

ACADEMIC CATALOG

2020-2021



SUNY CANTON

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Academic Calendar 2020-2021

Please reference the following link for updated Academic Calendar information.

<https://www.canton.edu/academic/calendar/>

<https://www.canton.edu/media/pdf/Academic-Calendar-2019-22.pdf>



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CATALOG DISCLAIMER

Notwithstanding anything contained in this Catalog, SUNY Canton expressly reserves the right, wherever it deems advisable, (1) to change or modify its schedule of tuition and fees, (2) to withdraw, cancel, reschedule or modify any course, program of study, degree or any requirement in connection with the foregoing, and (3) to change or modify any academic or other policy. Please be advised that, due to printing deadlines, information in this Catalog may be outdated. Changes in information in this Catalog and new academic regulations, policies or programs will be published on campus and in each semester's registration materials. It is the responsibility of each student to ascertain current information that pertains to the individual's program, particularly with regard to satisfaction of degree requirements, through consultation with the student's advisor, the office of the student's dean, and other appropriate offices such as the Registrar or Financial Aid. In preparing this Catalog, efforts are made to provide pertinent and accurate information; however, SUNY Canton assumes no responsibility for Catalog errors or omissions.



SUNY Canton's Mission and Goals



Great Majors. Great Careers.

MISSION STATEMENT

SUNY Canton is dedicated to providing a progression of accessible, affordable, high-quality applied programs that enable students in the North Country, New York State, and beyond to achieve their highest potential both personally and professionally.

VISION STATEMENT

Educating the leaders of tomorrow for careers in the global technological economy.

VALUES STATEMENT/DISTINCTIVE IDENTITY

We Value...

A Student-Centered Philosophy... by keeping students' best interests at the center of everything that we do.

Excellence... by challenging everyone to perform at a consistently high level through continuous quality improvement.

Integrity... by treating others with honesty and respect during every interaction.

Success... by creating an environment that encourages maximum personal and professional growth and helps students translate that growth into meaningful action.

Diversity... by fostering a culture of inclusiveness that values individual differences, gives voice to all in the campus community, promotes the free exchange of ideas based on merit, and encourages a global perspective.

Access... by offering affordable career-oriented public higher education to motivated, mature and disciplined students through innovative delivery methods.

Sustainability... by implementing viable long-term options for resource usage, disaster management, transportation, and waste management in connection with all campus activities and weaving sustainability concepts throughout the curriculum.

Flexibility... by embracing change to better address the needs of the college community and society at large.

INSTITUTIONAL STUDENT LEARNING OUTCOMES

The Institutional Student Learning Outcomes (ISLOs) represent the knowledge, skills, and attitudes students will develop as a result of their education experience at SUNY Canton. Upon completion of a degree program at SUNY Canton, students will have competency in five areas:

1. Communication Skills
2. Critical Thinking
3. Foundational Skills
4. Social Responsibility
5. Industry, Professional, Discipline-Specific Knowledge and Skills

ISLO	Definition
1. Communication Skills <i>(all subsets required for programs)</i>	The category of communication skills requires students to demonstrate competency in both oral and written expression, including a basic understanding of discourse contexts and appropriate use of style and necessary writing technologies.
Oral	Students demonstrate or share knowledge to foster understanding, or to promote change in the listeners' attitudes, values, beliefs, or behaviors through a prepared, purposeful, communicative act.
Written	Students develop and express ideas in writing. This written communication involves learning to work in many genres and styles. It can also involve working with many different writing technologies, and mixing texts, data, and images.
2. Critical Thinking <i>(one of three subsets required for programs)</i>	The category of critical thinking requires students to demonstrate competency in formulating conclusions as a result of exploration, evaluation, and analysis. Students will explore, evaluate, and analyze objects, subjects, and phenomena.
Critical Analysis	Students demonstrate a habit of mind characterized by the comprehensive exploration of issues, ideas, artifacts, and events before accepting or formulating an opinion or conclusion.
Inquiry and Analysis	Students demonstrate a systematic process of exploring issues/objects/works through the collection and analysis of evidence that result in informed conclusions/judgments (inquiry) and demonstrate the process of organizing complex topics or issues into parts to gain a better understanding of them (analysis).
Problem Solving	Students design, evaluate, and possibly implement strategies to answer an open-ended question or achieve a desired goal.
3. Foundational Skills <i>(all subsets required for programs)</i>	The category of foundational skills requires students to demonstrate knowledge in information management, basic math skills as required by disciplinary standards, and skills associated with their discipline.
Information Management	Students perform the basic operations of personal computer use to understand and use basic research techniques; and locate, evaluate and synthesize information from a variety of sources.
Quantitative Literacy & Reasoning (QLR) (Requirement filled by GER 1)	Students demonstrate competency in working with data. Individuals with QLR skills will possess the ability to reason and solve quantitative problems from a wide array of contexts. Students will be able to create arguments supported by quantitative evidence, accurately communicate those arguments in a variety of formats (e.g. using words, tables, graphs, mathematical equations, etc., as appropriate), and check the results for reasonableness and accuracy.
4. Social Responsibility <i>(two of four subsets required for programs)</i>	The category of social responsibility requires students to demonstrate understanding of cultural relations and global concerns. Students should demonstrate cultural sensitivity and global concerns with an emphasis on ethical standards.

Ethical Reasoning	Students demonstrate the ability to assess their own and others' ethical values and the social context of problems, recognize ethical issues in a variety of settings and contexts (which could include cultural, historical, or professional contexts), think about how different ethical perspectives might be applied to dilemmas, and consider the ramifications of decisions and actions.
Global Learning	Students critically analyze and engage with complex, interdependent global systems and legacies (natural, physical, social, cultural, economic, or political) and explore their implications for people's lives and the earth's sustainability.
Intercultural Knowledge	Students demonstrate knowledge that supports effective and appropriate sensitivity to, and interaction in, a variety of cultural contexts.
Teamwork	Students exhibit behaviors that facilitate teamwork and collaboration as demonstrated by effort they put into team tasks, their manner of interacting with others on team, and the quantity and quality of contributions they make to team discussions.
5. Industry, Professional, Discipline-Specific Knowledge and Skills	The category of industry, professional, and discipline-specific knowledge and skills requires students to demonstrate the knowledge and skills necessary to succeed as leaders of tomorrow in their chosen career path.



COLLEGE GOALS

- Offer programs in business, public service, health, liberal arts and engineering technologies that prepare students to enter rewarding careers and continue their education.
- Deliver a program of general education which provides a broad set of coherent and focused educational experiences aimed at enabling students to acquire knowledge and skills that are useful and important for all persons.
- Provide a community that enhances the development of leadership skills and creativity; encourages intellectual, ethical, and cultural growth; promotes an appreciation of our multicultural society; and advocates physical and emotional well-being.
- Promote excellence and innovation in teaching, advance scholarship and research, encourage continuous curricular evolution, and integrate technology into educational experiences.
- Design and implement extended and alternative programs to address the needs of national and international students, businesses, government agencies, and other specialized audiences.
- Advance the institution through philanthropic activities, external funding and cultivation of strong alumni relations.

About SUNY Canton

The State University of New York at Canton is a public, coeducational, residential college located on a spacious campus along the banks of the Grasse River. Its northern location places SUNY Canton close to the Adirondack Mountains, the St. Lawrence River, and major Canadian cities such as Ottawa and Montreal.

ACADEMICS

SUNY Canton is Northern New York's four- and two-year college for technology, health, management and public service. SUNY Canton offers more than 50 majors leading to bachelor's degrees, associate degrees, and one-year certificates. Numerous articulation agreements with other institutions provide further opportunities in fields such as business administration, forestry and medicine. Graduates of two-year programs are encouraged to enroll in bachelor's degree programs or begin their careers immediately.

SUNY Canton's 3,200 students are taught by faculty who have both outstanding academic credentials and excellent technical experience. Most have on-the-job professional experience, are licensed in their fields, and are current practitioners in their professions.

CAMPUS ENVIRONMENT

Academic facilities include numerous classroom buildings containing many specialized labs for practice in technology-based disciplines. The Southworth Library Learning Commons houses more than 30,000 books, and provides access to an impressive number of electronic books. The Betty J. Evans Tutoring Center is also located in the Learning Commons. The Tutoring Center offers extensive academic tutoring as well as educational resources that provide students with opportunities for application of theory as well as continued learning outside of the classroom. Services are available to all students enrolled in courses at SUNY Canton on a walk-in basis and are free of charge.

The Computer Center provides access for all students in open computer labs and networked computer classrooms. Students receive an email account and can access the Internet in computer labs or via wireless network access in most areas of campus, including all residence hall rooms.

The College opened a \$42 million athletic facility in July 2011. The massive building includes an ice arena, fitness center, basketball courts, field house, and swimming pool. Other additions include a synthetic turf field and a baseball field. SUNY Canton

has expanded its sports offerings and has recently added women's volleyball, men's and women's golf, women's ice hockey, women's lacrosse and men's lacrosse. That brings the total number of sports teams to 15, including men's and women's basketball, cross country, soccer, men's ice hockey, softball and baseball. The Kangaroos are a Division III NCAA member.

Kennedy Hall is the name of the new 305-bed, apartment-style residence hall on campus. It opened in August 2011 and features all single rooms in three, four, and five bedroom suites.

The four existing residence halls have also undergone renovations and house 950 students in single rooms, doubles, triples and suites. Special theme floors allow students to select living and learning options best suited to their interests. There's even a residence hall that allows small pets. Chaney Dining Center provides meals for residential students, and snack bars located around the campus make it easy to grab a quick bite to eat.

There are numerous student clubs, and the Richard W. Miller Campus Center serves as the hub for a wide range of cultural and recreational activities. Since the campus is located in a residential community that welcomes college/community interaction,



students find that SUNY Canton provides a fine blend of college learning and community involvement.

Many SUNY Canton alumni pursue careers in the technologies. Two-thirds of each graduating class choose to enter productive careers directly after graduation. Each year, nearly 100 percent of these graduates are successful in finding jobs for which SUNY Canton prepared them.

CAMPUS HISTORY

Originally founded in 1906 as the School of Agriculture (SOA) at St. Lawrence University, SUNY Canton was the first postsecondary, two-year college in New York authorized by the Legislature. In 1941, SOA was renamed the New York State Agricultural and Technical Institute (ATI). ATI became a member college of the State University of New York in 1948. To recognize advanced technology programs added in the 1950s and '60s, the College underwent another name change in 1965, this time becoming the State University of New York Agricultural and Technical College at Canton or ATC. In 1987, the University's Board of Trustees authorized yet another name change to the College's present designation as State University of New York College of Technology at Canton.

In 1997, SUNY Canton received bachelor's degree granting approval from the SUNY Trustees and the Governor of New York State. Since then, more than 20 bachelor's degrees have been approved, and several others are in development.

LOCATION

The village of Canton is situated in the St. Lawrence Valley near the northern foothills of the Adirondack Mountains and the scenic Thousand Islands. The location is perfect for those who enjoy outdoor activities, which range from camping, boating and hiking to cross-country and downhill skiing. Lake Placid, site of the 1980 winter Olympics, is less than two hours away and

offers a multitude of activities throughout the year. For those who wish to have a more metropolitan experience, Montreal and Ottawa are approximately two hours north across the Canadian border. These two cities provide a variety of attractions for shopping, plays and concerts as well as beautiful parks and recreational facilities.

The College is located on the outskirts of the village along the Grasse River, which adds to its beauty and relaxed atmosphere. The village is a short walk from campus and offers several unique shops and restaurants.

ACCREDITATIONS

SUNY Canton is accredited by the Middle States Commission on Higher Education, 3624 Market Street, Philadelphia, PA 19104-2680 — Telephone (267) 284-5000, Fax (215) 662-5501. The Middle States Commission on Higher Education is an institutional accrediting agency recognized by the U.S. Secretary of Education and the Council for Higher Education Accreditation.

The Air Conditioning Engineering Technology, Civil Engineering Technology, Electrical Engineering Technology, and Mechanical Engineering Technology programs are accredited by the Engineering Technology Accreditation Commission (ETAC) of ABET.

The Veterinary Science Technology program is accredited by the American Veterinary Medical Association. The Accreditation Commission for Education in Nursing has accredited the Nursing, AAS program. The Physical Therapist Assistant program is accredited by the Commission on Accreditation in Physical Therapy Education. The Dental Hygiene, AAS program is accredited by The American Dental Association (ADA), Commission on Dental Accreditation (CODA). The Automotive Technology program is certified by the National Automotive Technicians Education Foundation (NATEF) and the National Institute for Automotive Service Excellence (ASE).

ASSOCIATED COLLEGES OF THE ST. LAWRENCE VALLEY

SUNY Canton is a member of the Associated Colleges of the St. Lawrence Valley, a consortium that also includes Clarkson University, SUNY Potsdam, and St. Lawrence University. The Associated Colleges, with approximately 12,500 students in two villages 11 miles apart, expands opportunities through such activities as cross-registration for courses at the other three campuses, coordination of social events, and library privileges at all four college libraries.

ALUMNI ASSOCIATION

The Alumni Association maintains contact between the College and its alumni, keeping them informed about the College's programs and activities and encouraging their participation.

The Association works with the Canton College Foundation in coordinating the College's Annual Fund program to provide financial support for a variety of college activities. As a result of these efforts, funds can be provided for student scholarships and emergency loans, faculty research and special projects, and other activities in need of financial support.

*Bachelor's Degrees (ACT/SAT required)

CODE	PAGE	PROGRAM TITLE	MATH				ENGL	CHEM	BIO	Associate Degree in appropriate field
			75+ on Algebra Regents	70+ on Geometry Regents	75+ on Geometry Regents	75+ on Trig / Adv. Algebra Regents	75+ on ELA Regents	65+ on Regents and 75+ Geometry Regents	75+ on Regents & 65+ on Chem Regents	
2645	72	Agribusiness Management, BBA	•				•			
1965	73	Applied Psychology, BS	•				•			
2488	74	Civil and Environmental Engineering Technology, B.Tech.			•		•			
3006	75	Crime Analysis, BS	•				•			
1359	76	Criminal Investigation, B.Tech.	•				•			
1911	77	Criminal Justice: Law Enforcement Leadership, B.Tech.	•				•			
2698	78	Cybersecurity, BS			•		•			
2699	79	Early Childhood Care and Management, BBA	•				•			
0216	80	Electrical Engineering Technology, B.Tech.			•		•			
1864	81	Emergency Management, BS		•			•			
2991	82	Esports Management, BBA	•				•			
0282	83	Finance, BBA	•				•			
2994	84	Forensic Criminology, BS	•				•			
1525	85	Funeral Services Administration, B.Tech.	•				•			
2638	86	Game Design and Development, BS			•		•			
2026	87	Graphic and Multimedia Design, BS		•			•			
2254	88	Health and Fitness Promotion, B.Tech.	•				•			
253	89	Health Care Management, BS		•			•			
2335	90	Homeland Security, B.Tech.	•				•			
1935	91	Industrial Technology Management, B.Tech.			•		•			
2045	92	Information Technology, B.Tech.			•		•			
0818	93	Legal Studies, BS	•				•			
1645	94	Management, BBA	•				•			
0235	95	Mechanical Engineering Technology, B.Tech.			•		•			
2882	96	Mechatronics Technology, BS				•	•	•		
0291	97	Nursing, 2 + 2, BS in nursing		•			•			•
2373	98	Nursing Dual Degree, AAS/BS***			•		•	•		•
0182	99	Sports Management, BBA	•				•			
2673	100	Technological Communication, BS	•				•			
2535	101	Veterinary Service Administration, 2 + 2, BBA		•			•			•
2278	102	Veterinary Technology, BS **			•		•	•		•



Prerequisite Regents Exams (NYS)

*Associate Degrees (ACT/SAT recommended)

CODE	PAGE	PROGRAM TITLE	MATH				ENGL	CHEM	BIO	Associate Degree in appropriate field
			75+ on Algebra Regents	70+ on Geometry Regents	75 + on Geometry Regents	75+ on Trig / Adv. Algebra Regents	75+ on ELA Regents	65+ on Regents and 75+ Geometry Regents	75+ on Regents & 65+ on Chem Regents	
0473	103	Apprentice Training: Industrial Trades, AAS	must have or be working on BOCES Journeyman's Cert.							
0525	104	Automotive Technology, AAS	•				•			
0630	105	Business: Accounting, AAS	•				•			
0632	106	Business Administration, AAS	•				•			
0671	106	Business Administration-Transfer, AS		•			•			
0517	107	Civil Engineering Technology, AAS			•		•			
0581	108	Computer Information Systems, AAS	•				•			
1162	109	Construction Technology: Management, AAS	•				•			
0640	110	Criminal Justice, AAS	•				•			
1327	111	Early Childhood, AS	•				•			
0699	112	Electrical Engineering Technology, AAS			•		•			
0530	113	Engineering Science, AS				•	•	•		
2208	114	General Technology, AAS			•		•			
0444	115	HVAC Engineering Technology, AAS			•		•			
2953	116	HVAC Trades, AOS	•				•			
0688	117	Individual Studies, AAS								
0250	118	Liberal Arts & Sciences: General Studies, AA, AS	•				•			
0493	119	Mechanical Engineering Technology, AAS			•		•			
0622	120	Nursing, AAS ***			•		•	•		
0489	121	Physical Therapist Assistant, AAS **			•		•	75+	•	
0521	122	Veterinary Science Technology, AAS **			•		•	•		

Prerequisite Regents Exams (NYS)

*Cooperative Agreements

CODE	PAGE	PROGRAM TITLE	75+ on Algebra Regents	70+ on Geometry Regents	75 + on Geometry Regents	75+ on Trig / Adv. Algebra Regents	75+ on ELA Regents	65+ on Regents and 75+ Geometry Regents	75+ on Regents & 65+ on Chem Regents	Associate Degree in appropriate field
			0250 / varies	132	Environmental Science & Forestry, w/SUNY ESF				•	
0620 / 1086	132	Forest Technology, w/SUNY ESF	•				•		•	
	135	UB School of Law Degree (3+3) - B.S. + J.D.								
0250	135	Upstate Medical Univ. Early Admissions Program				•	•	•	•	

*Certificate Programs

0955-Electrical Construction & Maintenance, p.123
0938-Practical Nursing,** p.124

*Refer to Programs of Study (pages 71-135) for specific requirements. ** Selective Admission (see page 98, 102, 120, 121, and 122 for more information).

§ Preadmission test required – Kaplan Nursing Admission Test

If you have questions, are a transfer or an out-of-state student, please call the Office of Admissions (1-800-388-7123) for more information. Please note, all applicants pursuing a baccalaureate degree and all prospective student athletes, regardless of the degree being sought, must submit an official SAT or ACT test score.

ADMISSION TO CANTON

Admission to the State University of New York at Canton is based on the academic and personal qualifications of applicants and is made without regard to sex, age, race, color, creed, national origin, sexual orientation, military status, or disability of individuals. Admission will be offered to qualified applicants whose academic preparation and experience indicate a foundation for success in their chosen curricula.

Candidates for admission to SUNY Canton must have earned a high school diploma with a preferred minimum 75 cumulative average or a high school equivalency (GED/TASC). Please review the prerequisites listed for each program. All admissions decisions are subject to the discretion of the Director of Admissions. For students needing preparatory courses before being admitted to a program of interest, it may be necessary to extend the time needed to earn an associate or baccalaureate degree. This will not affect students enrolled in one-year certificate programs.

Admitted students will be required to submit a \$50 enrollment deposit, which is refundable if students withdraw prior to May 1st.

Degree seeking students must declare a major by the end of two full-time semesters or the completion of 30 credits.

For more information, contact the Office of Admissions at 315-386-7123, 800-388-7123, or www.canton.edu.

DEGREES OFFERED

The College offers the opportunity for students to earn the degrees of Bachelor of Technology, Bachelor of Business Administration, Bachelor of Science, Associate in Applied Science, Associate in Science, Associate in Arts, Associate in Occupational Studies, or a Certificate of one-year study. Many of our programs allow for a fall or spring start. Often the semester start date is decided on a case by case basis.

ADMISSION INTERVIEWS

Prospective students and their families are strongly encouraged to visit the campus in-person or virtually to discuss college plans with an admissions counselor. In-person or virtual interviews help to show your level of interest in SUNY Canton and can be very helpful in making admissions decisions. Admissions interviews are offered Monday through Friday, as well as at Open Houses on select Saturdays. The interview provides an opportunity to discuss curricula and career choices, college life, and financial aid. All visiting students and their families will be offered a tour of the campus. Tours are offered regularly at 10 a.m., 12 p.m., and 2 p.m., Monday through Friday.

Please contact the Office of Admissions at 800-388-7123 or admissions@canton.edu to schedule a visit.

HOW TO APPLY FOR ADMISSION

An application for admission may be completed online at www.canton.edu/apply. We accept the SUNY Application or the Common Application. Those applications can be found at www.suny.edu/applysuny and www.commonapp.org, respectively. In addition to the application form, applicants must submit all secondary school transcripts, showing date of graduation or score reports for the General Equivalency Diploma (GED) or Test Assessing Secondary Completion (TASC), and all previous official college transcripts to the Office of Admissions at SUNY Canton. All applicants pursuing a baccalaureate degree and all prospective student athletes, regardless of the degree or certificate being sought, must submit an official SAT or ACT test score if starting in the fall 2020 semester. SUNY Canton will be test optional for applicants applying for the spring 2021 semester.

All applications are processed on an individual basis and additional information may be requested by the Office of Admissions to make a fair assessment.

WHEN TO APPLY FOR ADMISSION

Prospective students are encouraged to submit their application before December 1 for the fall semester and November 1 for the spring semester. Decisions with respect to admission are made on a rolling basis, unless otherwise specified. Our Nursing, Physical Therapist Assistant, Practical Nursing, Veterinary Science Technology, and Veterinary Technology programs are selective and we very much encourage students applying to these programs to submit applications as early as possible. Candidates for admission to the spring semester should contact the Office of Admissions for the listing of available spring-start programs. There are no spring admits to selective programs (except transfer students from similar programs).

ADMISSION AS FRESHMEN

Candidates for admission to the College must meet the following minimum requirements:

1. Be a graduate of a secondary school accredited by its State Education Department, hold a high school equivalency diploma, or meet certain home-school criteria.

IEP diplomas are not considered.

Students with an IEP diploma must pass a high school equivalency.

2. Have completed, with a satisfactory level of achievement, the minimum course prerequisites for the curriculum selected.
3. Demonstrate academic preparation necessary for success in the curriculum selected.

The most important criterion for admission as freshmen directly from high school is the secondary school record (grade point average, pattern of course work, etc.). Some candidates will be asked to submit additional criteria, such as an essay, personal statement, or resume.

The Office of Admissions reserves the right to request additional information, and applicants may, of their own accord, submit additional supportive documents.

HOME-SCHOOLED STUDENTS

Home-schooled students must provide supplemental materials as part of their application for admission to SUNY Canton.

Students of compulsory school age must provide one of the following:

1. A high school diploma from an accredited state secondary school.
2. Letter from Superintendent of Schools certifying that the student has completed the substantial equivalent of a four-year high school course.
3. SAT/ACT scores are required for students pursuing a bachelor's degree and all prospective student athletes, regardless of the degree being sought if applying for the fall 2020 semester. Canton will be test optional for applicants applying for the spring 2021 semester.

Students beyond compulsory school age must provide one of the following:

1. Option #1 as stated above.
2. Option #2 as stated above.
3. Passing score on a high school equivalency (TASC/GED).
4. Proof of passing and completing all requirements for the required five Regents examinations or approved alternative assessments for these examinations.
5. Completion of 24-credit hour program in accordance with 8 NYCRR Section 3.47 for Earned Degrees
6. Proof of previously earning and been granted a degree from a degree-granting institution.

ONLINE CORRESPONDENCE HIGH SCHOOLS

New York State does not approve correspondence study, including online, as equivalent to a high school diploma for New York State residents. Correspondence

study and online diplomas are not valid for students who were New York State residents at the time they received the online diploma. New York State school districts are prohibited from recognizing correspondence or online programs of high school study as fulfilling the New York State requirements for completion of an approved course of high school study.

New York State residents who have attained a high school education/diploma through an online correspondence high school are not eligible to receive:

- New York State Tuition Assistance (TAP), Excelsior Scholarship, STEM Scholarship, TeachNY scholarship, 9/11 scholarship.
- Many Federal financial aid programs.
- An associates or bachelor's degree from a private or public college or university located within New York State.
- New York State residents may acquire recognized high school graduation through the following options:
- Successful completion of the New York State TASC(GED) exam;
- Successful completion of the 24-credit hour program in accordance with 8 NYCRR Section 3.47;
- Successful completion of either the Accuplacer or CELSA Ability to Benefit test.

Questions regarding correspondence and online high school diplomas should be directed to:

New York State Education Department
High School Equivalency Office
PO Box 7348
Albany, New York 12224
(518) 474-4906

Out-of-state residents should refer to the policies and regulations on correspondence and online high school diplomas established by their home state education departments.

PLACEMENT TESTING

The ACCUPLACER placement test may be required for scheduling purposes

after acceptance into SUNY Canton. This decision is based on standardized test scores, such as Regents exams, ACT or SAT scores or certain program demands. Transfer students must demonstrate a "D" or better in a college-level English course to be exempt.

Students who are required to be tested will be notified via their college email. Placement testing must take place prior to advising. For detail and practice test items, go to www.canton.edu/testing. For more information, call 315-379-3954.

ADVANCED PLACEMENT AND PROFICIENCY EXAMINATION CREDIT

SUNY Canton has a proficiency examination program to serve students who seek recognition for achievement acquired outside the conventional college classroom. Admission with advanced standing may be granted on the basis of satisfactory completion of College-Level Examination Program (CLEP) Subject Examinations, the Advanced Placement Program, both administered by the College Entrance Examination Board, and the International Baccalaureate (IB) examinations. Further, the College participates in selected Excelsior College Examinations (ECE) sponsored by the New York State Education Department. Interested students should check with the Office of Admissions regarding credits awarded for these examinations. For a listing of how CLEP, AP and IB exams are utilized, see: http://www.canton.edu/career_services/docs/Exam_Reference_Guide.pdf

HONORS PROGRAM

The purpose of SUNY Canton's Honors Program is to attract and retain academically gifted students who are interested in pursuing knowledge and experience beyond the standard expectations of their degree. The Honors Program rewards hard working students by providing additional opportunities and privileges to facilitate academic and personal growth.

Admissions

All Honors Program students are required to abide by the following requirements:

- Remain aware of Honors Program information by checking email, Blackboard, Honors Webpage, and attending meetings during the academic year
- Maintain a minimum cumulative 3.25 GPA.**
- Complete a minimum of five Honors Courses for students enrolled in a four-year degree program.***
- Complete a minimum of three Honors Courses for students in a two-year degree program.**
 - o In order for a non-honors course (with a minimum of 3 credit hours) to be credited as an honors course, students will be required to complete honors projects that comprise research, writing, and presentation components.
 - o Up to three courses or 9 hours of honors course credit (or equivalent) can be transferred in from another college. Honor transfer credit to be approved by Honors Committee
- Attend Honors Program meetings and participate annually in the Scholarly Activities Celebration or other sanctioned event.
- Present (poster or oral) at Scholarly Activities Day, Honors Symposium or some other approved forum (i.e. academic conference):
 - o 2 times for four-year degree
 - o 1 times for two-year degree
- Provide evidence of participation in community service, academic/scholarly activities or awards, and campus involvement outside of coursework. Students must be involved in:
 - o At least one school related group (club, organization, tutoring service, etc.) OR
 - o Community service effort or organization that is on volunteer bases OR
 - o Scholarly activity, such as an ongoing research project with a faculty advisor

•A student should inform the Honors Program Director whenever their address (including phone number and email) or academic major changes.

For more information about Honors Courses, please refer to the Honors Webpage at www.canton.edu/honors/.

ADMISSION PROCEDURES AND REQUIREMENTS FOR INTERNATIONAL STUDENTS

An application for admission may be completed online at www.canton.edu/apply. We accept the SUNY Application or the Common Application. Those applications can be found at www.suny.edu/applysuny and www.commonapp.org, respectively.

In addition to the application form, applicants must submit secondary school transcripts (translated to English), and all previous college transcripts (must be translated to English, WES preferred), to the Office of Admissions at SUNY Canton. A \$50.00 non-refundable application fee (in U.S. funds) must accompany the application. This fee may not be waived for any reason. In the interest of time, it is recommended that the fee is paid by credit card when an online application is submitted.

An English Proficiency Exam is required if English is not your first language. Students must demonstrate English Proficiency in one of the following five ways:

TOEFL (School Code 2523)

61 Internet Based Test
500 Paper Based Test
173 Computer Based Test

IELTS

6.0 Minimum
5.5 minimum in each subsection of exam

iTEP

3.5 Minimum

PTE Academic

44 Minimum

College Level English Course

Must receive a grade of "C" or better (US Grade)

Students who are interested in SUNY Canton who do not meet English Proficiency requirements can apply for conditional admission in which they will enroll in the ESL program at Fulton Montgomery Community College (FMCC) for a period of time based on their level of proficiency. Once they have successfully completed the program, they will be offered full admission to SUNY Canton. Students must meet all other admission requirements at SUNY Canton to qualify for conditional admission.

To be assured for full consideration for Fall admission, the application must be submitted no later than April 1st. If applying for Spring admission, the application must be completed with all supporting documents no later than November 1st. It may take several months to obtain the appropriate visa, so it is recommended that students apply for admission as early as possible. Additional supporting documents, such as a colored copy of the biography page of a valid passport, the Foreign Student Financial Statement (FSA-4) and supporting financial documentation will be required upon admission in order to obtain an I-20. These forms must be completed and certified by the appropriate financial institution. Please make sure the form is accurate and signed in all appropriate places to avoid delays with the I-20 processing. The application will be reviewed when all required information is received.

All supporting documents should be sent to Office of Admissions, SUNY Canton, 34 Cornell Drive, Canton, NY 13617-1098, USA

TRANSFER STUDENT ADMISSION

Applicants, who have previously registered at another college or university, following graduation from high school, are

considered transfer students. In addition to completing the Application for Admission, transfer students must also submit an official transcript from every college or university previously attended as well as an official high school transcript. Transfer students who have less than 24 college credits completed at the time of application will be required to submit their high school transcript. However, we encourage all transfer students to submit their high school transcript for financial aid requirements. Lack of a high school transcript on record with SUNY Canton may result in the loss of a financial aid opportunity. Transfer students must meet specific GPA and credit hour requirements for their program of application. All degree programs have specific requirements for admission. Transfer students should contact the Office of Admissions for further information at 1-800-388-7123.

For all transfer students, equivalency credit for course work shall be determined by the Coordinator of Transfer Services. A preliminary evaluation of coursework will be sent via email. A final approved evaluation can later be viewed in DegreeWorks. Courses completed at another institution transfer only as credits, quality points do not transfer. A letter grade of "D" or better is required for credit, unless specifically stated otherwise.

The Office of Admissions reserves the right to request additional information, and applicants may, of their own accord, submit additional supportive documents.

READMISSION

Students are considered to be readmits if they meet one of the following criteria: (1) have not attended classes as a matriculated student at SUNY Canton for at least one semester and have not attended another college; (2) have graduated and have not attended another college since graduation; (3) planning to graduate from SUNY Canton and continue in a different degree program (i.e. associate's degree to bachelor's degree).

Students must complete a Readmission Application available online at www.canton.edu/admissions/readmission.html

Readmit Academic Requirements

TO RE-REGISTER FOR SEMESTER:	COMPLETED HOURS (EARNED HOURS) ¹	CUMULATIVE GPA
2	9	1.25-1.49
3	18	1.50-1.74
4	27	1.75-1.99
5	39	2.00
6	51	2.00
7	63	2.00
8	75	2.00
9	90	2.00
10	105	2.00

¹At the discretion of the appropriate school dean, imputed credit hours may be used in determining a student's academic status.

LEAVE OF ABSENCE POLICY

Taking a Leave of Absence: Full-time matriculated students

If you are facing circumstances that will interrupt your course of study at SUNY Canton, but you wish to return to the College within one year, we recommend that you request a Leave of Absence. A leave of absence preserves your admitted status at the time you begin your leave. This means that the academic requirements that are in place when you leave are "frozen." It allows you to register without being readmitted and maintains access to your SUNY Canton email during your time away.

A leave of absence is normally granted for a maximum of 2 consecutive semesters or the total period of active duty for those called to active military service. Students may return to the campus following the leave by contacting the Dean's Office to select classes. If your leave expires, you must apply for readmission, and meet any new admission or degree requirements in place when you return to the College. A leave for part of a semester counts as one semester.

Eligibility Criteria

- Your SUNY Canton cumulative GPA must be 2.0 or greater at the end of your last semester.

- You must have completed one or more semesters at SUNY Canton.
- You have good student conduct standing.
- Note: Permission of the Program Director is required for students in select programs. Programs need-ing specific approval include:
 - > Nursing – AAS
 - > Dual Degree Nursing Program (DDNP)
 - > Veterinary Technology – BS
 - > Veterinary Science Technology – AAS
 - > Physical Therapist Assistant – AAS
 - > Practical Nursing

Procedure

Formally apply for a Leave of Absence via UCanWeb.

CREDIT FOR PRIOR LEARNING

FROM OTHER INSTITUTIONS OF HIGHER LEARNING

Applicants for admission who have attended other institutions of higher learning may be admitted with advanced standing depending upon the courses completed and grades earned. Applicants for advanced standing should apply for admission in the same way as other applicants; but in addition, they must request the Registrar of all institutions of higher learning which they have attended to forward official transcripts of work completed to the College. SUNY Canton accepts credit for courses transferred with a grade equivalent to a "D" or above at SUNY Canton. Prior credits which apply to an earned Associate's degree, including grades of "D" and above, will be accepted in transfer and may be applied towards the total credits for a SUNY Canton bachelor's degree. This policy may exempt credits received in the core curriculum when program specific grade requirements supersede this policy.

The College has formalized articulation agreements with a number of higher education institutions. A complete listing of

current transfer agreements may be found on the college website at www.canton.edu/admissions/transfer/agreements.html. Acceptance of satisfactorily completed credits taken at the prior institution is guaranteed upon transfer to SUNY Canton as specified in the applicable transfer agreement. Credit is awarded at the discretion of the School Dean.

Upon readmission, any new non-degree credit with a grade of D or better from a different institution of higher learning will be evaluated for transfer credit.

BY PROFICIENCY EXAMINATION

A complete Reference Guide to Earning College Credit by Examination may be found on the college website at

www.canton.edu/career_services/docs/exam_reference_guide.pdf.

1. Published Examinations: Admission with advanced standing may be granted on the basis of satisfactory completion of published proficiency examinations. The College participates in the College Level Examination Program (Subject Examinations) and the Advanced Placement Program, both of which are administered by the College Entrance Examination Board; the DSST examination (formerly DANTEs); and the Regents College Proficiency Examination Program sponsored by the New York State Education Department.
 2. Locally Developed Examinations: At the discretion of the school or departmental faculty, advanced standing may be granted for satisfactory completion of proficiency examinations developed by the College faculty and in accordance with the following policy:
 - a. Locally designed and administered exams are available only to students who are matriculated at SUNY Canton or are participating in a CREST "Career Ready Education and Success Training" program or course.
 - b. Such exams will consist of written and/or practical application tests as deemed appropriate.
- c. Any credit earned via such examinations will not be (a) counted as residency credit, included on official enrollment reports unless requested specifically, (c) included in a faculty member's reported workload, and (d) used in calculating the campus FTE credit report.
 - d. Any credit earned must fulfill degree requirements or be related to a CREST course that could fill a degree requirement.
 - e. Such exams will be administered prior to a student's enrollment in the equivalent course for which a proficiency exam is requested or at the end of a CREST course.
 - f. Satisfactory completion of a locally designed and administered proficiency exam will be recorded on the student's transcript following evidence of progress toward an educational objective. In the case of CREST course, successful completion will be recorded on the student's transcripts for possible future use toward an educational objective.
 - g. A student is not permitted to enroll in or repeat the equivalent course for which a proficiency exam has been satisfactorily completed.
 - h. A student may not repeat the proficiency exam administered for a specific course or portion thereof if not satisfactorily completed.
 - i. Proficiency exams shall be approved by the appropriate academic department and School Dean. Copies of all locally designed proficiency examinations will be placed on file with the Vice President for Academic Affairs and the appropriate School Dean.
 - j. Forty dollars (\$40) per credit hour will be charged for all locally designed and administered proficiency examinations.

FROM SECONDARY SCHOOL

The College may grant credit for selected courses completed at the secondary level. Transfer credit will be conditional upon evaluation of in-kind courses and experiences by the appropriate Dean of the School in which the credit will be granted. Approved secondary course work will match or exceed that offered on campus. The course must be subject to an articulation agreement. Students requesting credit must demonstrate superior performance and have the recommendation of the appropriate secondary school faculty member and endorsement of the high school principal.

PRIOR LEARNING NOT THE RESULT OF CREDIT-BEARING ACTIVITIES

Credit for Prior Learning may be granted to students enrolled in any program, at the discretion of the faculty of that program, a review committee, and the Dean of the School in which the program is located. NOTE: Students can apply for Prior Learning Credit for a course only if a proficiency exam, CLEP exam, or a DSST exam does not exist for that course. The maximum number of credit hours of Credit for Life Experiences that can be applied toward an associate degree is 15 and toward a baccalaureate degree is 30. Such credit will be evaluated according to the following procedure:

1. The student must apply for Prior Learning Credit during the first year of matriculation in the program. Applicants must complete the Application Form for Credit for Prior Learning and submit the form to the Dean of the School in which the program is located.
2. The Dean, in consultation with other Deans as appropriate, will appoint a Prior Learning Credit Advisor selected from the School's faculty to assist the student in preparing the necessary documentation in support of the number of credits requested. The portfolio must clearly evidence mastery of a preponderance of the learning outcomes as listed in the

- course outline(s) in order for a request to be viable.
3. The student will submit a formal letter of request and a portfolio containing all documentation and pertinent adjunct supportive material to the advisor within the first ten weeks of the student's first matriculated semester. The student will be notified of the decision within five weeks after submitting the portfolio. Only enrollment during the College academic year will count as the first semester of matriculation (Summer school is not part of the College academic year).
 4. The portfolio will be evaluated by one or more faculty members recruited by the Dean as content reviewers. In those cases when a portfolio proposes Prior Learning Credit for a course not in the School of the Dean of the student's program, that Dean shall ask the appropriate Dean to assign an appropriate content reviewer for that course.
 5. The advisor will provide the content reviewer(s) with a copy of the most recent appropriate course outline(s), including detailed learning objectives.
 6. The content reviewer(s) will submit their recommendation(s) to the Dean of the School of the student's program and also forward a copy of the recommendation to the Provost.
 - a. Credit for Life Experiences cannot be granted for courses in which the applicant has been, or is, enrolled at SUNY Canton.
 - b. Credit determinations in discipline-related fields (e.g., electrical, humanities, social work, etc.) will be made by faculty members in the respective or related department.
 7. Following the decision of the Dean, a notice will be forwarded to the student, the advisor, the Provost, and the Registrar regarding the amount of credit granted and the courses for which the credit will be counted in the student's program.
 8. Forty dollars (\$40) per credit hour will be charged for the review of the materials. This fee must be paid and registration procedures completed prior to the beginning of the review.
 9. Forty dollars (\$40) per credit hour will be charged for prior learning credit granted. This fee must be paid prior to the granting of credit.
 10. Credit will be recorded as "CR" on the student's official transcript under the appropriate course number, but only following the satisfactory (2.0) completion of one full-time semester or its equivalent in the student's program.

MILITARY TRAINING AND EXPERIENCE

The College may grant advanced standing for military training and experience as recommended by the American Council on Education. Where courses, service school experience, or subject matter exams are applicable to a curriculum in which a student is enrolled at this college, credit will be determined using the publication "Guide to the Evaluation of Educational Experiences in the Armed Services." In order to have your military transcripts evaluated, please utilize the Joint Service Transcript (<https://jst.doded.mil/smart/signIn.do>) website and have your military transcript digitally sent to the SUNY Canton Admissions office.

MANNER OF RECORDING ADVANCED STANDING

Official transcripts of this college will include the appropriate number of credits granted for (1) courses transferred in from other higher education institutions, (2) proficiency examinations completed satisfactorily, (3) validated life experiences, and/or (4) military training and experience as "CR" credit only and be excluded in the calculation of a student's cumulative honor point index.

EARLY ADMISSION PROGRAM

Early admission will be granted to an applicant who has completed grade eleven of an accredited secondary school, meets the admission criteria for the program applied for, has maintained a strong academic average, and is recommended for college by the principal or guidance counselor. A contract detailing specific arrangements for completing the requirements for high school graduation must be made between the student, the high school principal, and the Director of Admissions. For further information, please contact the Office of Admissions. Arrangements for this contract are the responsibility of the applicant.

Students may be eligible for New York State TAP awards prior to completion of high school graduation requirements pending successful completion of "Ability to Benefit" test, also known as "Accuplacer". Additional information about paying for college is provided by the NYS Higher Education Services Corporation. If a student will not have their high school diploma when they start at Canton and want to pursue a possible TAP award, they will need to take the Accuplacer. Scores would then be reviewed by the TAP certifying officer for aid consideration. Contact Sharon Tavernier at taverniers@canton.edu or by phone (315) 379-3954 to schedule the exam. Students seeking federal financial aid (in the form of grants or loans) will need to provide a letter signed by the high school principal stating that coursework will not be counted toward the high school diploma.

SUNY UPSTATE MEDICAL UNIVERSITY COLLEGE OF HEALTH PROFESSIONS EARLY ADMISSION PROGRAM

The SUNY Upstate Medical University Early Admission Program with SUNY Can-

Admissions

ton is a joint admissions program whereby students enroll at SUNY Canton for two years, complete an associate degree, and are then guaranteed admission into one of the SUNY Upstate Medical University College of Health Professions upper division programs. An exception to this is the Doctorate of Physical Therapy which requires a bachelor's degree prior to entry into the DPT Program at Upstate Medical University.

The degree programs offered through the College of Health Professions Early Admission Program are: Cardiovascular Perfusion, Medical Imaging Services, Medical Technology, Nursing, Radiation Therapy Technology, Respiratory Therapy and Cardiorespiratory Sciences, and Physical Therapy DPT.

This program is a unique opportunity for students with a demonstrated commitment to a career in the health professions and a strong record of achievement in high school. Students accepted into this program are required to have completed at least three years of Regents or honors level courses in math and science. Students applying to the Early Admissions Program should be in the upper quartile of their class and should have competitive SAT scores. They must demonstrate a strong leadership background and show participation in extracurricular activities.

To apply for the SUNY Upstate Medical University College of Health Professions Early Admissions Program, students must complete the SUNY application for admission applying for Liberal Arts & Science: General Studies at SUNY Canton noting joint admission with SUNY Upstate Medical University at Syracuse. **THE STUDENT DOES NOT COMPLETE THE SUNY APPLICATION FOR UPSTATE MEDICAL UNIVERSITY.** The student must contact the Office of Admissions, Upstate Medical University at Syracuse, (315) 464-4670, to request application materials specifically for the Early Admission Program. An admissions interview will be required.

For further details, contact the SUNY Canton Office of Admissions, 315-386-7123 or 800-388-7123.

EX-OFFENDERS/ DISCIPLINARY DISMISSAL FROM COLLEGE

Students are not required at the point of application to disclose prior felony conviction. The college is required to inquire if the student has a prior felony conviction if a student seeks access to campus housing, participation in clinical, field experiences or internships, or participation in a study abroad program. However, depending on the field of study, a felony conviction can prevent a student from earning a degree or a licensure. Potential students who have been dismissed for disciplinary reasons from a college will have their application reviewed by the Admissions Review Board. Copies of this policy are available from the Office of Admissions. Individuals who have been dismissed for disciplinary reasons from a college and who wish to apply are required to identify themselves as such and should request a copy of the policy. Individuals who do not disclose this information prior to admission may have their admission rescinded at the discretion of the Administration.

ARTICULATION AGREEMENTS

2+2 PROGRAMS

SUNY Canton has established articulation agreements with community colleges, whereby students, upon completion of an associate degree at the community college, can transfer into a SUNY Canton baccalaureate program.

ADIRONDACK COMM. COLLEGE	SUNY CANTON BACHELOR DEGREE
Business Admin., AS	Finance, BBA or Management, BBA
Computer Science, AS	Information Technology, BTech

ADIRONDACK COMM. COLLEGE	SUNY CANTON BACHELOR DEGREE
Criminal Justice: Police Science, AS	Criminal Investigation, B.Tech Homeland Security, B.Tech Law Enforcement Leadership, B.Tech
Individual Studies: Sports Management, AS	Sports Management, BBA
Liberal Arts and Sciences: Humanities and Social Sciences, AA	Health and Fitness Promotion, B.Tech
Liberal Arts: Humanities and Social Science, Psychology Concentration, AA	Applied Psychology, BS
Liberal Arts and Sciences: Humanities and Social Sciences - Health Education Concentration, AS	Health and Fitness Promotion, B.Tech
Liberal Arts and Sciences: Individual Studies, AS	Emergency and Disaster Management, BS
Liberal Arts and Sciences: Mathematics and Science, AS	Industrial Technology Management, B.Tech
Nursing, AAS	Nursing, BS

BERGEN COMM. COLLEGE	SUNY CANTON BACHELOR DEGREE
Veterinary Technology, AAS	Veterinary Services Management, B.Tech

SUNY BROOME COMM. COLLEGE	SUNY CANTON BACHELOR DEGREE
Nursing, AAS	Nursing, BS
Sports Management, AS	Sports Management, BBA

CAYUGA COMM. COLLEGE	SUNY CANTON BACHELOR DEGREE
Business Administration, AS/AAS	Agribusiness Mgmt., BBA Finance, BBA Management, BBA
Computer Information Systems, AAS	Information Technology, B.Tech
Early Childhood, AAS	Early Childhood Care and Management, BBA
Liberal Arts and Sciences: Mathematics, AS	Industrial Technology Management, B.Tech
Nursing, AAS	Nursing, BS

CLINTON COMM. COLLEGE	SUNY CANTON BACHELOR DEGREE
Business Admin., AAS	Management, BBA

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CLINTON COMM. COLLEGE	SUNY CANTON BACHELOR DEGREE
Business Admin., AS	Finance, BBA Management, BBA
Business Administration: Sports Management, AS	Sports Management, BBA
Criminal Justice, AA	Criminal Investigation, B.Tech Homeland Security, B.Tech Law Enforcement Leadership, B.Tech Legal Studies
Criminal Justice, AAS	Criminal Investigation, B.Tech Homeland Security, B.Tech Law Enforcement Leadership, B.Tech
Computer Information Systems, AAS (Development and Security Tracks)	Information Technology, B.Tech
Health Services Management, AAS	Health Care Management, BS
Individual Studies, AA or AS	Applied Psychology, BS
Individual Studies, AAS	Sports Mgmt., BBA
Individual Studies: Health & Fitness Promotion, AS	Health and Fitness Promotion, B.Tech
Liberal Arts and Sciences: Humanities and Social Science	Applied Psychology, BS
Nursing, AAS	Nursing, BS

COLUMBIA-GREENE COMM. COLLEGE	SUNY CANTON BACHELOR DEGREE
Business: Accounting, AAS/AS	Management, BBA
Business Administration, AAS	Finance, BBA
Business Administration, AS	Finance, BBA Management, BBA
Criminal Justice, AA/AAS	Criminal Investigation, B.Tech Homeland Security, B.Tech Law Enforcement Leadership, B.Tech
Nursing, AAS	Nursing, BS

COLUMBUS STATE COMM. COLLEGE	SUNY CANTON BACHELOR DEGREE
Veterinary Technology, AAS	Veterinary Service Administration, BBA

CORNING COMM. COLLEGE	SUNY CANTON BACHELOR DEGREE
Business Admin., AAS/AS	Agribusiness Management, BBA

Computer Information Science, AS	Cybersecurity, B.Tech
Criminal Justice, AS	Criminal Investigation, B.Tech Homeland Security, B.Tech Law Enforcement Leadership, B.Tech
Criminal Justice, AAS	Criminal Investigation, B.Tech
Cybersecurity, AS	Cybersecurity, BS
Directed Studies, AAS	Applied Psychology, BS
Electrical Technology - Electronics, AAS	Electrical Engineering Technology, BET
Engineering Science, AS	Industrial Technology Management, B.Tech Mechanical Engineering Technology, B.Tech
Liberal Arts and Science: Humanities and Social Science, AS	Funeral Services Administration, B.Tech
Nursing, AAS	Nursing, BS

DUTCHESS COMM. COLLEGE	SUNY CANTON BACHELOR DEGREE
Business Admin., AS	Agribusiness Mgmt., BBA Finance, BBA Management, BBA
Computer Information Systems: Information Management, AS	Information Technology, B.Tech
Criminal Justice, AS	Criminal Investigation, B.Tech Law Enforcement Leadership, B.Tech
Criminal Justice: Public and Private Security, AAS	Criminal Investigation, B.Tech
Early Childhood, AAS	Early Childhood Care and Management, BBA
Engineering Science, AS	Civil and EnvironEngineering Technology, B.Tech Industrial Technology Management, B.Tech Mechanical Engineering Technology, B.Tech
General Studies, AS	Applied Psychology, BS Health and Fitness Promotion, B.Tech Health Care Mgmt., BS
Human Services, AS	Applied Psychology, BS
Liberal Arts and Sciences: Humanities and Social Science, AA	Applied Psychology, BS

DUTCHESS COMM. COLLEGE	SUNY CANTON BACHELOR DEGREE
Liberal Arts and Sciences: Science, AS	Industrial Technology Management, B.Tech
ERIE COMMUNITY COLLEGE	SUNY CANTON BACHELOR DEGREE
Computer Science, AS	Cybersecurity, BS
Early Childhood, AAS	Early Childhood Care and Management, BBA
Electrical Engineering Technology - Electronics, AAS	Electrical Engineering Technology, B.Tech
Health and Wellness Promotion, AS (Exercise Science or Health Education)	Health and Fitness Promotion, B.Tech
Homeland Security, Cert	Homeland Security, B.Tech
Information Technology, AAS	Information Technology, B.Tech
Nursing, AAS	Nursing, BS

FINGER LAKES COMM. COLLEGE	SUNY CANTON BACHELOR DEGREE
Bus. Admin., AS	Finance, BBA or Management, BBA
Criminal Justice, AAS	Criminal Investigation, B.Tech
Health Care Studies, AS	Health Care Management, BS
Networking and Cybersecurity, AS	Cybersecurity, B.Tech
New Media, AS	Technological Communications, BS
Nursing, AAS	Nursing, BS

FULTON-MONTGOMERY COMM. COLLEGE	SUNY CANTON BACHELOR DEGREE
Business Administration, AAS/AS	Finance, BBA or Management, BBA
Criminal Justice, AS	Criminal Investigation, B.Tech Homeland Security, B.Tech Law Enforcement Leadership, B.Tech
Early Childhood, AAS	Early Childhood Care and Management, BBA
Electrical Tech., AAS	Electrical Engineering Tech., BET
Health Science, AS/AAS	Health and Fitness Promotion, B.Tech
Liberal Arts and Sciences: General Studies, AA	Industrial Technology Management, B.Tech Management, BBA
Nursing, AAS	Nursing, BS

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GENESEE COMMUNITY COLLEGE	SUNY CANTON BACHELOR DEGREE
Criminal Justice: Homeland Security/ Emergency Mgmt., AAS	Homeland Security, BTech
Liberal Arts and Science: General Studies, AS	Funeral Services Administration, BTech
Nursing, AAS	Nursing, BS
Veterinary Tech., AAS	Vet. Services Mgmt., B.Tech

HERKIMER COMM. COLLEGE	SUNY CANTON BACHELOR DEGREE
Accounting, AS	Finance, BBA Management, BBA
Business Administration, AAS	Finance, BA Management, BBA
Business Administration, AS	Management, BBA
Computer Science, AS	Information Technology, BTech
Criminal Justice, AS/AAS	Criminal Investigation, B.Tech Homeland Security, B.Tech Law Enforcement Leadership, B.Tech
Criminal Justice: Crime and Intelligence Analysis, AAS	Crime Analysis, BS
Criminal Justice: Forensic Investigation, AAS	Criminal Investigation, BTech Homeland Security, BTech Law Enforcement Leadership, B.Tech
Cybersecurity and Digital Forensics, AS	Cybersecurity, BS
Human Services, AAS	Applied Psychology, BS
Liberal Arts and Science: General Studies, AA	Applied Psychology, BS Health Care Mgmt. BS
Liberal Arts and Science: Science, AS	Industrial Tech. Management, BTech
Small Business Management, AAS	Management, BBA

HOLYOKE COMM. COLLEGE	SUNY CANTON BACHELOR DEGREE
Nursing, AAS	Nursing, BS
Veterinary Technology, AAS	Veterinary Service Administration, BBA

HUDSON VALLEY COMM. COLLEGE	SUNY CANTON BACHELOR DEGREE
Business Admin., AAS	Finance, BBA Management, BBA
Business Admin., AS	Finance, BBA
Business Admin., AS Honors Track	Finance, BBA Management, BBA

HUDSON VALLEY COMM. COLLEGE	SUNY CANTON BACHELOR DEGREE
Civil Engineering Technology, AAS	Civil and Environmental Engineering Technology, BTech
Computer Information Systems, AAS/AS Computer Information Systems: System and Network Administration, AAS	Information Technology, BTech
Criminal Investigation, AAS Criminal Justice, AAS/AS	Criminal Investigation, BTech
Engineering Science, AS	Civil and Environmental Engineering Technology, BTech Industrial Technology Management, BTech
Human Services, AS	Applied Psychology, BS
Individual Studies, AA	Applied Psychology, BS
Individual Studies, AS	Mechanical Engineering Technology, BTech
Liberal Arts and Sciences: Humanities and Social Science, AA	Health Care Management, BS
Mortuary Science, AAS	Funeral Services Administration, BTech
Nursing, AAS	Nursing, BS

JAMESTOWN COMM. COLLEGE	SUNY CANTON BACHELOR DEGREE
	Agribusiness Mgmt., BBA
	Applied Psychology, BS
	Civil and Environmental Engineering Technology, BTech
	Criminal Investigation, BTech
	Finance, BBA
	Funeral Services Administration, BTech
	Health and Fitness Promotion, BTech
	Health Care Mgmt., BS
	Homeland Security, BTech
	Industrial Technology Management, BTech
	Information Technology, BTech
	Law Enforcement Leadership, BTech
	Management, BBA
	Mechanical Engineering Technology, BTech

JEFFERSON COMM. COLLEGE	SUNY CANTON BACHELOR DEGREE
Accounting, AAS	Finance, BBA
Accounting, AS	Finance, BBA Management, BBA
Agri-business, AAS	Agribusiness Mgmt., BBA
Business Admin., AS/AAS	Finance, BBA Management, BBA
Computer Information Systems, AS Computer Information Technology, AAS Computer Science, AS	Information Technology, BTech
Criminal Justice, AS	Criminal Investigation, BTech Homeland Security, BTech Law Enforcement Leadership, B.Tech
Early Childhood, AAS or AS	Early Childhood Care and Management, BBA
Engineering Science, AS	Industrial Technology Management, BTech Mechanical Engineering Technology, B.Tech
Individual Studies, AA	Health Care Management, BS
Individual Studies, AAS/AS	Finance, BBA Health Care Mgmt., BS Management, BBA
Liberal Arts and Sciences: Humanities and Social Sciences, AA	Health Care Mgmt., BS
Liberal Arts and Sciences: Humanities and Social Sciences - Psychology Concentration, AA	Applied Psychology, BS
Nursing, AAS	Nursing, BS

JOHNSON COLLEGE	SUNY CANTON BACHELOR DEGREE
Veterinary Sci. Tech.	Veterinary Services Mgmt., B.Tech

MANOR COLLEGE	SUNY CANTON BACHELOR DEGREE
Veterinary Technology, AS	Veterinary Services Admin., B.Tech

MOHAWK COMM. COLLEGE	SUNY CANTON BACHELOR DEGREE
Accounting, AAS	Finance, BBA
Civil Engineering Technology, AAS	Civil and Environmental Engineering Tech., B.Tech
Criminal Justice, AAS	Criminal Investigation, B.Tech

Admissions

MOHAWK COMM. COLLEGE	SUNY CANTON BACHELOR DEGREE
Criminal Justice, AS	Criminal Investigation, BTech Homeland Security, BTech
Computer Science, AS	Information Technology, BTech
Engineering Science, AS	Mechanical Engineering Technology, BTech
Liberal Arts and Sciences: General Studies, AS	Funeral Services Administration, BTech Health Care Management, BS
Liberal Arts and Sciences: Mathematics and Science - Mathematics, AS	Industrial Technology Management, BTech Mechanical Engineering Technology, BTech
Nursing, AAS	Nursing, BS

MONROE COMM. COLLEGE	SUNY CANTON BACHELOR DEGREE
Business Administration, AS	Management, BBA
Criminal Justice, AS	Criminal Investigation, BTech
Homeland Security, AS	Homeland Security, BTech
Human Services, AS	Applied Psychology, BS
Mathematics, AS	Crime Analysis, BS
Nursing, AAS	Nursing, BS

NASSAU COMM. COLLEGE	SUNY CANTON BACHELOR DEGREE
Business Administration, AS	Management, BBA
Criminal Justice, AS	Criminal Investigation, BTech
Liberal Arts and Sciences: Humanities and Social Science, AA	Applied Psychology, BS
Nursing, AAS	Nursing, BS

NORTH COUNTRY COMMUNITY COLLEGE	SUNY CANTON BACHELOR DEGREE
Bus. Admin., AS/AAS	Agribusiness Mgmt., BBA Finance, BBA or Management, BBA
Child and Family Services, AS	Applied Psychology, BS
Entrepreneurship Management, AAS	Management, BBA
Health Sciences, AS	Applied Psychology, BS
Human Services, AAS	Applied Psychology, BS
Liberal Arts & Science: Humanities and Social Science - Psychology Track, AA	Applied Psychology, BS
Nursing, AAS	Nursing, BS

NORTH SHORE COMM. COLLEGE	SUNY CANTON BACHELOR DEGREE
Nurse Education, AS	Nursing, BS
Veterinary Technology, AAS	Veterinary Services Management, B.Tech

NORTHCENTRAL TECH. COLLEGE	SUNY CANTON BACHELOR DEGREE
Dental Hygiene, AAS	Dental Hygiene, B.Tech
Nursing, AAS	Nursing, BS

ONONDAGA COMM. COLLEGE	SUNY CANTON BACHELOR DEGREE
Computer Forensics, AS	Law Enforcement Leadership, BTech
Early Childhood, AAS	Early Childhood Care and Management, BBA
Human Services, AS	Applied Psychology, BS
Nursing, AAS	Nursing, BS

ROCKLAND COMMUNITY COLLEGE	SUNY CANTON BACHELOR DEGREE
Accounting, AS/AAS	Finance, BBA
Business Admin., AAS	Management, BBA
Business Admin., AS	Finance, BBA Management, BBA
Criminal Justice, AS	Homeland Security, BTech Law Enforcement Leadership, BTech
Engineering Science: Aerospace/Mechanical, AS	Mechanical Engineering Technology, BTech
Engineering Science: Industrial Engineering, AS	Industrial Technology Management, BTech
Entrepreneurship, AAS	Management, BBA
Entrepreneurship, AS	Finance, BBA Management, BBA
International Business, AS	Finance, BBA or Management, BBA
Liberal Arts and Sci: Humanities and Social Science: English, AA	Applied Psychology, BS Health Care Mgmt., BS
Liberal Arts and Sci.: Humanities and Social Science: Honors, AA	Applied Psychology, BS
Liberal Arts and Science: Humanities and Social Science: Psychology, AA	Applied Psychology, BS
Liberal Arts and Science: Math and Science - Honors, AS	Industrial Technology Management, BTech Mechanical Engineering Technology, BTech

ROCKLAND COMMUNITY COLLEGE	SUNY CANTON BACHELOR DEGREE
Liberal Arts and Science: Math and Science - Math, AA	Electrical Engineering Technology, BTech Industrial Technology Management, BTech Mechanical Engineering Technology, BTech Sustainable Energy Technology, BTech
Marketing, AS	Finance, BBA
Nursing, AAS	Nursing, BS

ST. JOSEPH'S SCHOOL OF NURSING	SUNY CANTON BACHELOR DEGREE
Nursing, AAS	Nursing, BS

SUFFOLK COUNTY COMM. COLLEGE	SUNY CANTON BACHELOR DEGREE
Nursing, AAS	Nursing, BS
Veterinary Science Technology, AAS	Veterinary Services Management, B.Tech

SUNY ULSTER CTY. COMM. COLLEGE	SUNY CANTON BACHELOR DEGREE
Business Admin., AS	Management, BBA
Criminal Justice, AAS	Criminal Investigation, BTech Homeland Security, BTech
Criminal Justice, AS	Criminal Investigation, BTech Homeland Security, BTech Law Enforcement Leadership, BTech
Human Services, AS	Applied Psychology, BS
Liberal Arts and Sciences; Humanities and Social Sciences, AA	Applied Psychology, BS
Liberal Arts and Sciences: Math and Science, AA	Industrial Technology Management, BTech Mechanical Engineering Technology, BTech
Nursing, AAS	Nursing, BS
Veterinary Technology, AAS	Veterinary Services Management, BTech

SUNY Canton has also established articulation agreements with several four-year colleges whereby a SUNY Canton student, upon completion of the associate degree and specified courses, can transfer to a participating four-year college in a parallel program with junior-level status.

The colleges which participate with SUNY Canton in the 2+2 programs are:

Admissions

COLLEGE	BACHELOR DEGREE CURRICULA
Clarkson University	Physical Therapy, DPT
Cornell University (College of Agriculture and Life Sciences)	All parallel programs
Houghton	All parallel programs
Morrisville State College	Automotive Technology, B.Tech
Paul Smiths College	Natural Resources: Management & Policy, BS; Nat. Resources: Env. Sci., BS; or Fisheries and Wildlife Sci., BS
SUNY Cobleskill	Child Care & Develop, BS
SUNY College of Environmental Sciences & Forestry	Aquatic & Fisheries Science, BS Bioprocess Engineering, BS Biotechnology, BS Chemistry, BS Conservation Biology, BS Construction Management, BS Environmental Resources Engineering, BS Environmental Biology, BS Environmental Education and Interpretation, BS Environmental Health, BS Environmental Science, BA/BS Environmental Studies, BS Forest Ecosystem Science, BS Forest Health, BS Forest Resources Mgmt., BS Natural Resource Mgmt., BS Paper Engineering, BS Renewable Materials Science, BS Sustainable Energy Mgmt., BS Wildlife Science, BS
SUNY Institute of Technology at Utica-Rome	Nursing, BS
SUNY Morrisville	Automotive Technology, B.Tech
SUNY Potsdam	All parallel programs
SUNY Upstate Medical University	Cardiovascular Perfusion, BS Medical Imaging Radiography (X-ray), BS Medical Imaging Sciences/Ultrasound, BS Medical Technology, BS Medical Biotechnology, BS Physical Therapy, DPT Physician Assistant, MS Nursing, MS Radiation Therapy, BS Respiratory Therapy, BS

Examples of other colleges SUNY Canton graduates transfer to include:

- Rensselaer Polytechnic Institute
- Rochester Institute of Technology

- SUNY Binghamton
- SUNY Buffalo

Admission is not guaranteed in a 2+2 agreement. Students must meet specific criteria as outlined in the signed agreement between the two institutions, as is the case with us in receiving 1+1 candidates from community colleges. Those interested in further information regarding these programs should contact SUNY Canton's Office of Admissions.

SUNY Canton has also established articulation agreements with four-year colleges whereby a SUNY Canton student, upon completion of the associate degree and specified courses, can transfer to a participating 4+1 Masters program at a four-year college in a parallel program with one year remaining to complete the Masters degree program.

The colleges which participate with SUNY Canton in 4+1 programs are:

COLLEGE	SUNY CANTON BACHELOR DEGREE
Clarkson University	Management, BBA
Palmer College of Chiropractic, Iowa Palmer College of Chiropractic, Florida Palmer College of Chiropractic, California	Health and Fitness Promotion, B.Tech
University of Albany, College of Preparedness, Homeland Security, and Cybersecurity	Any Criminal Justice Bachelors program
University of Albany, School of Criminal Justice	Any Criminal Justice Bachelors program

SUNY Canton has also established articulation agreements with four-year colleges whereby a SUNY Canton student, upon completion of specified courses, can transfer to a participating 3+3 Masters program at a four-year college in a parallel program with three years remaining to complete the Masters degree program.

The colleges which participate with SUNY Canton in 3+3 programs are:

COLLEGE	SUNY CANTON BACHELOR DEGREE
University at Buffalo School of Law	Legal Studies, BS

SUNY Canton has also established articulation agreements with doctoral degree granting colleges whereby a SUNY Canton student, upon completion of the bachelor degree and specified courses, can transfer to a participating program at a doctoral degree granting college in a parallel program with five years remaining to complete the doctoral degree program.

The colleges which participate with SUNY Canton are:

COLLEGE	BACHELOR DEGREE CURRICULA
Ross University	Veterinary Technology, BS

1+3 ASSOCIATE DEGREE PROGRAMS

SUNY Canton has established a cooperative program agreement with another institution of higher education.

Arrangements have been made with a community college whereby students take one year at the first college and the final year at SUNY Canton, from which the associate degree is granted.

For further information concerning this program, please contact the Office of Admissions.

COLLEGE	CURRICULA
Corning	Game Design

ARTICULATION AGREEMENTS WITH BOCES & CTE CENTERS

Currently, SUNY Canton has signed agreements with the following BOCES Centers. Students are encouraged to speak to their guidance counselor to learn the specifics about the agreement for their particular program and BOCES Center. We are continuously adding to our list of participating centers, therefore, students should check with their counselor to determine whether a particular center has established an agreement since this printing.

Admissions

BOCES/CTE		SUNY Canton	
Center Name	Program	Curriculum	Course(s) & (Credits)
Broome-Tioga County BOCES	Automotive Technology	Automotive Tech., AAS	AUTO 101 (2), AUTO 111 (1)
	Building Trades/Plumbing Careers	Construction Technology Management, AAS	CONS 112 (3)
	Business Management & Computer Careers	Information Technology, B.Tech or Computer Information Systems, AAS	CITA 110 (2), CITA 163 (3)
	CAD & 3D Animation	Air Conditioning Engineering, AAS	SOET 116 (3)
	PC-LAN Technician I & II	Information Technology, B.Tech or Computer Information Systems, A.A.S.	CITA 163 (3), CITA 170 (3)
	Criminal Justice	Criminal Investigation, B.Tech; Criminal Justice, AAS; CJ: Law Enforcement Leadership, B.Tech; or Homeland Security, B.Tech	JUST 101 (3), Gen Elective (3)
	Engine Mechanics I & II	Automotive Technology, AAS	AUTO 101 (2), AUTO 111 (1) AUTO 104 (2)
	General Automotive Services I & II	Automotive Technology, AAS	AUTO 101 (2), AUTO 111 (1) AUTO 104 (2)
	PC-LAN Technician I & II	Cybersecurity, BS Information Technology (B.Tech) Or Computer Information Systems (A.A.S.)	CITA 170 (3), CITA 163 (3) CITA 170 (3)
Capital Region BOCES	Automotive Trades Technology I & II	Automotive Technology, AAS	AUTO 101 (2), AUTO 111 (1), AUTO 141 (3), AUTO 144 (1), AUTO 241 (2), AUTO 282 (1)
	Criminal Justice I & II	Criminal Justice, AAS Criminal Investigation, B.Tech Homeland Security, B.Tech Law Enforcement Leadership, B.Tech	JUST 101 (3) JUST 299 (3)
	Gaming and Animation Design I & II	Game Design and Development, BS	GAME 110 (3)
	HVAC/Heating and Refrigeration I & II	Air Conditioning Maintenance and Repair, Cert	ACHP 103 (7) ACHP 104 (7)
	Manufacturing and Machining Technology I & II	Mechanical Engineering Technology, AAS	MECH 121 (3)
	Welding and Metal Fabrication	Automotive Technology, AAS	AUTO 104 (2)
Cayuga-Onondaga BOCES	Automotive Technology I & II	Automotive Tech., AAS	AUTO 101 (2) , AUTO 111 (1)
	Criminal Justice	Criminal Justice, AAS Criminal Investigation, B.Tech Homeland Security, B.Tech Law Enforcement Leadership, B.Tech	JUST 101 (3)
	Early Childhood Education	Early Childhood, AS Early Childhood Care and Management, BBA	ECHD 121 (3)
	Outdoor Power Equipment and Powersports Technology, Years I & II	Powersports Maintenance & Repair, Cert.	MSPT 101 (3)

Admissions

BOCES/CTE		SUNY Canton	
Center Name	Program	Curriculum	Course(s) & (Credits)
Champlain Valley Educational Services (CV-TEC)	Animal Science/Veterinary Assistant	Veterinary Sci. Tech., AAS Veterinary Technology, BS	VSCT 103 (2)
	Auto Collision	Automotive Tech., AAS	AUTO 101 (2), AUTO 111 (1), AUTO 104 (2)
	Auto Technology	Automotive Tech., AAS	AUTO 101 (2), AUTO 111 (1)
	Digital Art & Design	Information Technology, BTech Computer Information Systems, AAS	CITA 111 (2) CITA 163 (3)
		Graphics and Multimedia Design, BTech	GMMD 102 (3) and GMMD 111 (3) or SOET 116 (2) or CITA 152 (3) or CITA 180 (4)
	Early Childhood	Early Childhood, AS Early Childhood Care and Management, BBA	ECHD 121 (3)
	Graphic Design & Communications	Graphic & Multimedia Design, B.Tech	GMMD 102 (3), GMMD 103 (3), GMMD 201 (3)
	Heavy Equipment	Automotive Tech., AAS	AUTO 101 (2), AUTO 111 (1), AUTO 102 (2)
	Marine Technology	Powersports Maintenance & Repair (Cert)	MSPT 101 (3), MSPT 130 (3)
	Security and Law Enforcement	Criminal Justice, AAS Criminal Investigation, BTech Homeland Security, BTech	JUST 299 (3)
	Small Gas Engines I & II	Powersports Maintenance & Repair, Cert	MSPT 101 (3)
Welding	Automotive Technology, AAS	AUTO 104 (2)	
Cold Hollow Career Center (Vermont)	Automotive Technology	Automotive Tech., AAS	AUTO 101 (2), AUTO 111 (1)
Delaware-Chenango-Madison-Otsego (DCMO) BOCES	Computer Repair & Networking Technician	Computer Information Systems, AAS Cybersecurity, BTech Information Technology, BTech	CITA 170 (3), CITA 220 (3) CITA 221 (1)
	Conservation & Equipment Technology	Automotive Technology, AAS	AUTO 104 (2)
	Criminal Justice/Police Science I & II	Criminal Justice, AAS Criminal Investigation, BTech Homeland Security, BTech Law Enforcement Leadership, BTech	JUST 101 (3)
	Early Childhood	Early Childhood, AS Early Childhood Care and Management, BBA	ECHD 121 (3)
	Visual Communications & Graphic Design	Graphic and Multimedia Design, BTech	GMMD 102 (3)
Dutchess County BOCES	Computer Hardware Technician Technology	Computer Information Systems, AAS Cybersecurity, BS Information Technology, BTech	CITA 170 (3)
	Automotive Mechanics	Automotive Tech., AAS	AUTO 101 (2), AUTO 111 (1)
	Early Childhood Education	Early Childhood, AS	ECHD 200 (3)

Admissions

BOCES/CTE		SUNY Canton	
Center Name	Program	Curriculum	Course(s) & (Credits)
Eastern Long Island Academy of Applied Technology/Eastern Suffolk BOCES	Art, Design & Visual Communications	Graphic & Multimedia Design, BTech	GMMD 102 (3), GMMD 103 (3)
	Automotive Technology	Automotive Tech., AAS	AUTO 101 (2), AUTO 111 (1)
	Certified Personal Trainer	Health and Fitness Promotion, BTech	HEFI 299 (3)
		Health and Fitness Promotion, BTech Physical Therapy Assistant, AAS	Rubric bonus pts.
	Computer Technology	Computer Information Systems, AAS Information Technology, BTech	CITA 170 (3) CITA 175 (1)
	Criminal Justice I & II	Criminal Justice, AAS Criminal Investigation, BTech Homeland Security, BTech Law Enforcement Leadership, BTech	JUST 101 (3) General Elective (3) (2) JUST 299 (6)
	Early Childhood	Early Childhood, AS	ECHD 121 (3), ECHD 200 (3)
		Early Childhood Care and Mgmt., BBA	ECHD 121 (3), General Elective (3)
	Engineering	Electrical Engineering Technology, AAS or BET	ELEC 165 (3)
	Heating, Ventilation & Air Conditioning (HVAC)	Heating & Plumbing Svc., Cert	ACHP 171 (7), ACHP 172 (8)
or		Air Conditioning Maint. & Repair, Cert	ACHP 103 (7), ACHP 104 (7)
Marine/Motorsports Technology	Powersports Maint. & Repair, Cert	MSPT 101 (3), MSPT 130 (2)	
Erie (1) BOCES	Auto Technician Training	Automotive Technology, AAS	AUTO 101 (2), AUTO 111 (1) AUTO 104 (2)
	Criminal Justice	Criminal Justice, AAS Criminal Investigation, BTech Homeland Security, BTech Law Enforcement Leadership, BTech	JUST 101 (3) General Elective (3)
	Cybersecurity and Networking	Cybersecurity, BS	CITA 165 (3) CITA 220/221 (4)
	Early Childhood	Early Childhood, AS	ECHD 121 (3), ECHD 200 (3)
		Early Childhood Care and Mgmt., BBA	ECHD 121 (2), General Elective (3)
	Electronics and Computer Technology	Electrical Engineering Technology AAS or BTech	ELEC 101 (3), ELEC 109 (1), ELEC 161 (2), ELEC 165 (3), ELEC 166 (1)
	Engineering and Robotics	Mechanical Engineering Technology AAS or BTech	L/L Program Elective (3)
	Health Careers	Health and Fitness Promotion, BTech	HEFI 299 (3)
Sports Science Careers	Health and Fitness Promotion, BTech	HEFI 299 (3)	
Franklin-Essex-Hamilton BOCES	Automotive Technology	Automotive Technology, AAS	AUTO 101 (2), AUTO 111 (1)
	Building Trades	Construction Technology Mgmt., AAS	CONS 112 (3)
	HVAC	Air Conditioning Engineering Technology, AAS Or Mechanical Engineering Technology, AAS	MECH 103 (3)
	HVAC	Heating and Plumbing Service	ACHP 171 (7)
	Early Childhood Education	Early Childhood, AS	ECHD 121 (3), ECHD 200 (3)
		Early Childhood Care and Mgmt., BBA	ECHD 121 (3), General Elective (3)
	New Visions Game Design & Prototyping	Game Design and Development, BS	GAME 130 (3)
	New Visions Computer Logic	Game Design and Development, BS	CITA 152 (3)
	New Visions Fundamentals of Game Design	Game Design and Development, BS	GAME 110 (3)
Welding	Automotive Technology, AAS	AUTO 104 (2)	
Genesee Valley BOCES	Automotive Technology	Automotive Technology, AAS	AUTO 101 (2), AUTO 111 (1)
	Precision Machining/Metal Trades I & II	Automotive Tech., AAS or Mech.Eng. Tech., AAS	AUTO 104 (2)

Admissions

BOCES/CTE		SUNY Canton	
Center Name	Program	Curriculum	Course(s) & (Credits)
Gerard R. Claps Career and Technical Center (GC Tech)	Automotive Technology	Automotive Technology, AAS	AUTO 101 (2), AUTO 111 (1)
Hamilton-Fulton-Montgomery BOCES	Automotive Technology	Automotive Technology, AAS	AUTO 101 (2), AUTO 111 (1)
	Digital Multimedia	Graphic and Multimedia Design, BTech	GMMD 101, GMMD 111 GMMD 201
	Veterinary Animal Science	Veterinary Science Technology, AAS Veterinary Technology, BS	VSCT 103 (2)
Herkimer-Fulton-Hamilton-Otsego (Herkimer) BOCES	Automotive Technology	Automotive Technology, AAS	AUTO 101 (2), AUTO 111 (1)
	Child and Family Services	Early Childhood, AS Early Childhood Care and Mgmt. BBA	ECHD 121 (3)
	Computer Technology	Computer Information Systems, AAS Information Technology, BTech	CITA 110 (3) CITA 220 (3)
	Computer Technology	Cybersecurity, BS	CITA 220 (3)
	Criminal Justice	Criminal Justice, AAS Criminal Investigation, BTech Homeland Security, BTech Law Enforcement Leadership, BTech	JUST 101 (3) JUST 299 (3)
	Criminal Justice	Cybersecurity, BS	CITA 165 (3)
	Outdoor Power Equipment	Powersports Maintenance & Repair, Cert	MSPT 101 (3)
Jefferson-Lewis BOCES	3D Modeling and Design I & II	Mechanical Engineering Technology, AAS	Program Elective (3)
		Mechanical Engineering Technology, BTech	CAD Elective (3)
	Automotive Technology	Automotive Technology, AAS	AUTO 101 (2), AUTO 111 (1)
	Criminal Justice 1 & 2	Criminal Invest., BTech; Criminal Just., AAS; Criminal Just.: Law Enforce. Leader., BTech; or Homeland Security, B.Tech	JUST 101 (3), Gen. Elective (3)
	Early Childhood, AS	Early Childhood, AS	ECHD 121 (3), ECHD 200 (3)
		Early Childhood Care and Mgmt., BBA	ECHD 121 (3), General Elective (3)
	Electronic & Computer Tech. I & II	Computer Information Systems, AAS or Information Technology, B.Tech	CITA 170 (3), CITA 175 (3)
		Cybersecurity, BS	CITA 170 (3), CITA 220 (3), CITA 221 (1)
	Engineering and Design	Mechanical Engineering Technology, AAS or BTech	Program Elective (3)
	Gas/Diesel Mechanics	Automotive Technology, AAS	AUTO 101 (2), AUTO 111 (1)
		Powersports Maintenance & Repair, Cert.	MSPT 101 (3)
	Motorcycle, Marine, & Power Sports	Powersports Maintenance & Repair, Cert.	MSPT 101 (3)
	Visual Communications I & II	Graphic & Multimedia Design, B.Tech	GMMD 102 (3), GMMD 201 (3)
Welding Technology	Automotive Technology, AAS	AUTO 104 (2)	
Madison-Oneida BOCES	Auto Body Repair	Automotive Technology, AAS	AUTO 104 (2)
	Automotive Technology	Automotive Technology, AAS	AUTO 101 (2), AUTO 111 (1)
	Criminal Justice	Criminal Justice, AAS	JUST 101 (3), Gen. Elective (3)
	Early Childhood	Early Childhood, AS Early Childhood Care and Mgmt., BBA	ECHD 121 (3)
	Graphic Design Technology	Graphic and Multi Media Design, BTech	GMMD 102 (3), GMMD 103 (3)
	Heavy Equipment Repair Tech. I & II	Automotive Technology, AAS	AUTO 101 (2), AUTO 111 (1)
	Information Technology Systems/CISCO Networking 1 & 2	Computer Information Systems, AAS; Cybersecurity, BS; or Information Technology, B.Tech	CITA 163 (3), CITA 220 (3), CITA 221 (1)
	Manufacturing Technology	Mechanical Engineering Technology, AAS Mechanical Engineering Technology, BTech	MECH 299 (3)
	Recreational and Outdoor Power Equipment	Powersport Maintenance and Repair	MSPT 101 (3)

Admissions

BOCES/CTE		SUNY Canton	
Center Name	Program	Curriculum	Course(s) & (Credits)
Monroe 2-Orleans (WEMOCO) BOCES	Advertising Design/Multimedia	Graphic and Multimedia Design, BS	GMMD 101 (3) GMMD 102 (3)
		Technological Communications, BS	TCOM 299 (3)
	Automotive Technology	Automotive Technology, AAS	AUTO 101 (2), AUTO 111 (1), AUTO 104 (2)
	Auto Body Collision and Repair Technology	Automotive Technology, AAS	AUTO 104 (2)
	Child and Family Development	Early Childhood, AS Early Childhood Care and Management, BBA	ECHD 121 (3)
	Computer Technology	Computer Information Systems, AAS Information Technology, BTech	CITA 170 (3)
	Engineering and Metal Fabrication/ Manufacturing	Mechanical Engineering Technology, AAS	MECH 121 (3)
	Health & Exercise Science	Health and Fitness Promotion, BTech	HEFI 299 (3)
Nassau BOCES	Digital Design/Graphic Communications	Graphic & Multimedia Design, B.Tech	GMMD 102 (3)
	Powersports	Powersports Performance & Repair, Cert.	General Elective (3)
Oneida-Herkimer- Madison BOCES	Advertising Design & Multimedia Productions	Graphic & Multimedia Design, BTech	GMMD 102 (3)
	Auto Body Repair; or Auto Technology	Automotive Technology, AAS	AUTO 101 (2), AUTO 111 (1)
	Combination Welding	Automotive Technology, AAS	AUTO 104 (2)
	Criminal Justice	Criminal Justice, AAS Criminal Investigation, BTech Homeland Security, BTech Law Enforcement Leadership, BTech	JUST 101 (3) JUST 299 (3)
	Early Childhood Education	Early Childhood, AS Early Childhood Care and Mgmt., BBA	ECHD 121 (3)
	Emerging Technologies: Computer Repair/ Networking/Cybersecurity	Computer Information Systems, AAS; or Information Technology, B.Tech	CITA 163 (3), CITA 170 (3), CITA 220 (3)
		Cybersecurity, BS	CITA 165 (3), CITA 170 (3), CITA 220 (3)
Outdoor Power Equipment	Powersports Maintenance & Repair (Cert)	MSPT 101 (3)	
Onondaga-Cortland- Madison BOCES	Automotive Technology	Automotive Tech., AAS	AUTO 101 (2), AUTO 111 (1)
	Computer Technology	Computer Information Syst., AAS Cybersecurity, BS Information Tech., BTech	CITA 163 (3), CITA 220 (3), CITA 221 (1)
	Early Childhood	Early Childhood, AS Early Childhood Care and Mgmt., BBA	ECHD 121 (3)
	Graphic Communications	Graphic & Multimedia Design, BTech	GMMD 102 (3), GMMD 299(3)
	Health Occupations/Nursing Aide	Individual Studies - Health, AAS	HLTH 200 (3)
	Media Marketing	Technological Communications, BS	TCOM 299 (3)
	Welding Technology	Automotive Technology, AAS	AUTO 104 (2)

Admissions

BOCES/CTE		SUNY Canton	
Center Name	Program	Curriculum	Course(s) & (Credits)
Orange-Ulster BOCES	Computer Networking	Computer Information Systems, AAS Information Technology, BTech	CITA 220 (3) CITA 221 (1)
	Computer Programming	Computer Information Systems, AAS Information Technology, BTech	CITA 152 (3) CITA 163 (3)
	Early Childhood Development and Care	Early Childhood, AS	ECHD 121 (3)
		Early Childhood Care and Mgmt., BBA	ECHD 121 (3), Gen Elective (3)
	Education and Management	Early Childhood, AS	ECHD 121 (3)
		Early Childhood Care and Mgmt., BBA	ECHD 121 (3), Gen Elective (3)
	Law Enforcement	Criminal Justice, AAS Criminal Investigation, BTech Homeland Security, BTech Law Enforcement Leadership, BTech	JUST 101 (3)
Welding	Automotive Technology, AAS	AUTO 104 (2)	
Otsego-Norther Catskills (ONC) BOCES	Automotive Service Center Technician	Automotive Technology, AAS	AUTO 101 (2), AUTO 111 (1)
	Engineering	Sustainable Energy Technology, BTech Civil and Environmental Engineering Technology, BTech Electrical Engineering Technology, BTech Mechanical Engineering Technology, BTech	ENGS 101 (2)
	Engineering	Industrial Technology Management, BTech	Program Elective (ENGS 101)(2)
	Equipment Operation and Repair	Automotive Technology, AAS	AUTO 101 (2), AUTO 111 (1)
	Health Occupations	Health and Fitness Promotion, BTech	HEFI 299 (3)
		Physical Therapist Assistant, AAS	Bonus Points (2)
	Visual Arts Communications Technology	Graphic and Multimedia Design, BTech	ARTS 101 (3), GMMD 102 (3)
Welding and Metal Fabrication	Automotive Technology, AAS	AUTO 104 (2)	
CiTi (Oswego County) BOCES	Automotive Technology	Automotive Technology, AAS	AUTO 101 (2), AUTO 111 (1)
	Cisco Networking	Computer Information Systems, AAS Cybersecurity, BS Information Technology, BTech	CITA 220 (3), CITA 221 (1)
	Computer Systems and Networking - A+ Computer Repair	Computer Information Systems, AAS Cybersecurity, BS Information Technology, BTech	CITA 170 (3), CITA 175 (1)
Questar III BOCES	Criminal Justice	Criminal Justice, AAS Criminal Investigation, BTech Homeland Security, BTech Law Enforcement Leadership, BTech	JUST 101 (3) JUST 299 (3)
Rockland BOCES	Auto Body - Mechanical	Automotive Technology, AAS	AUTO 241 (2), AUTO 282 (1)
	Auto Body - Non-Structural	Automotive Technology, AAS	AUTO 104 (2)
	Automotive Technology I & II	Automotive Technology, AAS	AUTO 101 (2), AUTO 111 (1)
	Criminal Justice I	Criminal Justice, AAS Criminal Investigation, BTech Homeland Security, BTech Law Enforcement Leadership, BTech	JUST 101
	Criminal Justice II	Criminal Justice, AAS Criminal Investigation, BTech Homeland Security, BTech Law Enforcement Leadership, BTech	JUST 230
	Welding and Fabrication I & II	Automotive Technology, AAS	AUTO 104 (2)

Admissions

BOCES/CTE		SUNY Canton	
Center Name	Program	Curriculum	Course(s) & (Credits)
St. Lawrence-Lewis BOCES	Automotive Technologies	Automotive Tech., AAS	AUTO 101 (2), AUTO 111 (1),
	Automotive Technology I & II	Powersports Maintenance & Repair, Cert	MSPT 101 (3)
	Criminal Justice I & II	Criminal Justice, AAS Criminal Investigation, BTech Criminal Justice: Law Enforcement Leadership, BTech Homeland Security, BTech	JUST 101 (3) General Elective (3)
	Education & Human Services	Early Childhood, AS	ECHD 121 (3), ECHD 200 (3)
		Early Childhood Care and Mgmt., BBA	ECHD 121 (3), General Elective (3)
	Environmental Technology / Natural Resources	Air Conditioning & Eng. Tech., AAS	SOET 116 (2)
	Graphic Communications	Graphic & Multimedia Design, BTech	GMMD 102 (3), GMMD 100/103 (3)
	Heating, Ventilation, AC & Refrigeration	Air Conditioning & Eng. Tech., AAS Mechanical Engineering Technology, AAS	MECH 103 (3)
	Innovations in Science & Technology, I-IV	Mechanical Engineering Technology, AAS	ENGS 101 (3), ENGS 294 (1)
	Metalworking Technologies	Automotive Technology, AAS	AUTO 104 (2)
Software Development & Business Design	Cybersecurity, BS	CITA 170 (3)	
Sullivan BOCES	Public Safety	Criminal Justice, AAS Criminal Investigation, BTech Homeland Security, BTech Law Enforcement Leadership, BTech	JUST 101 (3)
Tompkins-Seneca- Tioga (TST) BOCES	Auto Body	Automotive Technology, AAS	AUTO 104 (2)
	Automotive Service	Automotive Technology, AAS	AUTO 101 (2), AUTO 111 (1)
	Computer Technology	Computer Information Systems, AAS Information Technology, BTech	CITA 163 (3), CITA 170 (3) CITA 220 (3), CITA 221 (1)
	Computer Technology	Cybersecurity, BS	CITA 170 (3), CITA 220 (3) CITA 221 (1)
	Criminal Justice I & II	Criminal Justice, AAS Criminal Investigation, BTech Homeland Security, BTech Law Enforcement Leadership, BTech	JUST 101 (3)
	Early Childhood	Early Childhood, AS Early Childhood Care and Mgmt., BBA	ECHD 121 (3)
	Exercise Science	Health and Fitness Promotion, BTech	HEFI 299 (3)
	Heavy Equipment	Automotive Technology, AAS	AUTO 104 (2)
	Welding	Automotive Technology, AAS	AUTO 104 (2)
Washington-Saratoga-Warren-Hamilton-Essex (WSWHE) BOCES	Auto Body Repair	Automotive Technology, AAS	AUTO 101 (2), AUTO 111 (1)
	Automotive Technology	Automotive Technology, AAS	AUTO 101 (2), AUTO 111 (1)
	Early Childhood Education	Early Childhood, AS	ECHD 121 (3), ECHD 200 (3)
	Heavy Equipment Maintenance and Operation	Automotive Technology, AAS	AUTO 101 (2), AUTO 102 (2), AUTO 111 (1)
	Power Sports Technology	Powersports Maintenance & Repair, Cert.	MSPT 101 (3)
	Welding	Automotive Technology, AAS	AUTO 104 (2)

BOCES/CTE		SUNY Canton	
Center Name	Program	Curriculum	Course(s) & (Credits)
Wayne-Finger Lakes BOCES	AME Academy	Automotive Technology, AAS	AUTO 101/111(3), AUTO 104 (2)
		General Technology, AAS	SOET 116 (2)
		Mechanical Technology, AAS or Mechanical Engineering Technology, BTech	SOET 116 (3) MECH 121 (3)
	Auto Body Repair	Automotive Technology, AAS	AUTO 104 (2)
	Automotive Technology	Automotive Technology, AAS	AUTO 101 (2), AUTO 111 (3)
	Computer Technologies	Computer Information Systems, AAS Cybersecurity, BS Game Design & Development, BTech Information Technology, B.Tech	CITA 152 (3), CITA 170 (3), CITA 220 (3), CITA 221 (1),
	Criminal Justice	Criminal Justice, AAS Criminal Investigation, BTech Homeland Security, BTech Law Enforcement Leadership, BTech	JUST 101 (3), JUST 299 (3)
Western Suffolk BOCES	Automotive Technology	Automotive Tech., AAS	AUTO 101 (2) , AUTO 111 (1)
	Certified Personal Trainer	Health and Fitness Promotion, BTech	(2) L/L Electives (6)
	Computer Game Design	Game Design and Development, BS	GAME 110 (3)
	Computer Networking & Repair/Technical Electronics (Year 1 & 2)	Computer Information Systems, AAS; or Cybersecurity, BS or Information Technology, BTech	CITA 163 (3), CITA 170 (3)
	Criminal Justice	Criminal Justice, AAS Criminal Investigation, BTech CJ: Law Enforcement Leadership, BTech Homeland Security, BTech	JUST 101 (3), General Elective (3)
	Early Childhood Education	Early Childhood, AS	ECHD 121 (3), ECHD 200 (3)
	HVAC I & II	Mechanical Engineering Technology, AAS or BTech	MECH 103 (3)
	Physical Therapy Assistant	Physical Therapy Assistant, AAS	3 pts on rubric
	Welding	Automotive Technology, AAS	AUTO 104 (2)

ARTICULATION AGREEMENTS WITH HIGH SCHOOLS

Currently, SUNY Canton has signed agreements with the following High Schools. Students are encouraged to speak to their guidance counselor to learn the specifics about the agreement for their particular program or courses. We are continuously adding to our list of participating schools, therefore, students should check with their counselor to determine whether the high school has established an agreement since this printing.

High School		SUNY Canton	
Center Name	Program	Curriculum	Course(s) & (Credits)
Abraham Lincoln High School	Veterinary Science	Veterinary Science Technology, AAS Or Veterinary Technology, BS	VSCT 103 (2)
Chateaugay	CASE	Veterinary Science Technology, AAS or Veterinary Technology, BS	VSCT 103 (2)
Public Service Leadership Academy at Fowler High School	Law Enforcement	Criminal Justice, AAS Criminal Investigation, BTech Homeland Security, BTech Law Enforcement Leadership, BTech	JUST 299 (3) JUST 299 (3)
William Floyd H.S.	Powersport and Small Vehicle Repair R.A.C.E. Program	Powersports Maintenance & Repair, Cert.	MSPT 101 (3)

ARTICULATION AGREEMENTS WITH INTERNATIONAL COLLEGES

Currently, SUNY Canton has signed agreements with the following international colleges.

INTERNATIONAL PARTNER COLLEGE	DEGREE PROGRAM
<i>Humber College, ITAL Sustainable Energy & Building Technology (Advanced Diploma)</i>	Alternate & Renewable Energy BTech
<i>Sri Lanka International Institute of Health Sciences,</i>	Physical Thearapist Assistant, AAS

CONCURRENT ADMISSIONS (CON AP)

The Concurrent Admissions Program (ConAP) is a partnership between the Army Recruiting Command and over 1,900 participating colleges to mutually advance the goals of lifelong learning and postsecondary education for Future Soldiers. The Concurrent Admissions Program (CON AP) is conducted by colleges and universities that are members of Servicemembers Opportunity Colleges (SOC). Concurrent with their enlistment in the Army, new soldiers are encouraged to apply for admission to SUNY Canton. Upon meeting satisfactory criteria for full or provisional admission, the soldier will be allowed to defer admission until completion of military service.

After completing a two-, three-, or four-year enlistment, the new veteran will be encouraged to enroll at SUNY Canton. This program also applies to soldiers enlisting in the Army Reserve.

Those interested in the CON AP program are encouraged to contact the SUNY Canton office of Admissions.

AIR FORCE RESERVE OFFICER TRAINING CORPS (AFROTC)

AIR, SPACE, & CYBERSPACE STUDIES

Air Force Reserve Officer Training Corps (AFROTC) combines college study with military leadership, discipline, and training to produce officers and leaders for the United States Air Force and Space Force. Upon graduation with at least a bachelor's degree, students are commissioned as second lieutenants in the active duty Air Force or Space Force. A commission is an appointment to a military officer by the President of the United States.

CURRICULUM

AFROTC is normally a four-year program divided into two parts, the General Military Course (GMC) for freshmen and sophomores, and the Professional Officer Course (POC) for juniors and seniors. All students also complete Leadership Laboratory (LLAB) each semester. Students are allowed to enroll as late as the fall of their sophomore year and would enroll in both the freshman and sophomore classes.

GENERAL MILITARY COURSE (GMC)

The GMC involves a one credit hour course and a two-hour Leadership Laboratory each semester. The freshman curriculum introduces the Air Force mission and organization, covers the basics of military customs and courtesies, military correspondence styles, and drill and ceremonies. As a foundational course, it also provides a historical perspective such as lessons on war and US military, AF operations, principles of war, and airpower. The sophomore curriculum picks up where the freshmen curriculum left off and focuses on the history of air power, starting with the Wright Brothers' first flight at Kitty Hawk, and traces the evolution of aircraft and Air Force missions throughout WWI, WWII, Korea, Vietnam, the Gulf War, and recent operations around the world such as Afghanistan and Iraq.

FIELD TRAINING

After successful completion of the GMC, students are normally scheduled to attend Field Training during the summer between the sophomore and junior year. Field Training is an intense, two-week, hands-on leadership challenge. Cadets are evaluated on their leadership ability, mastery of military customs and courtesies, and drill and ceremonies. Cadets are exposed to a variety of challenges which forces them to work as a team, learn to critically evaluate situations, and perform under stress. Field Training is often a life-changing experience that builds self-confidence and fine-tunes leadership skills.

PROFESSIONAL OFFICER COURSE (POC)

After successfully completing Field Training, cadets are sworn in to the POC and are enlisted in the inactive reserves while they complete their final two years of college. The junior curriculum focuses on an in-depth study of leadership and management concepts. The senior curriculum continues to emphasize leadership, but introduces national security concepts and issues, cultural awareness, military law, the law of armed conflict, and preparation for entrance into the active duty Air Force. POC cadets are placed in leadership positions and are charged with running the cadet wing that is modeled after the organizational structure of the active duty Air Force. Leadership Laboratory (LLAB)

LEADERSHIP LABORATORY (LLAB)

LLAB is a hands-on leadership training program. During LLAB, cadets are instructed in skills they will need for a thriving military career. POC members are responsible for planning and executing LLAB, as well as other extracurricular activities like formal dinners and awards ceremonies. Cadets are challenged in the classroom, and their jobs in the cadet wing require them to put the theories into practice. Additionally, cadets must participate in

2 hours of Physical Training (PT) per week during each semester.

SCHOLARSHIPS

Merit-based tuition scholarships are available to AFROTC cadets, however they are not required to join the program. Scholarships vary from \$18,000 per year to full tuition. Below is a list of current scholarships.

- TYPE 1 — Pays full tuition and authorized fees at any public or private institution
- TYPE 2 — Pays up to \$18,000 per year (or \$9,000 per semester) towards tuition and authorized fees at any public or private institution
- TYPE 7 - Pays full in-state tuition rate and authorized fees at in-state public institutions (this can for all of SUNY Canton's tuition and fees)

All scholarships include the following:
Monthly Stipend during the academic year
Book allowance

For more details, contact the Air, Space, & Cyberspace Studies Department at det536af@clarkson.edu or 315-269-7989.

ARMY RESERVE OFFICER TRAINING CORPS (AROTC) MILITARY SCIENCE

Army ROTC is a college program that produces Officers for the US Army. This program is available to SUNY Canton students by cross enrolling in the classes offered at Clarkson University. Students enroll in a series of classes and labs that teach problem solving, leadership theory, and decision making in a military context. There is a physical fitness component to the program and students are expected to meet fitness standards to complete the program. The goal of the department is to develop leadership and managerial ability, while preparing students to become Officers in the U.S. Army. An active extracurricular program provides many opportunities to participate in adventure training, intramural

sports, and cultural immersion missions. Qualified students can compete for an opportunity to attend the Army Airborne School or Air Assault School. Army ROTC allows students flexibility to include ROTC in their various courses of study.

BASIC COURSE (Freshman and Sophomore Years)

The Basic Course teaches rudimentary soldier skills and knowledge and provides students with sufficient military background to make informed decisions about continuing on the path to becoming an Army Officer. It also gives the Army ROTC instructors the ability to access the future potential of enrolled students. Most enrolled students in the Basic Course incur no military obligation and can withdraw at any time. Students who do decide to take the next step may compete for scholarships or pursue a non scholarship contract. All contracted Cadets receive a monthly stipend for participating in the class and incur a service obligation when they graduate.

PRIOR SERVICE/VETERANS

The Basic Course is normally a prerequisite for the Advanced Course; however, prior service personnel or members of the Reserve Forces who have completed basic training may enroll in the Advanced Course as juniors as long as they have achieved junior status.

BASIC-CAMP

Other interested students may qualify for the Advanced Course by attending a four-week Basic camp. Students applying through this route normally attend Basic Camp between the sophomore and junior years. This program is available to students who have at least two academic years remaining in their degree program, but did not participate in Army ROTC during some or all of their first two years of college.

ADVANCED COURSE (Junior and Senior Years)

The Advanced Course places increased emphasis on tactical, technical, and leadership skills to prepare students for the Advanced Camp, normally attended the summer between the junior and senior years. The final year is spent on topics in military officership, and gives the students the opportunity to hold Battalion level staff positions.

SCHOLARSHIPS

The Army ROTC program has a limited number of scholarships available to qualified students. These are merit based scholarships and normally offered to students who are enrolled in the program. They are awarded based on merit and academic potential, not on need. Students can compete for three-year scholarships during their freshman year and two-year scholarships during their sophomore year.

General information about ROTC can be found at www.armyrotc.com and information about the program at SUNY Canton can be found at www.clarkson.edu/armyrotc

To enroll or get more information contact the enrollment officer at 315 265-2180 or armyrotc@clarkson.edu.

Tuition and Fees

The following are estimated costs of attending SUNY Canton for 2020-21.
All costs are subject to change without notice.

	Fall 2020 SEMESTER	Spring 2021 SEMESTER	TOTAL
TUITION			
NYS Resident	3,685.00	3,685.00	7,370.00
Excelsior Students	3,235.00	3,235.00	6,470.00
Out-of-State Resident (Bachelor)	8,640.00	8,640.00	17,280.00
Out-of-State Resident (Associate)	5,650.00	5,650.00	11,300.00
Out-of-State Residents in Online Programs All Degrees	4,390.00	4,390.00	8,640.00
COMPREHENSIVE STUDENT FEE*			
First Time Students.....	937.50	937.50	1,755.00
Continuing Students.....	817.50	817.50	1,635.00
ADDITIONAL FEES			
Transcript Fee (billed each semester)	5.00	5.00	10.00
Graduation Fee (<i>graduating students only</i>)	—	25.00	25.00
Parking & Vehicle Registration Fee	188.60	—	188.60
<i>(includes NYS sales tax, full year charged in Fall semester)</i>			
Accident & Sickness Insurance	1,004.00	1,004.00	2,008.00
International Health Insurance	657.45	919.83	1,577.28
<i>(foreign students only)</i>			
MEALS**			
Smith, Mohawk, Heritage, Rushton.....	2,725.00	2,725.00	5,450.00
<i>(10 meals/wk & \$525 Campus Cash, 14 meals/wk & \$350 Campus Cash, Unlimited meals and \$225 Campus Cash)</i>			
Kennedy Hall.....	2,100.00	2,100.00	4,200.00
<i>(7 meals per week & \$600 Campus Cash)</i>			
Commuter Meal Plan – <i>optional</i>	725.00	725.00	1,450.00
<i>(5 meals per week)</i>			
HOUSING			
Smith, Mohawk, Heritage, and Rushton Residence Halls			
Double Room (standard)	4,050.00	4,050.00	8,100.00
Triple Room***	3,550.00	3,550.00	7,100.00
Single Room	5,875.00	5,875.00	11,750.00
Kennedy Hall	5,300.00	5,300.00	10,600.00
Laundry Fee	55.00	55.00	110.00

* See description below. ** Resident students are required to purchase the Meal Plan.

***Students housed in triple rooms pay the standard double room rate and are credited the prorated difference between the double rate and the triple rate three times throughout the semester. If the third roommate leaves the room the remaining occupants will no longer receive the triple room credit.

FEES

COMPREHENSIVE STUDENT FEE

The comprehensive Student Fee is charged to all degree students and consists of the following fees:

College Fee - (mandatory) Fee required by all State-operated campuses.

Athletic Fee – (mandatory) Supports all athletic programs.

Health Fee – (mandatory) Supports the campus health Center. Students can use the health center for minor illness/injuries with no additional charge.

Technology Fee – (mandatory) Supports the campus technology infrastructure and continued improvement of computer systems, classroom technology, wireless connections and technical help.

Student Activity Fee – (mandatory) supports a wide range of activities that take place on campus for educational and entertainment purposes.

Transcript Fee – (mandatory) Covers cost of all transcript requests for the student now and in the future.

Alumni Fee - (optional) Supports the College Alumni Association. Alumni services include: scholarships, gatherings, alumni weekend, and the alumni newsletter. (Instructions for waiver of fee on college billing instructions.)

Fitness Fee – (optional) Provides unlimited use of the campus fitness center. (Instructions for waiver of fee on college billing instructions.)

LATE REGISTRATION FEE

Should a student fail to register by the appropriate deadline, a \$50 late registration fee will be assessed.

LATE PAYMENT FEE

Should a student fail to process a bill by the appropriate deadline, a \$40 late payment fee will be assessed. This includes

Tuition and Fees

those checks used as payment of fees on or before a registration but returned by the bank as unpaid after registration day. A \$20 charge will be assessed for each check used for payment of fees which has been returned from a bank as unpaid.

BILL PAYMENT

Your student bill is required to be paid by the bill due date indicated on the semester bill. Bills received after these dates will be subject to a \$40 late payment fee and cancellation of class schedule and room assignment. If you wish to request a special deferment for payment, you should make arrangements with the Student Service Center **BEFORE** the bill due date. All deferments must be paid in full by the end of the semester for which it was made. Students not meeting the terms of their deferment may be subject to penalty during the semester. Penalties include, holds on accounts for transcripts, holds on meal plans and Roo Express credit, and possible suspension.

FINANCIAL AID REFUNDS

Refunds for those students who have a credit on their account from financial aid will begin with the fourth week after school begins. Refunds will be forwarded to BankMobile to whatever refund option the student has chosen with their BankMobile account. Additional information for new students on the BankMobile accounts will be sent prior to the start of school. Students may check their account statuses on their UCanWeb account.

DROP/ADD FEE

A fee of \$20 will be assessed for each Drop/Add Form processed beginning the second week of classes. Exceptions to this fee are noted in the Student Handbook.

IDENTIFICATION CARD REPLACEMENT CHARGE

An original identification card is pro-

vided at no charge. A \$15 charge will be assessed to replace the card.

ACCIDENT & SICKNESS INSURANCE

Medical insurance coverage is mandatory for full time students not covered by other insurance but **OPTIONAL** for part-time students. If your enrollment status changes from full-time to part-time (for any reason), you are not charged automatically for domestic health insurance. As a part-time student, you must request coverage if you want it, in writing, at the Student Service Center. All full-time students are charged for health insurance unless a waiver is submitted online to the insurance company before the end of the second week of school. Waivers must be completed each semester as part of the tuition billing process.

International students attending the State University of NY are required to purchase the International Student Insurance. The plan utilizes the Campus Health Center as the primary care provider, meaning that students should use the Health Center first when possible to avoid large deductible charges.

TUITION/FEE REDUCTIONS DUE TO WITHDRAWAL

TUITION

Semester charges reduced on a percentage basis as follows:

<i>Cancellation During</i>	<i>Reduction</i>
First week	100%
Second week	70%
Third week	50%
Fourth week	30%
Fifth week	0%

Full Semester Courses: The first that day that classes are offered, as scheduled by the campus, shall be considered the first day of the semester. The first week of classes for purposes of this section, shall be deemed to have ended when seven calendar days, including the first day of scheduled classes, have elapsed. This applies to all full-time

students even if they have partial semester courses.

Partial Semester Courses, including On-line (Part time Students only): The charge reduction period shall commence with that course's start date. Charge reductions will be pro-rated, based on the tables below: (This applies to part-time students only)

<i>7 week classes</i>	<i>Reduction</i>
First week	100%
Second week	65%
Third week	0%
<i>3 week classes</i>	
First & second Day	100%
Rest of first week	65%
Second week	0%

FEES

The following fees are non-refundable:

- College Fee, Orientation Fee, Alumni Fee, Placement Fee, International Health Insurance, Vehicle Registration Fee.

ACCIDENT AND SICKNESS INSURANCE

Except for medical withdrawal due to a covered injury or sickness, any student withdrawing from school during the first 31 days of the period for which coverage is purchased shall not be covered under the policy and a full refund of the premium will be made. After such 31 days, all students will remain covered under the policy for the full period for which premium has been paid, and no refund will be allowed.

Insured persons entering the Armed Forces of any country will not be covered under the policy as of the date of such entry. A pro-rata refund of premium will be made for such person upon written request received by the company within 90 days of withdrawal from school.

MEAL TICKET REFUND

Refunds will only be allowed for withdrawal from school or academic dismissal.

Tuition and Fees

Refunds due to the removal of a student from the residence hall for academic reasons is at the discretion of College Association management. Refunds will not be allowed for disciplinary reasons.

The refund will be based on the point value of the meal plan less a \$25 fee for processing and administration charges when the refund is approved and the check is drawn. The refund will be based on the official date of withdrawal or dismissal as recorded by the Student Service Center.

Students who advance register, but who do not subsequently attend the College, will receive a full refund of their entire dining meal plan payment. Transfers of funds from one student's account to that of another student are not permitted.

HOUSING: RESIDENCE HALL

Upon official withdrawal from the College, residence hall reductions are on a percentage basis as follows:

<i>Cancellation During</i>	<i>Reduction</i>
First week	100%
Second week	70%
Third week	50%
Fourth week	30%
Fifth week	0%

Residence hall opening day shall be considered the first day of the semester. Seven calendar days later will be deemed the end of the first week for refund purposes.

LAUNDRY FEE

Non-refundable.

TITLE IV REFUND POLICY

Under Federal Financial Aid rules, the college recalculates Federal* financial aid eligibility for students who withdraw, officially or unofficially are dismissed or take a leave of absence prior to completing 60% of a semester. Recalculation is based on the percent of earned aid using the following formula:

Percent earned = Number of days completed up to the withdrawal date**/total days in the semester (including weekends and breaks under five days).

Federal financial aid is returned to the federal government based on the percent of unearned aid using the following formula:

Aid to be returned = (100% – percent earned) X the amount of aid disbursed toward institutional charges.

When aid is returned, the student may still owe a balance to the College. The student should contact the Student Service Center to make arrangements to pay the balance. Also note that students who cease attendance but do not officially withdraw will be considered an unofficial withdrawal and a recalculation of federal aid eligibility will be done assuming completion of only

50% of the semester unless a last date of attendance is known.

** Federal financial aid includes Federal Pell Grant, SEOG Grant, Direct Student Loan—subsidized and unsubsidized, and the Direct PLUS Loan. Students who cease attendance and do not officially withdraw will be considered an unofficial withdrawal and a recalculation of federal aid eligibility will be done using the 50% date or the actual last date of attendance whichever is later.*

***Withdrawal Date is defined as the date the student began the withdrawal process, or the midpoint of the semester or last date of attendance for a student who leaves without notifying the College, whichever is later.*

TIME PAYMENT PLAN

To set up monthly payments, families can do so through CashNet. This plan allows you to pay the balance of your semester bill over a 4 or 5 month period depending on when the plan is set up. There will be an initial set-up fee and a fee for credit card use. Instructions will be included in the billing instructions and families can use the links on our billing screens on your UCanWeb account.



Financial Assistance

SUNY Canton offers a comprehensive program of financial assistance to help students and their families meet the costs of a quality college education. Approximately 96 percent of incoming freshman attending SUNY Canton receive some form of financial assistance.

The following information is provided as a general reference to financial aid at SUNY Canton and is based on statutes, regulations and policies current at the time this Academic Catalog was prepared for publication. These descriptions are, however, subject to change. Thus, it is recommended that candidates for admission and current students contact the Financial Aid Office, Miller Campus Center, SUNY Canton, 34 Cornell Dr., Canton, New York 13617, telephone (315) 386-7616 or toll free at (800) 388-7123 or email at fnaid@canton.edu.

FINANCIAL AID OFFICE - ONE HOP SHOP

The Financial Aid Office in the One Hop Shop at SUNY Canton exists to provide personal assistance to students and parents on a one-to-one basis from the time of initial inquiry until the completion of a student's program of study. Every effort is made to insure that qualified and deserving students are not denied the benefits of a SUNY Canton education on the sole basis of financial need. Financial aid at SUNY Canton is awarded based on financial need and merit, without regard to sex, race, age, color, creed, national origin, disability or handicap.

FINANCIAL AID OFFICE MISSION

The mission of the Financial Aid Office is to:

- Provide personal assistance regarding the financial aid process to students and families on a one-to-one basis.
- Provide education to students and families on all financial aid options.

- Develop administrative processes designed to provide the best customer service and efficiency for students and families.
- Strive to ensure, to the extent possible, that students are not denied the benefits of a SUNY Canton education on the sole basis of need.
- Maintain a caring, highly knowledgeable staff to assist in this mission.

STUDENT/PARENT RESPONSIBILITY

The federal financial aid system is based on the belief that it is first the family's responsibility to contribute to the costs of the student's college education, to the extent that the family is financially able. Determining what the family can contribute is accomplished by having the student complete the Free Application for Federal Student Aid (FAFSA) which assesses the family income and assets.

If the determination is made that the family resources are not sufficient to meet the total cost of education, SUNY Canton may help meet the student's need through some combination of its own aid funds and those funds available from other public or private sources. If it is determined that the family's resources are sufficient to meet the yearly college costs, or additional help is needed, the student, although ineligible for regular forms of aid, may qualify for some non-need-based assistance. Non-need-based aid and alternative methods of meeting college costs will be discussed later in this section.

INDEPENDENT/DEPENDENT STATUS DETERMINATION

The criteria that is used to determine whether a student is considered dependent or independent differs for federal and state aid. If a student meets the federal indepen-

ency criteria, then federal aid eligibility is based on the student's (and spouse's, if married) income from two years prior. If a student does not meet the federal independence criteria, then his/her federal aid eligibility is based on the student's and the parent's income from two years prior. Other factors, such as assets, family size and number of family members in college figure into the federal aid eligibility.

SUNY Canton adheres very closely to the federally-established independence criteria. We do recognize, however, that there are special cases in which students may not meet the federal independence criteria but may have extenuating circumstances. These students should contact the Financial Aid Office for further guidance.

Independence criteria for state aid is established in NYS law. The New York Higher Education Services Corporation (NYHESC) in Albany is the agency responsible for determining the student's dependency status for state aid.

Students over the age of 35 are considered independent for state aid. For students under the age of 35, the state criteria considers whether the student lived/lives with the parent(s), whether the student has been claimed as a tax exemption by the parent(s), and whether or not the student has/will receive financial support from the parent(s) in recent years.

Questions regarding dependency status for federal and/or state aid should be directed to the Student Service Center. Students should be ready to document the information they provide on the aid application concerning their dependency status.

TYPES AND SOURCES OF AID

There are three major types of financial aid: 1) Grants and scholarships, also known as gift aid because this type of aid, in almost all cases, does not have to be repaid; 2) loans, which must be repaid but typically not until the student has left school or dropped below half-time status; and

3) part-time employment, through which the student earns a wage by working on-campus.

There are four major sources of aid: 1) the federal government provides the largest source of funding; 2) the State, most states, including New York, sponsor state grant programs for their residents; and 3) the College itself may be a source of aid, or with scholarship or loan funds that the College has raised. 4) private sources- there are several scholarship and loan programs available to assist students. Refer to the financial aid page of www.canton.edu for more information.

APPLYING FOR FINANCIAL AID

Students applying for financial aid at SUNY Canton should be aware of the following application process:

- Each student must complete the following, as soon after October 1st of the year prior to anticipated enrollment: 1) the Free Application for Federal Student Aid (FAFSA), and 2) the New York State TAP Grant application. Both applications may be completed online at www.fafsa.gov. For an electronic signature you and your parents should will need to create an FSA ID at <https://studentaid.ed.gov/sa/fafsa/filling-out/fsaid>. You can do this at any time before filing the FAFSA.
- Out-of-state students should check with their state's higher education agency to determine if they need to complete a separate application to be considered for a grant from their home state.
- Aid eligibility is based on income from the tax year two years prior to the FAFSA year. Therefore, if applying for aid for the 2020-21 year, a family may be asked for signed copies of the 2018 income tax forms. Students and parents can link directly to the IRS database using the IRS Income Data Retrieval process for the tax information when completing the FAFSA.

—Students should research the availability of private scholarships. Visiting a high school guidance office, local library, or the Internet can provide free access to information concerning private scholarships.

—SUNY Canton funds a number of scholarships for freshmen and returning students. Freshmen who meet basic requirements will receive application instructions from Admissions and the Scholarship Committee. All admitted students with a scholarship application will be considered for scholarship funding and contacted by the Office of Admissions or Development Office if awarded a scholarship. Students will also be made aware of their scholarship application deadline. A listing of current College Foundation Scholarships is available at the end of this section. Questions concerning Scholarships should be directed to the scholarship@canton.edu.

—Any outside financial aid awards that a student receives must be included in the award package. If aid adjustments are necessary loans will be reduced before grand aid or work in most cases.

DEADLINES

Application deadlines vary from program to program. Since funding from the federal government is limited for the campus-based aid programs (Federal Work-Study, and Federal SEOG), these funds are awarded on a first-come, first-served basis, until funds are exhausted. To be considered for these funds, students should submit a FAFSA online at www.fafsa.gov by January 1st. It will take one to three weeks for the processing agency to process the student's application and forward it to the Student Service Center. *We strongly encourage all students to complete and submit their FAFSA before **January 1st** of each award year. Our priority deadline is March 1st.*

BASIC ELIGIBILITY REQUIREMENTS

All students applying for federal financial aid must meet the following basic requirements:

1. You must be a U.S. citizen or eligible non-citizen (have an alien registration number).
2. You must have a high school diploma or its equivalent (ex., GED). Home-schooled students must have officially completed their program.
3. You must be enrolled as a regular student in an eligible degree program.
4. You must not be in default of any previous student loans or owe a repayment on federal grants.
5. You must maintain satisfactory academic progress in your degree program.
6. All male students must register with Selective Service or be exempt from doing so.
7. You must not have been convicted of possession or sale of illegal drugs for an offense that occurred while you were receiving federal financial aid. More information regarding this requirement is available at the Financial Aid page of www.canton.edu.

NOTIFICATION OF ELIGIBILITY

Applications are reviewed by a financial aid advisor. In some cases, the Financial Aid Office will request additional information from the student and family (for example, we may request copies of income tax transcripts or other income verification). The student should respond immediately to any requests for information that he/she receives. Once the Financial Aid Office has received all necessary forms and documents from the student, the student's file is considered complete and ready for notification of aid eligibility.

Students are notified of their financial aid package availability by email and letter.

Awards may be accepted or declined online on their student UCanWeb account. Please read instructions and Terms & Conditions carefully.

The Financial Aid Office will begin award notifications as soon as it becomes possible. The process continues as applications are received.

SPECIAL CIRCUMSTANCES

If you feel that you have a special circumstance that needs to be taken into consideration for financial aid eligibility, we may be able to recalculate your eligibility within federal guidelines. You may download and complete a **Special Conditions Form** at www.canton.edu. Click on Financial Aid, then on Forms and Worksheets. If your special circumstance involves your dependency status for the FAFSA, you may also find the Request for Independence Consideration in the same area.

AVAILABLE FEDERAL PROGRAMS

Students are automatically applying for these aid programs when they complete the Free Application for Federal Student Aid (FAFSA).

FEDERAL PELL GRANTS

The Pell Grant Program is an entitlement program. It is also a grant program, i.e., no repayment is required. Eligibility and award amount are based on need and determined by the U.S. Department of Education. The Pell Grant may be used for tuition, fees, books, and living expenses. All Pell recipients have a lifetime eligibility limit of 12 full-time semesters. As of 7/1/09 any student whose parent/legal guardian died in Iraq or Afghanistan will be entitled to the full Pell award.

Currently, awards for eligible students can be as much as \$6345.00. The amount of the award will be affected by costs of attendance and full- or part-time enrollment status. The Pell Grant does not duplicate the State awards.

Pell recipients must continue to make satisfactory academic progress in the program in which they are enrolled. Students who possess a bachelor's degree are ineligible for a Pell Grant.

Students must file the FAFSA to determine Pell Grant eligibility.

FEDERAL SUPPLEMENTAL EDUCATIONAL OPPORTUNITY GRANTS (FSEOG)

The applicant must have financial need and be eligible for a Pell Grant. FSEOG, like PELL, is a grant program, i.e., no repayment is required. Students who possess a bachelor's degree are ineligible for FSEOG.

Currently, typical annual FSEOG awards range from \$200 to \$1,500 depending on funding. Recipients must continue to make satisfactory academic progress in the program in which they are enrolled.

FEDERAL PERKINS STUDENT LOAN

Please note that Congress ended the Perkins Loan Program as of September 20, 2017.

FEDERAL WORK-STUDY PROGRAM

Through the FWS Program, the College makes employment reasonably available to eligible students who have demonstrated that they are in need of financial assistance. In the event that more students are eligible for FWS than there are funds available, preference is given to students on a first-come, first-served basis. At least 7% of funds must be used for community service jobs both on and off campus.

The starting salary is usually set at minimum wage. Currently, a typical annual award is worth \$2,000 which means that the student would work approximately five - six hours per week to earn his/her full award.

FWS recipients must continue to make satisfactory academic progress in the program in which they are enrolled.

FEDERAL DIRECT STAFFORD STUDENT LOAN (SUBSIDIZED)

This is a program that allows students to borrow funds from the federal government. The first step in applying for a Stafford Loan is to complete the Free Application for Federal Student Aid (FAFSA) since students applying for a Stafford Loan need proof that they have first applied for the federal PELL Grant. The College will notify the student of his/her eligibility for a Stafford Loan on the award notice. *(Please note that not all students are eligible for a Subsidized Stafford Loan; the College's Student Service Center determines loan eligibility.)*

To be eligible, a student must be a U.S. citizen or eligible non-citizen and be enrolled or admitted on at least a half-time basis. Once again, the student must demonstrate need for the loan as evidenced on a processed FAFSA.

A SUNY Canton student may be eligible to borrow no more than \$3,500 as a freshman and no more than \$4,500 at the sophomore level. Once full junior status is achieved in a bachelor's program you may borrow up to \$5,500/year. The interest rate is currently fixed at 2.75% as of 7/1/20. Principal and interest are deferred during the time that the student is enrolled on at least a half-time basis. Borrowers have up to ten years to repay and repayment begins six months after the student ceases to be enrolled on at least a half-time basis. Students are eligible for the interest subsidy for up to 150% of their program length. If students do not graduate within the 150% timeframe the loans become unsubsidized. Payment of the principal may be deferred for up to three years for certain categories of Public Health Service officers, the temporarily disabled, those in internships required before entering a profession, and Peace Corps or Vista volunteers.

All Federal Stafford Loan recipients are required to attend an entrance interview and complete an electronic promissory note before receiving the first Stafford Loan disbursement. Both can be done online at www.studentloans.gov. Before leaving the

College, all Stafford Loan recipients are required to attend an exit interview. The purpose of these interviews is to inform the student of his/her rights and responsibilities concerning the loan, to be sure that the student is aware of what borrowing entails, to be sure that the student understands the consequences of not repaying the loan, and to be sure that the student is clear on the repayment terms of the loan and who the loan will be repaid to, as well as the amount of loan borrowed. Questions concerning loan entrance, exit interviews, or promissory notes should be directed to the Financial Aid Office.

FEDERAL NON-NEED BASED LOAN PROGRAMS

FEDERAL DIRECT STAFFORD STUDENT LOAN (UNSUBSIDIZED)

Most terms and conditions of the unsubsidized loan are the same as for the subsidized loan except that interest is a fixed 2.75% as of 7/1/20 and accrues while the student is in school. Loan limits for dependent students cover the cost of attendance minus any aid received, up to the limits of the subsidized Stafford Loan (that is, a dependent freshman cannot borrow more than \$3,500 in a combination of subsidized and unsubsidized, while a dependent sophomore cannot borrow more than \$4,500, and a dependent junior/senior cannot borrow \$5,500). An independent freshman cannot borrow more than \$7,500 between the subsidized and unsubsidized Stafford Loans. An independent sophomore cannot borrow more than \$8,500 between the subsidized and unsubsidized Stafford Loans. Independent juniors and seniors in the BT program can borrow up to \$10,500 between subsidized and unsubsidized loans. As of 7/1/08, all students are eligible for an additional \$2,000 in unsubsidized Stafford Loan. The total of the student's unsubsidized loan, and the other aid/resources that the student will be receiving, can never exceed the total cost of attendance. Accrued

interest may be paid or added to the loan (capitalized) as agreed by the borrower and the federal government. The first step in being considered for an unsubsidized loan is to complete the Free Application for Federal Student Aid (FAFSA).

FEDERAL DIRECT PARENT LOAN FOR UNDERGRADUATE STUDENTS (DPLUS)

This is a program that allows parents to borrow funds from the federal government. Under DPLUS, the parent is the borrower and if eligible, (these loans are subject to a credit check) may borrow up to the difference between the yearly cost of attendance and the student's other yearly financial aid.

Interest on the principal is fixed at 5.3% beginning 7/1/20. Repayment of a DPLUS Loan begins 60 days following receipt of the loan's second disbursement. Parents may request a deferment of payments from the loan servicer until the student is out of school.

It is also important to note that the parent and student must be U.S. citizens or eligible non-citizens, and neither can be in default on a prior student loan or owe a refund on a federal grant in order to be considered for a DPLUS loan. In addition, the student must be: 1) accepted or enrolled in an eligible program leading to a degree or certificate; 2) be enrolled on at least a half-time basis; 3) maintain satisfactory academic progress if currently enrolled; and 4) show compliance with applicable Selective Service requirements. The promissory note for the DPLUS can also be done online through the financial aid page of our website.

FEDERAL AID TO NATIVE AMERICANS (BIA GRANT)

To be eligible for consideration a student must: 1) possess one-fourth or more degree Indian blood and be certified by their Tribe, 2) be a member of a Tribe, 3) be enrolled (or accepted for enrollment)

on a full-time basis in a program which will lead to a four-year degree, and 4) have a definite financial need after all other sources of financial assistance have been applied.

Application forms may be obtained from a liaison office of the U.S. Bureau of Indian Affairs. The application deadline is July 15 for the Fall Semester/academic year and October 15 for students beginning their studies in the Spring Semester. Please note that students should first complete the Free Application for Federal Student Aid (FAFSA). Students must reapply for federal Native American aid each year and must meet certain academic standards to continue to receive the grant.

AVAILABLE STATE PROGRAMS

EXCELSIOR SCHOLARSHIP

Governor Cuomo approved a first in the nation free tuition program to begin the 2017-18 academic year. This program is available to NYS residents pursuing a two or four-year degree program in SUNY or CUNY. Successful applicants must earn at least 30 credits per year* toward their degree program and be on track for graduation. Awardees are required to reside in NYS once they have ceased enrollment for the amount of time that they received the award. They are not required to be employed but if so, must be employed within NYS. This scholarship is a "last dollar in" award so any grant or scholarship that is not a specifically a non-tuition award must count first toward tuition. Information is available at www.canton.edu/excelsior and application is available at www.hesc.ny.gov/excelsior. Students eligible for Excelsior will also have a corresponding Excelsior Tuition Credit.

**Exceptions for EOP students or those meeting ADA disability definitions.*

TUITION ASSISTANCE PROGRAM GRANT (TAP GRANT)

To apply, follow the procedure detailed in "Applying for Financial Aid."

Financial Assistance

The TAP Program is an entitlement program, and no repayment is required as it is a grant. To be eligible for consideration, the student must be: 1) a New York State resident (as defined by the New York Higher Education Services Corporation's residency policy) and a U.S. citizen or eligible non-citizen, 2) be enrolled on a full-time basis (at least 12 credit hours per semester required for student's curriculum). 3) certain students may be eligible if enrolled part-time. Eligibility for TAP is based on the family's prior year New York State taxable income from two years prior and also considers how many family members, other than the applicant, will be enrolled in college on a full-time basis.

TAP awards at SUNY Canton ranged from \$500 to \$5,165 per year, for students who qualified. Students can receive a TAP award for no more than six full-time semesters of undergraduate study at the associate degree level or eight semesters at the bachelor's degree level. EOP students may have additional eligibility. Recipients must be in good academic standing in the program in which they are enrolled.

SUNY TUITION CREDIT

If a NYS Resident student's semester tuition is at least \$3235 and they have a TAP award they will also receive a SUNY Tuition Credit.

OTHER AWARDS/SCHOLARSHIPS SPONSORED BY NEW YORK HIGHER EDUCATION SERVICES

The New York Higher Education Services Corporation sponsors the following awards for special populations:

- Veteran Tuition Awards (VTA)
- Child of Veteran Awards (CV)
- Military Enhanced Recognition Incentive and Tribute (MERIT) Scholarship
- Child of Deceased Police Officer/ Firefighter/Correction Officer Awards
- Memorial Scholarships for Children of Deceased Police Officers and Firefighters

—NYS Achievement and Investment in Merit Scholarship (NY-AIMS)

—NYS Science, Technology, Engineering and Mathematics (STEM) Incentive Program

—NYS World Trade Center Memorial Scholarship

In addition to completing the FAFSA, students who wish to be considered for any of the above awards must also complete the New York State TAP Grant Application and NYS scholarship application. Typically, if a TAP award is received in addition to any of the above awards, the combined award can be no greater than the cost of tuition. Recipients must be in good academic standing in the program in which they are enrolled.

For more specific information concerning the above state awards, contact the Financial Aid Office or the New York Higher Education Services Corporation, (HESC) at <http://hesc.ny.gov/>.

NEW YORK STATE AID TO NATIVE AMERICANS

Application forms may be obtained from the Native American Education Unit, New York State Education Department, Albany, NY 12230. The completed application should be forwarded to the Native American Education Unit, along with the supporting documentation required. This is an entitlement program, with neither a qualifying examination nor a limited number of awards, and repayment is not required. There are application deadline dates.

The award is a maximum of \$1,000 per semester for a maximum of four years of full-time undergraduate study (five years where a fifth year is required for completion of degree requirements). Awards are not provided for study in remedial programs.

Students are responsible for notifying the Native American Education Unit in writing of any change in student status. Students must also submit semester grades, at the end of each semester, showing satisfactory progress toward completion of degree requirements.

EDUCATIONAL OPPORTUNITY PROGRAM (EOP)

This program operates in the State University of New York and is designed to provide access to post-secondary education to educationally- and economically-disadvantaged students. It is a comprehensive program in which financial assistance is one possible component along with special counseling, tutoring, and remedial course work.

Application is automatic via the SUNY Application for Admission. An applicant must be:

- A New York State resident or eligible under the NYS Dream Act;
- Academically disadvantaged according to definitions promulgated by SUNY;
- Economically disadvantaged according to guidelines approved by the Board of Regents and the Director of the Budget. Students who apply for the EOP Program will be required to provide documentation of total family income to ensure that they meet prescribed income guidelines prior to admission in the EOP Program.

The amount of financial assistance and other support provided to EOP students is dependent on need as determined by SUNY Canton, using NYS regulations and budget approval.

EMPIRE STATE DIVERSITY HONORS SCHOLARSHIP PROGRAM

The SUNY Canton/Empire State Diversity Honors Scholarship program provides assistance to students who have demonstrated high academic achievement and have overcome a disadvantage or other impediment to succeed in higher education. Individuals selected to receive these scholarships must:

- Be residents of New York State;
- Have been accepted for enrollment or be enrolled in a degree program.

Selection from each year's eligible applicants is made by the College Scholar-

ship Committee in accordance with the following criteria:

- Financial need;
- If accepted for admission to the College, the prospective eligible student must have earned at least an 80% average for the first three and one-half years of high school;
- If enrolled at the College, each recipient must have at least a 2.75 cumulative grade point average;
- While it is the intent that the recipient will continue to receive such support while enrolled, support will be withdrawn if the students cumulative grade point average is lower than 2.50.

Further information concerning this program is available from the Financial Aid Office or the Development Office.

AID FOR PART-TIME STUDY (APTS)

This program provides tuition assistance for part-time undergraduates enrolled in degree or certificate programs in New York State. To be eligible for consideration, a student must: 1) be registered for at least 3 but less than 12 semester hours; 2) be working toward an undergraduate degree or be enrolled in a registered certificate or approved degree program; 3) be in good academic standing; 4) be a New York State resident and a U.S. citizen or eligible non-citizen; 5) have tuition charges of at least \$100 per year.

Eligibility is based on the family's New York Taxable Income figure from two years prior. Dependency status for the APTS program considers whether the student was eligible to be claimed as a tax exemption by his/her parents in the prior tax year.

The amount of APTS awards range from \$75 to \$400 or more per semester depending on the College's yearly allocation from the State. An award amount cannot exceed the tuition charges.

Specific questions concerning the APTS award may be directed to the Financial Aid Office. Funding for this program is very

limited so students are encouraged to apply early. Application can be found in the Part-Time Students link on the Financial Aid page of www.canton.edu.

SCHOLARSHIPS AT SUNY CANTON

Most of the financial assistance available at SUNY Canton is awarded on the basis of an individual student's financial need as determined by universally applied formulas. However, there is an increasing number of awards through state and the Canton College Foundation funding which recognize special characteristics and accomplishments of our students and incoming freshmen.

Scholarship Awarding Policy for State Funds

Committee Composition: The Scholarship Committee must be made up of the following:

2 Admissions representatives (1 Chair and 1 committee member), 2 Financial Aid representatives (1 records and financial aid reporter and 1 committee member), 2 Foundation representatives (1 Foundation liaison and 1 committee member)

*Committee composition restricts the membership of any individual whose campus role may show bias toward one specific group of students, (Ex. International Student Coordinator, Athletics Personnel, Admissions Athletics Liaison, Faculty Members).

Awarding Policy:

Only accepted students will be reviewed for scholarship.

All accepted students will receive an invitation email at both their canton.edu and personal email accounts with Instructions on how to log into Academic Works and complete the general scholarship application.

Students who have completed the general scholarship application will be given priority consideration; however, completing the general scholarship application does not guarantee the student will be awarded.

Scholarships will be awarded based on need with the consideration of criteria specific to each scholarship.

Review will begin at the end of February with an aim to award the majority of scholarships by the end of March.

Applicants who have completed the general scholarship application before the priority deadline of February 1st will be reviewed with precedence.

General applications will be reviewed by two independent reviewers and receive a score.

Applicants who achieve a score of 40 or higher on the Scholarship Rubric will receive priority for awarding.

Award recipients will be notified with an award email at their canton.edu email account noting the name and the amount of their award. The award email will outline the stipulations to maintain the award and the number of years/semesters that the amount will be provided. The email will also indicate how the student must log into Academic Works to accept their award and they must accept their scholarship within 30 days of the email date. Once the student accepts their scholarship the award will be included in their financial package. If the student fails to accept their award within the 30 day period, the award will be canceled and awarded to another deserving student.

Available scholarships and their award criteria are listed herein.

STATE AWARDS:

Presidential Scholarship

- Awarded to a first-time student
- \$5,000 annual value
- Recommended minimum HS GPA of 94
- Campus residency required
- Renewable up to four years with GPA requirement of 2.5

Excellence Scholarship

- Awarded to a first-time student
- \$3,600 annual value
- Recommended minimum HS GPA of 92
- Campus residency required
- Renewable up to four years with GPA requirement of 2.5

Leadership Scholarship

- Awarded to a first-time student
- \$2,500-\$3,500 annual value
- Recommended minimum HS GPA of 90
- Renewable up to four years with GPA requirement of 2.5

North Country Educational Scholarship

- Awarded to a first-time student
- \$1,500-\$2,500 annual value
- Recommended minimum HS GPA of 87
- Renewable up to four years with GPA requirement of 2.5

Grasse River Educational Scholarship

- Awarded to a first-time student
- \$1,000-\$2,000 annual value
- Recommended minimum HS GPA of 85
- Renewable up to four years with GPA requirement of 2.5
- Need Eligible

Financial Assistance

1906 Scholarship

- Awarded to a first-time student
- \$800-\$1,500 annual value
- Recommended minimum HS GPA of 85
- Renewable up to four years with GPA requirement of 2.5
- Need Eligible

Alumni Scholarship

- Awarded to a first-time student
- \$500-\$1,000 annual value
- Recommended minimum HS GPA of 85
- Renewable up to four years with GPA requirement of 2.5

Transfer Merit Scholarship

- \$1,000 annual value
- Recommended minimum transfer GPA of 2.5
- Renewable up to two years with GPA maintenance of 2.5
- Need Eligible

Part-Time Scholarship

- \$75-\$200 per credit hour
- Recommended minimum GPA of 2.5
- Renewable up to two years with GPA maintenance of 2.5

CANTON COLLEGE FOUNDATION SCHOLARSHIPS:

AAUW Memorial Scholarship

- Non-traditional student, with preference to women
- Math/Science-related field (STEM related fields)
- 2.5 or better GPA
- Leadership potential and community service

Alumni Association Scholarship

- Returning student
- Minimum 2.5 GPA
- Service to college community
- Financial need

Alumni Legacy Scholarship

- Entering freshman student
- Child or grandchild of alumnus
- Academic potential, as demonstrated by high school performance
- Financial need

American Society of Civil Engineers Scholarship

- Continuing student
- Selection made by Civil Engineering faculty and staff

Anderson-André Endowed Scholarship

- Entering freshman or continuing student
- Liberal Arts and Sciences: Chemistry option or Veterinary Science Technology curriculum

- St. Lawrence, Jefferson, or Lewis County resident
- Preference to graduates of Beaver River or Canton Central School

Timothy M. and Mary Lou Ashley

Family Endowed Scholarship

- Students in one of the following areas: Criminal Justice, Business Administration, or Liberal Arts
- To provide assistance to worthy individuals who appreciate the value of a quality education
- Student from St. Lawrence County

Alice Westaway Bagley Endowed Scholarship

- Nursing and allied health
- St. Lawrence County resident

Rachael M. and Leon E. Bagley Endowed Scholarship

- Freshman student, may be retained
- Preference to, but not restricted to, students from Madrid-Waddington or Edwards-Knox Central Schools

Baldwinsville High School Class of 1957 Scholarship

- Entering freshman from C.W. Baker High School, Baldwinsville, New York
- Air Conditioning Engineering Technology curriculum
- Other curriculums, if only one eligible Air Conditioning Engineering Technology student enrolls
- Students may retain scholarship

Patricia M. Barr '44 and Bernard P.

Raymo '32 Endowed Scholarship

- Continuing student
- Business curriculum
- Graduate from Canton Central, Clifton-Fine Central, or Massena Central High Schools

James D. Bartholomew Endowed Scholarship

- Entering freshman student
- Preference given to a graduate of Massena Central School or Madrid-Waddington Central School
- Construction Technology: Management or a related engineering curriculum

Dr. Adelord S. and Sylvia H. Blanchard Endowed Scholarship

- Returning student
- Business curriculum
- Preference to candidates intending to pursue a baccalaureate degree in business

Ronald J. Blanchard '68 Student Leadership Endowed Scholarship

- First Generation college student
- Demonstrates leadership as officer/board member of campus club or advisory board member
- Must have 2.5 GPA and student may retain scholarship

Leland Blevins Family Endowed Scholarship

- Entering freshman student
- Automotive Technology curriculum
- Demonstrates potential for success

Raymond W. and Mary Ellen C. Boushie Annual Scholarship

- Entering freshman student
- Graduate of Massena Central School

Bridge to Success Endowed Scholarship

- Established by R. Peter Heffering '51
- Assist students who have exhausted all their options for scholarships, loans, and other funds
- No curriculum restrictions

Goldie Burgess Endowed Scholarship

- Returning senior student
- Nursing curriculum
- Minimum 2.75 GPA
- Financial need

Tamara Rosezell Bullock '01 Annual Scholarship

- Student enrolled in Funeral Services Administration B-Tech degree program
- First in his/her family to have an interest in funeral services

Bobbi Butler Burnham Endowed Scholarship

- Liberal Arts associate or bachelor degree program
- Preference will be given to anyone with a surname of Sharlow, Butler, or Burnham but not limited to those aforementioned names
- The scholarship is renewable for the following year of study providing that the student has maintained a 3.0 grade point average

Agnes and John N. Burns Family Endowed Scholarship

- Continuing student
- Business and one is open curriculum
- Preference to female students from Franklin, Jefferson, Lewis, or St. Lawrence County

Denice Glascock Button Women in Accounting Endowed Scholarship

- Continuing female student
- Enrolled full time in an Accounting program
- Satisfactory academic progress
- Committed to building a better community

Financial Assistance

Paul W. Calkins Endowed Scholarship

- Entering freshman student
- High school record exemplary
- Business curriculum

Canton Area Zonta Club Scholarship

- Returning senior student
- Resident of Town of Canton or, secondly, St. Lawrence County
- Single parent with potential for success
- Financial need

Canton College Foundation North Country Academic Scholarship

- Entering or continuing student in any curriculum
- GPA of 2.5 or higher or 85 high school GPA
- Open to full and part-time students

Canton Fund Annual Scholarship

- Entering or continuing student in any curriculum
- GPA of 2.5 or higher or 85 high school GPA

Canton Fund Endowed Scholarship

- Entering or continuing student in any curriculum
- GPA of 2.5 or higher or 85 high school GPA

Canton-Potsdam Hospital Guild Scholarship

- Canton-Potsdam Hospital employee in the Nursing program
- Selected by the employer
- Preference to non-traditional students

Carkner Construction Endowed Scholarship

- Student enrolled in the Construction Technology: Management or engineering curricula

Preston C. Carlisle Annual Scholarship

- Student from St. Lawrence County

The Centennial Endowed Scholarship

- No restrictions on year or curriculum

Alden C. Chadwick Endowed Scholarship

- Continuing student
- Sports Management curriculum

Varick A. Chittenden Book Scholarship

- Continuing student
- Exceptional North Country student

Clark-Guyette Internship Assistance Program Endowment

- Students participating in non-subsidized internships
- Preference given to St. Lawrence County students

Ed and Clara Cloce Endowed Scholarship

- Demonstrates potential for success
- Preference to Automotive Technology curriculum

Stanley Cohen Sports Management Endowed Scholarship

- Academic achievement
- Sports Management curriculum
- Financial need
- U.S. citizen

College Association Admissions Scholarship

- Entering or continuing student in any curriculum
- Minimum of 85 or 2.5 GPA

College Association Management Team Scholarship

- Annual scholarship supporting a student from the North Country area from the College Association Management Team

Dr. Solomon Cook Endowed Scholarship

- Native American
- Preference to student from the Akwesasne St. Regis Mohawk Reservation or graduate of Salmon River Central School
- High school average of B or better
- Financial need

Coombs-Muscarella Endowed Scholarship

- Entering freshman student
- Active in extracurricular activities
- Demonstrated leadership skills during high school

William C. Cooper Endowed Scholarship

- Entering freshman student
- Business or Computer Information Systems curriculum
- Resident of St. Lawrence or Otsego County
- Highly-motivated, industrious student

Corning Foundation Endowed Scholarship

- Entering freshman student
- Electrical Engineering Technology curriculum
- Graduate of a St. Lawrence County high school
- Preference to women and minorities

Criminal Justice Alumni Award

- Aid students in Criminal Justice field with expenses for internship

Criminal Justice Department Endowed Scholarship

- Students enrolled in Criminal Justice, Criminal Investigation, Law Enforcement Leadership and Management, or Homeland Security
- Selected by Criminal Justice Department Scholarship Selection Committee

Cross Connection Control Foundation Scholarship

- Entering freshman student
- Air Conditioning Engineering Technology curriculum

Evan M. Dana Endowed Scholarship

- Veterinary Science Technology or Liberal Arts and Sciences: Chemistry option curricula
- Good academic standing
- Incentive, motivation

Anthony "Tony" E. Darcangelo Memorial Scholarship

- Rome Free Academy student in two- or four-year Business curriculum
- Second preference to anyone from Rome Free Academy
- Third preference to Business student from Oneida County
- Financial need

Ethelyn B. Davis Endowed Scholarship

- Returning senior student
- Nursing curriculum
- Demonstrated compassion, thoughtfulness, concern for the patient's well-being
- Academic achievement secondary

The Day & Nite All Service Annual Scholarship

- HVAC Engineering Technology, Air Conditioning Maintenance and Repair, Heating and Plumbing Service, or Mechatronics curricula

William D. Demo Family Endowed Scholarship

- Entering freshman student and continuing student
- Graduate of St. Lawrence or Franklin Counties; preference give to Brasher Falls Central School

Gerard '65 & Patricia Desormeau Family Endowed Scholarship

- Entering or continuing student
- Electrical Engineering Technology
- Preference to Indian River School District
- Jefferson, Lewis, St. Lawrence Counties can apply
- Financial need

Financial Assistance

Rosa Dixon Allied Health Endowed Scholarship

- Allied Health curriculum
- Financial need

Stuart B. Dragon Endowed Scholarship

- Entering freshman student
- First preference to Clinton County resident
- Secondly, any North Country resident

Professor Dr. Thomas and Virginia Duda Memorial Scholarship

- Two- or four-year non-traditional student
- Minimum 2.0 GPA
- Business curriculum

Duken Family Scholarship

- Entering freshman from Clinton County
- Preference to Seton Catholic High School, Plattsburgh High School, or other Clinton County school
- Strong interest and passion for Business; leadership skills in student, community, or religious activities

David '80 & Tracy Elliott Endowed Scholarship

- Entering or continuing student
- Agribusiness or related agricultural program
- Preference to St. Lawrence, Franklin, Jefferson, Lewis and Clinton Counties

Employee Assistance Program (EAP) Scholarship

- Full- or part-time student who is an employee of SUNY Canton - State, College Foundation, or College Association
- If no employees are eligible, spouse or dependent of SUNY Canton employee will be considered
- Awarded by semester
- Financial need

Eurto Family Endowed Scholarship

- Non-traditional student majoring in a certificate, associate, or bachelor degree program

Betty Evans Annual Scholarship

- No specific criteria

Betty Evans Endowed Scholarship in Memory of Perry Evans '75

- Entering or continuing student from an agricultural background who is enrolled in either a two- or four-year program
- Preference will be given to students who have had experience in 4H or a member of FFA

Robert W. and Helen Flanders Farmer Endowed Scholarship

- Entering freshman student
- Graduate of Tupper Lake High School

- High school record of good citizenship and academic achievement

- Strong motivation to succeed in college

William J. and JoAnne M. Fassinger Endowed Scholarship

- Transfer student from a New York State two-year learning institution
- Enrolled in Criminal Investigation
- Financial need

Daniel G. Fay Endowed Scholarship

- Student from St. Lawrence County
- Enrolled or planning to enroll in Accounting Program
- Demonstrate teamwork while being actively involved in student organizations and extracurricular activities in HS or college

George and Eileen Fay Endowed Scholarship

- Entering freshman student
- Graduate of Massena Central School or Canton Central School
- High school record of good citizenship, extracurricular activities, and academic achievement
- Preference to Business curriculum
- Financial need

Linda Lahey Fay Nursing Award

- Graduating senior student
- Assisted fellow students/faculty members
- Awarded at Nursing Program Pinning Ceremony

Kevin Fear '87 Endowed Scholarship

- Assist a student who has a learning disability
- Any curriculum

Clement J. Flanagan Endowed Scholarship

- Entering freshman student
- Graduate of Canton Central High School
- Involvement in high school/community activities
- Financial need

Tod Flanagan Scholarship

- Entering or continuing student
- Air Conditioning Engineering Technology, Electrical Engineering Technology or Heating & Plumbing Services programs
- Financial need

Nicole Fleury Memorial Endowed Scholarship

- Veterinary Science Technology major
- Graduate from a Section X high school
- Must demonstrate leadership, compassion, and a love for animals

The Fergal I. '80 and Colleen Foley Endowed Scholarship

- Emergency Management Curriculum
- Preference to a US military veteran

David A. Frary and Family Endowed Scholarship

- Continuing student
- Graduate of a St. Lawrence County high school
- Business curriculum
- Financial need
- Preference to candidates intending to pursue a baccalaureate degree

Albert E. French Endowed Scholarship

- Continuing student
- Financial need

Gerlach Family Endowed Scholarship

- Nursing student

Lawrence Germain Endowed Scholarship

- Entering or continuing students
- Veterinary Science Technology curriculum
- Financial need

Gilbert, Chadwick, and Christy Investment Club Scholarship

- Continuing student
- Business curriculum

John A. Goetze Endowed Scholarship

- Continuing student
- Construction Engineering Technology or Engineering Science, or Civil Engineering Technology curricula

Cleo J. Golding Endowed Scholarship

- Entering freshman student
- Financial need

Goolden Family Endowed Scholarship

- Entering freshman student
- Mortuary Science or Business curricula
- St. Lawrence, Jefferson, or Franklin County resident
- Preference to candidates from Madrid or Waddington
- Leadership potential and ethical values

Grace Family Nursing Scholarship

- Student enrolled in the Nursing bachelor's degree program
- Must be enrolled at least 6 credit hours
- St. Lawrence County resident
- Recommended by the Nursing faculty
- Financial need

Financial Assistance

Grosvenor '69 Annual Scholarship

- Entering freshman student
- Graduate of Harpursville Central High School or resident of Colesville, New York
- Enrolled or planning to enroll in the Construction Technology A.A.S., Civil Engineering Technology A.A.S., or Civil and Environmental Engineering Technology B. Tech. programs. Should a student not be found from one of these programs, the scholarship may be awarded to a student enrolled or planning to enroll in the Veterinary Science Technology A.A.S., Veterinary Service Administration B.B.A., Veterinary Technology B.S., or Legal Studies B. Tech.
- Second preference a student from Broome County
- Financial Need

David V. Guccione Endowed Scholarship

- Criminal Justice or Criminal Investigation degree
- Senior Criminal Justice Investigation enrolled in David A. Sullivan Police Academy
- Secondary consideration to a student enrolled in Correction Academy

Dr. Jonathan Gueverra Endowed Scholarship

- Awarded to student in Business or Criminal Justice curricula
- Either two- or four-year degree students

Harriett Gushea/Massena Memorial Hospital Nursing Endowed Scholarship

- Massena Memorial Hospital staff member in the Nursing program

Hahn-Kalberer Endowed Scholarship

- Senior student, must be in two-year curriculum
- Non-traditional, 23 years or older
- Must have at least a 3.0 GPA
- Full tuition
- Separate application required

Haig Family Endowed Scholarship

- Continuing full-time student

John L. Halford, Sr. Endowed and Memorial Scholarship

- Entering freshman student, to be retained with 2.5 GPA
- Good academic standing
- Awarded to a graduate of Gouverneur Central School who is enrolled in a four-year degree program
- Financial need

John L. Halford, Sr., '49 Nursing Endowed Scholarship

- Student enrolled in four-year Nursing program
- Currently employed as a nurse in St. Lawrence County or originally from St. Lawrence County

Maurice B. "Mick" Harrington Scholarship Endowment

- Continuing student in Business Administration or Sports Management
- 3.0 GPA to be eligible

Catherine Wells Hart Endowed Scholarship

- Female student in a STEM degree; AS, AAS or BS-following programs within the Canino School of Engineering
- Preference given to students from St. Lawrence, Essex, Clinton, Jefferson, Lewis, Hamilton or Warren County

Henning-Keeler Endowed Scholarship

- Students in Liberal Arts/Humanities or technical program
- Meritorious academic record
- Separate application required

Heuvelton Central School Alumni Endowed Scholarship

- Entering freshman student
- Graduate of Heuvelton Central School
- Earned at least a "B" average through first 3-1/2 years of high school
- Good relationship with teachers and peers
- No history of drug or alcohol abuse
- Financial need

Hirschey Family Business and Accounting Endowment

- Student must be enrolled in a Business or Accounting curriculum
- Resident of Jefferson, Lewis, or St. Lawrence County in that preferential order

Dr. Harry E. Howe Endowed Scholarship

- Continuing student
- Nursing curriculum
- Minimum 3.0 GPA
- Demonstrates nursing professionalism

Henry Lawrence Howe V Endowed Scholarship

- Continuing student
- Learning disabled
- Preference to graduate from St. Lawrence County pursuing careers in technical fields, especially in computers or electrical/electronics

Lloyd J. '92 and Paula King '80 Hurlbut Endowed Scholarship

- St. Lawrence or Jefferson Counties
- Financial need

Paula Bouchard Jacques Endowed Scholarship

- Continuing student
- Must have earned "B" or better in Nursing 101
- Assisted fellow students in learning
- Demonstrated strong assessment skills, effective communication skills, and respect and caring for elderly client
- Announced at Nursing Program Pinning Ceremony; awarded during following academic year or semester

Charles W. Johnson Endowed Scholarship

- Entering freshman student
- High school academic record meritorious
- Preference accorded to Liberal Arts: General Studies/Undeclared Major or Graphic and Multimedia Design who indicates an interest in majoring in the media

Grace Jones-Vesper Business Scholarship

- Continuing student
- Business Administration curriculum
- Must have maintained a B average
- Preference to a non-traditional student

Betsy B. Kaplan Memorial Endowed Scholarship

- Continuing students in Veterinary Science Technology curriculum
- To go to students who have demonstrated past involvement in animal welfare, work at a humane society or similar organization, or caring for abused animals in one's own home.

Jesse Kaufman Endowed Scholarship

- Entering freshman student
- Electrical Engineering Technology curriculum

Catherine M. Kelly Endowed Award for Excellence in Psychiatric Nursing

- Presented annually by the Nursing faculty to a graduating senior Nursing student who has a B or better average
- Demonstrates clinical excellence
- Strong interpersonal relationship skills
- A commitment to nursing of psychiatric clients

E.B. and Gladys Kennedy Endowed Scholarship

- Continuing student
- Commitment to community service
- Financial need

Financial Assistance

Dr. Joseph L. and Dine Kennedy

Endowed Scholarship

- Student in a four-year degree program
- Demonstrated high academic achievement in high school or while attending SUNY Canton

Harry E. King Endowed Scholarship

- Entering or continuing student
- Air Conditioning Engineering Technology curriculum or Alternative and Renewable Energy Systems

Richard C. King Endowed Scholarship

- Continuing student
- Veterinary Science Technology curriculum
- Good academic standing

Lloyd and Josephine Kingston Endowed Scholarship

- Entering freshman student
- Business curriculum
- St. Lawrence County resident
- Preference to graduate of Canton Central School

Walter R. Kingston Endowed

Scholarship for Automotive Technology

- Entering freshman student
- Automotive Technology curriculum
- Preference given to Canton or St. Lawrence County students
- Financial need

Ernest C. Krag Endowed Scholarship

- Entering freshman student
- Liberal Arts-Social Science curriculum
- First preference to a student planning to pursue studies in government and history; second preference to a student from St. Lawrence or Franklin County; third preference to a Native American student

Edwin Krenceski Memorial Scholarship

- Entering or continuing student
- Electrical Engineering Technology curriculum
- Financial need

Craig Larkin New Beginnings Scholarship

- Entering or continuing student
- Enrolled in Homeland Security or Emergency Management
- Documented disability
- Maintain 3.0 GPA

Aaron J. Lasher Endowed Scholarship

- Awarded annually to a deserving student
- One-year Heating & Plumbing certificate, returning student in Air Conditioning Engineering Technology two-year program, or the Alternative and Renewable Energy Systems four-year program

- Preference to Heuvelton Central School graduate, secondly to a St. Lawrence or Jefferson County graduate
- Financial need

Garnett M. Lawrence Endowed Scholarship

- Entering freshman student
- Massena Central High School graduate
- B average
- Good relationships with teachers and peers
- No history of alcohol or drug abuse

Gordon and Beatrice Lawrence Endowed Scholarship

- Entering freshman student
- St. Lawrence Central School graduate
- B average through junior year of high school
- Have good relationship with teachers and peers
- Have no history of alcohol or drug abuse

Leadership Institute Endowed Scholarship

- Entering freshman student
- Graduate of a St. Lawrence County high school, preference to Ogdensburg Free Academy or Massena Central School
- 85 high school average
- Demonstrate leadership potential by participating in student organizations
- Business curriculum

Liberty Utilities Scholarship

- Business or Canino School of Engineering Technology curriculum
- North Country resident

Frederick C. and Karen Liebi Endowed Scholarship

- May be awarded to freshman or continuing student
- Awarded to Construction majors first, then to Canino School of Engineering Technology curricula.

C. Ernest and Dorothy B. Lowery Endowed Scholarship

- Continuing student
- Demonstrate academic excellence
- Financial need

Albert F. and Agnes Powers Luck Endowed Scholarship

- Entering freshman or continuing student
- Preference accorded to students from Seton Catholic Central or Plattsburgh High School; second preference to a resident of Clinton, Essex, or Franklin County
- Civil or Construction Engineering Technology curriculum

Joel Lynde-Strive for Excellence Award

- Entering or continuing student
- Engineering program with preference to Air Conditioning Engineering Technology

Dr. Earl W. MacArthur Honors Scholarship

- Entering freshman
- Must meet two of the following categories:
 - Top five percent of high school class; 93 or better high school average; combined SAT of 1250 or ACT of 28 or better
- Must maintain 3.25 GPA to retain scholarship

Joyce A. MacArthur/CTC Women Endowed Scholarship

- Continuing student
- Outstanding scholar
- Demonstrates exemplary college or community service

Dr. Michael and Barbara Maresca Family Endowed Scholarship

- Awarded to both an entering freshman and continuing student in the Nursing program
- Preference given to students demonstrating leadership skills and community service
- Preference given to students from Canton-Potsdam Hospital and Massena Memorial Hospital areas
- Financial need

Massena High School Alumni Endowment Scholarship

- Entering freshman student
- Enrolled in a two- or four- year program
- Financial need

David R. Maynard Endowed Scholarship

- Entering freshman student
- Academic and extracurricular high school activity meritorious
- Financial need

Fulton and Anna McAllister Endowed Scholarship

- Continuing student
- Nursing curriculum
- St. Lawrence County resident
- Demonstrated academic improvement
- Financial need

Virginia McAllister Endowed Award for Excellence in Nursing

- Graduating senior student
- Nursing curriculum
- Demonstrate academic and clinical excellence and initiative
- Awarded at pinning ceremony

Financial Assistance

Kenneth R. McDonald/Howland Pump Endowed Scholarship

- Either freshman or continuing student
- Air Conditioning Engineering Technology or Heating and Plumbing curriculum
- St. Lawrence County resident

Robert McKenty and Family Scholarship

- Awarded annually to a student in a Construction-related program
- Financial need

Merriman Family Endowed Scholarship

- Entering freshman student
- High school record, academics, and extracurricular activities with merit
- Graduate of Colton-Pierrepont Central School, Norwood-Norfolk Central School, or Potsdam Central School
- Financial need

Susanne Connick Merritt Endowed Scholarship

- Returning student; must have completed two semesters of full-time study at SUNY Canton in a Business curriculum
- Outstanding scholar
- Participation in extracurricular activities on and off campus

Richard W. Miller Endowed Scholarship

- Entering freshman and continuing students
- Electrical Engineering Technology curriculum or technical curriculum

Richard W. Miller Academic Excellence Award

- Continuing student
- Canino School of Engineering Technology
- Academic excellence

Modell Family Endowed Scholarship

- Entering or returning student in Electrical Engineering Technology curriculum
- Preference to student from Onondaga County

Donald M. Morgan Memorial Endowed Scholarship

- Continuing student who is a graduate from Knox Memorial Central School or Edwards-Knox Central School
- Maintain a 2.75 cumulative GPA

Foundation Partners Group Mortuary Science Annual Scholarship

- Funeral services student

Rosanna Mae Moser Endowed Scholarship

- International student
- Enrolled in a Business curriculum
- Financial need

Amber Lynne Mote Memorial Scholarship

- Active Greek member
- 2.5 GPA or higher
- Separate application needed

Peter Nevaldine Endowed Scholarship

- Entering freshman student or continuing student
- Engineering Technology or one-year certificate program in Canino School of Engineering Technology

New York State Federation of Home Bureaus, Inc., in Honor of Audrey J. Hall Scholarship

- Continuing full-time student
- Early Childhood or Nursing curriculum
- 2.85 or better GPA
- Resident of counties where there are organized chapters of New York State Federation of Home Bureaus, Inc.
- Separate application needed

Allan P. and Catherine Barnett Newell Endowed Scholarship

- Continuing student
- North Country student from Clinton, Essex, Franklin, Jefferson, Lewis, or St. Lawrence Counties
- First preference to, but not restricted to, Veterinary Science Technology majors
- Evidence of leadership qualities, service to community, and participation in a variety of extracurricular activities will be viewed upon favorably in the selection process
- The recipient must maintain a 3.0 GPA to retain the scholarship for a consecutive semester of study
- Financial need

Elwood J. Nicholson, Jr. Endowed Scholarship

- Entering freshman student
- Recipient shall be Engineering Technology and Science and performance in and out of classroom exemplary
- Preference to Air Conditioning Engineering Technology/Heating and Plumbing Service

Robert A. Noble, Sr., Endowed Scholarship

- To further the talents of youth in engineering and nursing
- Entering or returning senior student
- Electrical Engineering Technology or Nursing curriculum
- Vermont or North Country resident

Elsie Lucy (Cole) Norton Endowed Scholarship

- Entering or returning student
- Resident of St. Lawrence County
- Preference to a student from the Canton area
- Early Childhood program
- Retain the scholarship if GPA is 3.0 or better

John G. A. and Chloe Ann R. O'Neil Endowment

No restrictions

John P. Ouder Kirk Endowed Scholarship

- Continuing student
- Bachelor's degree program in Alternative and Renewable Energy Systems, Mechanical Technology, Electrical Technology, or Civil and Environmental Engineering Technology
- Financial need

William J. Pacacha '69 Annual Scholarship

- One student majoring in Finance, Management, Accounting, Business Administration or Sports Management
- One student on track to receive Bachelor and one to receive an Associate degree
- Financial need

Dr. William F. Peters Tech Prep Endowed Scholarship

- Entering freshman student
- BOCES graduate
- Preference to Tech Prep participants

Bruce Petrie Memorial Endowed Scholarship

- St. Lawrence or Oswego County student

Phi Theta Kappa Endowed Scholarship

- Continuing student
- Must show leadership qualities and have participated in college and community activities
- Must have at least a 3.75 cumulative GPA

Elaine Claxton Pidgeon Endowed Scholarship

- Continuing student
- Nursing curriculum
- Demonstrates academic excellence

Plumbing, Heating, and Piping Contractors of Northern New York Endowed Scholarship

- Entering freshman student
- One-year Heating and Plumbing curriculum
- Resident of Jefferson, Lewis, or St. Lawrence County
- Financial need

Financial Assistance

Harry and Ella Winslow Podgurski Endowed Scholarship

- Entering freshman student
- Canino School of Engineering Technology
- Massena Central School graduate
- Has been a positive member of the high school community

Jean M. Poticher Endowed Scholarship

- Entering freshman student
- Resident of St. Lawrence County
- Enrolled in a Business curriculum

Lorence E. Pries Endowed Scholarship

- Continuing student
- Electrical Engineering Technology curriculum
- Participation in extracurricular activities

Alexander Reed Automotive Equipment Scholarship

- Awarded in the Spring semester
- Third semester Automotive Technology student to use to purchase tool

Bernard Creighton Regan Endowed Scholarship

- Freshman or continuing student
- Massena Central School graduate preferred; if not one available, then St. Lawrence County
- Electrical or Air Conditioning Engineering Technology
- Financial need

Gerald E. and Corinne C. Rice Endowed Scholarship

- Entering freshman or returning student
- Canino School of Engineering Technology
- Preference to non-traditional student

Joseph and Carolyne Rich Family Endowed Scholarship

- Non-traditional student
- Jefferson County resident
- Human Services field - Liberal Arts or Psychology
- Financial need

W. Stanley and Alice E. Richardson Endowed Scholarship

- Continuing student
- Enrolled in a Business curriculum
- Student from St. Lawrence County
- Meritorious academic record and motivation to succeed in business

Carol Sue (Morse) '53 and Paul A. Rosenberg Endowed Scholarship

- Two- or four-year program in human health care studies
- Financial need

Rosser Family Endowed Scholarship

- Entering freshman or returning student in business, health-related, education-related, construction-related or public service
- From either Western New York or Northern New York
- Preference given to student from Orchard Park, Canton, or St. Lawrence Central High Schools
- Renewable with 3.0 GPA
- Awarded based on merit and character

Laura Rose Rozell '69 Endowed Scholarship

- Second year student continuing studies in four year baccalaureate program
- Accounting or related field
- Highest GPA in Accounting determined by the Dean of SBLA or faculty

John F. Ruitberg Endowed Scholarship

- Entering freshman
- Student from St. Lawrence County
- Business or Liberal Arts-Social Science curriculum

Alex Sabo Mentoring Endowed Scholarship

- Entering freshman
- Financial need
- Enrolled in two to four year program
- Applicants recommended by Massena High School Guidance Department
- Enrolled in Finance or Business curriculum

The Saguaro Endowed Scholarship

- Entering or continuing student
- Any curriculum
- Financial need

William and Beatrice Schermerhorn Endowed Scholarship

- Continuing student
- Veterinary Science Technology curriculum
- Demonstrates a humane ethic and a personal commitment to animals

Seacomm FCU Financial Literacy Endowed Scholarship

- Entering or continuing student
- St. Lawrence or Franklin Counties
- Studies financial literacy
- Must have 3.0 GPA
- Major or minor in Business field
- Preference to Finance, Accounting, Business Administration or Management

Sheila Smith '82 Endowed Scholarship for Women In STEM

- Entering or continuing student
- Female student in a STEM-related program to include all programs in the Canino School,

Veterinary Science Technology and Veterinary Technology

- Must have a 3.5 GPA or 85 high school average

Margaret D. Sovie Endowed Scholarship

- Second-year Nursing student who has demonstrated a compassionate outlook and eagerness to become a registered nurse
- Chosen by the consensus of the Nursing faculty
- Second award to a graduate of Ogdensburg Free Academy enrolled in the Nursing curriculum

Bill and Peg Stalder Endowed Scholarship

- Entering freshman student
- St. Lawrence County resident

St. Lawrence Federal Credit Union Scholarship

- Deserving student from St. Lawrence County

St. Lawrence Gas Scholarship

- Business or Canino School of Engineering Technology curriculum
- North Country resident

St. Lawrence State Hospital School of Nursing Alumni Association Endowed Scholarship

- Continuing student
- Nursing curriculum
- Empathy, leadership, patient advocacy
- North Country resident

Stitt Family Endowed Scholarship

- Entering freshmen student
- Preference given to Ogdensburg Free Academy or Heuvelton Central School graduates
- Secondary preference given to student from St. Lawrence County

Jay F. Stone Endowed Scholarship

- Entering freshmen student
- Air Conditioning Engineering Technology

John H. and Eunice B. Stone Endowed Scholarship

- Continuing student from Jefferson or Lewis County
- Preference to part-time student
- Financial need

David W. Sullivan Memorial Endowed Scholarship

- Entering freshman student
- Criminal Justice curriculum
- Graduate of a St. Lawrence County high school
- School or community service involvement

Financial Assistance

SUNY Canton/Empire State Diversity Honors Scholarship

- Entering freshman or continuing student
- High school average B or better
- Native American, African American, or Hispanic
- Recipients maintaining a 2.75 GPA may retain the scholarship for a second year of study

SUNY Canton Student Veteran's Association and John L. Halford, Sr., '49 Endowed Scholarship

- Veteran or spouse/child of a veteran who received an honorable discharge from any branch of the United States Armed Forces
- Priority ranking for the award should be:
 - Purple Heart recipient
 - Combat veteran wounded in action
 - Spouse or child of a veteran killed in action
 - Combat veteran
 - Veteran who served overseas but did not see combat action
 - Veteran who served in the continental United States
 - Direct spouse or child of a veteran

W. H. Swart '51 - Veteran Recognition Endowed Scholarship

- Veteran honorably discharged from the US Armed Forces
- Preference to combat veteran wounded in action or child of veteran killed in action
- Unwounded combat veteran
- Veteran graduate from Deposit Central High School
- Veteran who served overseas with no combat action
- Veteran who served in continental United States
- Direct child, nephew, or niece of veteran

Daniel J. Sweeney '75 Delta Kappa Sigma Fraternity Leadership Endowment

- Entering or continuing student
- Performs well academically and demonstrates leadership within their community, in athletics, in student government, or any other area
- Strong financial need
- Preference given to son/daughter of a brother of Delta Kappa Sigma

Simona Szafran Endowed Scholarship

- Entering or continuing student
- Enrolled in Early Childhood Development program

Zachary R. Tartell '15 Nursing Scholarship

- Continuing non-traditional student in 2-year Nursing curriculum with interest in cardiology or critical care
- Preference to 3.0 GPA or higher

Myrna F. Thomas '79 Endowed Scholarship

- Entering with GPA of 3.0 or higher
- Financial need
- Studying Business including Finance
- Preference to students majoring in Accounting

Thompson-Weatherup Family (Marjorie J. Rock) Charitable Foundation Scholarship

- Non-traditional Nursing student
- Entering freshman
- Must have at least one year prior nursing experience
- Resident of St. Lawrence County
- Desires employment after graduation in the North Country

Tiberio Family Endowed Scholarship in Memory of Lena Chadwick

- Entering or continuing student
- Student must be enrolled in a business curriculum, including Finance or Management
- Preference will be given to students who are enrolled in Accounting
- High school average must be a 3.0 or higher
- Financial need

T. J. Toyota and Cloce Family Endowed Scholarship

- Entering or continuing student
- Automotive Technology curriculum
- Performance must demonstrate potential for success

Tougher Industries, Inc. Endowed Scholarship

- Entering freshman student
- Air Conditioning Engineering Technology curriculum
- Financial need

Harold C. Town Endowed Scholarship

- Entering freshman student
- Graduate of Norwood-Norfolk Central School
- Meritorious high school record

Carl W. Trainor Family Scholarship Endowment

- Continuing student in the Mortuary Science or Health Science curricula
- First preference to a resident of Boonville or Lewis County
- Second preference to a North Country resident

Tuper Automotive Student Textbook Scholarship

- Second year student
- Enrolled in Automotive Technology
- Used to offset cost of required textbooks and supplies
- Must walk at Graduation Ceremony

James M. and Charlene Tyler Endowed Scholarship

- Continuing student who had challenges in high school but has excelled academically during first year
- This is a merit award recognizing the change in the student's performance and accomplishment at SUNY Canton
- Should the student's performance continue to excel, this scholarship is renewable if the student wishes to earn a bachelor's degree

Rosella Todd Valentine Endowed Scholarship

- Business degree program
- North Country resident

William C. Vining and Dr. Judson R. Vining Endowed Scholarship

- Entering student in Nursing program

Arlington Walker Endowed Scholarship

- Continuing student
- Criminal Justice curriculum
- Resident of St. Lawrence County

The James '77 and Susan Waters Endowed Scholarship

- Continuing, entering, or transfer student
- Civil Engineering Technology A.A.S program or Civil and Environmental Engineering Technology Bachelors program
- Financial Need

John H. Wells Memorial Endowed Scholarship

- Entering freshman or returning student
- Air Conditioning Engineering Technology or Alternative and Renewable Energy Systems or Heating and Plumbing curriculum

Arthur S. Wheater Endowed Scholarship

- Entering or continuing student
- Preference to student from Town of Oswegatchie, Heuvelton, or Lisbon
- Pursing Agriculture related curriculum or Veterinary Technology

Guilford White '68 Endowed Scholarship

- Entering or continuing student in the Canino School of Engineering Technology
- Preference to Civil Engineering Technology or Construction Technology: Management
- Financial need

Frederick S. and Barbara R. '53 & '70 Wilder Endowed Scholarship

—Non-traditional student from Northern New York in their second year of Nursing RN degree program or third or fourth year of Nursing Bachelor degree program

Gregg and Anne Coloton Williams '78 Endowed Scholarship

—Entering or continuing student
—No restrictions
—Demonstrated good citizenship by being in extracurricular activities and community service activities

Brad Winters Annual Scholarship

—Entering student who is a graduate of Lisbon Central School

Woodcock Family Endowed Scholarship

—Continuing students
—Financial need
—Preference to students from St. Lawrence County, then Onondaga County
—Mechanical Engineering Technology curriculum
—Additionally, to students in any curriculum with special preference to women

Woodside Family Endowed Scholarship

—Entering freshman or continuing student
—Air Conditioning Engineering Technology curriculum
—Preference to students from St. Lawrence or Erie County
—Financial need

Katherine '77 and Peter Wyckoff Endowed Scholarship

—Either entering or continuing Nursing student
—Preference to non-traditional student
—Financial need

Zeta Alpha Phi Fraternity Student Leadership Initiative

—Student involved in campus activities
—Maintain 2.5 GPA
—Financial need

SATISFACTORY ACADEMIC PROGRESS

FEDERAL AID

(Federal Stafford Loans, Parent Loans, Perkins Loans, Work-Study, Pell Grant, Seog Grants)

Students receiving financial aid are required to maintain minimum program pursuit and academic progress standards in order to continue to receive assistance. Use the chart below for your degree program to determine your minimum requirements.

STATUS	ATTEMPTED CREDITS/REQUIRED GPA					
	1-23	24-35	36-47	48-59	60-71	72+
Minimum GPA Requirement	1.25	1.5	1.75	2.0	2.0	2.0
Percentage of Attempted Credits Successfully Completed	50%	50%	66.7%	66.7%	66.7%	66.7%

Additionally, students are required to complete their degree with 150% of a normal timeframe. Attempted hours will vary with required program lengths, see examples below.

Example 1: For a 60 credit hour degree program, you must complete it with 90 attempted hours. (90 attempted Credit Hours/60 Passed Credit Hours = 150%)

Example 2: The Nursing Associate Degree requires 65 credit hours. 65 Passed Credit Hours x 1.5 (150%) = 98 credit hours may be attempted.

Total attempted hours will be used regardless of any program changes that have occurred (switching majors, etc.). Grades of "W" count towards total attempted hours. Repeated courses that were previously passed count only once. Remedial courses that are not credit-bearing do not count in the total attempted hours.

Courses enrolled in each semester must be applicable to the students' current degree program.

FAILURE TO MEET MINIMUM STANDARDS (Please be aware that these are not the same as the Academic Recovery & Suspensions given out by the Dean's Offices.)

STEP 1 – FINANCIAL AID WARNING

A student who does not meet the required minimum standards will automati-

cally be given a one-time warning semester. This gives the student an opportunity to correct any deficiencies without losing federal aid eligibility. If a student withdraws from college, they have not met academic progress requirements.

STEP 2 – FINANCIAL AID TERMINATION

A student who fails a second time to meet the minimum standards will lose all federal aid eligibility. Eligibility can only be regained once they are again meeting the minimum standards. NOTE: If ALL courses taken while are warning are successfully passed with a 2.0 or better you can continue on warning.

WAIVER REQUESTS

If failure to meet standards is due to extenuating circumstances beyond a students' control, they may apply for a one-time waiver. All waiver applications must include full documentation and will be reviewed by the Financial Aid Director. Approval is not guaranteed. If approved the student will be given an academic plan to maintain eligibility.

An Academic Suspension from the Dean's Office overrides this eligibility criteria. Suspended students are ineligible for all financial aid.

Financial Assistance

NEW YORK STATE AID

(TAP Grant, SUSTA Grant, APTS Grant)

Students receiving financial aid are required to maintain minimum program pursuit and academic progress standards in order to continue to receive assistance. Use the chart below to determine your minimum requirements. Note: Eligibility for all EOP funds is determined separately by the EOP Office.

- If you received TAP at another college, be sure to include that in the number of semesters you have received a TAP.
- To calculate the percentage of credits you have completed divide total attempted credits by total earned credits.

Certificate/Associate Degree Programs

(Remedial Students*)

* Remedial Students are EOP Students or any student required to take at least 2 remedial courses with the first two semesters.

Semesters TAP Received	Earned Credit Hours	Cumulative GPA	Percentage of Credits Completed
1	3	0.50	50%/6 credits
2	9	0.75	50%/6 credits
3	18	1.30	75%/9 credits
4	30	2.00	75%/9 credits
5	45	2.00	100%/12 credits

Certificate/Associate Degree Programs

(Non-Remedial Students)

Semesters TAP Received	Earned Credit Hours	Cumulative GPA	Percentage of Credits Completed
1	6	1.30	50%/6 credits
2	15	1.50	50%/6 credits
3	27	1.80	75%/9 credits
4	39	2.00	75%/9 credits
5	51	2.00	100%/12 credits

Bachelor Degree Programs

(Remedial Students*)

* Remedial Students are EOP Students or any student required to take at least 2 remedial courses with the first two semesters.

Semesters TAP Received	Earned Credit Hours	Cumulative GPA	Percentage of Credits Completed
1	3	1.10	50%/6 credits
2	9	1.20	50%/6 credits
3	21	1.30	75%/9 credits
4	33	2.00	75%/9 credits
5	45	2.00	100%/12 credits
6	60	2.00	100%/12 credits
7	75	2.00	100%/12 credits
8**	90	2.00	100%/12 credits
9**	105	2.00	100%/12 credits

Bachelor Degree Programs

(Non-Remedial Students)

Semesters TAP Received	Earned Credit Hours	Cumulative GPA	Percentage of Credits Completed
1	6	1.50	50%/6 credits
2	15	1.80	50%/6 credits
3	27	1.80	75%/9 credits
4	39	2.00	75%/9 credits
5	51	2.00	100%/12 credits
6	66	2.00	100%/12 credits
7	81	2.00	100%/12 credits
8	96	2.00	100%/12 credits
9	111	2.00	100%/12 credits

For Disabled Students as defined by

ADA of 1990 (New as of 2015-16)

Certificate/Associate Degrees

Semesters TAP Received	Earned Credit Hours	Cumulative GPA	Percentage of Credits Completed
1	3	1.30	50%
2	9	1.50	50%
3	18	1.80	75%
4	30	2.00	75%
5	42	2.00	100%
6	51	2.00	100%
7	60	2.00	100%

Bachelor Degrees

Semesters TAP Received	Earned Credit Hours	Cumulative GPA	Percentage of Credits Completed
1	3	1.50	50%
2	9	1.80	50%
3	21	1.80	75%
4	33	2.00	75%
5	45	2.00	100%
6	60	2.00	100%
7	75	2.00	100%
8	90	2.00	100%
9	105	2.00	100%

FAILURE TO MEET MINIMUM STANDARDS

If a student fails to meet state academic progress requirements as outlined above at the end of the semester, they will lose eligibility for the next semester they attend. Eligibility will be regained once they meet the above standards. Additionally, students who stop attending for more than one year may regain eligibility upon return for one semester (if over 4 prior semesters of TAP you must have a 2.0 overall GPA). Then you must meet academic progress criteria each subsequent semester.

- If a student withdraws from college, they have not met academic progress requirements (automatic).
- APTS recipients who fail to receive a 1.0 (D) in a semester will not be eligible for APTS the following semester, even if otherwise meeting progress requirements.

WAIVER REQUESTS

If failure to meet standards is due to extenuating circumstances beyond a student's control, they may apply for a one-time waiver. All waiver applications must include full documentation and will be reviewed by the Financial Aid Director. Approval is not guaranteed. If approved the student will be given an academic plan to maintain eligibility.

Financial Assistance

IMPORTANT THINGS TO KEEP IN MIND

- Grades of “W” and transfer credits count towards total attempted hours.
- Remedial courses that are not credit-bearing, will not count in the total earned hours.
- Repeated courses that were previously passed do not count as earned hours for the semester.
- Courses enrolled in each semester must be applicable to the students’ current degree program.
- Repeating any course in which a passing grade has already been received (D or above) will not count for TAP eligibility, unless the college catalog states a higher grade is required for the student's current curriculum. For Federal Aid a course that is passed may be repeated only once.

An Academic Suspension from the Dean’s Office overrides this eligibility criteria. Suspended students are ineligible for all financial aid.



The Academic Program

RESPONSIBILITIES

FACULTY RESPONSIBILITIES

Faculty members have the responsibility of ensuring an educational environment that promotes academic excellence. All individuals have the right to a positive secure environment, one in which persons can realize their potential as intellectual, social, political, economic and creative beings.

STUDENT RESPONSIBILITIES

It is the students' responsibility to know and abide by the requirements for their programs and courses published in college publications and course outlines. Further, it is the students' responsibility to utilize the college environment, resources and professionals therein to meet requirements which shall assist in both academic and personal growth.

SCHEDULING, ATTENDANCE, GRADES, CONDUCT

SCHEDULING

The Registrar prepares a master schedule for each session of the College. The normal college academic day is 8 a.m. to 10 p.m.

The Registrar arranges for and coordinates the registration of new and returning students for each semester. The Advising Center coordinates the registration of new students. Faculty advisors will assist students with appropriate selections to meet their program requirements; however, the responsibility for meeting all graduation requirements is that of the student. Following advising, continuing students schedule their classes for the subsequent semester through secure access to the online student information system (called UCanWeb). Should a student fail to register by the appropriate registration deadline date, a \$50.00 non-refundable late registration fee will be assessed. Students who do not register by the deadline may register for courses

on a space-available basis. (Please note that only courses required for a student's current curriculum will be considered eligible for federal and state financial aid).

MAXIMUM STUDENT LOAD

Nineteen credit hours will constitute a maximum course load for fall, spring, and summer term semesters; seven credit hours is the maximum course load for winter term. Additional hours may be undertaken only with the approval of the Dean of the School in which the student is enrolled.

ATTENDANCE

Students are expected to accept full responsibility for meeting all of the academic requirements for every course in which they are enrolled. Attendance regulations are determined by the faculty of each department based upon their academic requirements for each curriculum and/or course. At the beginning of each semester, instructors of record will clearly state their attendance policy or participation policy in their course syllabi. Dismissal from a course may result from unexcused absenteeism or non-participation. A grade of "F" will be recorded for a student so notified unless the student makes a formal application for withdrawal from that course prior to the semester deadline for withdrawing without academic penalty, consistent with the college withdrawal policy. Course withdrawal requests are submitted in UCanWeb on the registration tab. Suspension from college may be imposed by the Provost/Vice President for Academic Affairs if absenteeism or non-participation has reached such proportions that further academic progress is not possible, with grades of "F" for courses not completed as of the suspension date.

ACADEMIC INTEGRITY POLICY

The instructor may impose a penalty upon a student exhibiting prohibited academic behavior. In those instances where cheating, plagiarism, and/or alteration of

academic documents are proven, a student may be subject to sanctions including, but not limited to a grade of "F" for the specific assignment and/or course. Similarly, a student may be dismissed from a course with a grade of "F" as a consequence of intentional disruption, obstruction or comparable class misconduct. These consequences should be included in the class syllabus. After written notification of the charge by the instructor, students may initiate the academic integrity appeal procedure if they believe they have proof that the charge is unwarranted. Repeated violations of this policy may result in suspension from the College. In cases of ethical dismissal, students are not permitted to withdraw from the course and will receive a grade of F on their transcript.

Please see the Academic Integrity Policy at www.canton.edu/provost/pdf/Academic_Integrity.pdf for additional information.

GRADING AND HONOR DEFINITIONS

A credit hour is defined as three hours work per week per semester in any combination of class, laboratory and outside study time.

PASSING GRADE

A, B+, B, C+, C, D+, D and P are passing grades. The grade considered satisfactory for completion of a course as a prerequisite for subsequent courses or activities will be determined by each department or program and stipulated in the course description.

GRADE POINT AVERAGE

The Grade Point Average is determined by dividing the total grade points earned by the total academic credit hours attempted (not including W's, I's, P's, or Equivalent Credits).

Letter Grade	Grade Pts. per Credit Hr.
A	4.00—Excellent
B+	3.50—Very Good
B	3.00—Good
C+	2.50—Above Average

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C	2.00–Average
D+	1.50–Below Average
D	1.00 Minimally Passing
F	0.00–Failing

HONORS LISTS

Honors Lists for each semester will be prepared by the Registrar's Office and sent to the Office of Public Relations for distribution to the news media. Media releases will not include the names of students who have restricted the release of directory information pursuant to FERPA (p. 70).

President's Honors Lists will include the names of full-time students who earn semester GPA's of 3.75 or higher. To be eligible, students must be enrolled in 12 or more credit hours graded A to F.

Dean's Honors Lists will include the names of full-time students who earn semester GPA's of 3.25 or higher. To be eligible, students must be enrolled in 12 or more credit hours graded A to F.

Part-Time Academic Honors Lists will include the names of part-time matriculated students who earn semester GPA's of 3.25 or higher. To be eligible, students must complete 6 or more credit hours graded A to F.

Note: Students who receive any incomplete grades at the completion of a semester are not included in the Dean's/President's/Part-Time honors lists. If a student is eligible for an honors list once the grade is changed, the appropriate honor will be notated on the student transcript. However, because the change will occur after the deadline, student letters and media releases will not include the names of students who are eligible for an honors list.

MIDTERM GRADES

1. At midterm, faculty members will submit student grades electronically for all courses they are teaching or supervising via secure access through UCanWeb, the online student information system.
2. Faculty members will report midterm grades using the same letter grade designations used for final course grades.
3. All mid-term grades are available to students electronically through secure

access to UCanWeb. Students receiving grades of D+, D, or F should seek out their instructors/academic advisors to identify the problem, seek additional support services (tutoring labs), and make the necessary improvement.

STUDENT GRADES

The permanent record is the official academic record and is permanently filed in the Registrar's Office. Only personnel authorized by the Registrar may have direct access to permanent records.

Final and mid-term grades are available to students online through secure access to UCanWeb. Final grades will only be mailed to the student's home address by special request to the Registrar's Office. Final grades may be withheld from any student who has a delinquent college obligation.

INCOMPLETE GRADES

An incomplete final grade may be assigned by a faculty member in cases when, for valid extenuating circumstances (illness, accident, etc.), all of the required work has not been completed but is otherwise satisfactory. (Unexcused absence from the final exam and/or failure to turn in a final project or paper are NOT extenuating circumstances). Except in unusual cases, the delinquent work should not exceed 10-20 percent of the total required work. An Incomplete Grade Contract must be completed in full, including all signatures, prior to receiving a grade of ("I") Incomplete.

Responsibility for making up incomplete work lies with the student. Incomplete work must be made up by the due date posted on the academic calendar subsequent regular term semester. Alternate arrangement (shorter or longer time frame) can be implemented if agreed upon by the instructor and student and approved by the Dean of the School. If the work is not completed according to the agreed upon plan, the incomplete grade will be recorded as "F" on the student's record.

WITHDRAWAL FROM COURSES

Following the course change period students may withdraw from credit courses without academic penalty (receiving a grade of "W") under the following conditions, unless dismissed for deviant academic conduct:

—In order to maintain the academic integrity of the institution, the academic focus of the students and adequate student academic progress toward a degree, a matriculated full-time student may not drop courses below a 12-credit hour load while a semester is in progress. In case of exceptional circumstances beyond the student's control and with the written approval of the Dean of the School in which the student is enrolled, a student may drop below the limit to part-time status. Students are encouraged to consult with the Financial Aid Office in the One Hop Shop and the Residence Life Office to determine the impact of this academic decision before dropping to part-time status.

—Withdrawal from a course is requested via a Course Change Request available in UCan Web under the Registration tab. The request must be approved by the student's academic advisor and/or academic Dean. A \$20 fee will be added to the student's account and must be paid at the Student Accounts Office in the One Hop Shop or via the online payment portal which is available on the SUNY Canton webpage (Quick Links > Online Payment). The course withdrawal will not be official until all required permissions have been completed.

—Withdrawal is allowed under the above conditions prior to the last ten class days of the semester. In courses less than a semester in length, withdrawal is allowed prior to completion of 85 percent of the class meetings.

—A matriculated part-time student may not withdraw from any course unless exceptional circumstances exist and the above procedure is followed.

- Non-matriculated students are required to pay a \$20 course change fee. No permissions are required.
- Approvals of the advisor, and/or School Dean do not necessarily indicate approval of the action, but signify that counseling has occurred and the student is fully aware of the consequences of course withdrawal.
- Failure to attend class or merely giving notice to an instructor is not an official withdrawal.
- A grade of “W” (Withdrawn) will be recorded and will not be used in calculating GPA. When all approvals have been completed, the official withdrawal will be confirmed by the student by returning to the Course Change Request Outcome Page in UCan Web and submitting requested changes.

Students who receive financial aid are reminded that their aid is based on the number of credit hours they maintain. A loss of aid may occur if a student drops below a certain credit hour level (e.g., from full-time to part-time). Students should consult with the Financial Aid Office - Student Service Center prior to any decision to withdraw from courses

LEAVE OF ABSENCE

Students facing circumstances that will interrupt their course of study at SUNY Canton, but wish to return to the College within one year, may apply for a Leave of Absence. A leave of absence preserves admitted status in the student’s current degree program at the time leave begins. This means that the academic requirements that are in place when the student leaves are “frozen” and allows students to continue to claim their current catalog year. It also allows students to register without being readmitted and maintains access to SUNY Canton email during their time away.

A leave of absence is normally granted for a maximum of 2 consecutive semesters or the total period of active duty for those called to active military service. Students

may return to the campus following the leave by con-tacting their Dean’s Office to select classes. If the leave of absence expires, the student must apply for readmission, and meet any new admission or degree requirements that are in place upon return to the College. A Leave for part of a semester counts as one semester. A form can be obtained from the SUNY Canton website at this link under forms: <http://www.canton.edu/provost/resources.html>

To be considered for a leave of absence, students **MUST** meet the following eligibility criteria:

- Be a full-time, matriculated student
- Have a SUNY Canton cumulative GPA of 2.0 or greater at the end of the student’s last semester.
- One or more semesters must have been completed at SUNY Canton.
- Have good student conduct standing.

Note: Permission of the Program Director is required for students in select programs. Programs needing specific approval include:

- Nursing – AAS
- Dual Degree Nursing Program (DDNP)
- Veterinary Technology – BS
- Veterinary Science Technology – AAS
- Physical Therapist Assistant – AAS
- Practical Nursing

REPEATING COURSES

Students may repeat courses. If higher, the grade earned in the repeated course shall be substituted for the original grade in computing the GPA. Repeating courses may affect TAP awards. Students should consult the Financial Aid Office prior to registering to retake a course. Repeated courses must be taken at SUNY Canton for the course grade to be calculated in your SUNY Canton GPA. Repeated courses taken at another institution where a grade of C or better is earned, will be transferred back for credit only and the SUNY Canton grade will be excluded from the student’s GPA; to clarify,

the student will receive transfer credit, but the grade will not transfer.

TRANSCRIPTS

SUNY Canton’s transcripts are processed through Credentials Solutions. Students will request their transcript(s) through their secure UCanWeb account. SUNY Canton will cover the cost of the actual transcript(s) from the \$5 transcript fee that students are charged each semester. However, it is the student’s responsibility to pay the handling fee associated with having their transcript(s) sent. The handling fee includes valuable notifications that alert students of any potential problems that may prevent their transcript(s) from being sent. In addition, students will have the ability to track the delivery status of their transcript(s). Electronic, official transcripts are available for a smaller handling fee. Expedited shipping is also available for an additional fee. The College reserves the right to deny transcripts to any student who is delinquent in an obligation to the College..

FINAL EXAMINATION

There will be a final examination period at the end of each semester. This period must be used by the professor for a comprehensive final examination, the last unit test, or some other activity of academic merit.

COURSE AUDIT

With permission of the instructor, a person may audit any credit course offered by the College. A maximum of two courses may be audited in one semester, unless a waiver is obtained from the Provost. An individual may not audit the same course in two consecutive semesters. The Course Audit Form, which is available from School offices or the Registrar, must be completed and returned to the Registrar’s Office. Course audits require a registration fee of \$50 per course, but are free of charge for those 60 years of age and over. Individuals may not begin auditing a course until the registration process is completed as

described on the course audit form. Once the individual has elected to audit a course, one cannot subsequently change the audit to credit. No credit is granted for audited courses. A grade of AU (audited course) will appear on the student transcript; this grade will not be calculated in the student's GPA. The course auditor will abide by the conditions agreed to by the instructor and auditor as stated on the course audit form. Auditors must adhere to the Student Code of Conduct as published on the college web site, in the Student Handbook and in each course syllabus. Permission to audit may be revoked for disruptive or inappropriate behavior. Campus student services (i.e. Academic Support Services, Counseling, etc.) are not available for course auditors.

WITHDRAWING FROM THE COLLEGE

Students wishing to withdraw from College must submit a Withdrawal notification through UCanWeb. The student is responsible for responding to and understanding any information sent to them during the withdrawal process. Failure to respond constitutes understanding and acceptance of the consequences of withdrawing. The deadline to withdraw from courses is posted on the Academic Calendar.

Non-Matriculated Students must complete the Course Change Request available in UCanWeb and act on the request within the posted deadlines.

MEDICAL WITHDRAWAL

A college withdrawal form or letter signed by the student or legal guardian must be submitted to the Vice President for the Student Affairs/Deans of Students to initiate the process. No medical withdrawals will be considered after the last official day of the semester as designated on the College calendar. Extenuating circumstances beyond the student's control may warrant an extension beyond the end of the semester.

Students wishing to return to the

College must meet with the Director of Health Services (medical) or Director of Counseling (mental health) and provide documentation from their health care provider regarding their sustainability to return and to determine if any additional accommodations, such as modified living arrangements or additional support services, are required. The academic transcript will reflect a grade of "W" to indicate a student has withdrawn. The Vice President for Student Affairs/Dean of Students will forward copies of the conditions of withdrawal to the College Registrar, School Dean's Office, Admissions, Counseling Center, and Health Services. Re-registration is not guaranteed. Each student must apply for re-admission.

ACADEMIC FORGIVENESS POLICY

The intent of this policy is to allow students who previously accrued a SUNY Canton academic record with a substantial number of grades below the 1.00 level of D to be "forgiven" for their earlier performance, if they meet certain criteria.

Academic Forgiveness in this context means that the student's previous college work shall be treated as if it had been transferred to SUNY Canton from another college: none of the grades received would be counted in the current GPA, but the student would receive credit for any courses in which he/she earned a D or above. All General Education requirements completed during prior attendance would continue to count as requirements met, but only courses with a D or higher grade would be included in credits earned toward the degree, at the discretion of the School Dean. Students wishing to apply for the privilege of Academic Forgiveness must meet the following criteria:

1. The student must not have taken any coursework at SUNY Canton for a minimum of two calendar years at the time of proposed readmission.
2. The student must complete the Academic Forgiveness Application Form at the time of application for readmission. The appli-

cation will include a reflective summary of why he/she should be considered for the privilege.

3. The student will not have attempted more than two semesters of coursework at SUNY Canton prior to readmission if enrolled in an associate degree program, or more than four semesters of coursework if enrolled in a bachelor's degree program. Students must complete at least one half of their degree requirement credits at SUNY Canton after forgiveness is granted.
4. The student is not eligible to receive Academic Forgiveness until he/she has completed a full-time semester of at least 12 credit hours as a readmitted student. In this probationary semester, the student must receive at least a C in every course and is not permitted to withdraw from any courses.
5. The student will be placed on academic recovery for this first semester after readmission.
6. Upon completion of the probationary semester, if all requirements for Academic Forgiveness have been met, the School Dean will notify the Registrar so that the student's academic record may be modified.
7. If approved for Academic Forgiveness, a notation to this effect will be made on the student's SUNY Canton transcript and a new cumulative GPA will be calculated for all work beginning with the semester of readmission. This new GPA will be printed on the official transcript and used for computing the student's academic standing, and for meeting the minimum GPA requirement for graduation. All previous SUNY Canton work will continue to be listed on the transcript with the original grades received.
8. Academic Forgiveness may be granted only once in a student's college career at SUNY Canton.
9. Academic Forgiveness does not override state and federal financial aid regulations

and satisfactory academic progress standards. Also, repeating courses previously passed may not count toward full-time enrollment for financial aid purposes. Students should contact the Financial Aid Office in the One Hop Shop for information on their eligibility if considering applying for Academic Forgiveness.

Students applying for Academic Forgiveness must also apply for readmission. See page 11 for more details.

GENERAL EDUCATION REQUIREMENTS

The General Education Program at SUNY Canton is designed to provide students, throughout their college years, with a broad set of coherent and focused educational experiences aimed at enabling them to acquire knowledge and skills that are useful and important for all persons, regardless of their jobs or professions. General Education goes beyond the acquisition of the skills necessary to be competent in a field of specialization. It involves the discovery, evaluation, and transmission of essential knowledge that prepares students to lead fulfilled lives and to assume roles as creative and contributing members of society.

In accordance with the SUNY Board of Trustees Policy on General Education, all entering freshmen must meet specific General Education requirements. Faculty and students will periodically be required to engage in assessment activities to ensure that the General Education learning outcomes are being met. At SUNY Canton, students enrolled in the Associate of Arts (AA) or Associate of Science (AS) degree must complete seven of the ten Knowledge and Skills Areas of General Education in order to transfer seamlessly to another SUNY college to earn a baccalaureate degree. These may be completed in separate courses, although some courses may satisfy more than one General Education Requirement. Nevertheless, in order to meet graduation requirements, students enrolled in a SUNY

Canton baccalaureate degree program must complete 30 credit hours of general education which must include Mathematics (GER 1) and Basic Communication (GER 10) as well as at least three credits each in at least five of the following academic areas – Natural Science, Social Science, American History, Western Civilization, Other World Civilizations, Humanities, the Arts and Foreign Languages. (See individual baccalaureate degree requirements for exceptions to this mandate.) All students will fulfill competency outcomes in Critical Thinking and Information Management, which are infused throughout the curricula. Courses meeting specific General Education knowledge and skill areas are so designated in the course description section of the academic catalog. Students should work carefully with their advisors to ensure they are fulfilling the SUNY General Education Requirements (GER) in order to transfer seamlessly to another SUNY college or to meet SUNY Canton baccalaureate graduation requirements.

SUNY GENERAL EDUCATION REQUIREMENTS

I. KNOWLEDGE AND SKILL AREAS (GER 1-10)

1. Mathematics
2. Natural Sciences
3. Social Sciences
4. American History
5. Western Civilization
6. Other World Civilizations
7. Humanities
8. The Arts
9. Foreign Language
10. Basic Communication

II. COMPETENCIES

1. Critical Thinking (Reasoning)
2. Information Management

GRADUATION REQUIREMENTS

GRADUATION DEGREES AND CERTIFICATES

The College is authorized to grant the Bachelor of Technology (B.Tech.), Bachelor of Science (BS), and the Bachelor of Business Administration (BBA) degree, each requiring a minimum of 120 credit hours. In addition, the College grants four associate degrees, each requiring a minimum of 60 credit hours; the Associate in Applied Science (AAS), Associate in Science (AS), Associate in Arts (AA), and the Associate in Occupational Studies (AOS). Finally the Certificate degree, which requires a minimum of 30 credit hours.

The College reserves the right to make modifications to a prescribed curriculum. Students failing to graduate due to failure, deficiency of grade points or credit hours, may be granted the degree after successful completion of the work either at SUNY Canton or another accredited college within seven years of departure. These hours must have the prior approval of the School Dean or Department Chairperson. All courses transferred will be recorded as “T_” (with the grade earned at the previous college: e.g., TA, TB+, TB, TC+. etc.). **Note: The commencement program is created once a year for May commencement ceremonies. The list of graduates is based on students who completed degree requirements in the prior August, December, January, and those who anticipate completing requirements in May. Students may petition their academic Dean for permission to participate in the current year's commencement ceremony without meeting degree requirements by the May deadline. Outstanding credit requirements will be at the discretion of the Dean. Please be aware that students are not permitted to have their names published in the commencement program in the same major within the past two years.**

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BACCALAUREATE DEGREES

1. A student must be matriculated in a SUNY Canton curriculum for a minimum of 30 semester credit hours of graded course work earning a minimum GPA of 2.00 for all such credit hours taken. 15 credits must be taken in the major, or acceptable cognates as determined by the department at SUNY Canton. Individual programs may have additional graduation requirements.
2. The successful completion of the prescribed curriculum. Upper division courses must comprise 45 semester credit hours, 24 of which must be taken within the major.
3. The successful completion of a writing intensive course taught within the prescribed curriculum.
4. The earning of an overall GPA of 2.00 unless otherwise prescribed.
5. Payment of all financial obligations to the College.
6. Liberal Arts & Sciences Requirements:
 - a. Bachelor of Technology (B. Tech.) This degree is intended to prepare students for careers in a variety of professions and serves both freshmen and transfers from the Associate in Applied Science degree programs. The course of study leading to this degree will be an organized curriculum leading to a minimum of 120 semester credit hours, 30 of which must be in the liberal arts. Upper division courses must comprise of 45 semester credit hours, 24 of which must be taken within the major.
 - b. Bachelor of Business Administration (B.B.A.) This degree is intended to prepare students for careers in a variety of professions and serves both freshmen and transfers from the Associate in Applied Science degree programs. The course of study leading to this degree will be an organized curriculum leading to a minimum of 120 semester credit hours, 30 of which must be in the liberal arts.

Upper division courses must comprise of 45 semester credit hours, 24 of which must be taken within the major.

c. Bachelor of Science (B.S.) The course of study leading to this degree will be an organized curriculum leading to a minimum of 120 semester credit hours, 60 of which must be in the liberal arts. Upper division courses must comprise of 45 semester credit hours, 24 of which must be taken within the major.

ASSOCIATE DEGREES

1. A student must be matriculated in a SUNY Canton curriculum for a minimum of 15 semester credit hours of graded course work, earning a minimum GPA of 2.00 for all such credit hours taken. 15 credits must be taken in the major, or acceptable cognates as determined by the department at SUNY Canton. Individual programs may have additional graduation requirements.
2. The successful completion of the prescribed curriculum.
3. The successful completion of a writing intensive course taught within the prescribed curriculum.
4. The earning of an overall GPA of 2.00 unless otherwise prescribed.
5. Payment of all financial obligations to the College.
6. Students matriculated in a baccalaureate program for a minimum of fifteen semester credit hours of graded coursework, earning a minimum GPA of 2.00 for all such credit hours taken, may be granted an associate degree in a related curriculum, without matriculation in that curriculum, upon completion of all associate degree requirements and application to the School Dean for the associate degree program.
7. Liberal Arts & Sciences Requirements:
 - a. Associate in Applied Science -

A.A.S. This degree, intended to be used primarily for occupationally oriented curricula, may at times be appropriate as a transfer degree to certain types of specialized baccalaureate programs such as Bachelor of Business Administration, Bachelor of Education, Bachelor of Engineering, or Bachelor of Engineering Technology. The course of study will be an organized curriculum with a minimum of 20 semester credit hours drawn from the liberal arts and sciences areas comprising of work distributed in the humanities, the natural sciences and mathematics, and the social sciences. The 20 semester credit hours will be distributed with balance among the three major areas. Not less than 30 semester credit hours will be concentrated in an area appropriate for employment at a sub-professional or middle management level in a recognized group of occupational fields.

b. Associate in Science - A.S. This degree may be used for certain occupationally oriented curricula but is primarily designed to serve science- or professionally-related programs which lead to transfer to a baccalaureate degree program. The course of study leading to this degree should be an organized curriculum composed of courses in the liberal arts and sciences. At least 30 semester credit hours will be offered in the humanities, the natural sciences and mathematics, and the social sciences. The exact balance within these 30 semester credit hours is not specific, but there must be a reasonable distribution of work in the three categories as well as appropriate depth in one.

c. Associate in Arts - A.A. This degree will be used primarily for transfer programs which lead to a baccalaureate degree program. The course of study leading to this degree will be

The Academic Program

an organized curriculum composed primarily of courses in the liberal arts and sciences. At a minimum, there will be 48 semester credit hours taken in the humanities, the natural sciences and mathematics, and the social sciences. The exact balance within the 48 semester credit hours among these three major fields is not specified, but there must be a reasonable distribution of work among these three categories as well as depth in one.

d. Associate in Occupational Studies - A.O.S. The course of study leading to this degree should be an organized curriculum of post-secondary level education leading to occupational competence. The program requires two academic years (or a minimum of 60 semester credit hours) for completion and may consist solely of course work in the specialized area and related work thereto. General education may be optionally included but will not be considered to contribute toward program registration. Such programs should have a distinct identity of their own, independent of courses of study leading to the Associate in Applied Science degree.

CERTIFICATE PROGRAMS

1. A student must be matriculated in a SUNY Canton curriculum for a minimum of 12 semester credit hours of graded course work, earning a minimum grade point average of 1.75 for all such credit hours taken. Individual programs may have additional graduation requirements.
2. Successful completion of all required courses.
3. A minimum GPA of 1.75, unless otherwise specified in the section describing that Certificate in the catalog.
4. Payment of all financial obligations to the College.

NOTE: Successful completion of a Certif-

icate Program does not automatically qualify a student for admission to a degree curriculum. In order to be admitted to a degree curriculum, the graduate of the Certificate Program must achieve a record that indicates a reasonable probability of success in the new curriculum and be recommended by the faculty.

GRADUATION WITH HONORS

Honors for the Commencement Program are based on cumulative GPA to December 31 of the year prior to commencement.

Cum Laude	GPA not less than 3.25
Magna Cum Laude	GPA not less than 3.50
Summa Cum Laude	GPA not less than 3.75

Upon program completion, students who have earned cumulative GPA's as listed above will be designated for Cum Laude, Magna Cum Laude, or Summa Cum Laude on their diplomas and transcripts.

AWARDING TWO BACCALAUREATE DEGREES

In order to qualify for a second baccalaureate degree from SUNY Canton, a student must satisfactorily complete at least 30 semester credit hours beyond the first degree requirements and also meet the specific curriculum requirements of the second program. All of the subsequent work should be taken in an essentially different area of specialization.

A student who wishes to earn a second baccalaureate degree at SUNY Canton must have written approval of course requirements by the appropriate School Dean. When the required courses are completed, the School Dean will notify the Registrar that the student is to be certified for the additional degree. No student may be awarded two degrees within the same minimum time span.

AWARDING TWO ASSOCIATE DEGREES

No student may be awarded two associate degrees simultaneously within the same

minimum time span. In order to qualify for a second associate degree from SUNY Canton, a student must satisfactorily complete at least 15 semester credit hours beyond the first degree requirements and also meet the specific curriculum requirements of the second program, all of the subsequent work to be taken in an essentially different area of specialization.

A student who wishes to earn an additional associate degree at SUNY Canton must have written approval of course requirements by the appropriate School Dean. When the required courses are completed, the School Dean will notify the Registrar that the student is to be certified for the additional degree.

COMMENCEMENT

The commencement program is created once a year for May commencement ceremonies. The list of graduates is based on students who completed degree requirements in the prior August, December, January, and those who anticipate competing requirements in May. Students may petition their academic Dean for permission to participate in the current year's commencement ceremony without meeting requirements by the May deadline. Outstanding credit requirements will be at the discretion of the Dean. Please be aware that students are not permitted to have their names published in the commencement program in the same major within the past two years.

DEGREE REQUIREMENTS AND CATALOG YEAR

Students are enrolled into a catalog year based on the date of admission to their declared program. Students may keep this initial catalog year for up to five years for Certificate/ Associate's degree programs and up to seven years for Bachelor's degree programs. After which the catalog year may be reset to the current catalog year. Students who change programs or have a break in matriculation will be re-admitted to the current catalog year. If program requirements

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change while the student is enrolled, the student has the right to continue to claim the requirements for the year that they were last admitted to the program. Exceptions may be approved by the academic dean.

ACADEMIC INFORMATION

STUDENT CLASSIFICATION

FULL-TIME STUDENT: one who is enrolled for 12 or more semester hours of credit.

PART-TIME STUDENT: one who is enrolled for less than 12 semester hours of credit.

MATRICULATED STUDENT: a student who has made formal application to and has been admitted into the College as a degree or certificate seeking candidate.

NON-MATRICULATED STUDENT: a student who has not made application for nor has been admitted into the College as a degree or certificate seeking candidate.

FRESHMAN: a student who has earned 0–29 credit hours, all of which must be a part of a degree program offered by the College.

SOPHOMORE: a student who has earned 30–59 credit hours, all of which must be a part of a degree program offered by the College.

JUNIOR: a student who has earned 60–89 credit hours, all of which must be a part of a degree program offered by the College.

SENIOR: a student who has earned 90+ credit hours, all of which must be a part of a degree program offered by the College.

ACADEMIC REQUIREMENTS— RE-REGISTRATION

To register for the second or any subsequent semester, a full-time matriculated, degree student must achieve the following standards (see chart below) or have the approval of the Dean of the School in which the *student* is registered.

STATUS	ATTEMPTED CREDITS/REQUIRED GPA					
	1-23	24-35	36-47	48-59	60-71	72+
Good Standing	1.5	1.75	2.0	2.0	2.0	2.0
Academic Jeopardy/ Warning	1.25 - 1.49	1.5 - 1.74	1.75 - 1.99			
Academic Recovery	0.5 - 1.24	0.75 - 1.49	1.50 - 1.74	1.50 - 1.99	1.65 - 1.99	1.75 - 1.99
Suspension	0.0 - 0.49	0.0 - 0.74	0.0 - 1.29	0.0 - 1.49	0.0 - 1.64	0.0 - 1.74

** Imputed credit - Courses designated as remedial/developmental cannot be awarded academic credit, and therefore do not count towards overall GPA or earned hours towards a college degree. However imputed credits are included when determining a student's academic status for their first semester only.*

** Students in academic jeopardy/warning are considered to be maintaining minimum satisfactory academic progress and are eligible to re-register.*

** Students on Academic Recovery have failed to achieve the minimum GPA but are allowed to re-register if they comply with the conditions specified in the Academic Recovery Contract. This program offers an opportunity for students to improve their academic standing.*

Any student who is suspended from College for academic reasons will have two options: 1) Submit an academic appeal and detailed plan for success by the stated deadline, or 2) complete a minimum of six credit hours and achieve a GPA of 2.5 or higher. Students are permitted to take these credits at SUNY Canton as a non-degree student or this coursework may be taken at another institution. Financial aid and campus housing are not available for SUNY Canton non-degree students. Students may then apply for readmission to SUNY Canton after one semester has passed via the Readmission Request Form in UCan Web. Permission to re-register is not guaranteed and will be granted only after approval by the appropriate School Dean.

Academic Recovery is a privilege and not a right. Students placed on academic recovery who fail to meet all requirements of the program may be immediately suspended. A student suspended mid-semester for violating Academic Recovery may appeal ONLY if there are documented extenuating circumstances by emailing the Provost at provostoffice@canton.edu. The decision of the Provost is final.

Students suspended or expelled from the college for disciplinary reasons will receive grades earned for all courses completed. Students who voluntarily withdraw from College will be permitted to re-register with the concurrent written approval of the Director of Admissions and the School Dean of the requested curriculum. Students who are suspended or expelled from SUNY Canton or any other college/university for behavioral matters are required to meet with the Admissions Review Board before a decision of admission will be made.

Online Learning

TAKING AN ONLINE COURSE

In an online course, students connect with their teacher and classmates via the computer using the Internet. Course materials, tests, assignments, and discussions are delivered via the college's learning platform called Blackboard (Bb). Students can chat with their instructor virtually, collaborate with other students, and participate in classroom discussions in their online courses.

Online courses provide students with the flexibility and convenience of studying anytime, anywhere in an interactive and innovative learning environment.

COURSE EXPECTATIONS

SUNY Canton's online courses provide the same quality experience as our traditional campus-based courses and have the same credits and requirements as face-to-face courses. All of SUNY Canton's online courses and academic programs are designed to produce the same learning outcomes as traditional courses. To ensure quality, online courses undergo a rigorous course review process before they are offered online.

The majority of online classes are not self-paced and active online participation is often mandatory. Additionally, many online courses have extensive reading and writing demands.

REQUIREMENTS

Students in online courses are required to be responsible for their learning. Strong time-management skills and study habits are essential in this learner-centered environment.

To participate in an online course,



students need to have access to a working computer and connection to the Internet. Broadband connection, such as Roadrunner or DSL, is preferred. Students should check the course syllabus for broadband requirements before registering for a course. Additional technical requirements include:

- Microsoft Windows XP, Vista, 7 or 8, Mac OS X: 10.3 or higher (added a bulleted list)
- The latest browser available (Firefox or Chrome)

Internet Explorer 7 **is not** compatible

LEARNER SUPPORT

SUNY Canton is dedicated to helping students achieve their educational goals by supporting and promoting initiatives that enhance student accessibility and academic excellence in online learning environments. SUNY Canton online students have access to the same advisement, registration, financial aid, library, academic and support services as on-campus students. Our library provides online tutorials on Internet research and links to databases and electronic journals. Tutoring Services and Student Accessibility Services offer tutoring, academic assistance, and various resources

and materials online. Learner resources and support services are available online through the www.canton.edu website.

On a technical level, SUNY Canton's Information Services offers on-going technical support to students during normal institutional working hours for hardware, software, and course management issues through their Help Desk at helpdesk@canton.edu. Additional technical support is provided through the Open SUNY Help Desk at 1-844-673-6786. UCanWeb provides access to various student services such as financial aid, registration, course schedules, grades, and unofficial transcripts.

ACCREDITATION

SUNY Canton is approved to offer distance learning through the Middle States Commission on Higher Education (MSCHE). Some programs are SUNY and SED approved to be offered online. See individual academic programs for more information.



Academic Support Services

Academic support services enhance the educational opportunities for all students at SUNY Canton. For complete descriptions and current contact information, go to www.canton.edu/academic_support_services. All academic support services are free of charge to SUNY Canton students.

PLACEMENT TESTING

SUNY Canton requires new matriculated students to take the Accuplacer placement exam unless exempt as determined by standardized test scores, such as Regents exams, ACT or SAT tests. Transfer students must demonstrate a “C” or better in a college-level English course to be exempt.

Students required to test **will be notified** after acceptance. SUNY Canton offers both on-site and remote testing possibilities. For details and practice test items, go to www.canton.edu/testing or call 315-379-3954.

DEVELOPMENTAL STUDIES

Developmental education courses allow students the opportunity to build competencies in reading, writing and mathematics that are essential to college success. Placement in these courses is based on test results, admissions referral and/or faculty referral. The developmental studies faculty works closely with students and their curriculum advisors to encourage growth in academic skills and the exploration of personal and vocational goals. Students are given the opportunity to demonstrate their potential for success in the academic environment.

ADVISING AND FIRST-YEAR PROGRAMS

Advising and First-Year Programs is part of the Ready Center in Miller Campus Center 224. The office is charged with helping students adjust to college level learning and responsibility. The office can assist with:

- Advising new students and providing them with an understanding of degree requirements and scheduling.
- Coordinate the First Year Experience (FYEP 101) class and experience
- Provide information on the academic rules and resources
- Provide degree worksheets and advice on degree completion
- Assist students considering a change in major to understand their unique situation
- Assist students in preparing to meet with their faculty advisors and plan a schedule
- Referrals to appropriate faculty advisors, dean's offices or other campus resources.
- Work with Academic Recovery students to help them return to good academic standing
- Administer the Accuplacer placement exam.
- Offer a series of study skills workshops, called “Smart Steps” each semester.

See www.canton.edu/advising for more details or for additional contact information.

COLLEGIATE SCIENCE & TECHNOLOGY PROGRAM

SUNY Canton's Collegiate Science & Technology Entry Program (CSTEP) is a scholars program designed to prepare minority and economically disadvantaged students for careers in scientific, technical, engineering, mathematical, health-related and licensed professions. The program, which is part of a state-wide effort to address the issue of minority under-representation in the STEM and Licensed professions, emphasizes academic preparation and achievement, and career awareness. CSTEP provides students with a unique college experience that combines academic services and activities with a variety of network-

ing and career-advancement opportunities. Participants share invaluable social interaction and congenial support with fellow students, as well as receive customized strategies for success in both professional and personal aspects of life. Space is limited so students are encouraged to apply early. The CSTEP Office is located in Nevaldine Hall South 131.

EDUCATIONAL OPPORTUNITY PROGRAM

The Educational Opportunity Program (EOP) is committed to the recruitment, retention and graduation of students who normally would not be afforded the chance to pursue a college education. Students are admitted who meet specific academic and financial criteria and who demonstrate the potential for post-secondary success. All new EOP students are required to participate in an extended EOP orientation/summer programs in August In addition to the regular campus orientation required of all Incoming students. EOP provides academic support services, personal counseling, tutoring and financial assistance. Space is limited so students are encouraged to complete their academic and financial applications early.

TRIO STUDENT SUPPORT SERVICES PROGRAM

The TRiO Student Support Services (SSS) program is federally funded and provides enhanced academic assistance to eligible students. To be eligible, students must meet specific academic and financial criteria. The goal of the program is to help students successfully complete their post-secondary education and encourage them to pursue a baccalaureate degree. SSS provides a variety of support services to about 200 students each year, including study skills, time management, academic and transfer counseling and tutorial assistance in math, and science. Students are required to com-

plete mandatory financial literacy modules. Newly admitted TRiO students may also have the opportunity to participate in a summer program. Please contact the director at 315-386-7406 with any questions.

SOUTHWORTH LIBRARY LEARNING COMMONS

Southworth Library Learning Commons is located in the geographic center of the campus. Its services and resources include the Circulation Desk, reserve materials and textbook collection, a library instruction classroom, the Betty J. Evans Tutoring Center, and the Information Services Help Desk. The second level houses circulating book collections, individual study carrels, group study and media-viewing rooms, printers, scanners and copier machines.

The facility provides space for group discussion, quiet study, and tutoring, including the S.T.E.M. Lab, Business & Accounting Lab, Writing Center, and the Late Night Learning Lab. The Think Tank Classroom provides space for information literacy instruction for classes. The library's collection includes approximately 25,000 print and 180,000 electronic books, extensive electronic databases, and a variety of digital media. Additionally, the college has access to all circulating physical materials within the SUNY system available via interlibrary loan, and SUNY Canton students, faculty and staff have borrowing privileges at all of the Associated Colleges libraries, including Clarkson, St. Lawrence University and SUNY Potsdam.

The 24/7 availability of electronic books and various databases is particularly supportive of non-resident students and online courses. The building is equipped with wi-fi, and provides access to laptops, iPads, Kindle reading devices and other emerging technologies. Ongoing innovative technology initiatives support both the learning styles and the needs of the 21st-century learner. The library offers a highly successful, in-demand reserve textbook collection, as well as other resources of anatomical

models that support hands-on learning for students.

Professional librarians are available to assist students with a full range of library services, and a web-based chat reference service provides access to professional research assistance at any time, 24 hours a day, 7 days a week.

The Southworth Library Learning Commons offers extended hours of operation and is open 124 hours a week during the regular academic term, and also maintains 24-hour accessibility for final examination weeks.

BETTY J. EVANS TUTORING CENTER

The Betty J. Evans Tutoring Center, part of the Southworth Library Learning Commons, is committed to helping students achieve their full potential by providing high quality, professional, and accessible student support services in a resource-rich environment designed to promote learning. The Tutoring Center holds International Tutor Training Program Certification through the College Reading and Learning Association (CRLA) and is staffed professional and peer tutors as well as faculty volunteers. All services are free to students who are enrolled in courses at SUNY Canton and are available on a walk-in basis. In addition to supportive staff, the Tutoring Center provides students outside-the-classroom learning opportunities by offering a variety of educational resources.

In addition to traditional tutoring, SUNY Canton holds membership with STAR-NY an online tutoring consortium that provides students with access to tutoring through a fully online platform.

Tutoring Services includes:

WRITING CENTER

Provides tutoring and academic support to students enrolled in all levels of English courses, writing intensive courses, and writing assignments across all curriculums

offered by the college. ESL/ELL assistance and materials are also available.

STEM (SCIENCE, TECHNOLOGY, ENGINEERING, MATH) LAB

Provides tutoring and academic support in STEM related majors and courses including Nursing, Physical Therapy, and Vet. Science. The STEM Lab offer many educational resources including human A & P models and textbook loans.

BUSINESS & ACCOUNTING LAB

Provides tutoring and academic support to students enrolled in business, accounting, finance, and economics courses offered by the campus.

LATE NIGHT LEARNING LAB

Offers students tutoring assistance in courses offered at the college that are not available in any of the above labs. Courses that are offered reflect courses requested by faculty and/or students. In addition, this lab also offers hours during the weekend and evenings to support students who are not able to come during the day. This lab offers all of the resources listed above.

ONLINE TUTORING

Online tutoring is available 2/7/365 through ThinkingStorm. In addition, students are encouraged to engage with the staff of the Tutoring Center virtually as well as face-to-face. Online tutoring and support is available during the traditional semesters as well as the summer and winter terms.

For additional information about our services, please call (315) 386-7879 or visit us at www.canton.edu/tutoring.

STUDENT ACCESSIBILITY SERVICES

The Office of Student Accessibility Services is committed to and supports the mission of SUNY Canton in the inclusion of all students who can benefit from full and equal access to educational advancement and student life.

In accordance with Section 504 of the Rehabilitation Act of 1973, Section 508, the Americans with Disabilities Act of 1990, and the Americans with Disabilities Act Amendments of 2008, the college community endeavors to make reasonable adjustments in its policies, practices, services, and facilities to ensure equal access for students with disabilities. SUNY Canton will also strive to ensure that an otherwise qualified individual with a disability will not, on the basis of that disability, be subjected to discrimination under academic programs, services and activities offered by the College.

The mission of the Office of Student Accessibility Services is to provide academic

accommodations for all qualified students who have documentation of a learning disability, mental health diagnosis, or a physical disability. It is the initial responsibility of the student to identify her/himself as having a disability, request accommodations, and submit complete and valid documentation of their diagnosis. The student must register with the Office of Student Accessibility Services in order to request and receive accommodations. Accommodations will be determined on an individual basis and based on the student's current presenting documentation. The Office of Student Accessibility Services will coordinate, assist, and advocate for students requesting

academic accommodations, non-academic auxiliary aids, or services with the appropriate academic or professional campus office. Personal care needs are the responsibility of the student.

For additional information regarding Student Accessibility Services and our documentation guidelines, please call (315) 386-7392 or visit us at www.canton.edu/accessibility/.

Campus Life

The educational experience at SUNY Canton consists of both academic efforts in the classroom and developmental opportunities through programs offered by the Division of Student Affairs. Overall, the Division is concerned with the quality of life of each student and provides programs and services which . . .

- Promote student development by encouraging positive and realistic self-appraisal, intellectual development, physical fitness, the capacity to appreciate cultural and aesthetic differences, the capacity to work independently and interdependently, and to make appropriate personal and occupational choices;
- Assist students in overcoming personal, physical or educational problems;
- Identify environmental conditions that may negatively influence welfare of students and take steps to overcome such conditions.

The Student Affairs staff has a major responsibility for the quality of student life on the Canton campus. The staff works closely with students through the services available in the Counseling, Health Services, Intramural Sports, Diversity, University

Police, Student Activities, Involvement, and Leadership (SAIL), and Residence Life Offices.

NEW STUDENT ORIENTATION PROGRAMS

The College recognizes the social and academic adjustments which must occur for entering college students to be successful. To enable new students to move with ease and confidence from the home/high school, SUNY Canton provides an orientation program as a total campus endeavor. All new students are expected to participate in orientation and it is mandatory for all new students who will be attending at least one course on campus. During orientation, students get a sense of the academic expectations, meet faculty, staff and administrators, experience campus life and have a chance to meet other new students as well as student leaders.

COUNSELING CENTER

The Counseling Center supports the mission of SUNY Canton and the Division of Student Affairs by contributing to the improvement of both mind and character of

our students. By responding to the personal and psychological needs of the student body, we strive to support their independence and emotional well-being, assisting them in negotiating the complexities of college and successfully preparing them to meet the challenges of the future.

The Counseling Center provides professional and confidential counseling services to assist students in achieving their personal and academic goals through consultation with organizations, faculty, staff and administrators. Collaboration with departments on and off campus contributes to accurate response, assessment, and/or referral.

The Counseling Center provides individual and group counseling, crisis intervention, outreach, educational presentations, and leadership training. The Center is dedicated to maintaining an open atmosphere on campus, honoring the numerous social and cultural contexts represented by our students.

The Counseling Center plays an integral role in promoting a safe and positive environment which values the unique contribution of all individuals and establishes a foundation conducive to learning and developing a healthy lifestyle.

RESIDENCE LIFE

RESIDENCE HALLS

At SUNY Canton, we consider on-campus living an important part of your education—in fact, it's an education in itself. Living in one of Canton's five residence halls means that your life here will include far more than classroom and lab work... it means that SUNY Canton will be your home for 9 out of 12 months for the next few years.

Canton's five halls—Heritage, Mohawk, Rushton, Smith and Kennedy Hall—are located along the Grasse River near classroom buildings, the library, the gym, other recreational facilities, and Chaney Dining Center. It is about a ten minute walk over the footbridge to downtown Canton. The residence halls provide you with a living environment that is clean, safe, and pleasant at an affordable price.

Rooms are attractively furnished with beds, desks, chairs, dressers, blinds, and large closets or armoires. Cable TV is also provided. Three rooms are clustered around an adjoining bath in Heritage, Rushton, Mohawk and Smith. In Kennedy Hall, each apartment has at least one full bath. While we provide the basics, you may desire to add a touch of home with such items as rugs, posters, desk lamps or plants. Each building has a formal main lounge equipped with a TV and comfortable furniture.

SUNY Canton is proud to offer non-gendered inclusive housing. Kennedy Hall is open to all genders and features 303+ beds of suite-style housing. We are also happy to work with students living in the other residence halls to accommodate special requests related to gender identity and/or sexual orientation. If you would like more information or would like to discuss your living space just give us a call at 315-386-7513.

LIVE ON CAMPUS?

SUNY Canton provides students with a pleasant affordable residential experience that assists you in getting the most out of College. Have you thought about why you should live on campus? Here are some of the advantages:

CONVENIENT:

Living five minutes from your classes, computer lab, library, tutoring center, gym, or fitness center can't be beat in the heart of winter. Having your food prepared for you, your parking lot plowed, your heat, electricity, cable paid for, and your friends just down the hall, all make your college experience more comfortable. No more getting up at 5:30 a.m. to clean the snow off your car so you can make the commute for your 8:00 a.m. class.

INTERNET ACCESS:

Recognizing the role that the Internet plays in the educational and social lives of college students all residence halls feature high-speed wireless internet.

IT'S WHERE THE ACTION IS:

When you talk to friends who have gone to college, they first think back to the fun they had in the Residence Halls. From the pizza parties, the intramural champion teams, the late night study groups, the floor trips and activities, to the lifelong friends that you will make, the residential experience is a must.

SAFE:

Your personal safety on campus is a priority for us. Our campus is well lit, patrolled and secure with electronic front door access systems, room combinations, and blue light system. This allows you to spend more time doing the things that are important to you, right here on campus. This means no driving home after a long day of classes and studying and affords you one of the best opportunities to pursue your education.

LIFE-STYLE OPTIONS

Numerous life-style options have been

developed to assist you in finding just the right match for your "home-away-from-home." They are:

All-Female Wing – This wing will be reserved for female students only.

Non-Themed Housing – These rooms are in co-ed wings and do not have a centralized theme. These rooms are suited best for students who are not interested in living in theme housing, but are looking for a more traditional-styled college living experience.

Honors Floor – This floor is designed for those students who are interested in academic honors programs at SUNY Canton and excelled academically in high school.

Team Roo! – This is a special interest floor for those participating in college athletics, intramurals, or those who are simply athletically inclined or enjoy sports.

Gamer – This is a special interest floor for those interested in gaming (such as video game systems like X-Box, Wii, PS3), board games and card games.

Kennedy Hall – This brand new, state-of-the-art residence hall that offers apartment-style housing opened in Fall 2011 for upperclassmen students only. Eligibility requirements include, but are not limited to: grade point average, class year, and disciplinary record.

The Pet Wing – This housing option is designed for students who enjoy sharing their living space with animals. It is not a requirement that a student possess an animal to live on this floor, however, students who have allergies to any kind of animal are strongly discouraged from living in this area due to the various animals that live on these floors. Residents are permitted to bring small, caged pets from home with the prior approval of the Residence Hall Director. We're sorry, but at this time we do not permit dogs (of any size), birds, spiders, or snakes in this living environment. You will be notified during the summer

months if you are approved to live in this housing option. This wing is also designated as Alcohol Free.

All rooms are attractively furnished, costing you less than the average apartment per month. They come with standard room furniture and are wired for over 70 channels of cable. For the room rate per semester, the price can't be beat. It is the policy of the State University of New York that all residence halls are smoke free. No smoking will be permitted in any residence hall.

MANDATORY HOUSING POLICY

Every student in full-time attendance at SUNY Canton, other than married students, single parents, students residing with parent or guardian, students 21 years of age or older, and students living in college-approved Greek housing are required to live on-campus, or be released from that requirement by the Director of Residence Life. Any student who is officially enrolled in a bachelor's degree program and is in their junior or senior year with 60+ earned credit hours can be released. Due to the higher tuition rates paid by out-of-state and international students release requests not meeting the above criteria will be considered on a case-by-case basis for these students. All other cases will be reviewed on an individual basis, and a judgment will be made by the Director of Residence Life as to whether the severity of the hardship warrants a release. In addition, all students who live on-campus in college housing must contract one of the available meal plans with the College Association.

HOW DO I SIGN UP?

To apply for a residence hall room, all you need to do is return the housing application with your life-style and roommate preferences and the appropriate deposit. You can also apply online through your UCan-Web account. If you have any questions or need a housing application, feel free to call us at (315) 386-7513, e-mail us at reslife@canton.edu, or visit us at: www.canton.edu.

INFORMATION SERVICES

Information Services are available to every student attending the College. PC opportunities are located around the campus, providing all students with the opportunity for virtually unlimited use of PCs. All public PC labs use Microsoft Windows-based PCs connected to printers and the internet via the campus Local Area Network (LAN).

SUNY Canton participates in the Microsoft Campus Licensing Agreement. All students have access to standard software packages as listed on our website, www.canton.edu/it/. Many additional software listings are also available and can be found on the same site. Additional assistance for faculty, staff and students is available at the Help Desk. Each student receives an e-mail account.

The campus strongly supports distance learning opportunities for students. Many instructors make use of Internet-based instructional materials and testing, and some courses are taught entirely online.

HEALTH SERVICES

As a team of health care professionals, the Davis Health Center is dedicated to providing culturally competent medical care, educational programs and student advocacy which will enhance a student's wellbeing and empower a student to become a well-informed consumer of health care during their lifetime. The Davis Health Center is staffed by a physician, nurse practitioners, and support staff. The Health Center promotes healthy life style choices as well as providing acute care for students with illnesses and injuries. Laboratory and x-ray facilities are available in Canton as well as at the hospitals in Potsdam and Ogdensburg. Referrals and consultation with medical specialists from the area are available when necessary.

All students enrolled in six or more credit hours must complete the SUNY Canton Health History and Immunization Form. The SUNY Canton Health History and Immunization Form can be found

online at: www.canton.edu/health_center/forms/health_history.pdf or at the college's enrollment site, www.canton.edu/enroll. The completed form should be submitted to the Davis Health Center 30 days prior to the first day of classes. The physical exam section is optional except for students who are:

1. International students
2. Students in Nursing AAS and PN, Physical Therapist Assistant, Early Childhood Education and Dental Hygiene AAS curriculums

There are additional health requirements for students in Nursing (AAS and PN programs), Physical Therapist Assistant (PTA), Dental Hygiene (AAS), and Early Childhood, so please review the form carefully.

Note for athletes: All students who anticipate trying out for intercollegiate athletic teams need to complete only one health/immunization/physical form which is the Athletic Pre-Participation Physical Exam Form. The form can be found online at: www.canton.edu/health_center/forms/Athletic_Physical.pdf. Athletes will not be allowed to try out for a team or to practice with a team until the Athletic Pre-Participation Physical Exam Form is completed.

IMMUNIZATIONS

New York State Public Health Law 2165 requires students attending colleges and universities to demonstrate proof of immunization against measles, mumps and rubella (MMR). All students who are registered six or more credit hours will be required to show written proof of MMR immunity to the Davis Health Center prior to the first day of classes. **Exemptions** to this requirement are:

- Students born before January 1, 1957;
- Students who hold genuine and sincere religious beliefs which are contrary to immunizations (documentation required);
- Students for whom immunization is medically contraindicated (documentation required);

—Students taking all classes online and not living on campus;

—Students who are part-time taking less than six credit hours.

New York State Public Health Law (NYSPHL) 2167 requires institutions, including colleges and universities, to distribute information about meningococcal disease and vaccination to all students attending college six or more credit hours. The law also requires that these students, whether they live on or off campus, acknowledge in writing that they have either:

—A record of meningococcal meningitis immunization within the past ten years; OR

—An acknowledgement of meningococcal disease risks and refusal of meningococcal meningitis immunization signed by the student or student's parent or guardian if under age 18.

Failure to comply with either of these mandatory health requirements within 30 days from the start of classes will result in suspension from the College.

INSURANCE

The College does not insure students against medical expenses which may result from an illness or accident while pursuing their activities at the College. Full-time students are mandated to have medical insurance, either under a policy held by the individual or parent, or through a health and accident policy available through the College. The insurance policy provided through the College provides medical coverage, including preventative services benefits such as screenings, exams and immunizations as specified by the Affordable Care Act (ACA).

An Insurance brochure outlining the insurance coverage is available online at: http://www.canton.edu/health_center/insurance.html or at the Health Center or One Hop Shop. All international students are required to purchase SUNY Medical

Insurance for International Students. Information about the International Student Insurance can be found online at: http://www.canton.edu/health_center/insurance.html

OFFICE OF DIVERSITY AFFAIRS

The Office of Diversity Affairs operates in unison with the college by providing students quality cross-cultural programs, needed services, and engaging leadership development opportunities.

OUR GOALS:

- Identify the needs of students from under-represented ethnic and social groups.
- Provide counsel for students from under-represented ethnic and social groups regarding personal, academic, and social concerns.
- Identify, promote, and provide educational cross-cultural awareness programs.
- Identify, promote, advise, and provide leadership programming for students from under-represented ethnic and social groups.
- Provide or refer students to receive appropriate advocacy.

The services and programs available through our office and through networked referrals include:

- Programs/ Events/ Speakers
- Sensitivity Training
- Student Leadership Development
- Mediation between Individuals/ Groups
- Classroom Presentations
- Provide Resources Regarding Culturally Diverse Issues
- Personal Counseling
- Mentoring/ Tutoring/ Advising
- Advocacy

CAREER COACHING, EMPLOYMENT AND CONTINUING EDUCATION

The Career Services Office is a dynamic office that students should visit long before they get ready to graduate and look for a job. While the Office does help students prepare their job search documents and brings many employers right to the campus to interview students, the Office also provides coaching and resources to help make sure they are on an academic/career path that is right for them. We encourage first year students to make an appointment to build their college resume and identify career goals.

Stop in to the office or log on to www.canton.edu/career, and check out the many resources available to students on topics like

- Job opportunities
- Internships
- Professional etiquette
- Starting a business
- Cover letters and resumes
- And more!

EMPLOYMENT

The Career Services Office coordinates two Career Fairs every year. Even if students are not ready to look for a job, a Career Fair is an excellent opportunity to talk to employers, get advice and make helpful connections.

Career Services can assist students in drafting resumes and cover letters, planning a job search and preparing for interviews. Students can even look for and apply to jobs listed specifically for SUNY Canton graduates on the Career Services recruiting website: Jobs4Roos.

Many employers come to campus to conduct on-site interviews. Below are a few of the companies for which SUNY Canton students have gone to work:

- Siemens Building Technologies
- BreconRidge
- New York State Police

- GE
- Schneider Packaging Equip. Co.
- Novelis
- Canton-Potsdam Hospital
- IBEW
- Champlain Valley Physicians Hospital

Recent graduates have taken jobs as far away as Florida and Texas.

CONTINUING EDUCATION

SUNY Canton has created a number of 1-, 2- and 4-year programs that allow you to continue your education. If, however, you decide to follow an educational path not offered at SUNY Canton, the Career Services Office can help you find a school that will meet your career goals. From personal advising to online resources, we can help you identify the school that will best be able to build on your SUNY Canton education. The Career Services Office can assist students researching options of graduate school and will help them prepare their application documents.

RECREATION AND ATHLETICS

SUNY Canton has recently expanded its athletic programs by adding six new sports teams in the past several years, including women's volleyball, men's and women's golf, men's lacrosse, women's lacrosse, and women's ice hockey.

Other teams include men's and women's soccer, men's and women's cross country, men's and women's basketball, men's ice hockey, women's softball and men's baseball.

SUNY Canton competes against NCAA, NAIA and USCAA competition. Teams play colleges throughout the northeast, including New York, Vermont, Maine, Pennsylvania and Massachusetts.

Coaches work diligently to recruit top student-athletes to fill highly competitive spots on team rosters. If you hope to try out for a sport or would like more information,

particularly regarding eligibility, we strongly encourage you to contact the appropriate coach or athletic department. Contact and other information can be found on the official SUNY Canton athletic website (www.rooathletics.com).

NEW ROOS HOUSE

In July 2011, SUNY Canton opened its brand new \$42 million athletic facility nicknamed Roos House. The building features a three-court field house, indoor baseball/softball practice capability with year-round drop-down batting cages, new 5,000 sq. ft. fitness center, lap pool, ice rink, indoor golf cages, state-of-the-art athletic training room, dedicated team locker rooms and a dedicated study area for student-athletes with wireless computer access.

In 2008-2009, men's and women's soccer played their first full seasons on the college's new lighted synthetic turf field and baseball played its first games on their new baseball field. In the spring of 2011, a new scoreboard was added to the softball field and, in 2012, new fencing around the field. A new press box was recently constructed for the turf field, while new dugouts were completed this past spring for baseball and softball.

SUNY Canton also offers a wide variety of intramural and free recreation programs. Whether you're looking for individual activities like a jog around the beautiful, on-campus cross-country trail, a workout at the Fitness Center, or a Zumba or aerobics class, there is something for you.

FITNESS CENTER

The SUNY Canton Fitness Center is open to all students seven days a week. It features all new Precor equipment including circuit weight machines, free weights and racks, and a variety of state-of-the-art cardiovascular machines including treadmills, elliptical machines, steppers and bikes. Most cardiovascular machines have television viewing capabilities.

INTRAMURALS

If you're looking for more of a competitive, structured recreational activity, the Intramural Department offers leagues in flag football, basketball, dodgeball, softball, volleyball, floor hockey, indoor soccer, badminton, and a variety of other weekend tournaments and activities. Programs are subject to change throughout any given year.

CLUBS AND ACTIVITIES

The Richard W. Miller Campus Center is the focal point for extra-curricular and co-curricular activities for the college community. It is part of the educational program as well as the social life of the College. The Miller Campus Center and Office of Student Activities, Involvement, and Leadership staff encourages students to participate in social, cultural, educational and recreational activities in order to enrich their out-of-class life, to benefit their personal growth and development, and to educate them for the wise use of leisure time.

The College sponsors many clubs and activities. Student groups are easy to organize. Some 70 clubs serve academic, professional and cultural interests, and all clubs welcome students from throughout the college.

Participation in student government comes through the Student Government Association, the College Activities Board, and the Residence Hall Councils.

Students are also very involved in the design of the Paysonian yearbook. A sample of the clubs and activities:

- Diversified Ladies
- Black Student Union
- Newman Club
- Gospel Choir
- Greek Council
- Habitat for Humanity
- Karate Club
- Nursing Club
- Omega Alpha Club
(commuting students)

- Outdoor Adventures Club
- Phi Theta Kappa
(academic honor society)
- Paysonian Yearbook
- Auto Club

STUDENT GOVERNMENT ASSOCIATION

The Student Government Association is the governance voice of the students and provides a means of cooperation and unity among the students, faculty and administration.

SGA is divided into three branches, the executive, legislative and judicial. The executive power is vested in a president, vice president, budget director, secretary and CAB president. The Senate, the legislative branch, is made up of student representatives from each club/organization or appointed by the SGA President. The Judicial Board is responsible for interpreting the constitution and for hearing cases in accordance with the Code of Student Conduct.

COLLEGE ACTIVITIES BOARD

The College Activities Board is the major entertainment and activities group for the campus, and all enrolled students are invited to participate in CAB activities. CAB is responsible for special weekends, films, coffeehouses, recreational tournaments, concerts, cultural, educational and social programs, and special events.

STUDENT JUDICIAL AFFAIRS

Most students find it relatively easy to adjust to the privileges and responsibilities of campus citizenship. For those students who find this process more difficult, the College provides such counsel as the student needs to gain insight and confidence in adjusting to college life. In some cases, when a student is unable or unwilling to assume

his or her social responsibilities, it becomes necessary to impose disciplinary action.

The Code of Student Conduct is published yearly in the Canton *Student Handbook*, which can be viewed online at www.canton.edu/student_affairs/pdf/handbook.pdf. It is the obligation of all students to familiarize themselves with the regulations printed in the handbook.

UNIVERSITY POLICE DEPARTMENT

The University Police Department is the law enforcement agency for the campus. The goal of the Department is to work with the campus community in an effort to create a safe environment. Keeping in mind the specialized needs of a college campus, the University Police take an active role in the educational process; its educational, informational and awareness programs strive to enlist the assistance and cooperation of all members of the academic community in the promotion of practical and responsible community safety. The Department takes pride in its service-oriented approach which reflects a high degree of sensitivity toward the campus environment, student issues and campus community concerns.

The University Police Department is open 24 hours, seven days a week and can be reached by dialing 7777 from any campus phone or (315) 386-7777 from a non-campus phone. Among the services provided are:

- Vehicle registration, firearms registration and storage;
- Loan of motorist aids such as jumper cables, gas, booster pack and performing vehicle unlocks;
- A Crime Prevention Office providing free bicycle registration and personal property registration using Operation Identification;
- The campus lost and found department.

Students are permitted to have motor vehicles on-campus, provided all such motor

vehicles are registered with the University Police Department, and the vehicle registration fee has been paid. Motor vehicle registration can be accomplished at the Student Service Center between 8:30 a.m. and 4:00 p.m., Monday through Friday. Students are required to abide by all parking regulations. A copy of the regulations is issued at the time of vehicle registration.

Temporary registrations may be obtained at the University Police Department or at the Student Service Center in French Hall.

CAMPUS SECURITY ACT

SUNY Canton crime statistics filed with the United States Department of Education can be located in the Jeanne Clery Act at http://www.canton.edu/clery_act. The Advisory Committee on Campus Security will provide upon request all campus crime statistics as reported to the United States Department of Education. You can obtain a copy of these statistics by contacting the University Police Department at 315-386-7777. The United States Department of Education website is: <http://ope.ed.gov/security/index.asp>.

THE COLLEGE ASSOCIATION

The College Association, Inc. is a not-for-profit educational corporation whose purpose is to operate, manage, and promote services to the entire campus community in conjunction with the goals of SUNY Canton. The core services that the College Association currently provide are dining, vending, retail operations, including The Campus Store, Textbook Center, laundry facilities and manage the Roo Shuttle Bus. The College Association provides SUNY Canton ID's for all students, faculty, and staff. It also provides accounting and banking services for the Student Government Association. The College Association Board of Directors consists of four faculty members (selected by the Faculty Senate), three administrators (appointed by the Campus

President) and four students (selected by the Student Government Association). The Board of Directors approves policies and provides oversight to management activities.

CAMPUS MINISTRY OFFICE

The Campus Ministry Office, staffed by local volunteer clergy, strives to minister to the campus community (students, faculty, administration and staff) by creating a physical, personal and spiritual presence within a caring environment. It stimulates and fosters spiritual development and growth by tending to the emotional, physical and intellectual well being of each person within the campus community. The office provides opportunities for worship, outreach, mentoring and spiritual guidance in collaboration with other campus committees.

- Interfaith prayer services
- Connects with the local churches, temples, mosques and synagogues
- Advisors for faith-based student clubs
- Service projects (i.e., community service, Fall “Make a Difference Day,” Spring “Clean-Up, Fix-Up Day” and Blessing of the Brains)
- Confidential spiritual guidance
- Educational programs
- Recreational and social events
- Provide resource contacts and/or assistance for those with critical needs.

The CARES (Character, Acts of Kindness, Respect, Environment and Spirituality) Committee, composed of members of the campus community, serves as both an advisory board to the Campus Ministry Office and assists with programming.

CHURCHES

Canton students are welcomed to services at the many churches in the area. In Canton, there are various Christian churches of both Roman Catholic and Protestant denominations. In the nearby vicinity, there are Jewish synagogues and a mosque. For a

list of individual denominations/churches, please see the Campus Ministry webpage, www.canton.edu/campus_ministry/.

STUDENTS UNABLE BECAUSE OF RELIGIOUS BELIEFS TO ATTEND CLASSES ON CERTAIN DAYS

*(As required by Section 224-A
New York Education Law)*

1. No person shall be expelled from or be refused admission as a student to an institution of higher education for the reason that he is unable, because of his religious beliefs, to attend classes or to participate in any examination, study or work requirements on a particular day or days.
2. Any student in an institution of higher education who is unable, because of his religious beliefs, to attend classes on a particular day or days shall, because of such absence on the particular day or days, be excused from any examination or any study or work requirements.
3. It shall be the responsibility of the faculty and of the administrative officials of each institution of higher education to make available to each student who is absent from school, because of his religious beliefs, an equivalent opportunity to make up any examination, study or work requirements which he may have missed because of such absence on any particular day or days. No fees of any kind shall be charged by the institution for making available to the said student such equivalent opportunity.
4. If classes, examinations, study or work requirements are held on Friday after four o'clock post meridian or on Saturday, similar or makeup classes, examinations, study or work requirements shall be made available on other days, where it is possible and practicable to do so. No special fees shall be charged to the student for these classes, examinations, study or work requirements held on other days.

5. In effectuating the provision of this section, it shall be the duty of the faculty and of the administrative officials of each institution of higher education to exercise the fullest measure of good faith. No adverse or prejudicial effects shall result to any student because of his availing himself of the provisions of this section.

6. Any student, who is aggrieved by the alleged failure of any faculty or administrative officials to comply in good faith with the provisions of this section, shall be entitled to maintain an action or proceeding in the supreme court of the county in which such institution of higher education is located for the enforcement of his rights under this section.

7. As used in this section, the term “institution of higher education” shall mean schools under the control of the board of trustees of the State University of New York or of the Board of Higher Education of the City of New York or any community college.

FAMILY EDUCATIONAL RIGHTS AND PRIVACY ACT OF 1974

The Family Educational Rights and Privacy Act permits current or former students to inspect and review their educational records. Students wishing to review their records should complete the request form available in the Registrar's Office identifying the record(s) they want to inspect. The Registrar will make arrangements for access within 45 days of the request and notify the student of the time and place where the records may be inspected. If the records are not maintained by the Registrar, the student will be advised to whom the request should be addressed.

Students are also accorded a right to challenge the contents of their educational records to insure that the records are not inaccurate, misleading or in violation of rights to privacy or other rights. In order to request

the College to amend a record that he or she believes is inaccurate or misleading, a student should complete the request form available in the Registrar's Office, clearly identify the part of the record they want changed, and specify why it is inaccurate or misleading. If the College decides not to amend the record as requested by the student, the College will notify the student of the decision and advise the student of his or her right to a hearing regarding the request for amendment. Additional information regarding the hearing procedures will be provided to the student when notified of the right to a hearing.

The Act also provides the right to withhold the release of personal information except as provided by law and College policy. SUNY Canton may disclose those items designated as directory information from a student's education record unless directed otherwise by the student in writing. SUNY Canton has designated directory information to include: student's full name, local address and telephone number, campus e-mail address, home address and home telephone number, date of birth, major field of study, dates of attendance, degrees and awards received, date(s) of graduation, participation in officially recognized sports and activities, and the most recent previous educational institution attended.

Students have the right to restrict the disclosure of the items designated as directory information. If students exercise this right, such information will not be released without their written consent except as provided by law and College policy. Non-directory information such as grades, GPA and Student ID number are not released for any student, except directly to the student, without express written consent. Students wishing to restrict the release of the items identified as directory information must notify the Office of the Registrar in writing by the first Friday of the academic term in which the information is not to be disclosed. Such restriction will remain in effect unless rescinded in writing by the student. Students should be aware that restricting the

release of directory information will prevent the College from providing enrollment and graduation information to prospective employers, insurance companies, and lenders without written authorization. It will also prevent inclusion in any news releases of the Dean's List or other honors, as well as graduation lists for publication.

A student may choose to waive their FERPA rights and allow academic information to be shared with persons of their choice by assigning a proxy(ies) in UCanWeb. This allows SUNY Canton to share academic information from the student's educational records with the person(s) the student assigns as a proxy. The proxy must provide the student's SUNY Canton ID and the correct password. This access is available through UCanWeb under the miscellaneous Student Requirements tab.

An exception permitting disclosure without consent is disclosure to school officials with legitimate educational interests. A school official is a person employed by the college in an administrative, supervisory, academic or research, or support staff position (including law enforcement unit and personal health staff); a person or company with whom the College has contracted (such as an attorney, auditor, or college agent); a person serving on the Board of Trustees; or a student serving on an official committee, such as a disciplinary or grievance committee, or assisting another school official in performing his or her tasks. A school official has a legitimate educational interest if the official needs to review an education record in order to fulfill his or her professional responsibility.

Inquiries or complaints may be filed with the Family Educational Rights and Privacy Act Office, Department of Health, Education and Welfare, 400 Maryland Avenue, S.W., Washington, D.C. 20202-4605.

Copies of the Family Educational Rights and Privacy Act are available at the Office of Student Affairs, Miller Campus Center 229, and the Office of the Registrar, Miller Campus Center 012.



Program Offerings

Enrollment in other than registered or otherwise approved programs may jeopardize a student's eligibility for certain student aid awards.

	PAGE	SUNY Code	HEGIS Code
BACHELOR DEGREES			
Agribusiness Management, <i>BBA</i>	72	2645	0112
Applied Psychology, <i>BS</i>	73	1965	2099
Civil & Environmental Engineering Technology, <i>B. Tech</i>	74	2488	0925
Crime Analysis, <i>B.S.</i>	75	3006	2105
Criminal Investigation, <i>B. Tech</i>	76	1359	2105
Criminal Justice:			
Law Enforcement Leadership, <i>B. Tech</i>	77	1911	2105
Cybersecurity, <i>B.S.</i>	78	2698	0701
Early Childhood Care & Management, <i>BBA</i>	79	2699	0506
Electrical Engineering Technology, <i>B. Tech</i>	80	0216	0925
Emergency Management, <i>BS</i>	81	1864	0599
Esports Management, <i>BBA</i>	82	2991	0599
Finance, <i>BBA</i>	83	0282	0504
Forensic Criminology, <i>BS</i>	84	2994	2209
Funeral Services Administration, <i>B. Tech</i>	85	1525	1202
Game Design and Development, <i>BS</i>	86	2638	0799
Graphic and Multimedia Design, <i>BS</i>	87	2026	0605
Health and Fitness Promotions, <i>B. Tech</i>	88	2254	1299.3
Health Care Management, <i>BS</i>	89	0253	1202
Homeland Security, <i>B. Tech</i>	90	2335	2105
Industrial Technology Management, <i>B. Tech</i>	91	1935	0925
Information Technology, <i>B. Tech</i>	92	2045	0799
Legal Studies, <i>BS</i>	93	0818	2199
Management, <i>BBA</i>	94	1645	0506
Mechanical Engineering Technology, <i>B. Tech</i>	95	0235	0925
Mechatronics Technology, <i>BS</i>	96	2882	0925
Nursing, <i>BS</i>	97	0291	1203.10
Nursing Dual Degree, <i>AAS/BS</i>	98		
Sports Management, <i>BBA</i>	99	0182	0599
Technological Communication, <i>BS</i>	100	2673	0699
Veterinary Service Administration, <i>BBA</i>	101	2535	1202
Veterinary Technology, <i>BS</i>	102	2278	1299
ASSOCIATE DEGREES			
Apprentice Training: Industrial Trades, <i>AAS</i> ...	103	0473	5301
Automotive Technology, <i>AAS</i>	104	0525	5306
Business: Accounting, <i>AAS</i>	105	0630	5002
Business Administration, <i>AAS, AS</i>	106	0632/0671	5004
Civil Engineering Technology, <i>AAS</i>	107	0517	5309
Computer Information Systems, <i>AAS</i>	108	0581	5101
Construction Technology: Management, <i>AAS</i> ...	109	1162	5317
Criminal Justice, <i>AAS</i>	110	0640	5505
Early Childhood, <i>AS</i>	111	1327	5503
Electrical Engineering Technology, <i>AAS</i>	112	0699	5310
Engineering Science, <i>AS</i>	113	0530	5609
General Technology, <i>AAS</i>	114	2208	5301
HVAC Engineering Technology, <i>AAS</i>	115	0444	5317

	PAGE	SUNY Code	HEGIS Code
HVAC Trades, <i>AOS</i>	116	2953	5317
Individual Studies, <i>AAS</i>	117	0688	5699
Liberal Arts and Sciences: General Studies, <i>AA, AS</i> 118	0250	5649	
Mechanical Engineering Technology, <i>AAS</i>	119	0493	5315
Nursing, <i>AAS</i>	120	0622	5208.10
Physical Therapist Assistant, <i>AAS</i>	121	0489	5219
Veterinary Science Technology, <i>AAS</i>	122	0521	5402

CERTIFICATE PROGRAMS

Gainful Employment information is available at: www.canton.edu/academics/gel

Electrical Construction & Maintenance	123	0955	5317
Practical Nursing.....	124	0938	5209.20

ACADEMIC MINORS

Accounting.....	125
Aging in Society	125
Applied Physics	125
Applied Psychology	126
Corrections	126
Criminology.....	126
Criminal Justice Administration	126
Cybersecurity	126
Early Childhood Studies.....	127
Economics.....	127
Environmental Technology.....	127
Finance.....	128
Forensic Science	128
Fraud Examination.....	128
Gender Studies	128
Graphic and Multimedia Design	128
Healthcare Management	129
Homeland Security.....	129
Hospitality Management.....	129
Legal Studies	129
Management Information Systems	129
Marketing Management	130
Mathematics.....	130
Sociology.....	130
Sustainability.....	130
Veterinary Services Administration	131
Writing and Communications.....	131

OTHER PROGRAMS

Environmental Science & Forestry, 2+2 w/SUNY ESF, Syracuse.....	132	0250/	various
Forest Technology, 1+1 w/SUNY ESF, Wanakena.....	132	0620/	1086
Police Academy	133		
SUNY Canton Corrections Academy	134		
UB School of Law Degree (3+3) - B.S. + J.D.	135		
Upstate Medical Univ. Early Admissions Program, Joint admission w/SUNY Upstate Medical University at Syracuse	135	0250	

Agribusiness Management—BBA

ABOUT THIS MAJOR:

Are you looking for a career in management? Consider Agribusiness Management. Want to explore the potential of food and agriculture industry? Think of Agribusiness as a career option. SUNY Canton's Agribusiness Management BBA degree is designed to create future entrepreneurs, thanks to a rigorous curriculum that focuses on the agriculture and food industry, including modern day farming.

The agriculture industry constantly evolves to meet the changing needs of society. Crop management, production and distribution are all critically important as the world's population continues to grow. Success in the field requires an advanced understanding of technology and entrepreneurship.

STUDENTS WILL LEARN:

- Accounting
- Finance
- Marketing
- Strategy
- Operations
- Human Resources
- Economics
- Ethics
- Communications

STUDENTS IN THIS MAJOR:

- Are educated in all of the functional managerial skills
- Use cutting-edge case studies to hone analytical skills

CAREER OPPORTUNITIES:

The employment opportunities cover a broad range, including major employers and also entrepreneurship. Graduates are working in:

- Technical sales representatives
- Food brokers
- Accountants

- Financial managers
- Market analysts
- Fruit and vegetable marketing representatives
- Sales managers
- Small animal health care distribution
- International business specialists

ADMISSION REQUIREMENTS:

Refer to the table of high school course prerequisites for admission.

- Students must be prepared to take ENGL 101 (Composition and the Spoken Word).
- Transfers cannot be admitted until Fall 2019.
- Transfer students must meet re-registration requirements to be considered for admission.

PROGRAM REQUIREMENTS: CURRICULUM (2645)

Semester I		Credits
AGMT 100	Introduction to Agribusiness.....	3
BSAD 100	Introduction to Business.....	4
CITA 110	Intro. to Information Technology	3
ENGL 101	Composition and the Spoken Word (GER 10)	3
FYEP 101	First Year Experience.....	1
	Mathematics Elective (GER 1) Recommended MATH 111	3-4
		17-18

Semester II		Credits
ACCT 101	Foundations of Financial Accounting.....	4
ECON 101	Macroeconomics (GER 3)	3
ECON 105	Survey of American Economic History	3
MATH 141	Statistics	3
Natural Science (GER 2).....		3-4
		16-17

Semester III		Credits
ACCT 102	Foundations of Managerial Accounting.....	3
ECON 103	Microeconomics	3
BSAD 203	Marketing.....	3
BSAD 215	Small Business Management.....	3
	Other World Civilization (GER 6) ...	3
		15

Semester IV

BSAD 201	Business Law I.....	3
FSMA 210	Introduction to Finance.....	3
	Humanities (GER 7)	3
	Foreign Language (GER 9) (Spanish recommended)	3
	General Elective.....	3
		15

Semester V

AGMT 305	Agricultural Policy	3
AGMT 320	Agricultural Markets and Price Analysis	3
BSAD 301	Principles of Management	3
BSAD 310	Human Resource Management.....	3
ECON 314	Managerial Economics.....	3
		15

Semester VI

AGMT 310	Agribusiness Management	3
AGMT 330	Farm Business Management	3
AGMT 385	Agriculture Law.....	3
BSAD 322	Advertising and Promotion.....	3
LEST 388	Environmental Law	3
		15

Semester VII

BSAD 340	Management Communications	3
BSAD 345	Technological Innovations & Entrepreneurship	3
BSAD 425	New Product Marketing	3
	U/L Program Elective	3
	U/L Program Elective	3
		15

Semester VIII

AGMT 410	Internship AND/OR U/L Program Elective(s)	3-12
AGMT 450	Capstone in Agribusiness Management	3
		15

* *Fulfills writing intensive requirement.*

U/L = Upper Level Courses (300/400)

GER = General Education Requirement

*Upper Level Program Electives: ACCT, BSAD,
ECON, FSMA, LEST*

Applied Psychology—BS

ABOUT THIS MAJOR:

The mission of the B.S. Applied Psychology program is to train students with the knowledge and skills for a rewarding career in the helping professions. This degree prepares its graduates for:

- Non-licensed Entry level positions in human and social service settings;
- Advancement from current positions; and
- Ability to sit for examinations for licensure that allow individuals to work in positions in the human and social service settings; and
- Admission to graduate level education in Social Work, Mental Health Counseling, Psychology, Applied Behavior Analysis, and Law, among other disciplines.

The B.S. in Applied Psychology addresses a growing need, both locally and nation-wide for trained personnel to serve in human services related fields. This need stems from 10-year projections forecasting the need of social services. These include the delinquent population, pregnant teenagers, homeless persons, and people with mental disabilities and/or developmental disabilities, people with substance abuse, as well as the growing elderly population.

Disclaimer

The completion of this baccalaureate degree will not qualify the holder to apply for, be hired for, or perform the duties related to, employment which involves the provision of services prohibited by New York State Education Law Article 153, Psychology, Paragraphs 7601 and 7601a. This prohibits graduates from SUNY Canton who hold a BS in Applied Psychology, like other baccalaureate programs in Psychology, from performing tasks which only licensed providers are authorized to do under state law (i.e., psychologists, mental health counselors, psychoanalysts, creative arts therapists, marriage and family therapists, registered nurses, physicians, licensed maters social workers, licensed clinical social workers, and licensed behavior analysts).

IN CLASS OR ONLINE

This degree can be completed face-to-face, online, or using a combination of both, making us unique in the SUNY System. It is our goal to meet the needs of every potential student, from recent high school graduates to adult learners considering a career change.

CAREER READY AT GRADUATION:

Organizations prioritize hiring individuals with skills in working with people who have a strong background in applied psychology. SUNY Canton students spend time in a variety

of human service agencies and are prepared for immediate employment in non-licensed entry level positions with other professionals in counseling, habilitation and rehabilitation, and social work to assist clients in becoming successful in their lives. The SUNY Canton applied psychology program also provides a strong foundation for students who plan to seek licensure for positions in human and social service settings and who want to continue their studies at graduate and professional schools.

While working with licensed and certified human service professionals, will be prepared to:

- Help assess clients.
- Assist in identifying and employing best practices in crisis interventions for clients.
- Carry out programs developed in collaboration with supervising professionals.
- Apply professional and legal standards in daily work assignments.
- Use scientific research to help develop successful intervention programs for clients.
- Employ knowledge of counseling and intervention strategies to collaboratively develop successful life programs for clients.

CAREER OPPORTUNITIES:

- Graduates of this program have moved directly into these meaningful careers:
- Performing assessments to determine general eligibility for services
- Providing substance abuse treatment services for incarcerated individuals
- Coordinating prevention and residential services for victims of domestic violence
- Assisting in adult or child protective services investigations
- Working in agencies that administer services to families seeking to adopt children or provide foster care

ADMISSION REQUIREMENTS:

- Refer to the table of high school course prerequisites for admission.
- Transfer students must have a minimum GPA of 2.0 OR a two-year degree.

PROGRAM REQUIREMENTS: CURRICULUM (1965)

Required Courses	Credits
Semester I	
HUSV 100+ Human Services Forum.....	1
ENGL 101+ Composition & the Spoken Word (GER 10).....	3
PSYC 101+ Introduction to Psychology	3

HUSV 201+	General Elective (Math).....	3-4
	Intro. to Human Services*.....	3
	History Elective (GER 4 or 5 or 6)	3
		16-17

Semester II		
ABAP 245+	Introduction to Applied Behavior Analysis	3
SOCI 101+	Intro to Sociology(GER 3).....	3
PSYC 225+	Human Development	3
	BIOL 101, 117, 150 & Lab+	
	Science Elective (GER 2)	4
	Humanities Elective (GER 7).....	3
		16

Semester III		
PSYC 275+	Abnormal Psycholgoy.....	3
SSCI 181+	Alcohol Drugs & Society(GER 3).....	3
MATH 141+	Statistics**(GER 1)	3
	General. Elective (any GER)	3
	General. Elective	3
		15

Semester IV		
PSYC 308+	Personality and Individual Differences	3
	+ Arts/Language Elective (GER 8 or 9)	3-4
HUSV 310+	Working in Human Service Agencies	3
+	Program Elective.....	3
+	Program Elective.....	3
		15-16

AS or AA GRAD Total Credits: 62-64

Semester V		
SSCI 370	Research Methods	3
HUSV 305	Professional & Ethical Responsibilities	3
SOCI 300 or PSYC 300	Race & Ethnic Relations or Cultural Psychology	3
HUSV 315	Mental Health Practice	3
	Program Electives	3
		15

Semester VI		
PSYC 410	Counseling Skills & Procedures	3
PSYC 308	Personality & Individual Differences.....	3
PSYC 315	Crisis Intervention.....	3
PSYC 340	Social Psychology.....	3
HUSV 310	Working in Human Service Agencies	3
		15

Semester VII		
HUSV 421***	Practicum I.....	3
	Program Elective	3
	U/L Program Elective.....	3
	U/L General Elective.....	3
	General Elective.....	3
		15

Semester VIII		
HUSV 422 or U/L Pr. Elective		3
	U/L Program Elective	3
	U/L General Elective	3
	General Electives	3
	General Elective.....	3
		15

BS GRAD Total Credits for Degree 122-124

L/L Program electives include: ABAP, ECHD, HUSV, PSYC, SOCI, SSCI courses. U/L Program electives include: 300/400 HUSV, PSYC, SOCI, SSCI courses

*MATH 141 is a co-requisite for SSCI 370; may use first semester General Elective for MATH 141 pre-req (e.g., MATH 106, MATH 111) if necessary

**Writing Intensive course

***Applied learning course

+Courses to be used to meet Liberal Arts Associates Degree. Student must take Science with a lab to qualify.

Civil & Environmental Engineering Technology—B. Tech.

The Civil & Environmental Engineering Technology (C&EET) curriculum provides students with a Bachelor of Technology (BTech) degree that meets the demands of today's industry.

Students receive hand-on training and the background necessary to be competitive and successful in civil and environmental engineering technology. Flexibility with program electives allows students to study in areas of structural analysis and design, water and wastewater testing and treatment, environmental remediation, geotechnology, construction and project management, surveying, and AutoCADD/REVIT drafting and BIM. Graduates have the opportunity to pursue graduate study.

STUDENTS IN THIS MAJOR:

- Master the knowledge, techniques, skills, and modern tools in civil and environmental engineering technology.
- Select and apply engineering, technology, science, mathematical skills to applications, problems and design.
- Conduct experiments, analyze, interpret, and apply experimental results.
- Have knowledge of construction and earth materials; their properties, use, manipulation, and testing procedures.
- Proficient in common water, wastewater, and soil collection and testing procedures.

CAREER OPPORTUNITIES:

Employment opportunities span the range of industry and commerce. Opportunities include: Structural/Environmental/Construction Engineering and Technology, Civil/Environmental Engineer, Engineering Assistant, Structural Design and Detailers, Assistant Project Manager/Engineer/Environmental Engineer, Surveyor, Environmental Technologist, QC Engineering Technologist, Groundwater Engineer, Municipal Water/Wastewater Treatment Plant Operator, Geotechnical Engineer, Construction Project Estimator, Construction Inspectors and Residential & Commercial/General Contractors. Recent graduates have started their career with companies like Kiewit Corporation, Parson, GHD, Atlantic Testing Laboratories, Gies Steel Company and the United States Navy. Graduates have also gone on to graduate school for Master of Science/Engineering degrees in both Civil Engineering and Environmental Engineering.

CAREER OUTLOOK

- Employment opportunities for civil and environmental engineering technicians are expected to increase by 78% and 10%, through 2016 due to the growth and repair of infrastructure (highways, bridges, dams, etc).
- Employment in environmental technology is expanding because of the increased awareness of environmental issues, and more stringent regulations.

ADMISSION REQUIREMENTS:

- Freshmen will meet all general admission requirements to SUNY Canton.
- Students should have completed four years regents level high school math and be ready for Pre-Calculus (MATH 123) and College Physics I (PHYS 121/125). Students not meeting these criteria will be required to take prerequisite math courses.
- Students with a two-year college degree in a related program area will be evaluated and awarded maximum credit. They must have a minimum grade point average of 2.00. Other transfer students will be evaluated on case-by-case basis.

PROGRAM REQUIREMENTS:

(CURRICULUM 2488)

Semester I	Credit
ENGS 101 Intro to Engineering	2
SOET 116 Intro to Computer Drafting	2
CONS 101 Elementary Surveying	4
MATH 123 Pre-Calculus ¹	4
PHYS 121/131 College/Univ. Physics I	3
PHYS 125/135 College/Univ. Physics I Lab	1
	16
Semester II	
CONS 172 Technical Statics ²	3
GER (3, 4, 5, 6, 7, 8, or 9) ³	3
MATH 161 Calculus ¹	4
PHYS 122/132 College/Univ. Physics II	3
PHYS 126/136 College/Univ. Physics II Lab	1
ENGL 101 Composition and the Spoken Word	3
	17
Semester III	
CONS 203 Advanced Surveying	3
CONS 272 Strength of Materials for Tech ²	3
CONS 280 Civil Engineering Materials	3
MECH 221 Engineering Materials Lab	1
MATH 162 Calculus II ¹	4
CHEM 150 College Chemistry and Lab	4
	18
Semester IV	
ENGS 102 Programming for Engineers	2

CONS 216 Soils In Construction ⁴	4
Program Elec. ^{6(UD) + 7 (CHEM 155)}	3
MATH 364 Differential Equations ¹	3
GER (3, 4, 5, 6, 7, 8, or 9) ³	3
	16

Semester V

CONS 336 Structural Analysis	3
GER (3, 4, 5, 6, 7, 8 or 9) ³	3
CONS Course ⁵	8
Program Elec. ^{6(LD/UD) + 7(UD)}	3
	17

Semester VI

SOET 370 Engineering Economics	3
CONS 274 Construction Management	3
SOET 250 Intro 3D CADD and BIM	2
CONS Course ⁵	3
Program Elec. ^{6(UD) + 7(UD)}	3
	14

Semester VII

SOET 377 Engineering Ethics	1
CONS Course ⁵	4
Program Elec. ^{5 6(UD) + 7(UD)}	3
Program Elec. ^{6(UD) only}	3
GER(3, 4, 5, 6, 7, 8 or 9) ³	3
	13

Semester VIII

CONS 477 Capstone Project	3
SOET 348 Engineering Safety	1
CONS Course ⁵	4
Program Elec. ^{6(UD) + 7(UD)}	6
	14

¹ Students starting with Calculus I, will take Calculus I, Calculus II, Differential Equations, and a fourth math class of their choosing and with advisement.

² Students may take ENGS 201 Statics in place of CONS 172 and ENGS 203 Engineering Strength of Materials in place of CONS 272. Note that ENGS 201 and ENGS 203 may not be offered in like semesters to CONS 172 and CONS 272 and this substitution may alter program course sequencing.

³ GER = General Education Elective. Students must accomplish 7 separate GER categories: GER 3, 4, 5, 6, 7, 8, or 9. Students focusing on environmental engineering technology must take 2 300/400 level GER courses in order to reach 45 upper division credits.

⁴ Writing Intensive Course

⁵ CONS Course: Five (5) courses are required by all students in the program. These courses are: CONS 285 Engineering Geology, CONS 322 Hydraulics, CONS 385 Hydrology & Hydrogeology, CONS 386 Water Quality, and CONS 387 Water & Wastewater Treatment. They are being referred to as CONS Courses because they will be offered on a rotational basis, every 2, 3, or 4 semesters depending on enrollment.

⁶ Program Elective - Focus on Structural Civil Engineering Tech.: A list of approved Program Electives is provided. Students focusing on structural civil engineering technology must also take a total of 7 program electives. At least 1 must be one of the classes marked "S" (CONS 304, CONS 324, or CONS 370). Students may take additional courses designated as "S", which is highly encouraged. Students are strongly advised to take CONS 222. Students must be sure that enough 300/400 level courses are taken to fulfill the minimum requirement of 45 upper division courses. For students focusing on structural civil eng., 5 of their 6 additional program electives must be 300/400 level. In addition to CONS 222, one additional program elective could be 100/200 level, but only with advisement. Course selection must be under advisement of and with approval of the assigned academic program advisor or program coordinator.

⁷ Program Elective - Focus on Environmental Engineering Tech.: A list of approved Program Electives is provided. Students focusing on environmental engineering technology must also take a total of 6 program electives. They must take the 2 courses marked "E" (CHEM 155 College Chemistry II and BIOL 150 College Biology I) and 4 additional program electives, with strong advisement that two of these be CONS 350 and MATH 141. It's advised that CHEM 155 be taken in Semester 4 if possible, putting off the Semester 4 GER until a later semester. It's advised that BIOL 150 be taken in Semester 5 or sooner if possible. Students may take a course designated with a "S" as an additional program elective. Students must be sure that enough 300/400 level courses are taken to fulfill the minimum requirement of 45 upper division courses. All 4 additional program electives must be upper division, and one upper division GER must be taken to fulfill the 45 requirement. If MATH 141 is taken a second GER must be upper division or an additional upper division elective course must be taken. Course selection must be under advisement of and with approval of the assigned academic program advisor or program coordinator.

NOTE: Civil & Environmental Technology students must meet seven of the ten and have a total of 30 credits for the General Education Requirements.

Student Learning Outcomes can be found at www.canton.edu/soet/ceet/.

Crime Analysis—B.S

The four-year, undergraduate Bachelor of Science in Crime Analysis combines a core concentration in crime analysis with select courses in data analytics, cyber security, and geographic information systems. Through-out this program, students identify solutions to crime problems and learn to formulate crime prevention strategies. Additionally, students learn crime mapping and the application of statistics to understand the techniques available to map crime and provide predictive analytics to criminal justice agencies. Applying spatial analysis and mapping, quantitative assessment, and using standard software packages, individuals who complete the program will be prepared to understand investigative techniques and data in order to provide criminal justice agencies with tactical, operational, and strategic crime analysis products. Students will also be prepared to enroll in and pass the New York State Division of Criminal Justice Services crime analysis certification examination.

STUDENTS IN THIS MAJOR:

- Receive training in spatial & data analysis
- Learn components associated with the NYS crime analysis certification exam
- Complete classes toward a minor, including Forensic Science, Criminology, or Homeland Security

CAREER OPPORTUNITIES:

- Crime Analyst
- Criminal Justice Research Analyst
- Law Enforcement
- Intelligence Analyst
- Criminal Justice Policy Analyst
- Public Policy and Administration

ADMISSION REQUIREMENTS:

- Students must be prepared to take Intermediate Algebra (MATH 106).
- Students must be prepared to take Composition and the Spoken Word (ENGL 101).
- Transfer students must have a minimum cumulative grade point average of 2.0 or above.

Recommended preparatory courses or their equivalencies are:

JUST 232	Intelligence Analysis
JUST 233	Crime Analysis
MATH 111	Survey of Mathematics OR
MATH 121	College Algebra
MATH 141	Statistics

PROGRAM REQUIREMENTS:

(CURRICULUM 1359)

Semester I		Credits
JUST 233	Crime Analysis	3
ENGL 101	Composition & Spoken Word	3
	MATH Elective (GER 1).....	3
	Liberal Arts Elective [Any GER]	3
	American History Elective [GER4].....	3
		15
Semester II		
JUST 232	Intelligence Analysis	3
CITA 110	Introduction to Info Technology	3
MATH 141	Statistics [GER1]	3
	Natural Science (GER 2)	3-4
	Liberal Arts Elective [Any GER]	3
		15-16
Semester III		
GMMD 101	Intro to Media Studies [GER7]	3
	Liberal Arts Elective.....	3
	Liberal Arts Elective.....	3
	Liberal Arts Elective[GER5,6,8,9]	3
	General Elective.....	3
		15
Semester IV		
MATH	Math Elective [GER1]	3
	Liberal Arts Elective.....	3
	Liberal Arts Elective.....	3
	General Elective	3
	General Elective	3
		15

Semester V

JUST 421	Cyber Criminology.....	3
JUST 380	Civil Liberties & Homeland Sec.....	3
	Liberal Arts Elective.....	3
	Liberal Arts Elective.....	3
	General Elective.....	3
		15

Semester VI

JUST 347	Res Methods in Criminology & CJ	3
JUST 314	Ethics in CJ*	3
JUST 423	Intelligence Led Policing.....	3
	U/L Liberal Arts Elective	3
	U/L Liberal Arts Elective	3
		15

Semester VII

JUST 402	GIS: Crime Mapping	3
CYBR 365	Digital Forensic Analysis.....	3
LEST 450	Trial Court & Rules of Evidence.....	3
	Liberal Arts Elective.....	3
	Liberal Arts Elective.....	3
JUST 429	Intro to Culm. Exp.....	1
		16

Semester VIII

JUST 425	Law Enforcement Intell. Syst.....	3
JUST 430	Culminating Experience in CJ OR	
	(4) U/L Program Electives	3-12
		15

Students in the Criminal Investigation, B.Tech. program are required to earn a "C" or better in JUST 430.

** Fulfills writing intensive requirement.*

U/L = Upper Level Courses (300/400)

GER = General Education Requirement

NOTE: *Crime Analysis students must meet seven of the ten General Education Requirements and have 30 total GER credits.*

Student Learning Outcomes can be found at www.canton.edu/sci_health/ci/.

Criminal Investigation—B. Tech.

The Bachelor of Technology in Criminal Investigation provides a unique alternative to traditional criminal justice programs. This degree focuses on developing the necessary knowledge and skills required in criminal investigations. Students can opt to complete an internship with an agency in the Criminal Justice field or complete 5 Upper Level JUST courses

STUDENTS IN THIS MAJOR:

- Receive advanced training in criminal investigation.
- Learn to analyze forensic evidence, preserve crime scenes, collect and process evidence.
- Complete classes toward a minor, including Forensic Science or Criminology.

CAREER OPPORTUNITIES:

- Police Officer
- Federal law enforcement agencies
- Autopsy Technician/Medical Investigator
- Military police
- Crime Scene Technicians
- Forensic Scientist

ADMISSION REQUIREMENTS:

- Students must be prepared to take Intermediate Algebra (MATH 106).
- Students must be prepared to take Composition and the Spoken Word (ENGL 101).
- Transfer students must have a minimum cumulative grade point average of 2.0 or above.

Recommended preparatory courses or their equivalencies are:

JUST 101	Introduction to Criminal Justice
JUST 110	Criminal Law
JUST 111	Criminal Procedure
JUST 203	Criminal Investigations
JUST 209	Law Enforcement Communications
JUST 210	Introduction to Forensic Investigation

MATH 111	Survey of Mathematics OR
MATH 121	College Algebra

PROGRAM REQUIREMENTS:

(CURRICULUM 1359)

Semester I		Credits
JUST 101	Intro. to Criminal Justice	3
ENGL 101	Composition & Spoken Word	3
	MATH Elective (GER 1)*	3
PSYC 101	Introductory Psychology	3
CITA 110	Intro. to Information Technology	3
		<u>15-16</u>
Semester II		
JUST 105	Correctional Philosophy	3
JUST 110	Criminal Law	3
SOCI 101	Introduction to Sociology	3
	Natural Science w/Lab (GER 2)	4
	Humanities Elective (GER 7)	3
		<u>16</u>
Semester III		
JUST 111	Criminal Procedure	3
JUST 201	Critical Issues in Crim. Justice*	3
JUST 209	Law Enforc. Communications	3
	Liberal Arts Elective (Any GER)	3
	American History Elective (GER 4)	3
		<u>15</u>
Semester IV		
JUST 203	Criminal Investigations	3
JUST 207	Police Services	3
JUST 210	Intro. to Forensic Invest.	3
	Lib. Arts Elective (any GER)	3
	Lib. Arts Elective (GER 5,6, 8,9)	3
		<u>15</u>
Semester V		
JUST 300	Forensic Photography	3
JUST 303	Investigative Interviews	3
	U/L General Elective	3
	General Elective	3
	General Elective	3
		<u>15</u>
Semester VI		
JUST 301	Latent Prints and Impressions	3
JUST 314	Ethics in CJ	3
	U/L Program Elective	3
	U/L General Elective	3
	General Elective	3
		<u>15</u>
Semester VII		
JUST 406	Crime Scene Investigation	3
JUST 408	The Investigation of Death	4
JUST 429	Intro. to Culminating Experience	1
	U/L Program Elective	3
	General Electives	6
		<u>16</u>

Semester VIII

JUST 430	Culminating Experience in CJ OR	
	(5) U/L Program Electives	3-15
		<u>15</u>

Students in the Criminal Investigation, B. Tech. program are required to earn a "C" or better in JUST 430.

** Fulfills writing intensive requirement.*

U/L = Upper Level Courses (300/400)

GER = General Education Requirement

NOTE: *Criminal Investigation students must meet seven of the ten General Education Requirements and have 30 total GER credits.*

Student Learning Outcomes can be found at www.canton.edu/sci_health/ci/.

Criminal Justice: Law Enforcement Leadership—*B. Tech.*

The Law Enforcement Leadership program blends the disciplines of criminal justice, law enforcement and management. It provides the foundation to allow graduates to seek entry positions in law enforcement or to seek promotion into supervisory and management positions. Most graduates of this program will seek employment with law enforcement agencies, other governmental agencies or in the private sector. Since the program provides ample opportunities for electives, students may choose electives that may help them to develop or hone management skills, or acquire knowledge and skill in law enforcement techniques.

STUDENTS IN THIS MAJOR:

- Develop leadership and managerial skills needed to succeed in contemporary law enforcement agencies.
- Analyze critical issues in law enforcement
- Study under the tutelage of experienced criminal justice professionals.
- Are exposed to current issues and state-of-the-art technology.
- Culminate their education with a semester-long internship or additional course work.
- Qualified students have the opportunity to attend the David Sullivan-St. Lawrence County Law Enforcement Academy as an internship site.
- Can choose to take all classes for the degree online!

CAREER OPPORTUNITIES:

- Law enforcement officers at local, state and federal level
- Law enforcement management for municipal, state, and federal agencies
- Probation and Parole
- Security consultants
- College and university campuses

CAREER OUTLOOK:

- Jobs for graduates in law enforcement are projected to increase by 7% through 2020 according to the U.S. Department of Labor Bureau of Labor Statistics.
- Higher education requirements for entry level employees of law enforcement agencies at all levels are becoming more common.

ADMISSION REQUIREMENTS:

- Students must be prepared to take Intermediate Algebra (MATH 106).
- Students must be prepared to take Composition and the Spoken word (ENGL 101).
- Transfer students must have a minimum cumulative grade point average of 2.0.

PROGRAM REQUIREMENTS

(CURRICULUM 1911)

Semester I		Credits
JUST 101	Introduction to Criminal Justice.....	3
BSAD 100	Intro. to Business.....	3
ENGL 101	Composition & Spoken Word.....	3
MATH 111	Survey of Math or Higher.....	3
PSYC 101	Introduction to Psychology.....	3
		<u>15</u>
Semester II		
JUST 110	Criminal Law	3
JUST 111	Criminal Procedure	3
SOCI 101	Introduction to Sociology.....	3
	Amer. History Elective (GER 4)	3
	Humanities Elective (GER 7)	3
		<u>15</u>
Semester III		
CITA 110	Intro. to Information Technology	3
MATH 141	Statistics	3
	Natural Sci. w/Lab Elect. (GER 2) ...	4
	Lib. Arts Elective (GER 5,6,8,9).....	3
	General Elective.....	3
		<u>16</u>
Semester IV		
JUST 201	Critical Issues in Criminal Justice **.	3
JUST 207	Police Services.....	3
JUST 209	Law Enforcement Communication OR	
BSAD 200	Business Communications.....	3

Elective [GER]	3
General Elective.....	3
	<u>15</u>

Semester V

JUST 321	Managing Law Enforce. Training.....	3
JUST 344	Civil Liability Issues for CJ Admin. ...	3
BSAD 301	Principles of Management	3
	U/L Program Elective ²	3
	U/L Program Elective ²	3
		<u>15</u>

Semester VI

JUST 314	Ethics in Criminal Justice OR	
BSAD 319	Professional Ethics	3
JUST 333	Managing Patrol Functions.....	3
	U/L BSAD,or JUST Elective	3
	U/L Program Elective ²	3
	U/L Program Elective ²	3
	General Elective.....	3
		<u>15</u>

Semester VII

JUST 429	Intro to Culminating Experience *....	1
JUST 449	Current Issues in Law Enforce.	3
JUST 335	CJ Agency Management	3
BSAD 375	Leadership & Decision Making.....	3
	General Elective.....	3
	General Elective	3
		<u>16</u>

Semester VIII

JUST 430	Culminating Exper. in CJ AND/OR	
	U/L Program Electives.....	3-15
		<u>15</u>

**This course is only required for students intending to take JUST 430 Culminating Experience.*

***Writing Intensive course*

U/L = Upper Level course (300/400)

GER = General Education Requirement

Program Electives: JUST, BSAD, or LEST

NOTE: Criminal Justice: Law Enforcement Leadership students must meet seven of the ten General Education Requirements and have 30 total General Education credits.

NOTE: As of Fall 2013, all newly admitted transfers and freshmen must attain a grade of 2.0 or greater for any Upper Level JUST course to receive credit towards graduation. .

Student Learning Outcomes can be found at www.canton.edu/sci_health/leml/.

Cybersecurity—B.S.

The Bachelor of Science in Cybersecurity program prepares students to assess security needs of computer and network systems, recommend safeguard solutions, and manage the implementation and maintenance of security devices, systems, and procedures. The program includes instruction in computer architecture, programming, and systems analysis; networking; telecommunications; cryptography; security system design; applicable law and regulations; risk assessment and policy analysis; contingency planning; user access issues; investigation techniques; and troubleshooting.

STUDENTS IN THIS MAJOR:

- Develop management skills, communication skills, and other skills in order to meet their challenging career.
- Are taught by qualified faculty in small classes.
- Gain hands-on experience on security and risk management, asset security, security engineering, communication and network security, identity and access management, security assessment and testing, security operations, and software development security.
- Will complete a Capstone Project.

CAREER OPPORTUNITIES:

- Cybersecurity Forensic Specialist
- Security Analyst
- Security Auditor
- Security Consultant
- Security Risk Assessor
- Security Manager
- Information Security Officer
- Security Trainer
- Security Systems Designer

POTENTIAL EMPLOYERS:

- Information Security / Information Technology Companies
- Health Management Services
- Financial Services
- Government
- Education
- Military
- Information Security / Information Technology Departments in any industry

ADMISSION REQUIREMENTS:

- Students must be qualified to enter at least College Algebra (MATH 121) and Composition and the Spoken Word (ENGL 101).
- Computer or technology courses are strongly recommended.
- Transfers into this program must have a 2.0 GPA for admission. Students from other institutions and majors may have to complete certain bridge courses that could extend their graduation date.

Students who do not meet necessary prerequisites may be admitted to the College. However, completing the program may require more than four years.

PROGRAM REQUIREMENTS: * (CURRICULUM 2698)

Semester I		Credits
CITA 152	Computer Logic	3
CYBR 165	Survey of Cybersecurity	3
ENGL 101	Composition & Spoken Word	3
	Mathematics Elective1	3
	LA Course (GER 2,4, 5, 6, 7, 8, 9)...	3
		15
Semester II		
CITA 170	Comp. Concepts & Oper. Sys.	3
CITA 175	Comp. Concepts & Oper. Sys Lab ...	1
CITA 171	Oper. Sys. Use & Administration	3
MATH 141	Statistics	3
	LA Course (GER 2,4, 5, 6, 7, 8, 9)...	3
	LA Course (GER 2,4, 5, 6, 7, 8, 9)...	3
		16
Semester III		
CITA 180	Introduction to Programming.....	4
CITA 215	Database Apps & Concepts	3
CITA 220	Data Comm & Network Tech	3
CITA 221	Data Comm & Network Tech Lab ...	1
	LA Course (GER 3).....	3
	LA Course(GER 2, 4, 5, 6, 7, 8, 9)...	3
		17
Semester IV		
CITA 204	Systems Analysis and Design2	3
CITA/CYBR 250	Information Security.....	3
	GER/LA Course.....	3
	GER/LA Course.....	3
	LA Course	3
		15
Semester V		
	Network Security Cluster	3
	Data Security Cluster	3
MATH 351	Discrete Mathematics	3
	LA Course	3
	General Elective.....	3
		15
Semester VI		
	Network Security Cluster	3
CITA 352	Ethical Hacking & Pen Testing.....	3

CITA 360	Data Security Cluster.....	3
	LA Course	3
	General Elective.....	3
	General Elective.....	3
		18

Semester VII

CYBR 450	Cyber Security Body of Knowledge ..	3
	LA Course	3
	U/L LA Course.....	3
	U/L LA Course.....	3
	U/L LA Course.....	3
		16

Semester VIII

CYBR 485	Cybersecurity Practice.....	6
	Or	
	UL Program Elective	3
	UL Program Elective	3
	UL Program Elective	3
	UL LA Course.....	3
	UL General Elective	3
		12

Program Elective-CYBR, CITA, JUST

Seven of ten SUNY GER academic areas (including mathematics and basic communication) and 30 credits of SUNY GER courses must be completed within the first two years of full-time study of the program.

*Network Cluster-CYBR 354, CYBR 356, CITA 440/441
Data Security Cluster-CYBR 360, CYBR/JUST 365, CYBR 455*

1 Minimum mathematics requirement is MATH 121 College Algebra.

2 Fulfills writing intensive requirement.

ADDITIONAL GRADUATION REQUIREMENTS

Each required CYBR/CITA course used to meet graduation requirements must have a grade of C or higher or transfer credit. No more than 3 CITA credits with a course number below CITA 150 may be used for credit towards graduation.

Early Childhood Care & Management—BBA

The Bachelor of Business Administration in Early Childhood Care and Management combines theory and practice for students seeking careers in the childcare field; working specifically with children from infancy - 5 years of age. The degree program prepares students for careers in childcare centers or various early childhood-based businesses and organizations within the early childhood and childcare industry.

The degree program prepares students for work in childcare centers or various early childhood based businesses and organizations within the early childhood and childcare industry.

Early Childhood upper-level program electives offer content relevant to the professional development and growth of the early childhood educator and early childhood director. Additional courses provide a strong business-focused foundation. Courses include content related to organizational leadership, human resources and fiscal management, small business management and ownership, and leadership.

PROGRAM DELIVERY:

The Bachelor of Business Administration in Early Childhood Care and Management can be completed fully online, on campus, or a combination of both. Distance students can attend classes virtually in real-time or view recorded class sessions throughout the semester. Students can begin enrollment in fall or spring and attend part or full-time.

STUDENTS IN THIS MAJOR:

- Participate in student teaching field-based experiences and internships in various childcare settings, including Head Start Programs, Universal Pre-K, and Kindergarten Public School Classrooms, Child Care Centers, Family Child Care Provider Homes, Nursery, and Pre-School programs, Children's Museums, Libraries, and additional Early Childhood Businesses and Organizations
- Design a final semester of study to include an internship, or capstone project, or enrollment in program electives or a combination of all, based on students' individual future career or academic goals.
- Take part in professional development opportunities offered through courses, conferences, trainings, seminars, and workshops

CAREER OPPORTUNITIES:

- Child Care Center Owner or Director
- Child Care Center Director
- Self Employed Family Child Care Center Provider
- Early Childhood Resources and Referral Agencies
- Early Childhood Trainer or Consultant
- Early Childhood-Based Businesses and Organizations

- Head Start Program Administration
- Children's Museum Educator/Trainer

CAREER OUTLOOK:

- According to the U.S. Department of Labor, employment of preschool and childcare center directors is projected to grow 11 percent from 2016 to 2026, faster than the average for all occupations. Overall job opportunities for preschool and childcare center directors are favorable. The median annual wage for preschool and childcare center directors was \$46,890 In May 2017. **Employment statistics are from the Bureau of Labor Statistics 2014-2024*
- Certification requirements are increasing for Early Care and Education providers. Bachelor Degrees are necessary to work in lead administrator positions in childcare facilities and Head Start programs.
- Changes in society and the workforce demand an increase in the availability of high-quality early childcare and education options for families and children from infancy to pre-kindergarten.

ADMISSION REQUIREMENTS:

- Students must meet entrance requirements and be eligible for enrollment in:
Composition & the Spoken Word (ENGL 101).
- Transfer students must have a minimum 2.0 GPA for admittance to the ECHD major
- Transfer students must meet re-registration requirements to be considered for admission
- Students who do not meet ECHD admission requirements may enroll in preparatory courses. Students must pass all *preparatory courses and have a minimum 2.0 GPA for admittance to the ECHD program.
- Graduates of BOCES Early Childhood Occupations programs may be eligible for 3-6 college credits toward the Early Childhood Program at SUNY Canton. Refer to the College catalog for a list of BOCES Programs for which we have articulation agreements.

PROGRAM REQUIREMENTS:

- Students are required to complete mandated trainings offered through NYS Office for Children: Identification of Child Abuse & Neglect and Foundations in Health, Safety & Nutrition [offered within our courses]
- Early Childhood students must complete a Health Clearance through the SUNY Canton Davis Health Center; have evidence of a recent physical exam, and updated immunizations.
- For off campus teaching experiences (ECHD 201 and the Internship) residential students will need to arrange for coordination of and/or transportation to their assigned placement sites.

Distance students' complete student teaching and internship experiences in close proximity to their residence and attend seminars virtually.

(CURRICULUM 2699)

Semester I		Credits
FYEP 101	First Year Experience	1
ECHD 101	Introduction to Early Childhood (GER 3)	3
ENGL 101	Composition & the Spoken Word (GER 10)	3
PSYC 101	Introduction to Psychology (GER 3)	3
	Science Elec. w/lab (GER 2)	4
	History Elective (GER 4,5,6)	3
		17
Semester II		
BSAD 100	Introduction to Business	3
ECHD 121	Wellness in Young Children	3
PSYC 220	Child Development	3
	Math Elective (GER 1)	3-4
ECHD 131	Infants and Toddlers	3
		15-16
Semester III		
ECHD 125	Curriculum Development	3
ACCT 101	Foundations of Fin. Accounting	4
ECHD 250	Children with Special Needs	3
	Humanities Elective (GER 7)	3
	Art or Lang. Elective (GER 8 or 9)	3-4
		16-17
Semester IV		
ECHD 201	Student Teaching Field Experiences	4
ECHD 204	Early Childhood Observation	3
ECHD 285	Issues & Policies in Early EC & ED* - WI	3
BSAD 203	Marketing	3
	General Elective	3
		16
Semester V		
ECON 101	Principles of Macroeconomics	3
BSAD 215	Small Business Management	3
ECHD 340	Policies & Regulations in EC Settings	3
ECHD 404	Positive Child Guidance	3
	General Elective	3
		15
Semester VI		
BSAD 319	Professional Ethics	3
BSAD 310	Human Resource Management	3
ECHD 401	DAP: Learning Environments Infants-Age 5	3
ECHD 301	Fostering Relationships in EC Programs	3
	U/L Program Elective	3
		15
Semester VII		
BSAD 420	Applied Organizational Management	3
HLTH 330	Grant Writing Strategies	2
ECHD 409	Orientation to Culminating Experience	1
ECHD 420	EC Program Development & Management	3
BSAD 340	Management Communications	3
	U/L Program Elective	3
		15
Semester VIII		
	Early Childhood Care & Management Internship OR Capstone Project OR U/L Program Electives OR Combination of:	
ECHD 410	Internship AND/OR	3-12
ECHD 411	Capstone AND/OR	3-12
	U/L Program Elective	3-12
		12

* Fulfills writing intensive requirement.

GER = General Education Requirement

NOTE: Early Childhood students must meet seven out of ten General Education Requirements.

Student Learning Outcomes can be found at:

www.canton.edu/business/early_childhood/

Electrical Engineering Technology—B. Tech.

The Electrical Engineering Technology (B. Tech.) program at SUNY Canton provides opportunities for students to acquire knowledge and practical skills necessary to begin a career in engineering technology as technologist or engineer.

PROGRAM EDUCATIONAL

OBJECTIVES

1. Be effective in performing their duties as Engineers, Technologist, or Technician;
2. Be effective in writing and oral communications;
3. Be ready to expand knowledge in engineering profession through continuing education, or other life-long learning experiences;
4. Be committed to quality, timeliness and respect for diversity.

STUDENT LEARNING OUTCOMES

What students are expected to know and be able to do by the time of graduation:

1. An ability to apply knowledge, techniques, skills and modern tools of mathematics, science, engineering, and technology to solve broadly-defined engineering problems appropriate to the discipline;
2. An ability to design systems, components, or processes meeting specified needs for broadly-defined engineering problems appropriate to the discipline;
3. An ability to apply written, oral, and graphical communication in broadly-defined technical and non-technical environments; and an ability to identify and use appropriate technical literature;
4. An ability to conduct standard tests, measurements, and experiments and to analyze and interpret the results to improve processes; and
5. An ability to function effectively as a member as well as a leader on technical teams.

CAREER OPPORTUNITIES:

- Electronics Technologist or Engineer
- Biomedical Engineering Technologist
- Sale Engineering Technologist or Engineer
- Service Engineering Technologist or Engineer
- Systems Test Engineering Technologist or Engineer

- Product Engineering Technologist or Engineer
- Software Engineering Technologist
- Documentation Engineering Technologist or Engineer
- Quality Control Engineering Technologist or Engineer
- Applications Engineering Technologist or Engineer
- R&D Technologist or Engineer
- Engineering Assistant
- Power Sub-Station Design Engineer
- Graduate School

ACCREDITATION

- Accredited by the Engineering Technology Accreditation Commission (ETAC) of ABET, 415 N. Charles Street Baltimore, MD 21201 – Telephone (410) 347-7700.

ADMISSION REQUIREMENTS

- Candidates must have a minimum of a high school diploma or GED.
- Students must be prepared to take Pre-Calculus (MATH 123). If a student does not meet the criteria, he/she will be required to take prerequisites in math. All students with high school diploma or GED will be required to take a placement examination to determine his/her standing.
- Students who graduate with a two year college degree in a program related area will be evaluated and awarded maximum credit to enable him/her to complete the (B. Tech) degree in two years. Transfer students from community colleges, universities or other institutions of higher learning with some coursework completed will be evaluated on case-by-case basis. Minimum grades of “C” for transfer provided the content is comparable to that offered at SUNY Canton.

PROGRAM REQUIREMENTS:

(CURRICULUM 0216)

Semester I	Credits
ELEC 161 Electronic Fabrications	2
ENGL 101 Composition & the Spoken Word	3
MATH 123 Pre-Calculus	4
SOET 116 Intro to CAD & Design	2
ELEC 101 Electrical Circuits I.....	3
ELEC 109 Electrical Circuits I Lab	1
	15
Semester II	
ENGS 102 Programming for Engineers.....	2
ELEC 102 Electric Circuits II	3
ELEC 129 Electric Circuits II Laboratory	1
MATH 161 Calculus I.....	4

ELEC 165 Digi Fundamentals & Systems.....	3
ELEC 166 Digi Fundamentals & Systems Lab...1	17

Semester III

PHYS 121 College Physics I OR	
PHYS 131 University Physics.....	3
PHYS 125/135 Physics I Lab	1
ELEC 141 Industrial Controls	2
ELEC 213 Microprocessors	3
ELEC 231 Electronic Circuits.....	4
MATH 162 Calculus II.....	4
	17

Semester IV

ELEC 243 Computer Automated Control Systems	2
ELEC 215 Electrical Energy Conversion.....	4
ELEC 225 Telecommunications.....	3
PHYS 122 College Physics II OR	
PHYS 132 University Physics II.....	3
PHYS 126/136 Physics II Lab.....	1
MATH 263 Calculus III	4
	17

Semester V

ELEC 332 Industrial Electronics.....	3
ELEC 343 Advanced Circuit Analysis	3
SOET 377 Engineering Ethics.....	1
MATH 141 Statistics 1	3
MATH 364 Differential Equations	4
Elective (GER 3, 4, 5, 6, 7, 8, 9)	3
	17

Semester VI

ELEC 380 LAN/WAN Technology.....	3
ELEC 383 Power Transmission and Distribution.....	3
ELEC 385 Electronic Communications I.....	3
SOET 348 Engineering Safety.....	1
Program Elective.....	3
Elective (GER 3, 4, 5, 6, 8, 9)	3
	16

Semester VII

ELEC 386 Electronic Communications II	3
ELEC 416 Microelectronics Circuit Design	3
SOET 361 Project Management.....	3
Program Elective.....	3
Elective (GER 3, 4, 5, 6, 7, 8, 9)	3
	15

Semester VIII

ELEC 477 Capstone Project*	3
ELEC 436 Biomedical Electronics OR	
ELEC 488 Electrical Power Systems.....	3
ECON 370 Engineering Economics	3
Program Elective.....	3
Elective (GER 3,4,5,6,7,8,9)	3
	15

* Fulfills writing intensive requirement

UL = Upper Level Courses (300/400)

GER = General Education Requirement

Program Electives: Must be from approved list of program electives for the Electrical Technology program or permission of program coordinator.

NOTE: *Electrical Engineering Technology students must meet seven of ten General Education Requirements, 45 upper level credits.*

Student Learning Outcomes can be found at www.canton.edu/csoet/elect/.

Emergency Management—BS

The Bachelor of Science degree in Emergency Management focuses on the development and education of emergency managers and other administrative personnel with responsibilities in emergency management or the allied homeland security field of study. Students receive education in the mitigation of, preparedness for, response to, and recovery from natural or technological emergencies, disasters and catastrophes. Students complete virtual incident command and training exercise activities, and have the opportunity to develop significant research projects or internships with emergency and disaster management agencies.

STUDENTS IN THIS MAJOR:

- Learn about the four phases of emergency management: mitigation, preparedness, response, and recovery.
- Analyze past disasters and examine effectiveness of the current all-hazards approach to emergency management.
- Learn about natural and technological hazards, and develop hazard and vulnerability assessments.
- Study new and innovative methods for preparing communities and organizations to address the risk of emergencies, disasters, and catastrophes.
- Build leadership, communication, decision-making and problem solving skills through the development and completion of incident command system-based tabletop, functional and full-scale virtual exercises.
- Explore the major legal and liability issues in emergency management and their potential roles in rule-making and policy development.
- Acquire the skills necessary to develop, conduct and evaluate disaster exercises in highly-structured and applied, interactive educational simulations.

CAREER OPPORTUNITIES:

- County and city emergency and disaster management agencies
- Regional and state emergency management and homeland security departments and agencies
- Federal emergency management and homeland security agencies
- Emergency management departments within many Federal agencies
- Hospitals and public health agencies
- Private corporations and businesses, including nuclear power plants
- Criminal justice, firefighting and emergency service agencies

ADMISSION REQUIREMENTS:

- Students must be prepared to take Survey of Math (Math 111) or College Algebra (MATH 121)
- Students must be prepared to take Composition and the Spoken Word (ENGL 101)
- Transfer students must have a minimum 2.0 GPA for admittance to the Emergency Management major and meet specific program requirements for admission.

PROGRAM REQUIREMENTS:

(CURRICULUM 1864)

Semester I	Credits
ENGL 101 Composition & the Spoken Word....	3
MATH 111 Survey of Math OR.....	3
MATH 121 College Algebra (GER1).....	4
PSYC 101 Introductory Psychology (GER3).....	3
	American History (GER 4).....3
	Liberal Arts Elective.....3
FYEP 101 First Year Experience.....	1
	15-17
Semester II	
ACCT 101 Foundations of Financial Accounting	6
OR	
ACCT 104 Survey of Accounting	4
MATH 141 Statistics	3
	Foreign Language (GER 9).....3

Arts Elective (GER 8).....	3
Liberal Arts Elective.....	3
	16

Semester III

EADM 201 Fundamentals of EADM	3
EADM 205 Risk & Hazard Impact Studies	3
SOCI 101 Introduction to Sociology.....	3
	Other World Civil Elect. (GER 6)....3
	Liberal Arts Elective.....3
	15

Semester IV

EADM 220 Disaster Mgmt. & Preparedness.....	3
EADM 222 Comm.: Preparedness & Defense	3
	Humanities Elective (GER 7)
	Science Elective (GER 2)..... 3-4
	West. Civilization Elect. (GER 5).....3
	15-16

Semester V

BSAD 305 Public Budgeting & Fiscal Mgmt.	3
BSAD 301 Principles of Management	3
BSAD 319 Professional Ethics	3
	U/L Liberal Arts Electives.....6
	15

Semester VI

EADM 307 Legal Issues in E&D.....	3
BSAD 340 Management Communications *	3
	U/L Liberal Arts Electives.....9
	15

Semester VII

BSAD 375 Leadership and Change	3
EADM 400 Incident Command: System	
Coord. & Assessment	3
EADM 430 Simulated Disaster Training.....	3
	U/L Liberal Arts Electives.....6
	15

Semester VIII

EADM 435 Disaster Simulation	6
EADM 480 Internship in EADM.....	1, 3, 6, 9
AND/OR	
EADM 485 Senior Project AND/OR	
U/L Program Electives.....	9
	15

Upper Level Program Electives: All upper level EADM, JUST, LELM, HSMB, CONS, ECON, BSAD, SSCI, CITA and PSYC courses, and/or other upper-level courses with permission of instructor.

* *Fulfills writing intensive requirement.*

U/L = Upper Level Courses (300/400)

GER = General Education Requirement

NOTE: Emergency Management students must meet all ten General Education Requirements.

Student Learning Outcomes can be found at www.canton.edu/business/eadm/.

Esports Management—BBA

Esports is a rapidly growing field, both nationally and internationally. Experts predict that, by 2021, global Esports revenues will have reached \$1.65 billion. As more game designers and gaming consumers enter the market, there will be a need for managers to support their efforts. Game publishers, college and professional leagues, advertisers, and firms in complementary markets (gaming accessories, computers, specialty eyewear products, etc.) will together create a high demand for employees who understand the basic technology, language, and culture of Esports and who possess marketing and management skill and knowledge. Graduates of the Esports Management program will be able to pursue positions in public relations, Esports marketing and promotion, tournament directors, collegiate Esports coaches and directors, events management, sales, facilities management, game day operations, and general Esports administration.

CAREER OPPORTUNITIES:

Graduates will be well-qualified for entry-level professional opportunities in fields such as:

- Esports public relations
- Advertising
- Event management
- Sales
- Coaching/administration

ADMISSION REQUIREMENTS:

- Refer to the table of high school course prerequisites for admission <http://www.canton.edu/academics/prerequisites.html>.
- Students must be prepared to take ENGL 101 (Composition and the Spoken Word).

PROGRAM REQUIREMENTS:

(CURRICULUM 2991)

Semester I	Credits
CITA 110 Introduction to Information Technology.....	3
ESPT 100 Introduction to eSports Mgmt.....	3
ENGL 101 Composition and the Spoken Word .3	3
FYEP 101 First Year Experience.....	1
MATH 111, 121, or 141 (GER 1)3-4	13-14
Semester II	
BSAD 100 Introduction to Business.....	3
BSAD 203 Marketing.....	3
ACCT 101 Foundations of Financial Accounting.....	4
ECON 101 Macroeconomics (GER 3).....	3
GMMD 101 GMMD 101 Introduction to Media Studies (GER 7)	3
	16
Semester III	
ACCT 102 Foundations of Managerial Accounting.....	3
BSAD 201 Business Law I.....	3
ECON 103 Microeconomics (GER 3).....	3
GAME 110 Fundamentals of Game Design.....	3
American History (GER 4).....	3
	15
Semester IV	
FSMA 210 Introduction to Finance.....	3
Arts (GER 8).....	3
Liberal Arts Elective (must be GER).3	3
Western Civilization (GER 5) OR	3
Other World Civilization (GER 6) ...3	3
Foreign Languages (GER 9).....	3
	15
Semester V	
SPMT 240 Sports Governance.....	3
SPMT 312 Sports Entrepreneurship	3
BSAD 301 Principles of Management	3
U/L Program Elective	3
General Elective.....	3
	15
Semester VI	
BSAD 372 Electronic Commerce.....	3
BSAD 373 International Business Management .3	3
SPMT 412 Sports Sales and Sponsorship.....	3
U/L Program Elective.....	3
U/L Program Elective.....	3
	15

Semester VII

BSAD 340 Management Communications	3
ESPT 308 Esports Event Management	3
U/L Program Elective.....	3
General Elective.....	3
General Elective.....	3
	15

Semester VIII

ESPT 450 Esports Internship OR	3-12
U/L Program Electives.....	3-12
ESPT 404 Esports Capstone.....	3
	15

* *Fulfills writing intensive requirement.*

U/L = Upper Level Courses (300/400)

GER = General Education Requirement

Upper Level Program Electives: ACCT, BSAD, ECON, ENGL 270, ENGL 301, ESPT, FSMA, LEST, GMMD, SPMT, CITA and MINS

Finance—BBA

As our society moves to a more service-oriented world, the area of financial services becomes critical to our present and future economic situation. The movement towards blurring of the worlds of business, finance, stock brokerage, bond trades, insurance, banking and retirement planning has produced a tremendous growth industry. SUNY Canton's Finance program puts our graduates on the leading edge of this service industry.

STUDENTS IN THIS MAJOR:

- Receive a solid fundamental education in the areas of business, finance, accounting, and liberal arts.
- Train in many operational areas of financial services.
- Have the opportunity to spend an entire semester in the financial industry.
- Prepare for graduate-level education.

CAREER OPPORTUNITIES:

The employment opportunities cover a broad range of options, including major employers and also entrepreneurship. Graduates are working in:

- Banking
- Insurance
- Credit Unions
- Brokerage Firms
- Financial Planning Firms
- Colleges and Universities

EMPLOYERS OF SUNY CANTON GRADUATES:

- Community Bank
- SEACOMM Federal Credit Union
- SUNY Canton
- North Franklin Federal Credit Union
- North Country Savings Bank
- MetLife

ADMISSION REQUIREMENTS:

- Students must be prepared to take Composition & the Spoken Word (ENGL 101).
- Transfer students must have a minimum 2.0 GPA for admittance to the Finance major and meet specific program requirements for admission.

PROGRAM REQUIREMENTS:

(CURRICULUM 0282)

Semester I		Credits
ACCT 101	Foundations of Financial Accounting.....	4
ECON 101	Macroeconomics.....	3
ENGL 101	Composition & the Spoken Word	3
CITA 110	Intro. to Information Technology	3
FYEP 101	First Year Experience	1
	Mathematics Elective (GER 1)	3-4
		17-18

Semester II		Credits
ACCT 102	Foundations of Managerial Accounting.....	3
ECON 103	Microeconomics	3
MATH 141	Statistics	3
BSAD 200	Business Communications.....	3
	GER (2,4,7 or 9)	3
		15

Semester III		Credits
BSAD 201	Business Law I	3
FSMA 210	Introduction to Finance.....	3
	GER (2,4,7 or 9)	3
	General Elective (GER Recommended)	3
	Program ¹ Elective	3
		15

Semester IV		Credits
FSMA 220	Introduction to Investments	3
BSAD 301	Principles of Management	3
FSMA 312	Financial Management	3
	GER (2,4,7 or 9)	3
	GER (2,4,7 or 9)	3
		15

Semester V		Credits
FSMA/ECON 330	Financial Institution & Market.....	3
ECON 315	Global Economy (GER 6)	3
FSMA 315	Global Investments.....	3
	Program Elective ¹	3
	Program Elective ¹	3
		15

Semester VI

BSAD 319	Professional Ethics.....	3
BSAD 203	Marketing.....	3
FSMA 415	Global Finance	3
FSMA 420	Financial Derivatives.....	3
	Program Elective ¹	3
		15

Semester VII

FSMA 325	Financial Compliance & Regulation.....	3
FSMA 422	Risk Management.....	3
	Program Elective ¹	3
	Program Elective ¹	3
	U/L Program Elective ²	3
FSMA 429	Orientation to Culminating Exp.....	1
		15-16

Semester VIII

FSMA 480	Finance Internship** OR.....	6-15
FSMA 460	Senior Project OR U/L Program Electives ¹	3-15
		15

¹ Program Electives: Courses in ACCT, AGMT, BSAD, CITA, ECON, ESPT, FSMA, HSMB, LEST and MINS

² Program Electives: Courses in FSMA

*Lowest acceptable level: College Algebra or Survey of Math.

**REMINDER: Pre-req to FSMA 480 or 460 is FSMA 429 (Orientation to Culminating Experience).

Forensic Criminology, B.S.

The four-year, undergraduate Bachelor of Science in Forensic Criminology is an exciting new program which combines a core concentration in criminology with select courses in the forensic sciences. Throughout this program, students explore the complex interplay between theory and practice in the criminal justice system. Applying the scientific method to criminological theory, individuals who complete the program will be prepared to actively investigate the relationship between criminological research and evidence-based practice in the justice system, and will be poised to begin professional work in criminal justice, or for enrollment in graduate work. The program is interdisciplinary, reflecting the wide range of job opportunities in the field, including: law enforcement, corrections, victim services, juvenile justice and forensic behavioral sciences.

The program requires 3 lower-level core requirements in criminology and the social sciences; 6 upper-level core courses in criminology, forensic science, information management, and research methods; 2 courses from the criminology cluster; and 2 courses from the forensics cluster.

PROGRAM OBJECTIVES

The primary educational objectives of the BS in Forensic Criminology include:

- Exploring a broad range of liberal arts disciplines, and identifying the ways in which these disciplines are interrelated, both in theory and in practical application of theory;
- Demonstrating facility with conventions of academic and professional discourse;
- Analyzing the foundations and evolution of criminological theory;
- Analyzing the foundations and principles of forensic science and criminological practice, including the systems in which these disciplines are found, as well as the prevailing ethical and practical guidelines for practice in these disciplines and systems;
- Identifying systemic issues and problems in contemporary forensic and criminological practice; and
- Applying research and data to current forensic and criminological practice to

investigate potential mechanisms for evidence-based practice to lead change in emerging justice-system reforms.

CAREER OPPORTUNITIES:

- Court positions
- Criminalistics
- Criminal justice researcher
- Research analyst
- Criminal justice policy analyst
- Victim advocacy
- Victim services
- Offender re-entry services
- Rehabilitation services
- Offender programming
- Restorative justice services
- Child protective and social services
- Governmental administration
- Law enforcement, corrections and juvenile justice programming

ADMISSION REQUIREMENTS:

- Refer to the table of for admission.
- Students must be prepared to take College Algebra (MATH 121)
- Students must have a high school average of at least 80.
- Students must be prepared to take ENGL 101 or ENGL 102.
- Transfer students must have a minimum cumulative grade point average of 2.0.

PROGRAM REQUIREMENTS

(CURRICULUM 2994)

Semester I	Credits
ENGL 101 Composition and the Spoken Word (GER 10)	3
JUST 202 Intro to Forensic Criminology	3
PSYC 101 Introduction to Psychology (GER 3) ..	3
SOCI 101 Intro to Sociology	3
Liberal Arts Elective	3
	15
Semester II	
MATH 111 Survey of Math (or higher)	3
POLS 105 Intro to American Government and Politics	3
SOCI 105 American Social Problems (GER 3) ..	3
Science w/ Lab (GER 2)	4
Arts Elective (GER 8)	3
	16

Semester III

GMMD 101 Intro to Media Studies	3
SSCI181 Alcohol, Drugs & Society	3
American History Elective (GER 4) ..	3
General Elective	3
General Elective	3
	15

Semester IV

MATH 141 Statistics	3
PSYC 275 Abnormal Psychology	3
Other World Civilizations (GER 5) ..	3
Liberal Arts Elective (any GER)	3
General Elective	3
	15

Semester V

JUST 310 Causes of Crime	3
Criminology Cluster*	3
Forensics Cluster**	3
U/L Liberal Arts Elective	3
U/L Liberal Arts Elective	3
	15

Semester VI

JUST 426 Ethics in Forensic Science	3
Forensics Cluster**	3
U/L Liberal Arts Elective	3
U/L Liberal Arts Elective	3
General Elective	3
	15

Semester VII

JUST 302 Information Management in Criminal Justice	3
JUST 347 Research Methods Criminology	3
JUST 349 Vulnerable Populations in Criminal Justice	1
Criminology Cluster*	3
U/L Liberal Arts Elective	3
General Elective	3
	16

Semester VIII

JUST 432 Senior Seminar (Capstone)	3
U/L Program Elective	3
Program Elective	3
Program Elective	3
Program Elective	3
	15

Students in the Criminal Investigation, B. Tech. program are required to earn a C or better in all JUST courses taken for credit in the program.

** Criminology Cluster JUST 307, JUST 313, JUST 316, JUST 322, JUST 324, JUST 350 or JUST 351*

*** Forensic Cluster JUST 303, JUST 320, JUST 422 or JUST 424*

NOTE: Forensic Criminology students must meet seven of the ten General Education Requirements and successfully complete the SUNY Canton computer competency requirement.

Funeral Services Administration—B. Tech.

The Bachelor of Technology degree in Funeral Services Administration is open to new students, transfer students and funeral directors who have passed the National Board Examination and are licensed. This is the only bachelor's degree in Funeral Services Administration in New York State and one of only a few in the country.

STUDENTS IN THIS MAJOR:

- Participate in classes, Practicums, and Internships that provide theoretical education as well as practical training and experience in all phases of the funeral service profession including embalming, funeral directing, funeral customs and traditions, and restorative Art..
- Are eligible to take the National Board Examination required for licensure.
- Experience a learning environment that is rigorous yet supportive and flexible.
- Can concentrate elective courses in their field of interest such as business, coroner preparation, or Human Services.
- Will be involved in online and on campus courses.

ACCREDITATION:

The Funeral Services Administration program at the State University of New York (SUNY) at Canton, is an accredited program by the American Board of Funeral Service Education (ABFSE), 992 Mantua Pike, Suite 108, Woodbury Heights, NJ 08097; www.abfse.org; (816)233-3747.

National Board Examination pass rates, graduation rates, and employment rates for this and other ABFSE-accredited programs are available at www.abfse.org. To request a printed copy of this program's pass rates, go to the office of the FSAD program Director, Cook 109 or by email at penepentd@canton.edu, or by telephone 315-386-7170.

CAREER OPPORTUNITIES:

- Funeral Director
- Embalmer

- Funeral Home Manager/Owner
- Pre-need Funeral Counselor in a funeral home or with specialized pre-need companies
- Funeral Service After Care Specialist
- Educator in Funeral Services
- Cemetery Administration
- Allied Professions such as cemeteries, crematories, morgues, coroners, and medical examiners offices, organ and tissue banks, teaching funeral service, and funeral supply sales such as caskets, vaults, embalming fluids, computer software companies.

B-TECH COMPLETION PROGRAM FOR LICENSED FUNERAL DIRECTORS:

Graduates from an accredited ABFSE mortuary science program and who have passed both sections of the National Board Exam are eligible for the B-Tech Completion program. Admissions and graduation requirements apply. Up to 30 credits may be obtained through challenge exams and/or from life experience credits.

ADMISSION REQUIREMENTS:

- Students must be eligible for enrollment in Composition and the Spoken Word (ENGL 101).
- Students must be eligible for enrollment in Intermediate Algebra (MATH 106) or higher.
- Transfer students must have a minimum 2.0 GPA.
- Blue Card requirements, see website under Program Description.

PROGRAM REQUIREMENTS

(CURRICULUM 0152)

Semester I	
BIOL 101	Intro to Biology.....4
PSYC 101	Intro to Psychology** .....3
ENGL 101	Composition & Spoken Word.....3
FSAD 111	Study of Funerals: Past and Present...3
BSAD 100	Intro to Business.....3
	16

Semester II

BSAD 201	Business Law I **3
CITA 110	Intro to Information Technology**...3
MATH 111	Survey of Math OR
MATH 141	Statistics (Any GER 1).....3
	English/Humanities Elect (GER 7)...3
	Social Science Elective .....3
	15

Semester III

ACCT 101	Foundations of Financial Acct.** .....4
SSCI 315	Death, Dying & Bereavement** .....3
	Liberal Arts Elective (GER 4,5,6,8) ..3
	General Elective.....6
	16

Semester IV

BIOL 207	Human Anatomy** .....4
FSAD 115	Thanatochemistry** .....2
FSAD 121	Analytical Embalming Tech.**.....3
FSAD 129	Clinical Practicum** .....2
FSAD 225	Professional Funeral Practice**.....3
	Liberal Arts Elective (GER 4,5,6,8) ..3
	17

Semester V

FSAD 211	Embalming & Asep. Tech** .....4
FSAD 214	Funeral Home Management I** .....3
	General Elective.....3
	U/L Liberal Arts Elective .....3
	U/L Management, Social Science or
	Health Elective .....3
	16

Semester VI

FSAD 308	Intro to Internship.....1
FSAD 205	Mortuary Hygiene** .....3
FSAD 307	Human Response to Death** .....4
FSAD 322	Funeral Home Management II** .....3
	U/L General Elective .....3
HLTH 303	Occupational Health & Safety.....3
	17

Semester VII

FSAD 321	Advanced Embalming** .....3
FSAD 440	Internship.....7
FSAD 420	Current Issues in Funeral Services...3
	13

Semester VIII

FSAD 323	Restorative Art** .....4
FSAD 401	Funeral Service Law** .....3
FSAD 406	Bereavement Counseling** .....3
FSAD 445	Mortuary Compliance .....2
	12

* *Fulfills writing intensive requirement.*

***Core course: covers topics directly assessed on the NBE*

U/L = Upper Level Courses (300/400)

GER = General Education Requirement

—“C” or better is required in all FSAD courses and core courses. Students must take the National Board Examination to pass Mortuary Compliance (FSAD 445).

NOTE: Funeral Services Administration students must meet seven of the ten General Education Requirements and 30 total liberal arts credits.

Student Learning Outcomes can be found at

www.canton.edu/sci_health/fsad/outcomes.html.

Game Design & Development—BS

The Bachelor of Science in Game Design and Development is a comprehensive program focusing on the design and development of modern video games. Courses in the Bachelor of Science in Game Design and Development program provide a focus on video game design and development, imaginary storytelling, and production needs of the modern gaming industry. Graduates of the Game Design program will have hands-on skills to pursue a career creating content for everything from home computers and mobile devices, to emerging platforms like cloud gaming.

STUDENTS IN THIS MAJOR:

- Students will learn the most recent technologies and programming skills to create video games on multiple platforms and devices.
- They will learn the theories and fundamentals of the game development life cycle, such as prototyping, producing, designing, programming, level creation, art production, and testing.
- Through this program, students will gain a high degree of hands-on experience with the design and development of modern video games.
- They will also receive intensive training in developing and applying an algorithmic approach to problem solving through using structure and object-oriented programming techniques, as well as designing and building gaming databases.
- Throughout the program, students will collect samples of their work and create a professional portfolio used in pursuing a job in gaming and other interactive entertainment industry.

CAREER OPPORTUNITIES:

- Game programmers
- Computer graphics and visualization developers

- Virtual reality and augmented reality software engineer
- Modelers
- Animators
- Digital content producers
- Level designers
- Texture mappers

CAREER OUTLOOK

Employment of gaming software developer, computer graphics and virtual reality engineer, multimedia artists and animators, is projected to grow 6 percent from 2014 to 2024. Projected growth will be due to increased demand for animation and visual effects in video games, movies, and television, according to the U.S. Department of Labor Bureau of Labor Statistics. The median pay scale for these positions was \$63,970 per year.

ADMISSION REQUIREMENTS:

- Refer to the table of high school course prerequisites for admission.
- Students must be prepared to take ENGL 101 Composition and the Spoken Word.
- Transfers cannot be admitted until Fall 2019.
- Transfer students must have completed a college level English course.
- Transfer students to this program must have a 2.0 GPA for admission.
- Transfer students from other institutions and majors have to complete certain bridge courses that could extend their graduation rate.

PROGRAM REQUIREMENTS:

(CURRICULUM 2638)

Semester I	Credits
CITA 152 Computer Logic	3
ENGL 101 Composition and the Spoken Word (GER 10)	3
GAME 110 Fundamentals of Game Design.....	3
GMMD 101 Intro to Media Studies.....	3
MATH Elective.....	4

FYEP 101 First Year Experience.....	1
	17

Semester II Credits

CITA 180 Intro to Programming	4
ENGL 202 Creative Non-Fiction.....	3
GAME 130 Game Design and Prototyping	3
SOCI 101 Intro to Sociology.....	3
MATH 121 College Algebra (GER1).....	3
	16

Semester III Credits

CITA 215 Database Apps and Concepts.....	3
ENGL 221 Creative Writing.....	3
GAME 210 Object-Oriented Design for Game Development.....	3
Elective (GER 3, 4, 5, 6, 8, 9)	3
Elective (GER 3, 4, 5, 6, 8, 9)	3
	15

Semester IV Credits

GAME 230 3D Modeling and Texturing.....	3
GAME 240 3D Graphics for Game Development.....	3
GAME 250 Game Mechanics and Dynamics.....	3
Elective (GER 3, 4, 5, 6, 8, 9)	3
Elective (GER 3, 4, 5, 6, 8, 9)	3
	15

Semester V Credits

CITA 342 Visual Programming.....	3
ENGL 301 Professional Writing.....	3
GAME 350 Aesthetics and Immersion.....	3
Liberal Arts Elective.....	3
U/L Liberal Arts Elective	3
	15

Semester VI Credits

CITA 204 System Analysis Design	3
ENGL 315 Short Fiction: The Art of the Tale.....	3
GAME 370 Digital Media and Interaction	3
GMMD 432 Virtual Worlds.....	3
U/L Liberal Arts Elective	3
	15

Semester VII Credits

GAME 390 GAME Capstone I	1
GAME 450 Mobile Game Development	3
GMMD 420 Animation Techniques.....	3
SOCI 250 Sociology of Mass Media.....	3
U/L Liberal Arts Elective.....	3
U/L Liberal Arts Elective.....	3
	16

Semester VIII Credits

GAME 470 Emerging Gaming Applications.....	3
GAME 490 GAME Capstone II	3
GMMD 330 Web Design & Development.....	3
U/L Liberal Arts Elective.....	3
U/L Liberal Arts Elective.....	3
	15

* *Fulfills writing intensive requirement.*

UL = Upper Level Courses (300/400)

GER = General Education Requirement

Graphic and Multimedia Design—BS

The Bachelor of Technology in Graphic and Multimedia Design (GMMD) is a fast paced technology and culture driven major for creative students interested in pursuing a four-year degree. Students can also expect to learn about mobile and social media, and other new forms of communication.

STUDENTS IN THIS MAJOR:

- Create and design original works using graphics, video, photography, sound, and animation.
- Develop communications skills, management skills, and analytical skills.
- Learn design theory and interact with the latest multimedia authoring software.
- Design and launch their own multimedia project individually, as part of a team, and/or complete an internship within the media field.

CAREER OPPORTUNITIES:

- Graphic designer
- Web designer
- Advertising specialist
- Public Relations specialist
- Video/Sound/or Video Game designer
- Journalist

POTENTIAL EMPLOYERS

- Web Design Firms
- Advertising Firms
- Government
- Education
- News Agencies
- Other (design departments)

ADMISSION REQUIREMENTS:

- Prepared to take Expository Writing (ENGL 101)
 - NYS English Regents score ≥ 75 ; or
 - Verbal SAT score ≥ 420 ; or
 - Reading and Writing ACT scores ≥ 17 ; or
 - Transfer student who has already passed a college level English course.
- Transfer students from other institutions and majors may have to complete certain bridge courses that could extend their graduation date.

PROGRAM REQUIREMENTS:

(CURRICULUM 2026)

Semester I	Credits
GMMD 101 Intro to Media Studies.....	3
ARTS 101 Intro to Drawing OR	
SOET 116 Introduction to Computer Aided Drafting and Design.....	3
CITA 152 Computer Logic.....	3
ENGL 101 Composition and the Spoken Word..	3
SOCI 101 Introduction to Sociology.....	3
	15
Semester II	
GMMD 102 Intro to Design OR	
GMMD 103 Intro to Digital Design Software.....	3
CITA 180 Intro to Programming OR	
GMMD 121 Programming for Visual Arts & Design OR	
GMMD 111 Digital Video Editing.....	3
Writing Elective.....	3
HUMA 189 Acting and Improvisation OR	
SPCH 104 Introduction to Speech.....	3
MATH 111 Survey of Mathematics.....	3
OR	
MATH 121 College Algebra.....	4
	15-16
Semester III	
GMMD 200 Digital Photography.....	3
ARTS 201 Art History BCE to 16th Century **	3
ENGL Writing Elective.....	3
GER Elective (GER 4, 5, 6 or 9).....	3
Natural Science (GER 2).....	3-4
	15-16

Semester IV

GMMD 211 Film Analysis.....	3
SOCI 250 Sociology of Mass Media OR	
GMMD 317 Culture and Communication.....	3
ARTS 202 Art History 16th-20th Centuries.....	3
GMMD 3013-D Design OR	
GMMD 3513D Animation.....	3
GMMD 240 Professional Practice.....	3
	15

Semester V

GMMD 313 Studies in Genre Film.....	3
Upper Level ENGL Writing Intensive**.....	3
CITA 342 Visual Programming OR	
Upper Level ARTS* OR	
Upper Level GMMD* Production Elective.....	3
Upper Level General Elective.....	3
	15

Semester VI

GMMD 302 Professional Photography.....	3
GMMD 330 Web Design and Development OR	
GMMD 311 Video Effects & Post-Production.....	3
GMMD 331 Digital Illustration and Typography..	3
ENGL 301 Professional Writing.....	3
Upper Level General Elective.....	3
	15

Semester VII

GMMD 401 Multimedia Product Design.....	3
GMMD 408 Portfolio Development and Media Strategies.....	3
Upper Level GMMD* Production Elective.....	3
Upper Level GMMD* Production Elective.....	3
GMMD 440 Senior Project Proposal/Internship Orientation.....	1
Upper Level Liberal Arts Elective.....	3
	16

Semester VIII

GMMD 432* Virtual Worlds OR	
Upper Level ARTS* OR	
Upper Level GMMD* Production Elective.....	3
GMMD 444 Multimedia Product Design 2.....	4
GMMD 443 Arts Management Internship OR	
Upper Level Elective.....	3-4
Upper Level Elective.....	3
	13-14

*Program Elective

**Writing Intensive Course

U/L = Upper Level Courses (300/400)

GER = General Education Requirement

Student Learning Outcomes can be found at
www.canton.edu/csoet/gmmd/gmmd/html.

Health & Fitness Promotion—B. Tech.

The fitness industry continues to grow as the benefits of good health and exercise become more evident in our society. Fitness is no longer reserved for the elite athlete, but is important for all of society as a means of disease prevention and longevity. Students who complete the bachelor program in Health and Fitness Promotion may pursue employment in settings that promote health and wellness including fitness centers, corporate fitness facilities, as personal trainers, as strength and conditioning coaches with athletic teams, community health, and health organizations. Once enrolled in the program, students have three tracks to choose from to best meet their career goals: science, business, or physical therapy assistant.

The science track is designed for students who plan on pursuing graduate level studies in physical therapy, occupational therapy, chiropractic, athletic training, or physician's assistant. If a student is interested in physician's assistant, they may also be required to take additional science and math course work that may not be included in this program, such as organic chemistry, microbiology, genetics, and calculus. This is best discussed with the student's advisor.

The business track is designed for students who are interested in handling the day-to-day business operations of a fitness facility in addition to their personal trainer or strength and conditioning duties. These students are more interested in helping run a facility or perhaps owning their own business or facility. The business track will provide students with fundamental courses in business and management which should serve to prepare them for business ownership or positions of management in the field.

The physical therapy assistant track is designed for students who have already obtained a two-year PTA degree and wish to complement their physical therapist assistant training with further knowledge in exercise and fitness, or who wish to pursue a Doctor of Physical Therapy Degree after obtaining their bachelor's in Health and Fitness Promotion.

All tracks provide students with a core foundation in health promotion and fitness. Students will be able to choose from specialized electives with an emphasis on exercise and sports. Students also have the opportunity to pursue an internship in an area of their interest.

CAREER OPPORTUNITIES:

- Graduates of the program may pursue employment in settings that promote health and wellness including fitness centers, corporate fitness facilities, as personal trainers,

as strength and conditioning coaches with athletic teams, and community and health organizations.

GRADUATE STUDY

OPPORTUNITIES:

- Doctor of Physical Therapy (DPT) programs
- Doctor of Chiropractic (DC)
- Master of Science in Occupational Safety and Health
- Master of Science in Physician Assistants Studies
- Master of Science in Occupational Therapy
- Occupational Therapy Doctorate (OTD)
- Master of Science in Kinesiology
- Master of Science in Exercise Science
- Master of Science in Community Health
- Master of Science in Therapeutic Recreation
- Master of Science in Athletic Training
- Master of Science in Human Performance

ADMISSION REQUIREMENTS:

- Students must have prerequisites to enroll in a GER Math course and ENGL 101.

PROGRAM REQUIREMENTS:

(CURRICULUM 2254)

Semester I

HEFI/HLTH/PHTA/BSAD	Program Elective.....	3
BIOL 217	Anatomy & Physiology I.....	4
ENGL 101	Composition & Spoken Word.....	3
PSYCH 101	Introduction to Psychology.....	3
	GER/Liberal Arts Elective(4,5,6,7,9)3	16

Semester II

HEFI/HLTH/PHTA/BSAD	Program Elective.....	3
BIOL 218	Anatomy & Physiology II.....	4
	GER Math*.....	3-4
	GER/Liberal Arts Elective(4,5,6,7,9)3	3
	GER/Liberal Arts Elective(4,5,6,7,9)3	16-17

Semester III

	Program Elective (HEFI/HLTH/PHTA/BSAD)....	3
PSYC 225	Human Development.....	3
ACCT 101	Founds. of Financial Accounting OR	
PHYS 121 & 125	Or College Physics I & Lab.....	4
	GER/Liberal Arts Elective (1-9).....	3
	GER/Liberal Arts Elective (1-9).....	3
		16

Semester IV

HEFI/HLTH/PHTA/BSAD	Program Elective.....	3
HEFI 203	Motor Development OR	
PHTA 103	Neuromuscular Pathologies	3-4
PHTA 102	Kinesiology.....	3
BSAD 201	Business Law I OR	
PHYS 122 & 126	College Physics II & Lab.....	3-4
	GER Elective (1-9) U/L if needed.....	3
		15-17

Semester V

HEFI 303	Exercise Physiology.....	3
CHEM 150	College Chemistry I OR	
BSAD 301	Principles of Management	3-4
MATH 141	Statistics	3
	General Elective.....	3
	General Elective U/L if needed.....	3
		15-16

Semester VI

CHEM 155	College Chemistry II OR	
SPMT 306	Sports Operations & Facilities Management.....	3-4
HEFI 401	Fitness Assessment and Exercise Prescription	4
HEFI 375	Fitness and Sports Nutrition.....	3
HEFI 405	Current Issues in Health &.....	3
	Fitness (WT)**	
	General Elective U/L if needed.....	3
		16-17

Semester VII

HSMB 330	Grant Writing Strategies	2
HEFI 406	Orientation to Culminating Exp.	1
HEFI 404	Legal Aspects and Documentation in Health & Fitness professions	3
	U/L Program Elective.....	3
	U/L Program Elective.....	3
		12

Semester VIII

HEFI 407	Health & Fitness Internship AND/OR U/L Program Electives.....	12-15
		12-15

* Students who wish to pursue the science track or are planning to pursue a DPT or wish to take Physics must take College Algebra (Math 121) for their required GER math.

** Fulfills writing intensive requirement.

U/L = Upper Level Courses (300/400)

GER = General Education Requirement

Program Electives: HEFI 310 Advanced Care and Prevention of Athletic Injuries, HEFI 320 Psychology of Health and Fitness, HLTH 303 Occupational Health & Safety, HEFI 370/SSCI 370 Research Methods in the Social Sciences, HEFI 402 Strength and Conditioning, HEFI 403 Community Wellness, HEFI 408 Exercise Prescription for Special Populations, HEFI 409 Applied Exercise Prescription, HEFI 410 Applied Strength & Conditioning.

NOTE: Health & Fitness Promotion students must take seven out of ten General Education Requirements including one and ten, and 30 total General Education credits.

Student Learning Outcomes can be found at

www.canton.edu/sci_health/hefi/

Health Care Management—B.S.

Health Care Management is a Bachelor of Science degree, which includes study in health, science, business and management. Students will be prepared to enter public and private service jobs with theoretical and practical skills necessary for a challenging lifelong career in an ever changing technological society.

STUDENTS IN THIS MAJOR:

- May start as a freshman or transfer credits from another discipline for advanced standing in the major.
- May take asynchronous online courses and thus attendance in Canton will not be necessary.
- Will have internship possibilities in the last semester of study.
- Will have a diverse background in health sciences, health care management and business management upon completion of the program.

CAREER OPPORTUNITIES:

- Upward mobility in management of allied health fields
- Public and private health service careers
- Long-term care administration
- Research in public health on county, state and federal levels
- Business sector jobs in administration within industry, education, government as well as health care

ADMISSION REQUIREMENTS:

- Students must be prepared to take Composition & the Spoken Word (ENGL 101).
- Transfer students must have a minimum GPA of 2.0.

PROGRAM REQUIREMENTS:

- All students will complete a minimum of 125 credits, maintaining a GPA of 2.0.
- In order to advance to junior level status

students will complete 60 credits, maintaining a GPA of 2.0.

- Course work from certificate and associate degree programs may be accepted to permit advanced standing.
- In order to maintain junior and senior level status and to advance to the final semester, all students must maintain a GPA of 2.0.
- In order to advance to the final semester and begin an internship, all students must obtain a passing grade in Health Services Management Internship Orientation (HSMB 308).
- In order to graduate, all students must successfully complete an Internship (HSMB 408) and/or an Internship Alternative and Senior Seminar (HSMB 410).

(CURRICULUM 0253)

Semester I	Credits
HSMB 101 Intro. to Health Care Mgmt.	3
ENGL 101 Basic Communication (GER 10)....	3
Liberal Arts (GER 1)	3
American History Elective (GER 4)....	3
PSYC 101 Introduction to Psychology.....	3
FYEP 101 First Year Experience.....	1
	16
Semester II	
ECON 103 Microeconomics	3
BSAD 201 Business Law I	3
SOCI 101 Introduction to Sociology.....	3
Humanities or Arts Elective (GER 7	3
or 8; must be Liberal Arts)	3
MATH 141 Statistics	3
CITA 101 Library/Information Literacy.....	1
	16
Semester III	
ACCT 101 Foundations of Financial Acct.	4
CITA 108 Introduction to Spreadsheets	1
Science Elective (GER 2).....	3-4
HLTH 200 Medical Terminology of Disease OR	
HSMB 200 Terminology and Coding.....	3
Liberal Arts and Sciences Electives....	3
	14-15
Semester IV	
HSMB 304 U.S. Health Care System	3
FSMA 210 Introduction to Finance.....	3
ENGL 301** Professional Writing and Commu-	
nication*	3
Other World Civilization (GER 6)	
OR Foreign Language (GER 9) .	3-4
Program Elective.....	3
	15-16

Semester V

HSMB 301 Public Health Issues.....	3
HSMB 306 Health Care Financing.....	3
Liberal Arts and Sciences Elective	3
Liberal Arts and Sciences Elective	3
Liberal Arts and Sciences Elective	3
	15

Semester VI

HSMB 305 Managed Care	3
ECON 310 Economics of Healthcare.....	3
HSMB 307 Health Care Facility Admin.	3
Liberal Arts and Sciences Elective	3
Liberal Arts and Sciences Elective	3
	15

Semester VII

HSMB 308 HSM Internship Orientation.....	1
BSAD 340 Management Communications*.....	3
Liberal Arts and Sciences Electives....	3
HSMB 302** Legal and Ethical Issues	
in Health.*	3
HSMB 310 Quality and Patient Safety	3
Program Elective.....	3
	16

Semester VIII

HSMB 410 Senior Seminar	3
HSMB 408 Internship (3-12) AND/OR Up to 4	
program electives for total of 12 credits	
U/L program elective.....	3
U/L program elective.....	3
U/L liberal arts elective.....	3
Program elective	3
	15

Total Credits: 122-124

Program Electives: ACCT, BIOL, BSAD, CHEM, CITA, DHYG, ECON, FSAD, FSMA, HEFI, HLTH, HSMB, LEST, MINS, NURS, PHTA, VSCT, VSAD. Program must meet 7 of 10 General Education Requirements (including 1,2,3 & 10) and 30 total GER credits.

*Students must meet the pre-requisite for MATH 141 Statistics (MATH 106 Intermediate Algebra)

**Writing Intensive

Homeland Security—B. Tech.

The Homeland Security program provides students with a combination of theory and practical skills in the subject area as well as offering a solid grounding in the broader justice system. As a result, students will understand the importance of the impact of technology, human resources and other organizational constraints on homeland security strategies confronting both the public and private sector.

STUDENTS IN THIS MAJOR:

- Receive advanced training in identifying, protecting and responding to threats in both the public and the private sectors in the post-USA PATRIOT Act society.
- Are familiarized with immigration law and issues related to civil liberties while involved in intelligence operations.
- Receive the same certification in the Incident Command System/National Incident Management System as our nation's first responders.
- Individualize their final semester by either completing an internship with a criminal justice agency or completing five upper level criminal justice courses.

CAREER OPPORTUNITIES:

- FBI
- U.S. Border Patrol
- U.S. Coast Guard
- U.S. Department of Homeland Security's Immigration and Customs Enforcement (ICE)
- U.S. Drug Enforcement Administration
- U.S. Marshal's Service
- U.S. Secret Service
- International Criminal Police Organization (Interpol)
- Transportation Security Administration
- Criminal & Intelligence Analysis

- Private Sector Security/Domestic Infrastructure Security

ADMISSION REQUIREMENTS:

- Students must be prepared to take Intermediate Algebra (MATH 106).
- Students must be prepared to take Composition and the Spoken Word (ENGL 101).
- Transfer students must have a minimum cumulative grade point average of 2.0 or above.

Recommended preparatory courses or their equivalents are:

JUST 101	Introduction to Criminal Justice
JUST 105	Correctional Philosophy
JUST 110	Criminal Law
JUST 111	Criminal Procedure
JUST 209	Law Enforcement Communications OR BSAD 200, Business Communications
MATH 111	Survey of Mathematics OR
MATH 121	College Algebra

PROGRAM REQUIREMENTS

(CURRICULUM 2335):

Semester I		Credits
JUST 101	Introduction to Criminal Justice.....	3
ENGL 101	Composition and the Spoken Word..	3
	MATH 111 or Higher.....	3
PSYC 101	Introduction to Psychology.....	3
CITA 110	Intro to Information Technology.....	3
		15
Semester II		
JUST 230	Fundamentals of Homeland Security	3
JUST 110	Criminal Law	3
SOCI 101	Introduction to Sociology.....	3
	Natural Science w/ Lab (GER 2)	4
	Humanities Elective (GER 7)	3
		16
Semester III		
JUST 111	Criminal Procedure	3
JUST 201	Critical Issues in Criminal Justice **.	3
JUST 232	Intelligence Analysis	3
	Liberal Arts Elective (GER 5,6,7,8,9)	3
	American History Elective (GER 4).....	3
		15

Semester IV

JUST 233	Crime Analysis	3
	General Elective.....	3
	General Elective.....	3
	Liberal Arts Elective (Any GER).....	3
	Liberal Arts Elective (Any GER).....	3
		15

Semester V

JUST 326	Threats to Homeland Security.....	3
JUST 375	Global Terrorism: 20th Century to Present.....	3
JUST 380	Civil Liberties & Homeland Security	3
	General Elective.....	3
	General Elective.....	3
		15

Semester VI

JUST 314	Ethics in Criminal Justice	3
LEST 375	Immigration Law & Border Control	3
JUST 355	Public Safety Incident Response	3
	U/L Program Elective.....	3
	General Elective.....	3
		15

Semester VII

JUST 415	Emerging Issues in Homeland Security.....	3
JUST 425	Intelligence Research & Analysis.....	3
JUST 429	Intro. to Culminating Experience	1
	UL Program Elective	3
	General Elective.....	3
	General Elective.....	3
		16

Semester VIII

JUST 430	Culminating Experience in Criminal Justice OR (5) U/L Program Electives	15
		15

Students in the Homeland Security, B. Tech. program are required to earn a C or better in JUST 430

** *Writing intensive course.*

U/L Program electives are chosen from JUST or LEST courses.

GER=General Education Requirement

NOTE: Homeland Security students must meet seven of the ten General Education Requirements and have 30 total GER credits.

Student Learning Outcomes can be found at www.canton.edu/sci_health/home/.

Students must attain a passing grade of C or better to receive credit for any U/L JUST or LEST course

Industrial Technology Management—B. Tech.

The Industrial Technology Management (ITM) curriculum provides students with the opportunity to blend technical interests with management and leadership aspirations. This academic program is ideal for students seeking to build upon a background in engineering technology (e.g. electrical, mechanical, civil, or construction) with an emphasis on developing abilities for project management, systems thinking, managerial skills, entrepreneurship, and business development.

STUDENTS IN THIS MAJOR:

- Have a specialization in an engineering discipline.
- Are able to plan and manage technical projects.
- Are prepared to contribute to business development activities such as product development, operational support, technical marketing, and production management.
- Develop skills to function in and lead a team based effort.
- Are able to communicate in an organized manner through technical reports in written, oral, and other formats appropriate to their careers.

CAREER OPPORTUNITIES:

Employment opportunities are broad and span the range of industry and commerce. Opportunities in this market include:

- Manufacturing and quality control
- Operations management
- Logistics
- Field managers
- Planning and scheduling
- Project engineers or managers

ADMISSION REQUIREMENTS:

Incoming students will meet all general admission requirements as freshmen to SUNY Canton and be prepared to take College Algebra (MATH 121). Transfer students will be evaluated individually by the program academic advisor and must have a minimum GPA of 2.0.

PROGRAM REQUIREMENTS:

(CURRICULUM 0935)

Semester I	Credits
ENGL 101 Composition and Spoken Word	3
Physics, Chemistry OR	
Mathematics Elective ^{4,5}	4
Program Elective.....	3
Program Elective.....	3
Program Elective.....	3
	16
Semester II	
ACCT 101 Foundations of Financial Accounting	
OR	
ACCT 104 Survey of Accounting	4
Physics, Chemistry OR	
Mathematics Elective ^{4,5}	4
Program Elective.....	3
Program Elective.....	3
Program Elective.....	3
	17
Semester III	
ECON 103 Microeconomics OR	
ECON 101 Macroeconomics.....	3
MATH 141 Statistics	3
Program Elective.....	3
Program Elective.....	3
GER (4, 5, 6, 7, 8, 9)	3
	15
Semester IV	
BSAD 201 Business Law I.....	3
Math Elective ⁴	4
Program Elective.....	3
GER (4, 5, 6, 7, 8, 9)	3
GER (4, 5, 6, 7, 8, 9)	3
	16
Semester V	
BSAD 340 Management Communications*	3
SOET 361 Project Management	3
U/L Program Elective	3
Program Elective.....	3
Program Elective.....	3
	15

Semester VI

BSAD 301 Principles of Management	3
SOET 370 Engineering Economics	3
Program Elective.....	3
Program Elective.....	3
U/L Liberal Arts/Science	3
	15

Semester VII

BSAD 449 Strategic Policies & Issues	3
SOET 377 Engineering Ethics.....	1
SOET 430 Systems Analysis	3
U/L Program Elective	3
U/L Program Elective	3
U/L Liberal Arts/Science	3
	16

Semester VIII

SOET 348 Engineering Safety.....	1
SOET 477 Engineering Capstone Project.....	3
U/L Business Elective ³	3
U/L Program Elective	3
U/L Program Elective	3
	13

* *Fulfills writing intensive requirement.*

L/L = *Upper Level Courses (100/200).*

U/L = *Upper Level Courses (300/400).*

GER = *General Education Requirement.*

Program Electives: Any course from the Canino School of Engineering Technology, or the Business Department.

¹ *All Program Elective courses presented for graduation must have at least a grade of "C" (or transfer credit).*

Students in this program must take at least 45 upper division credits (course numbers 300/400) and a minimum of 30 Liberal Arts credits

² *NOTE: Industrial Technology Management students must meet seven of the ten General Education Requirements. Three of the GERs (GER 1, 3, and 10) are met with existing curriculum course requirements. The remaining four GERs must be met by selecting one course each in four of the following seven areas: Natural Sciences (GER 2) American History (GER 4); Western Civilization (GER 5); Other World Cultures (GER 6); Humanities (GER 7); The Arts (GER 8); Foreign Language (GER 9).*

³ *A business elective (U/L) is an elective from business school upper division courses.*

⁴ *Minimum mathematics requirement is MATH 121 College Algebra or MATH 123 Pre-Calculus Algebra, or equivalent.*

⁵ *Physics or Chemistry Electives can be chosen from any course in PHYS or CHEM*

Student Learning Outcomes can be found at www.canton.edu/csoet/itm/.

Information Technology—B. Tech.

The Information Technology (IT) curriculum introduces the student to computer systems, networks, and communications. This academic program is appropriate for students seeking careers in information technology including network administration, operations, systems design, troubleshooting and management. Students have the opportunity to learn systems analysis and design, information management, security implementation, web administration and commerce, and programming.

STUDENTS IN THIS MAJOR:

- Develop management skills, communication skills, and other skills in order to meet their challenging career.
- Are taught by qualified faculty in small classes.
- Gain hands-on experience on computer hardware, networking, database management, web development, security implementation, and IT applications.
- Will complete a Capstone Project and may take an internship.

CAREER OPPORTUNITIES:

- System Analyst
- IT Consultant
- Network Administrator
- Database Manager
- Web Master
- IT Security Specialist
- IT Position in any industry

POTENTIAL EMPLOYERS:

- IT Companies
- Health Management Services
- Financial Services
- Government
- Education
- Military
- IT Departments in any industry

ADMISSION REQUIREMENTS:

- Students must be qualified to enter at

least College Algebra (MATH 121) and Oral and Written Expression (ENGL 102).

- Chemistry or Physics courses are recommended.
- Computer or technology courses are strongly recommended.
- Transfers into this program must have a 2.0 GPA for admission. Students from other institutions and majors may have to complete certain bridge courses that could extend their graduation date.

Students who do not meet necessary prerequisites may be admitted to the College. However, completing the program may require more than four years.

PROGRAM REQUIREMENTS: *

(CURRICULUM 2045)

Semester I		Credits
BSAD 100	Introduction to Business.....	3
CITA 163	Survey of Information Tech.	3
CITA 152	Computer Logic	3
ENGL 101	Composition & Spoken Word.....	3
	Mathematics Elective ¹	3
		<u>15</u>

Semester II		Credits
CITA 170	Comp. Concepts & Oper. Sys.	3
CITA 175	Comp. Concepts & Oper. Sys Lab ...	1
CITA 171	Oper. Sys. Use & Administration	3
MATH 141	Statistics	3
	GER Course	3
	GER Course	3
		<u>16</u>

Semester III		Credits
CITA 180	Introduction to Programming.....	4
CITA 215	Database Apps & Concepts	3
CITA 220	Data Comm & Network Tech	3
CITA 221	Data Comm & Network Tech Lab ...	1
ECON 101	Macroeconomics OR	
ECON 103	Microeconomics	3
	GER Course	3
		<u>17</u>

Semester IV		Credits
CITA 204	Systems Analysis and Design ²	3
CITA 250	Information Security	3
	GER Course	3
	GER Course	3
	GER Course	3
		<u>15</u>

Semester V		Credits
BSAD 301	Principles of Management	3
CITA 300	Management Information Sys.....	3
CITA 310	Web Server Administration.....	3

SOET 361	Project Management.....	3
	Accounting ³	3
		<u>15</u>

Semester VI

CITA 330	Emerging IT Applications	3
CITA 400	Quantitative Approaches to Mgmt. ...	3
SOET 370	Engineering Economics	3
	Program Electives ⁴	3
	Program Electives ⁴	3
	UD Program Elective ⁴	3
		<u>18</u>

Semester VII

CITA 440	Network Management.....	3
CITA 441	Network Management Lab.....	1
	Program Elective ⁴	3
	UD Program Elective ⁴	3
	UD Liberal Arts/Science.....	3
	General Elective.....	3
		<u>15</u>

Semester VIII

CITA 460	IT & Networked Economy	3
SOET 477	Capstone Project	3
CITA 480	Internship in IT OR	
	2–Program Electives ⁴	6
		<u>12</u>

UD = Upper Division Course (300/400)

GER = General Education Requirement

Students in this program must take at least 45 upper division credits (course numbers 300/400) and a minimum of 30 Liberal Arts credits.

Seven of ten SUNY General Education Requirement academic areas (including mathematics and basic communication) and 30 credits of SUNY General Education courses must be completed within the first two years of full-time study of the program.

¹Minimum mathematics requirement is MATH 121 College Algebra.

²Fulfills writing intensive requirement.

³ACCT 101 Financial Accounting or ACCT 104 Survey of Accounting recommended.

⁴Program Electives are courses from within the Canino SOET and the Business Department.

Student Learning Outcomes can be found at www.canton.edu/csoet/it/.

ADDITIONAL GRADUATION REQUIREMENTS

Students must take at least four upper level CITA courses and SOET 477 (Capstone Project) from SUNY Canton. Each required CITA course used to meet graduation requirements must have a grade of C or higher or transfer credit. No more than 3 CITA credits with a course number below CITA 150 may be used for credit towards graduation.

Legal Studies—BS

According to the U.S. Department of Labor Bureau of Labor Statistics, “The legal system affects nearly every aspect of our society, from buying a home to crossing the street.” Such a profound impact suggests that there are a variety of opportunities for individuals with an education in Legal Studies. The Department of Labor states that employers prefer graduates of postsecondary education programs. A graduate of SUNY Canton’s Legal Studies program may find employment in law firms, corporations, hospitals, and local, state or federal government offices. Since the program covers many legal specialties, students may choose electives that may help them to specialize in one or more areas.

STUDENTS IN THIS MAJOR:

- Spend a significant amount of time engaging in legal research, analysis, and writing.
- Learn from faculty who bring a wealth of real world legal experience to the classroom.
- May take elective courses in Accounting, Business, Criminal Justice, and Liberal Arts & Sciences to receive an interdisciplinary education.
- Can choose as many online program components as needed for maximum flexibility.
- Can choose to engage in a semester-long internship as a culminating experience.

CAREER AND GRADUATE EDUCATION OPPORTUNITIES

- Law school or other graduate programs
- Paralegals or legal assistants in law firms.
- Specialists in Real Estate and mortgage document preparation.
- Professionals in District Attorney, Sheriff, Probation, Legal Aid, and Public Defender Offices
- Freelance work as legal professionals.

CAREER OUTLOOK

- Jobs for graduates in Legal Studies are projected to grow by 12 percent (much faster than average) from 2018 to 2028 and experienced, formally trained paralegals should have the best job prospects according to the U.S. Department of Labor Bureau of Labor Statistics.

ADMISSION REQUIREMENTS:

- Students must be prepared to take Composition & the Spoken Word (ENGL 101).
- Transfer students must have a cumulative grade point average of 2.0 for admission to the Legal studies major and meet specific program requirements to be considered for admission.

PROGRAM REQUIREMENTS

(CURRICULUM 0818)

Semester I	Credits
LEST 101 American Legal System.....	3
MATH Elective (GER1).....	3
American History Elective (GER 4) .	3
ENGL 101 Composition & Spoken Word.....	3
Social Science Elective (GER 3).....	3
FYEP 101 First Year Experience.....	1
	16
Semester II	
ACCT 101 Foundations of Financial Accounting.....	4
BSAD 201 Business Law I.....	3
Arts Elective (GER 8)	3
Liberal Arts & Sciences Electives	6
CITA 101 Library/Info Literacy	1
	17
Semester III	
BSAD 202 Business Law II	3
LEST 221 Criminal Practice	3
Science Elective (GER 2).....	3-4
West. Civilization Elec. (GER 5)	3
Foreign Language (GER 9).....	4
	16-17
Semester IV	
LEST 310 Legal Research	3
ENGL 301 Professional Writing & Com.	3
Other World Civilization (GER 6) ...	3
Humanities Elective (GER 7)	3
Upper Level Legal Studies Elective....	3
	15

Semester V

LEST 340 Constitutional Law	3
LEST 330 Legal Writing**.....	3
LEST 350 Civil Litigation	3
Liberal Arts & Sciences Electives	6
	15

Semester VI

BSAD 319 Professional Ethics	3
LEST 449 Advanced Legal Writing **	3
Liberal Arts & Sciences Electives (U/L Recommended)	9
	15

Semester VII

LEST 429 Internship Orientation (If taking LEST 480 in 8th semester).....	1
Upper Level Legal Studies Electives ..	.6
Upper Level Liberal Arts & Sciences Electives.....	9
	15-16

Semester VIII

LEST 480 Legal Studies Internship	3-15
OR	
LEST 485 Senior Project	3-15
AND/OR	
U/L Program Electives.....	3-15
	15

Total Credits for Degree 124-127

** Writing Intensive Course

U/L = Upper Level Courses (300/400)

GER = General Education Requirement

U/L Legal Studies Electives: LEST 320, LEST 360, LEST 370, LEST 375, LEST 380, LEST 388, LEST 410, and LEST 450.

U/L Program Electives: LEST 320, LEST 360, LEST 370, LEST 375, LEST 380, LEST 388, LEST 410, LEST 450, BSAD 301, BSAD 305, BSAD 310, EADM 307, HSMB/NURS 302, JUST 345, and JUST 350.

NOTE: Legal Studies students must meet all ten General Education Requirements.

Student Learning Outcomes can be found at www.canton.edu/business/lest/.

Management—BBA

The Bachelor of Business Administration in Management provides a solid foundation in current management theory and practice. Students are introduced to the principles of accounting, finance, marketing, strategy, operations, human resources, economics, ethics, and communications. Case studies, internships and real world applications in corporate, non-profit, and government settings are integral parts of this exciting four-year program.

STUDENTS IN THIS MAJOR:

- Are educated in all of the functional managerial areas.
- Use cutting-edge case studies to hone analytical skills.
- Are encouraged to pursue a minor for additional skill sets.

CAREER OPPORTUNITIES:

Graduates plan, organize, and control organizational resources to enhance value to stockholders and stakeholders of the organization. Graduates assume entry managerial roles in:

- Retail organizations
- Non-profit organizations
- Government organizations
- Manufacturing organizations

ADMISSION REQUIREMENTS:

- Students must be prepared to take Composition & the Spoken Word (ENGL 101) and GER 1 Math.
- Transfer students must have a cumulative GPA of 2.0 to be admitted into the program.

PROGRAM REQUIREMENTS:

(CURRICULUM 1645)

Semester I	Credits
FYEP 100 First Year Experience.....	1
BSAD 100 Intro. to Business	3
CITA 110 Intro. to Information Technology	3
ENGL 101 Composition & the Spoken Word....	3
Math III or higher	3-4
Western Civilization (GER 5).....	3
	16-17
Semester II	
ACCT 101 Foundations of Financial	
Accounting.....	4
BSAD 203 Marketing.....	3
ECON 101 Macroeconomics (GER 3)	3
American History (GER 4).....	3
Humanities (GER 7)	3
	16
Semester III	
BSAD 201 Business Law I.....	3
ACCT 102 Foundations of Managerial	
Accounting.....	3
ECON 103 Microeconomics	3
Arts Elective (GER 8).....	3
L/L Elective (BSAD/ECON/ACCT/ SPMT)	3
	15
Semester IV	
BSAD 202 Business Law II.....	3
FSMA 210 Introduction to Finance.....	3
MATH 141 Statistics	3
Foreign Language (GER9) OR	
Other World (GER 6)	3
Business Elective (LL).....	3
	15
Semester V	
BSAD 301 Principles of Management	3
BSAD 310 Human Resource Management.....	3
BSAD 373 International Business Management .	3
U/L Elective (BSAD/ECON/ ACCT).....	3
Business Elective (Upper Level)	3
	15
Semester VI	
BSAD 319 Professional Ethics*	3
BSAD 340 Management Communications	3
ECON 314 Managerial Economics.....	3
General Elective.....	3
Business Elective (Upper Level)	3
	15

Semester VII

BSAD 400 Operations Management	3
BSAD 449 Strategic Policies and Issues.....	3
General Elective.....	3
U/L General Elective	3
U/L Elective (BSAD/ECON/ ACCT/SPMT)	3
	15

Semester VIII

BSAD 406 Cumulative Evaluation-BBA in	
Management	3
BSAD 450** Business Internship AND/OR.	6-12
BSAD 410 Senior Project AND/OR	6-12
U/L Program Elective	3-12
	15

L/L = Lower Level Courses (100/200)

U/L = Upper Level Courses (300/400)

GER = General Education Requirement

* Fulfills writing intensive requirement.

**3.0 GPA required to enroll in BSAD 450 Business Internship

Program Electives: ACCT, BSAD, ECON, FSMA, LEST, GMMD, HSMB, SPMT, and CITA

NOTE: Management students must meet eight of the ten General Education Requirements.

Student Learning Outcomes can be found at www.canton.edu/business/bsad/.

Mechanical Engineering Technology—B. Tech.

Graduates of the Bachelor of Mechanical Engineering Technology (B. Tech) program have knowledge on the applied aspects of science and engineering technology that demonstrate skills in analysis, design, development, implementation, and oversight of mechanical systems. Graduates will exhibit skills necessary to be successful in industrial manufacturing processes, experimental techniques and procedures, machinery, thermal/fluid/energy systems, instrumentation and control systems, heating, ventilation and air conditioning (HVAC) systems, and Alternative Energy Systems dependent upon elective choices. Graduates will be successful technologists, field technologists, technical managers, process and sales engineers and will be prepared academically to enter and succeed in related postgraduate degree programs.

STUDENTS IN THIS MAJOR:

- Choose from four tracks of study: (Alternative & Renewable Energy, Mechanical Energy Systems Design, Manufacturing/Mechanical Design, Mechatronics and Robust Quality)
- Apply mathematics, science, engineering and technology to design systems, components and/or processes.
- Utilize sophisticated laboratory equipment to conduct, analyze and Interpret experimental data and report results for process improvement.
- Apply computer skills to design, interpret and analyze data, solve problems and prepare reports/presentations for professional communications.
- Develop team skills through hands projects that require a commitment to quality, timeliness, and continuous improvement while maintaining professional, ethical and social responsibilities.
- Gain real world experience through internship/Co-Op opportunities and project-based learning.

CAREER OPPORTUNITIES:

- Aerospace, Automation & Controls, Automotive Industry, Composite Materials Production, CIM, Electronics Manufac-

turing, Construction and Fabrication, Machining & Metalworking, Manufacturing (electronics, mechanical, defense, energy, Medical Products Packaging, Plant Engineering & Maintenance, Plastics Molding & Manufacturing, Product Design & Development, and Rapid Prototyping, Quality Assurance, Robotics, Supply Chain Management, and Graduate School.

ACCREDITATION

Accredited by the Engineering Technology Accreditation Commission (ETAC) of ABET, 415 N. Charles Street Baltimore, MD 21201 – Telephone (410) 347-7700.

ADMISSION REQUIREMENTS

- Candidates should have completed NYS Regents Math B with grade 80 or better, or Course III with one additional year of high school mathematics, and be ready to enroll in pre-calculus. If a student does not meet this criterion, he/she will be required to take prerequisites in mathematics.
- Students who graduate with a two year college degree in a program related area will be evaluated with the objective of awarding maximum credit toward the completion of the (B Tech) degree.
- Transfer students from community colleges, universities or other institutions of higher learning with some coursework completed will be evaluated on case-by-case bases.
- Refer to the table of high school course prerequisites for admission.

PROGRAM REQUIREMENTS:

(CURRICULUM 2250)

Semester I	Credits
ENGL 101 ¹ Composition And The Spoken Word	3
ENGS 101 Introduction to Engineering	2
MATH 123 Pre-Calculus Algebra	4
MECH121 Manufacturing Processes I	3
PHYS 121 College Physics I OR	
PHYS 132 University Physics I	3
PHYS 125/135 Physics Lab I	1
	<u>16</u>

Semester II

CAD Elective	2-3
MATH 161 Calculus I	4
MECH 128 Electromechanical Technology	3
CONS 172 Technical Statics	3
PHYS 122 College Physics II OR	
PHYS132 University Physics II	3
PHYS 126/136 College Physics II Lab	1
	<u>16-17</u>

Semester III

ELEC 261 Electricity	4
ENGS 102 Programming for Engineers	2
MATH 162 Calculus II	4
MECH 241 Fluid Mechanics	3
MECH 242 Fluid Power Lab	1
CONS 272 Strength of Materials for Tech.	3
	<u>17</u>

Semester IV

MECH 220 Engineering Materials	3
MECH 232 Machine Design	3
Program Elective	3
Program Elective	3
GER (3,4,5,6,7,8,9)	3
	<u>15</u>

Semester V

MATH 364 Differential Equations	4
MECH 301 Technical Dynamics	3
MECH 342 Thermodynamics	3
SOET 377 Engineering Ethics	1
Program Elective (U/L)	3
GER (GER 3,4,5,6,7,8,9)	3
	<u>17</u>

Semester VI

MATH 141 Statistics	3
MECH 343 Heat Transfer	3
Program Elective (U/L)	3
Program Elective (U/L)	3
GER (GER 3,4,5,6,7,8,9)	3
	<u>15</u>

Semester VII

MECH 341 Intermediate Fluid Mechanics	3
MECH 377 Capstone Research and Proposal	1
SOET 361 Project Management	3
Program Elective (U/L)	3
Program Elective (U/L)	3
GER (GER 3,4,5,6,7,8,9)	3
	<u>16</u>

Semester VIII

MECH 477 Capstone Project	3
SOET 370 Engineering Economics	3
Program Elective (U/L)	3
Program Elective (U/L)	3
	<u>12</u>

* *Fulfills writing intensive requirement*

U/L = Upper Level Courses (300/400)

GER = General Education Requirement

NOTE: Mechanical Engineering Technology students must meet seven of ten General Education Requirements, 45 upper level credits, maintain a minimum 2.0 GPA and complete the OSHA 10 hour safety training for graduation

Student Learning Outcomes can be found at www.canton.edu/csoet/mechl/.

Mechatronics Technology—BS

The Bachelor of Science in Mechatronics is a multidisciplinary program which embraces the necessary skills of traditional programs of mechanical, electrical, computer, and controls engineering. The base knowledge is then applied to integrating mechanical, electrical, software, and controls into practice through applied problem solutions before graduation.

STUDENTS IN THIS MAJOR:

- Will be able to apply mathematics, science, and engineering principles
- Will be able to design and conduct experiments, analyze and interpret data
- Will be able to design a system, component, or process to meet desired needs
- Will be able to identify, formulate, and solve engineering problems
- Will be able to function on multidisciplinary teams, professional and ethically communicate
- Will be able to react to the impacts of engineering solutions in a global and societal context

CAREER OPPORTUNITIES:

Mechatronics is a rigorous multidisciplinary program that will prepare our students for any real-world engineering challenges. Because of this program's multidisciplinary nature, Mechatronics Engineering Technology offers the broadest spectrum of employment opportunities, allowing for our graduates to pursue jobs seeking Mechanical, Electrical, Computer, Telecommunications, Systems, and Control Engineers.

These post-undergraduate opportunities include, but are not limited to:

- Robotics Engineer
- Field Service Engineer
- Design Engineer (Electrical, Mechanical, Mechatronics, etc...)
- Research Engineer
- Software Development Engineer

- Controls and Automation Engineer
- Hardware Support Engineer
- Automation Engineer
- Graduate School (Masters or Doctorate)

ACCREDITATION

NYSED requires to accredit this program at the first opportunity with ABET, 415 N. Charles Street Baltimore, MD, 21201 – Telephone (410) 347-7700. SUNY Canton plans for accreditation with the first graduating class.

ADMISSION REQUIREMENTS

Incoming students will meet all general admissions requirements as freshmen to SUNY Canton. Additionally; students must be qualified to enter Calculus I (MATH 161) and have completed the NYS Chemistry Regents Exam with 65 or above. Transfer students should meet the SUNY Transfer Path for Engineering: Mechanical. Also, transfer students should satisfy 5 of the 10 SUNY GER areas. Transfer students will be required to have a minimum GPA of 2.00.

PROGRAM REQUIREMENTS:

(CURRICULUM 2882)

Semester I	Credits
ENGL 101 Composition And the Spoken Word.....	3
ENGS 101 Introduction to Engineering	2
MATH 161 Calculus I	4
CHEM 150 College Chem I & Lab	4
PHYS 131 University Physics I	1
PHYS 135 University Physics I Lab.....	1
	<u>17</u>
Semester II	
CITA 152 Computer Logic	3
English (GER 7) Literature	3
MATH 162 Calculus II.....	4
American History Elective (GER 4)	3
PHYS 132 University Physics II	3
PHYS 136 University Physics II Lab.....	1
	<u>17</u>
Semester III	
ENGS 201 Statics.....	3
MECH 112 3D Modeling	3
MKTX 215/216 Digital Fundamental & Logic Design/Laboratory.....	3/1
MATH 263 Calculus III	4

Western Civilization Elective (GER 5)3
17

Semester IV

ENGS 202 Dynamics

CITA 180 Intro to Programming

ENGS 263 Electric Circuits.....

ENGS 264 Circuit Lab

ECON 103 Principles of Economics.....

ENGS 203 Engineering Strength of Materials.....3
17

Semester V

ENGS 341 Fluid Mechanics.....

MATH 364 Differential Equations

Liberal Arts Elective.....

MKTX 320 Lab I Mechatronics Lab I.....

ENGS 350 Mechanical Design.....3
14

Semester VI

MKTX 310 Instrumentation & Controls.....

MKTX 325 Microcontroller

MATH 361 Linear Algebra

MKTX 370 Mechatronics Laboratory II

CITA 380 Advance Programming

3
13

Semester VII

Liberal Arts Elective

MKTX 477 Capstone I.....

MKTX 410 Robotics Analysis & Synthesis

SOET/BSAD 361 Project Management

Liberal Arts Elective U/L.....

SOET 348 Engineering Safety

1
15

Semester VIII

Liberal Arts Elective U/L.....

MKTX 478 Capstone II.....

Liberal Arts Elective U/L.....

Program Elective (U/L)

MATH 461 Advance Calculus I.....3
14

Nursing—BS

The SUNY Canton RN-BS Nursing program is based upon the beliefs that:

- Communities are comprised of unique, holistic individuals and aggregates who have values and beliefs that originate from their life-world, who have specific needs and are capable of making decisions by themselves, with others, and/or by proxy.
- Health and well-being are dynamic lived experiences uniquely defined by the individual and community within the context of culture and environment.
- Nursing is a unique profession that provides a service to society that is culturally sensitive, evidence-based, collaborative, and individualized. Utilizing the nursing process, the nurse facilitates transformation within individuals, groups, and communities to attain desired outcomes.

STUDENTS IN THIS MAJOR:

- Demonstrate critical thinking and decision making that utilizes the nursing process and evidence-based practice in the delivery of care to culturally diverse individuals, families, groups, and community.
- Synthesize knowledge from the liberal arts and nursing to promote the health and well-being of culturally diverse individuals, families, groups, and communities.
- Integrate legal and ethical concepts with the leadership role to advance and promote the health and well-being of culturally diverse individuals, families, groups, and communities.
- Utilize nursing theory/conceptual frameworks, nursing research, and evidence-based practice in addressing the nursing care needs of culturally diverse individuals, families, groups and communities.
- Incorporate leadership theory to the nurse manage role in the collaboration, coordination, and provision of nursing care in health care settings.

- Apply knowledge from nursing, humanities, biological, and social sciences to plan, implement, and evaluate care for sick and well individuals, families, groups, and communities.
- Participate as nurse leaders on interdisciplinary care teams to influence positive social change and health care policy.
- Plan and implement educational activities that empower individuals, families, group, and communities to manage their health care at the local, national, and global level.
- Collaborate with health care colleagues to promote holistic health care for individuals, families, groups, and communities.

CAREER OPPORTUNITIES:

- Public and Community Health
- Armed Services and Veterans Administration
- Entry level nursing management
- Acute, long-term, and specialty nursing units

TRANSFER OPPORTUNITIES:

- Graduates of the RN-BS program are able to transfer into Nursing graduate programs.

ACCREDITATIONS:

- Registered by the NYS Education Department, Office of the Professions.
- Accredited by the Accreditation Commission for Education in Nursing.

ADMISSION REQUIREMENTS:

Admission requirements can be found online at: http://www.canton.edu/sci_health/nurs/description.html

PROGRAM REQUIREMENTS:

(CURRICULUM 0291)

Semester I	Credits
NURS 300 Conceptual Frameworks in Nursing	.3
NURS 303 Health Assessment In Nursing	.....4
MATH 111 Survey of Math	OR
MATH 121 College Algebra*	..... 3-4
Liberal Arts Elec. (GER 4,5,6,7,8)	.....3
BIOL 335 Pathophysiology	.....3
	16-17
Semester II	
NURS 302 Legal & Ethical Iss. in Healthcare	.....3
NURS 304 Health Promotion & Restoration	.....3
BIOL 310 The Genome	.....3
MATH 141 Statistics	..... 3
SOCI 101 Intro to Sociology	.....3
Lib. Arts Elective (GER 4,5,6,7,8)	.....3
	18
Semester III	
NURS 370 Research Methods in Health Sci.	.....3
NURS 400 Nursing Mgmt & Leadership**	.....3
Lib. Arts Elective (GER 4,5,6,7,8)	.....3
U/L Lib. Arts Elec. (GER)	.....3
U/L Lib. Arts Elec. (GER)	.....3
	15
Semester IV	
NURS 402 Community Health Nursing	.....4
NURS 403 Transcultural Nursing	..... 2
U/L Lib. Arts Elec. (GER)	.....3
U/L Liberal Arts Elective	.....3
U/L Liberal Arts Elective	.....3
	15

—Part-time status program requirements can be found online at: http://www.canton.edu/sci_health/nurs/description.html

—Students must pass all courses with a grade of “C” or better prior to graduating with the BS degree.

* Students who have not met the prerequisite for MATH 141 (Statistics) take MATH 111 or Math 121; students who have already taken Statistics or have met the prerequisite for MATH 141 take a Liberal Arts elective

** Fulfills writing intensive requirement

UL = Upper Level Courses (300/400)

GER = General Education Requirement

NOTE: Nursing students must take seven out of ten General Education Requirements including one and ten, 30 total General Education credits and 45 upper level credits.

Student Learning Outcomes can be found at www.canton.edu/sci_health/nurs/.

Residency Requirements: Students must complete a minimum of 30 credits at SUNY Canton's RN-BS program in order to receive a Bachelor of Science degree from SUNY Canton. Required courses include: Health Assessment in Nursing (NURS 303), Nursing Management and leadership (NURS 400), and Community Health Nursing (NURS 402).

Nursing Dual Degree—AAS/BS

The Dual Degree Nursing Program (DDNP) combines general education courses and nursing courses that allow students to complete their baccalaureate education in four years and be eligible to take the NCLEX-RN (RN licensing exam) in three years. After three years of full-time study, graduates earn an Associate in Applied Science (AAS) Degree in Nursing and are eligible to take the NCLEX-RN licensing examination to become Registered Nurses (RN). The fourth year is online for those who have obtained their RN license and have graduated with an AAS degree in nursing from SUNY Canton. The final year is career oriented so that students may work as RNs and attend school online to complete their degree.

STUDENTS IN THIS MAJOR

- Make judgments in practice, substantiated with evidence, that integrate nursing science in the provision of safe, quality care and that promote the health of patients within a family and community context.
- Minimize risk of harm to patients and providers through both system effectiveness and individual performance.
- Use information and technology to communicate, manage knowledge, mitigate error, and support decision-making.
- Implement one's role as a nurse in ways that reflect integrity, responsibility, ethical practices, and an evolving identity as a nurse committed to evidence-based practice, caring, advocacy, and safe, quality care for diverse patients within a family and community context.
- Function effectively within nursing and inter-professional teams, fostering open communication, mutual respect, and shared decision-making to achieve quality patient care.
- Advocate for clients and families in ways that promote their self-determination, integrity, and ongoing growth as human beings.
- Recognize the client or designee as the source of control and full partner in providing compassionate and coordinated care based on respect for client's preferences, values, and needs.
- Examine the evidence that underlies clinical nursing practice to challenge the status quo, question underlying assumptions, and offer new insights to improve the quality of care for patients, families, and communities.
- Use data to monitor the outcomes of care processes and use improvement methods to design and test changes to continuously improve the quality and safety of health care systems
- Integrate best current evidence with clinical expertise and patient/family preferences and values for delivery of optimal health care.
- Utilize the nursing process, think critically, and base client care on evidence based practice.
- Engage in active learning.

- Develop personally and professionally.
- Upon meeting the requirements for graduation, are eligible to sit for the licensing examination to become Registered Professional Nurses.

PROGRAM HIGHLIGHTS

- Career oriented
- Obtain eligibility to be a Registered Professional Nurse
- Develop critical thinking and professional behaviors
- Become competent in nursing skills
- Participate in clinical practicums and the skills laboratory

CAREER OUTLOOK

- Nursing is the largest health care occupation.
- There is increasing diversity in nursing employment, and projections indicate large numbers of new jobs.

EMPLOYERS OF SUNY CANTON

GRADUATES

- Hospitals and physicians' offices
- Home healthcare services
- Nursing care facilities
- Correctional facilities
- Schools
- Military service

TRANSFER OPPORTUNITIES

- Graduates have a number of transfer options including: RN-MSN programs.

ACCREDITATIONS

- Accreditation Commission for Education in Nursing, 3343 Peachtree Road NE, Suite 850, Atlanta, Georgia 30326 404-975-5000.
- Registered by the NYS Education Department, Office of the Professions.

ADMISSION REQUIREMENTS:

Admission requirements can be found online at: www.canton.edu/sci_health/nur/

PROGRAM REQUIREMENTS:

(CURRICULUM)

Semester I		Credits
BIOL 217	Anatomy and Physiology I	4
ENGL 101	Composition and the Spoken Word	3
PSYC 101	Introduction to Psychology	3
MATH111	Survey of Math OR	
MATH 121	College Algebra	3
SOCI 101:	Introduction to Sociology	3
		16
Semester II		
BIOL 218	Anatomy and Physiology II	4
PSYC 225	Human Development or	
PSYC 220	Child Development	3
MATH 141	Statistics	3

Liberal Arts Elective (GER 4, 5, 6, 7, 8 or 9)	3
Liberal Arts Elective (GER 4, 5, 6, 7, 8 or 9)	3
	16

Semester III

BIOL 209	Microbiology	4
NURS 101	Nursing Fundamentals	6
NURS 103	Pharmacology	1
NURS 105	Nursing Seminar	1
	Liberal Arts Elective (GER 4, 5, 6, 7, 8 or 9)	3
		15

Semester IV

NURS 106	Maternal Child Nursing	4.5
NURS 107	Mental Health Nursing	4.5
NURS 104	Pharmacology	1
BIOL 391	Pathophysiology	3
	U/L Liberal Arts Elective (GER if needed)	3
		16

Semester V

NURS 201	Medical Surgical Nursing I	10
BIOL 310	The Genome	3
NURS 200	Pharmacology	1
	U/L Liberal Arts Elective (GER if needed)	3
		17

Semester VI

NURS 202	Medical Surgical Nursing II	10
NURS 203	Professional Issues & Trends in Nursing	1
NURS 204	Pharmacology	1
	U/L Liberal Arts Elective (GER if needed)	3
		15

Semester VII

NURS 300	Conceptual Frameworks	3
NURS 370	Research Methods in the Health Sciences	3
NURS 303	Health Assessment	4
NURS 304	Health Promotion and Restoration	3
	Upper Liberal Arts Elective	3
		16

Semester VIII

NURS 302	Ethical and Legal Issues	3
NURS 400	Nursing Mgmt. and Leadership	3
NURS 402	Community Health Nursing	4
NURS 403	Transcultural Nursing	2
	Upper Liberal Arts Elective	3
		15

* Fulfills writing intensive requirement

** Co-requisite for NURS 201, Pre-requisite for NURS 202
Graduation Requirements: Total Semester Hours – 126 credits with minimum 2.0 GPA

*A grade of "C+" or better is required for successful completion of all Nursing courses and a "C" or better in all co-requisite courses.

Successful completion of all co-requisite courses and a minimum semester GPA of 2.0 is required to continue in the program. This requirement is different from that of the college in order to help insure that the student is adequately prepared to enter the nursing profession, increase likelihood of success on the NCLEX-RN test, and enhance the ability of the student to transfer credit to another college.

Once enrolled in NURS 101, students must complete the program within five years. For extraordinary circumstances, permission to complete the program beyond five years must be granted by the Dean of the School of Science, Health, and Criminal Justice in consultation with the Nursing Department Director.

Additional Graduation Requirements can be found online at: www.canton.edu/sci_health/nur/

Sports Management—BBA

The BBA in Sports Management prepares individuals for professional careers within sport organizations, such as non-profit companies, commercial and private enterprises, government/public sector jobs, and various levels of professional sports.

The BBA in Sports Management will develop capable sport management professionals able to apply creative communication, leadership, and managerial skills in an array of positions in the sport industry. These positions can include sports administration, sales, marketing, public relations, information and media, operations, facilities, and event management. The program offers an exciting array of sports management courses that provide students experiential learning opportunities and hands-on application throughout their journey. The program also offers various culminating experience options that include applied senior level courses and/or senior research project and/or semester internship.

STUDENTS IN THIS MAJOR:

- Will be prepared to be effective managers and leaders in the various skills, roles, and functions of sport management professionals.
- Develop communication and technical skills needed to be effective professionals in various sport management settings.
- Will gain valuable hands-on experience and developmental insights from applied learning opportunities throughout the program.

CAREER OPPORTUNITIES

- Sport Event Management
- Marketing and Promotions
- Athletic Director
- Sport Facilities Manager
- Sport Programming
- Athletic Business Operations
- Sport Media Relations

- Ticket Sales Operations
- Sport Corporate Sales
- Recreation Programming
- Sport Coordinators

In addition, the Sport Management program prepares students who desire to pursue an advanced degree in Sport Management.

ADMISSION REQUIREMENTS

- Students must satisfy SUNY Canton general admission's requirements.
- Students must meet requirements to enroll in MATH 106 or higher and ENGL 101.

PROGRAM REQUIREMENTS

(CURRICULUM 0182)

Semester I	Credits
SPMT 100 Major Prep	1
BSAD 100 Introduction to Business.....	3
ENGL 101 Composition & the Spoken Word ...	3
Math (GER 1)*	3-4
GER - Intro to Soc. recommended...3	
GER (4, 5, 6, 7, 8, 9)	3
	15-16
Semester II	
SPMT 101 Foundations of Sports Management .3	
ACCT 101 Foundations of Financial Accounting.....	4
ECON 103 Microeconomics	3
GER (4, 5, 6, 7, 8, 9)	3
GER (4, 5, 6, 7, 8, 9)	3
	16-17
Semester III	
SPMT 201 Sport in Society	3
SPMT 240 Sport Governance.....	3
BSAD 201 Business Law I.....	3
Natural Science (GER 2).....	3-4
GER (4, 5, 6, 7, 8, 9)	3
	15
Semester IV	
SPMT 241 Legal Issues in Sport	3
SPMT 242 Sports Finance	3
SPMT 311 Sports Information	3
BSAD 350 Marketing.....	3
GER (1-10).....	3
	15
Semester V	
SPMT 203 Leadership for Sports Professionals ...3	
SPMT 307 Sports Marketing.....	3

SPMT 411 Sports Public Relations*	3
BSAD 301 Principles of Management	3
SPMT 308 Sports Event Management	3
	15

Semester VI

SPMT 306 Sports Operations & Facilities Mgt...3	
BSAD 310 Human Resource Management.....	3
SPMT 320 Global Sports Perspectives	3
U/L Program Elective	3
General Elective**	3
	15

Semester VII

SPMT 410 Orienta. to Culminating Experience.1	
U/L Program Electives.....	6
SPMT 415 Sports Media & Broadcasting.....	3
General Elective.....	3
General Elective.....	3
	16

Semester VIII

SPMT 421 Sport Management Internship	9-15
AND/OR	
U/L Program Electives	3-15
	15

Students may also combine an internship with Upper Level elective. Internship must be a minimum of 6 credits.

Students must have a combined 3.0 GPA of all SPMT courses completed to be eligible to apply for an internship.

Upper Level Program Electives:

SPMT 300 SPMT Practicum.....	1-3
SPMT 312 Sport Entrepreneurship.....	3
SPMT 313 Economics of Sport	3
SPMT 412 Sport Sales and Sponsorships	3
SPMT 413 Contemporary Issues in College Sport Administration	3
SPMT 414 Labor Relations in Sport.....	3
SPMT 430 Advanced Sports Marketing & Sales .3	
SPMT 431 Applied Sports Media and Broadcasting.....	3
SPMT 432 Applied Sports Event Management...3	

(Upper level BSAD, ECON, FSMA, HEFI courses also accepted as Program Electives)

* GER MATH must be MATH 111 or higher

UL = Upper Level Courses (300/400)

GER = General Education Requirement

NOTE: Sports Management students must meet seven out of ten General Education Requirements including one and ten, 30 total General Education Requirements.

Student Learning Outcomes can be found at www.canton.edu/sci_health/spmt/

Technological Communications—BS

SUNY Canton's Bachelor of Science in Technological Communications is a career-focused program of study cultivating expertise in the latest technology for building community and sharing ideas. The program offers an opportunity to explore writing for multimedia, database applications, presentation tools, application design, and digital mapping, all while considering audience, context, and the literary, architectural, interactive, and design elements of media.

Students learn vital workplace skills including professional and media writing, a variety of communications methods designed to reach general and specialized audiences, and learn best practices in the field of Technological Communications to craft innovative projects as part of guided internship experiences. Graduates are well-qualified for entry-level professional opportunities in fields such as public relations, advertising, and cultural heritage, as well as businesses and nonprofit organizations looking for trained writers and narrators who are well-versed in the most recent digital communication technology.

STUDENTS IN THIS MAJOR:

- Explore the use of emerging social and digital media outlets for effective communication and messaging.
- Understand industry standard design frames such as User Experience (Ux) and Design Thinking
- Use the latest digital technology to create innovative communications and content to effectively reach specialized and general audiences.
- Collaborate in designing and mapping content to create powerful narratives designed for a variety of media channels.
- Work closely with expert faculty mentors to learn to effectively present, organize, and articulate thoughts, ideas, viewpoints, and conclusions both orally and/or in writing.
- Gain significant practical experience

with internships focusing on development and publication of traditional and new media content.

CAREER OPPORTUNITIES

The employment opportunities cover a broad range, including major businesses and non-profit organizations. Graduates will be prepared for employment opportunities in:

- Advertising
- Public Relations
- Web/Social Media Content Management
- Design for Gaming Industry
- Editing
- Grant Writing
- Building and Maintaining Digital Archives
- Narrative Writing
- Media Project Management
- Podcasting

ADMISSION REQUIREMENTS

- Refer to the table of high school course prerequisites for admission.
- Students must be prepared to take ENGL 101 (Composition and the Spoken Word).
- Transfers cannot be admitted until fall 2019.
- Transfer students must meet re-registration requirements to be considered for admission.
- Transfer students must meet re-registration requirements to be considered for admission.

PROGRAM REQUIREMENTS

(CURRICULUM 2673)

Semester I	Credits
TCOM 101 Introduction to Technological Communications.....	3
Math Elective (GER 1).....	3-4
American History Elective (GER 4).....	3
ENGL 101 Composition and the Spoken Word (GER 10).....	3
Social Science Elective (GER 3).....	3
FYEP 101 First Year Experience.....	1
	17-18

Semester II

Western Civ Elective (GER 5).....	3
Arts Elective (GER 8).....	3
TCOM 200 Narrative Form in Video Games.....	3
Humanities Elective (GER 7).....	3
General Elective.....	3
	16-17

Semester II

ENGL 270 Media Writing*.....	3
ENGL 314 Digital Graphic Storytelling.....	3
Science Elective (GER 2).....	3-4
Foreign Language (GER 9).....	3-4
General Elective.....	3
	15

Semester IV

ENGL 380 Intercultural Communications.....	3
TCOM 290 Mobile Media Stories & Games.....	3
SOCI 305 Gender in the Media.....	3
Other World Civilization (GER 6).....	3
Program Elective.....	3
	15

Semester V

TCOM 310 Identity in the Digital Age.....	3
ENGL 301 Professional Writing.....	3
ENGL 302 Global Englishes.....	3
Program Elective.....	3
General Elective.....	3
	15

Semester VI

TCOM 330 Digital Narratives Workshop.....	3
TCOM 350 Electronic Literature.....	3
Program Elective (U/L Recommended).....	3
Program or Liberal Arts Elective (U/L Recommended).....	6
	15

Semester VII

TCOM 400 Internship I.....	3
TCOM 360 Online Media & Pop Culture.....	3
Program Elective (U/L Recommended).....	3
Program or Liberal Arts Elective (U/L Recommended).....	6
	15

Semester VIII

TCOM 410 Internship II.....	3
TCOM 420 Senior Seminar.....	3
Program Elective (U/L Recommended).....	3
Program or Liberal Arts Elective (U/L Recommended).....	6
	15

* *Fulfills writing intensive requirement.*
U/L = Upper Level Courses (300/400)
GER = General Education Requirement
Program Electives: ENGL and GRST

Veterinary Service Administration—BBA

The Bachelor of Business Administration (BBA) program in Veterinary Service Administration constitutes the final two years of a 2+2 articulation program in which the first two years entail completion of a degree in Veterinary Technology from an (AVMA) - Accredited Veterinary Technology Program. This degree serves to provide the knowledge and skills necessary to manage a business or organization that provides veterinary care to animals. Emphasis is placed upon establishing a foundation in basic business and accounting principles, then applying these principles to the management of specific types of veterinary businesses and institutions. Students will complete the program with an internship concentrating on management and administration within a veterinary setting. This program may be completed partially or entirely online.

STUDENTS IN THIS MAJOR:

- Begin by laying a foundation in Business, Accounting, Math, and Liberal Arts.
- Build upon this foundation with coursework specific to veterinary management.
- Will spend a semester in the field as an intern in a managerial capacity.
- Are prepared for entry-level management positions in veterinary hospitals or other veterinary industries or organizations.
- Will complete the course work required for Certified Veterinary Practice Manager (CVPM) certification.

CAREER OPPORTUNITIES:

- Veterinary Practice Management
- Animal Shelter Management
- Veterinary Mobile and Spay/Neuter Clinic Management
- Biomedical Research Facility Management
- Zoo and Wildlife Management

- Public Sector employment (State, Federal, and Local regulatory agencies)

CAREER OUTLOOK:

- Veterinary Technician has been listed as one of Money Magazine's "Top 10 Fastest Growing Career Fields." Coupling this training with a baccalaureate degree focusing on veterinary business management increases its value, expanding the scope of employment opportunities and earning potential for graduates.
- Veterinary hospitals and other animal care facilities seek managers with not only a working knowledge of the medical and technical aspects of veterinary medicine, but also an understanding of the operational structure of animal care facilities and the ability to oversee the personnel, information, finances, infrastructure, equipment, and other integral components of the operation of these facilities.
- With fewer, larger veterinary facilities becoming the norm, there is greater stratification of duties within these facilities, and greater demand for full-time managers and Technician/Managers.

ADMISSION REQUIREMENTS:

- Graduation from an AVMA-accredited veterinary technology program.
- Veterinary Technician licensure, registration, or certification, as applicable for state of residency, or eligibility thereof.

PROGRAM REQUIREMENTS:

(CURRICULUM 2535)

Semester V

ACCT 101	Foundations of Financial Accounting	4
BSAD 201	Business Law I	3
BSAD 340	Management Communications*	3
MATH 111	Survey of Mathematics or Higher	3
	Liberal Arts Elective (GER)	3
		<u>16-17</u>

Semester VI

BSAD 215	Small Business Management	3
VSAD 301	Veterinary Practice Management	3
BSAD 310	Human Resource Management	3
HLTH 303	Occupational Health and Safety	3
	U/L Liberal Arts Elective (GER if needed)	<u>3</u>
		<u>15</u>

Semester VII

HSMB 301	Public Health Issues	3
BSAD 301	Principles of Management	3
VSAD 302	Animal Care Institution Management	3
VSAD 308	Veterinary Service Administration Internship Orientation	1
VSAD 402	Veterinary Business & Financial Management	3
	U/L Liberal Arts Elective (GER if needed)	<u>3</u>
		<u>16</u>

Semester VIII

VSAD 408	Internship for Veterinary Service Administration	12
	Upper-Level General Elective	<u>3</u>
		<u>15</u>

* *Fulfills writing intensive requirement.*

U/L = Upper Level Courses (300/400)

GER = General Education Requirement

NOTE: Veterinary Service Administration students must meet seven of the ten General Education Requirements.

Student Learning Outcomes can be found at www.canton.edu/sci_health/vsct/.

Veterinary Technology—BS

The Bachelors of Science degree program in Veterinary Technology provides an advanced educational opportunity to students interested in pursuing careers in the veterinary health care field. The program includes specific course work required in our Veterinary Technology AAS program and adds upper division offerings in the sciences and applied electives to obtain the distribution hours required of a Bachelor's of Science degree. Graduates of this program have the opportunity to become veterinary technicians coupled with the career flexibility that a Bachelor's degree provides.

STUDENTS IN THIS MAJOR:

- Work with companion animals, farm animals and common laboratory animals.
- Receive advanced technical training above core requirements of a graduate veterinary technician.
- Perform two 120 hour Preceptorships
- Will be eligible to take the Veterinary Technician National Licensing Examination (VTNE).
- May be eligible to pursue a post graduate degree (MS, PhD, DVM).

CAREER OPPORTUNITIES:

Veterinary technicians provide professional technical support to veterinarians, biomedical researchers, and other animal care specialists. They may work in:

- Clinical practice
- Educational Institutions
- Public Health
- Government agencies
- Research & Pharmaceutical industry
- Veterinary supply and equipment sales

CAREER OUTLOOK:

- Veterinary Technician has been listed as one of Money Magazine's "Top 10 Fastest Growing Career Fields."
- At the present time, there is a serious shortage of veterinary technicians throughout the country.

TRANSFER OPPORTUNITIES:

- Articulation with Ross University School of Veterinary Medicine for students with an overall GPA of 3.0 or higher and possessing the required prerequisite courses.

ADMISSION REQUIREMENTS:

Admission is selective and based on academic credentials. To be considered for admission, please refer to the requirements posted on our webpage at: www.canton.edu/sci_health/vet/description.html

The pre-exposure rabies vaccine is required in the program. This is administered in a series of three vaccinations and must be completed during or prior to the semester student is enrolled in VSCT 115

PROGRAM REQUIREMENTS:

(CURRICULUM 2278)

Semester I		Credits
VSCT 101	Fundamental Vet. Nursing Skills I	2
VSCT 103	Intro. to Animal Agriculture	2
BIOL 150	College Biology I	4
CHEM 150	College Chemistry I	4
ENGL 101	Expository Writing OR	
ENGL 101	Composition & Spoken Word	3
		<u>15</u>

Semester II		Credits
VSCT 104	Veterinary Office Practices	1
VSCT 114	Animal Anatomy & Physiology	3
VSCT 115	Fundamental Vet. Nursing Skills II	2
BIOL 155	College Biology II	4
CHEM 155	College Chemistry II	4
	Lib.Arts Elec. (GER 4, 5, 6, 7,8, 9)	3
		<u>17</u>

Semester III		Credits
VSCT 206	Anesthetic Principles	3
VSCT 207	Health & Disease of Farm Animals	3
BIOL 209	Microbiology	4
	Math Elective (GER 1) †	3-4
	Lib.Arts Elec. (GER 4, 5, 6, 7,8, 9)	3
		<u>16-17</u>

Semester IV		Credits
VSCT 112	Veterinary Clinical Pathology I	3
VSCT 201	Veterinary Technology	
	Preceptorship I	1
VSCT 212	Research Animal Techniques	1
VSCT 213	Practical Nutrition	2
PSYC 101	Introductory to Psychology	3
	Lib.Arts Elec. (GER 4, 5, 6, 7,8, 9)	3
	U/L Program Elective	3
		<u>16</u>

Semester V

VSCT 202	Veterinary Clinical Pathology II	3
VSCT 203	Small Animal Medicine & Therapeutic Techniques	3
VSCT 204	Large Animal Medicine & Therapeutic Techniques	2
VSCT 205	Radiographic Techniques	2
VSCT 209	Veterinary Technology	
	Preceptorship II	1
	U/L Program Elective	3
	U/L Liberal Arts Elective	3
		<u>17</u>

Semester VI

VSCT 210	Veterinary Microbiology	3
VSCT 211	Animal Hospital Practices and Procedures *	3
VSCT 214	Veterinary Pharmacology	2
	U/L Liberal Arts Electives	6
		<u>14</u>

Semester VII

	Upper Level BIOL OR CHEM	3
	U/L Program Electives	9
	U/L Liberal Arts Elective	3
		<u>15</u>

Semester VIII

	U/L Program Electives	9
	U/L Liberal Arts Elective	6
		<u>15</u>

† Math Elective: MATH 111, 121, 122, 141 or another appropriate math by advisement

—Of the courses with the VSCT prefix, any course may only be repeated one time.

—Students are required to earn a C or better in all specified curriculum courses prefixed with VSCT in order to progress in the program.

—The NYS Education Department Office of the Professions requires persons applying for licensure to answer questions related to a conviction of a crime or professional misconduct.

* Fulfills writing intensive requirement.

U/L = Upper Level Courses (300/400)

GER = General Education Requirement

U/L Program Electives: Any U/L course with the prefix of: VSAD, VSCT, BIOL, or CHEM; as well as: BSAD 319 Professional Ethics, HSMB 301 Public Health Issues, HSMB 303 Occupational Health and Safety, or SSCI 370 Research Methods in the Social & Health Sciences.

NOTE: Veterinary Technology students must take seven out of ten General Education Requirements including one and ten, 30 total General Education credits.

Student Learning Outcomes can be found at www.canton.edu/sci_health/vet/.

Apprentice Training: Industrial Trades—AAS

STUDENTS IN THIS MAJOR:

- Enter into this program while working towards or after obtaining a Journeyman's Certificate through technical instruction and on-the-job training through the BOCES coordinated NYS Apprentice Program.
- Earn the equivalent of one year's college-level study following satisfactory completion of the Journeyman's Certificate, leading to an Associate in Applied Science.

CAREER OPPORTUNITIES:

- Program is designed to prepare skilled tradesmen to enhance their employment growth potential, not entry-level employment.

POTENTIAL SALARY:

- Average salary for skilled trades employees varies greatly depending on employer. This degree can enhance the employee's earning ability both with the current employer and future employers.

PROGRAM REQUIREMENTS: (CURRICULUM 0473)

	Credits
Related Technical Instruction and Supervised On-the-Job Training	30
<i>(Represented by satisfactory completion of Journeyman's Certificate* with related instruction provided by St. Lawrence-Lewis BOCES)</i>	
English/Humanities.....	6
Social Sciences	6
Mathematics/Science.....	6-8
Liberal Arts & Science Elective.....	3
General Electives	9
	30-32

** Fulfills writing intensive requirement.*

Student Learning Outcomes can be found at www.canton.edu/business/apprentice.html.

Automotive Technology—AAS

Graduates of the Automotive Technology program experience an exciting period of transition as manufacturers continue their shift toward higher fuel efficiency. Recruiters and employers of SUNY Canton's graduates include dealerships, service industries, automobile manufacturers, and parts suppliers. Graduates learn how to troubleshoot, diagnose and repair all aspects of the automobile power train, suspension, steering, braking and air conditioning systems.

STUDENTS IN THIS MAJOR:

- Have the opportunity to earn two Snap-On Diagnostics certifications.
- May receive Subaru training in senior year if academic average is 'B' or better.
- Can earn NATEF certification upon successful examination.
- Utilize the latest technology in an electronics-based curriculum.
- Acquire extensive hands-on experience in well-equipped laboratories.
- Receive a world class education in automotive electrical, mechanical, technical, and services areas.
- Learn on late model cars donated by automotive manufacturers.
- Get special attention from faculty in small laboratory classes.
- Enjoy outstanding career placement.

CAREER OPPORTUNITIES:

- Automotive Service Technician
- Service Manager
- Service Advisor
- Industrial Research and Development
- Automotive Machine Shop
- Auto Parts Manager/Owner
- Technical Representative
- Automatic Transmission Technician
- Wheel Alignment/Suspension Technician
- Maintenance Technician
- Fleet Maintenance Supervisor/Technician
- Heavy Equipment Maintenance Technician

CAREER OUTLOOK:

- The U.S. Department of Labor cites a strong demand for qualified automotive technicians and master technicians.

RECENT EMPLOYERS OF SUNY CANTON GRADUATES:

- Ford Motor Company
- Chrysler Corporation
- Toyota (Lexus Division)
- General Motors Corporation
- Sears
- Firestone Tire Company
- Goodyear Tire Company
- NAPA Auto Parts
- Snap-On Tools Corporation
- Taylor Rental Corporation
- Troyer Race Car Engineering
- Various dealerships throughout NYS
- Many graduates own their own businesses.

TRANSFER OPPORTUNITIES:

- Morrisville State College
- SUNY Utica/Rome, Oswego

ARTICULATION:

- Applicants who have completed a two-year vocational-technical automotive program may qualify for advanced standing (transfer credit).

ADMISSION REQUIREMENTS:

- Students must be qualified to enter Applied College Mathematics (MATH 101)

PROGRAM REQUIREMENTS:

(CURRICULUM 0525)

Semester I	Credits
AUTO 101 Automotive Services	2
AUTO 104 Basic Welding	2
AUTO 111 Automotive Services Laboratory	1
AUTO 112 Automotive Electrical Systems	3
AUTO 122 Automotive Electrical Syst. Lab.	1
ENGL 101 Composition & Spoken Word	3

MATH101 Applied College Mathematics¹3
15

Semester II

AUTO 113 Engine Performance I	3
AUTO 114 Engine Performance I Laboratory	1
AUTO 141 Automotive Braking Systems	3
AUTO 144 Auto. Braking Systems Lab.	1
AUTO 102 Diesel Engines OR	
AUTO 103 Automotive Air Conditioning ³	2
MECH 121 Manufacturing Processes I	3
GER Elective	3
	16

Semester III

AUTO 213 Engine Performance II	4
AUTO 220 Internal Combustion Engines ⁴	4
AUTO 241 Suspension Design and Services	2
AUTO 282 Suspension Design and Serv. Lab.	1
PHYS 115 Basic Physics	4
	15

Semester IV

AUTO 212 Automotive Electrical Systems II	4
AUTO 214 Automotive Computer Systems	3
AUTO 230 Service Mgt. and Operations	1
GER Elective	3
Humanities Elective	3
Social Science Elective	3
	17

1 *Mathematics level depends on previous preparation. Applied College Mathematics (MATH 101) is the minimum requirement. Math 106 Intermediate Algebra or higher maybe substituted.*

2 *PHYS 121/125 – College Physics I lecture/lab may substitute if student meets prerequisites*

3 *One required. Courses offered alternating years*

4 *Writing Intensive course*

5 *Transfers from Powersports use MSPT 101 for AUTO 101 & 111, MSPT 130 as an elective replacement for AUTO 102 or 103, and MSPT 110 for Auto 220. MSPT 120 can be used as the 3rd semester elective.*

Student Learning Outcomes can be found at www.canton.edu/csuet/auto_tech.html.

ADDITIONAL GRADUATION

REQUIREMENTS

Students must meet a minimum GPA of 2.0

Business: Accounting—AAS

The Associates in Applied Science degree program is a two-year program. Students learn the basics of financial accounting and real-world accounting practice from our faculty with professional working experience. The skill will be extended to tax preparation and information technology using the most recent accounting and tax software.

In addition, the two-year program In Accounting prepares graduates to continue their education in accounting or finance or business management four-year bachelor degree.

STUDENTS IN THIS MAJOR:

- Learn accounting theory, financial, managerial and cost accounting systems.
- Learn how accountants track, report, and interpret activity to allow for appropriate decisions by business, government, education, and individuals.
- Students have the opportunity to receive IRS approved training, to be certified in preparing taxes, and to volunteer through the only Volunteer Income Tax Assistance (VITA) site in St. Lawrence County.
- Students have the opportunity to learn real world accounting practice with simulations and QuickBooks, the current accounting software.

CAREER OPPORTUNITIES:

Graduates are able to disseminate financial information to public reporting entities and business decision makers. Opportunities in this field include:

- Private business and industry
- Public accounting agencies
- Governmental accounting positions
- Tax preparation
- Financial management

CAREER OUTLOOK:

Students with a degree in accounting are positioning themselves for career advancement and greater earning power. According to the Bureau of Labor Statistics, employment of accountants and auditors is projected to grow by 13% from 2012 to 2022. The accounting profession is committed to delivering a strong ethical foundation engaged in the preparation and examination of financial records, and a commitment to lifelong learning. The role of the

accountant is ever changing and integral to any business entity. See more compensation information from the website of U.S. Bureau of Labor Statics, Accountants and Auditors. <https://www.bls.gov/oes/current/oes132011.htm#st>

TYPICAL JOBS UPON

GRADUATION:

- Staff Accountant
- Claims Adjustor
- Project Manager
- Credit Analyst
- Loan Specialist
- Account Clerk
- Tax Preparer
- Business Manager

RECENT EMPLOYERS OF SUNY

CANTON GRADUATES:

- St. Lawrence County
- Pinto, Mucenski & Watson PC
- United Helpers
- Home Depot
- Claxton-Hepburn Medical Center
- C. Rowe Accounting & Tax Preparation
- North Country Savings Bank
- SeaComm Credit Union
- Dragon Benware Crowley and Company PC
- Gray & Gray and Associates CPAs, P.C.

TRANSFER OPPORTUNITIES:

- Clarkson University
- SUNY Canton, SUNY Albany, SUNY IT, SUNY Plattsburgh, SUNY Potsdam, SUNY Oswego
- Siena College
- LeMoyne College
- Rochester Institute of Technology
- Syracuse University
- University of Vermont

Students wishing to transfer into a four-year program should consult their transfer school of choice prior to transfer.

ADMISSION REQUIREMENTS:

- Students must be prepared to take Composition & the Spoken Word (ENGL 101).

PROGRAM REQUIREMENTS:

(CURRICULUM 0630)

Semester I		Credits
FYEP 101	First Year Experience.....	1
ACCT 101	Foundations of Financial Accounting ¹	4
ECON 101	Macroeconomics.....	3
ENGL 101	Composition & the Spoken Word....	3
CITA 110	Intro. to Information Technology	3
	Mathematics* ²	3-4
		17-18

Semester II		Credits
ACCT 102	Foundations of Managerial Accounting ¹	3
ECON 103	Microeconomics	3
	Mathematics (GER 1) ²	3-4
BSAD 200	Business Communications**.....	3
	Humanities Elective (GER 7)	3
		15-16

Semester III		Credits
ACCT 300	Intermediate Accounting	3
ACCT 306	Cost Accounting.....	3
BSAD 201	Business Law I.....	3
	Liberal Arts & Sciences Elective OR GER (2,4,5,6,8,9) ³	3
	Program Elective.....	3
		15

Semester IV		Credits
	Accounting Electives (2)	6
FSMA 210	Introduction to Finance.....	3
	Program Elective or GER (2,4,5,6,8,9) ^{3***}	3
	General Elective or GER (2,4,5,6,8,9) ^{3***}	3
		15

** *Fulfills writing intensive requirement.*

GER = General Education Requirement

¹ *Lowest acceptable grade 2.0.*

² *Lowest acceptable level: Intermediate Algebra (MATH 106). Math courses recommended: College Algebra and Statistics.*

³ *Management or Finance Bachelor's Degree track: Seven GERSs are required.*

A minimum cumulative GPA of 2.0 is required to remain in this program.

Accounting Electives: ACCT 242, 245, 302, 310, 335, 410, 430, or 440.

Program Electives: Courses in ACCT, BSAD, ECON, FSMA, and LEST.

³GER = General Education Requirement; students may take no more than one course per GER category.

<http://www.canton.edu/gened/>

Student Learning Outcomes can be found at www.canton.edu/business/accounting.html.

Business Administration—AS, AAS

STUDENTS IN THIS MAJOR:

- Obtain a viable business background for immediate employment and/or transfer to a four-year program.
- Learn principles of business, accounting, and economics.

CAREER OPPORTUNITIES:

- Assistant Manager
- Advertising Representative
- Sales Representative
- Supervisor
- Customer Service Representative

CAREER OUTLOOK:

- With the importance of technology in the global economy, business positions are anticipated to increase.

RECENT EMPLOYERS OF SUNY CANTON GRADUATES:

- Community Bank
- Wal-Mart
- Ward Real Estate
- New York State
- Canton-Potsdam Hospital
- St. Lawrence Health Alliance

TRANSFER OPPORTUNITIES:

- Eligible students may enroll in one of SUNY Canton's four-year business or management programs.

ADMISSION REQUIREMENTS:

- Students must be prepared to take Composition & the Spoken Word (ENGL 101).

PROGRAM REQUIREMENTS:

AS DEGREE—TRANSFER PROGRAM (CURRICULUM 0671)

Semester I	Credits
FYEP 101 First Year Experience***	1
ACCT 101 Foundations of Financial Accounting	4
BSAD 100 Introduction to Business.....	3
ECON 101 Macroeconomics (GER 3)	3
ENGL 101 Composition & the Spoken Word (GER 10)	3
Mathematics* (GER 1).....	3-4
	17-18
Semester II	
ACCT 102 Foundations of Managerial Accounting.....	3
CITA 110 Intro. to Information Technology	3
ECON 103 Microeconomics	3
GER(2, 4, 5, 6, 7, 8, 9)	3
MATH 141 Statistics	3
	15
Semester III	
BSAD 200 Business Communications**	3
BSAD 201 Business Law I	3
Program Elective.....	3
GER (2, 4, 5, 6, 7, 8, 9)	3
GER (2, 4, 5, 6, 7, 8, 9)	3
	15
Semester IV	
FSMA 210 Introduction to Finance.....	3
Program Elective	3
Program Elective	3
GER (2, 4, 5, 6, 7, 8, 9).....	3
GER 9.....	4
	16

**Survey of Mathematics (MATH 111), College Algebra (MATH 121), Pre-Calculus Algebra (MATH 123) and Trigonometry (MATH 131), or Calculus (MATH 161)*

** *Fulfills writing intensive requirement.*

****Required for Freshmen students only*

GER = General Education Requirement - Students may take no more than one course per GER subject area

Program Electives: ACCT, BSAD, ECON, FSMA, or LEST

AAS DEGREE (CURRICULUM 632)

Semester I	Credits
FYEP 101 First Year Experience***	1
ACCT 101 Foundations of Financial Accounting.....	4
BSAD 100 Intro. to Business	3
ECON 101 Macroeconomics.....	3
ENGL 101 Composition & the Spoken Word (GER 10)	3
Mathematics*	3-4
	17-18
Semester II	
ACCT 102 Foundations of Managerial Accounting.....	3
CITA 110 Intro. to Information Technology	3
ECON 103 Microeconomics	3
Humanities Elective (GER 7)	3
Mathematics* (GER 1).....	3-4
	15-16
Semester III	
BSAD 200 Business Communications**	3
BSAD 201 Business Law I.....	3
Program Elective.....	3
GER (2, 4, 5, 6, 8, 9) OR	
Liberal Arts & Sciences Electives	3
GER (2, 4, 5, 6, 8, 9) OR	
General Electives	3
	15
Semester IV	
FSMA 210 Introduction to Finance.....	3
Program Elective.....	3
Program Elective.....	3
General Elective	3
GER (2, 4, 5, 6, 8, 9) OR	
General Elective.....	3
	15

**Intermediate Algebra (MATH 106), Survey of Mathematics (MATH 111), College Algebra (MATH 121), Pre-Calculus (MATH 123), College Trigonometry (MATH 131), Statistics (MATH 141), or Calculus (MATH 161).*

** *Fulfills writing intensive requirement.*

*** *Required for all Freshmen*

GER = General Education Requirement

Program Electives: ACCT, BSAD, ECON, FSMA, or LEST

Student Learning Outcomes can be found at www.canton.edu/business/bus_admin.html.

Civil Engineering Technology—AAS

Graduates of the Civil Engineering Technology program receive the Associate of Applied Science degree which enables them to go directly to work or transfer into a bachelor's degree program. Career options may be primarily office-based (drafting and design) or field-based (surveying, inspection, and construction management). Students are well prepared to meet the career challenges of the civil engineering and construction industries. Graduates may pursue a baccalaureate degree (Civil and Environmental Engineering Technology at SUNY Canton or elsewhere). Hands-on learning and extensive practical skills are emphasized in classes.

STUDENTS IN THIS MAJOR:

- Communicate effectively and professionally in the construction environment through proper use of verbal, written, and graphic techniques.
- Develop mathematical skills in algebra, trigonometry, and calculus, using analytical problem-solving methods.
- Employ logical and concise analytical techniques to solve technical problems.
- Demonstrate the capability to develop engineering drawings for construction projects.
- Demonstrate a thorough knowledge of common construction materials; both their proper use and their proper testing procedures.
- Understand the mechanics of structural design.
- Be proficient in the use of surveying equipment to collect data to lay out projects, and to solve engineering problems.
- Graduates will have developed the personal and academic skills required to pursue lifelong learning in, and beyond, the chosen major.

CAREER OPPORTUNITIES:

- Structural Steel Designer, Drafter, Estimator, Surveyor, Construction Su-

perintendent, Construction Inspector, Materials Technician, Environmental Technician, Industrial Sales Representative, Residential/Commercial Contractor and General Contractor.

CAREER OUTLOOK:

- Nearly 100% of graduates willing to relocate/travel are able to establish civil engineering or construction-related careers.

RECENT EMPLOYERS OF SUNY CANTON GRADUATES:

- NYS Department of Transportation
- Atlantic Testing Laboratories
- CIVES Steel Corp.
- C & S Cos. General Contracting
- Northeast Construction Services, Inc.
- Bette and Cring Construction Group
- NC Dept. of Transportation
- Advanced Testing Labs
- Barrett Paving
- Northland Construction
- Army Corps of Engineers
- Stebbins Engineering

TRANSFER OPPORTUNITIES:

Transfer Opportunities can be found at www.canton.edu/csoet/civil_eng.html

ACCREDITATION:

- Accredited by the Engineering Technology Accreditation Commission (ETAC) of ABET, 415 N. Charles Street, Baltimore, MD 21201 – Telephone (410) 347-7700.

ADMISSION REQUIREMENTS:

- Students must be qualified to enter Pre-Calculus Algebra (MATH 123)

Students who do not meet the recommended high school math prerequisites may still be admitted to the College, but completing the program may require more than two years.

PROGRAM REQUIREMENTS:

(CURRICULUM 0517)

Semester I	Credits
ENGS 101 Intro to Engineering.....	2
SOET 116 Intro. to Computer Drawing.....	2
CONS 101 Elementary Surveying.....	4
MATH Math Elective ¹	4
PHYS 121/131 College/Univ. Physics I.....	3
PHYS 125/135 College/Univ. Physics I Lab.....	1
	16
Semester II	
CONS 172 Technical Statics.....	3
SOET 250 Intro 3D CADD and BIM.....	2
MATH Math Elective ¹	4
PHYS 122/132 College/Univ. Physics II.....	3
PHYS 126/136 College/Univ. Physics II Lab.....	1
ENGL 101 Composition and the Spoken Word.....	3
	16
Semester III	
CONS 203 Advanced Surveying.....	3
CONS 272 Strength of Materials for Tech.....	3
CONS 280 Civil Engineering Materials.....	3
MECH 221 Engineering Materials Lab.....	1
CONS 222 Construction Estimating.....	2
Social Science GER (3,4,5, or 6).....	3
	15
Semester IV	
CONS 375 Structural Engineering Design.....	3
CONS 216 Soils In Construction ²	4
CONS 322 Hydraulics.....	4
CONS 274 Construction Management.....	3
Humanities GER (7,8 or 9).....	3
	17
Total Required Program Credits = 64	

¹ MATH Electives = must complete 2 math courses. Must enter the program at MATH 123 or higher. If entering at MATH 123 students will complete MATH 123 and MATH 161. If entering at MATH 161 they will complete MATH 161 and MATH 162.

² Fulfills writing intensive requirements.

Student Learning Outcomes can be found at www.canton.edu/csoet/civil_eng.html

ADDITIONAL GRADUATION REQUIREMENTS

Students transferring a significant number of credits from outside must complete the designated "Capstone" course at SUNY Canton, and the student's transfer records must have been reviewed and approved by the CET Program Director.

Computer Information Systems—AAS

Computer Information Systems (CIS) students develop abilities for working with computer systems, databases, networks, and web development. Qualified graduates also have the opportunity of completing a four-year program in Information Technology with two additional years of study earning a Bachelor of Technology degree.

STUDENTS IN THIS MAJOR:

- Develop the knowledge and experience for a successful career in the computer industry.
- Develop teamwork skills throughout the program.
- Enhance their skill sets by opportunities to electives of interest.
- Acquire hands-on experience in small, well-equipped laboratories.
- Work with qualified faculty in small class sizes solving real-world problems.

CAREER OPPORTUNITIES:

- Junior Programmers
- Network Technician/Administrator
- Systems Manager
- Technical Representative
- Web Developer
- Help Desk Manager

CAREER OUTLOOK:

- Computer Information Systems is expected to continue as a strong growth area for career opportunities.

RECENT EMPLOYERS OF SUNY

CANTON GRADUATES:

- SUNY Canton
- Clarkson University
- Canton-Potsdam Hospital
- St Lawrence-Lewis County BOCES
- Eclipsys
- IBM
- Corning, Inc.

TRANSFER OPPORTUNITIES:

- SUNY Canton: Information Technology and Industrial Technology Management
- SUNY Plattsburgh: Information Technology

ADMISSION REQUIREMENTS:

- Students must be qualified to enter at least Intermediate Algebra (MATH 106) and Composition and the Spoken Word (ENGL 101).
- High school chemistry and physics courses are recommended.
- High school computer technology courses are strongly recommended.
- Transfer students must have a minimum of 2.0 GPA.

Students who do not meet necessary pre-requisites may be admitted to the college. However, completing the program may require more than two years.

PROGRAM REQUIREMENTS:

(CURRICULUM 0581-01)

Semester I		Credits
BSAD 100	Introduction to Business.....	3
CITA 163	Survey of Information Technology ¹ ...	3
CITA 152	Computer Logic ¹	3
ENGL 101	Composition & Spoken Word.....	3
	Mathematics Elective ²	3
		15
Semester II		
CITA 170	Comp. Concepts & Oper. Sys ¹	3
CITA 175	Comp. Concepts & Oper. Sys Lab ¹	1
CITA 171	Oper. Sys. Use & Administration ¹	3
CITA 202	Computer User Support* ¹	3
	Math or Science Elective ²	3
SPCH 104	Introduction to Speech.....	3
		16
Semester III		
ACCT 104	Survey of Accounting ⁶	4
CITA 220	Data Comm and Network Tech ¹	3
CITA 221	Data Comm and Net. Tech Lab ¹	1
ECON 101	Macroeconomics OR	
ECON 103	Microeconomics.....	3
	2-Program Electives ^{1,5}	6
		17
Semester IV		
CITA 250	Information Security ¹	3
	Social Science Elective ⁷	3
	Program Elective ^{1,5}	3
	2-LA Electives ^{3,4}	6
		15

*Fulfills writing intensive requirement..

Student Learning Outcomes can be found at www.canton.edu/csot/com_inf_sys.html.

Although there are several modern well-equipped computer labs on campus, it is expected each student has a personal computer.

¹Any CITA course presented for meeting degree requirements must have a grade of at least C (or transfer credit). No more than 3 CITA credits with a course number below CITA150 may receive credit towards graduation.

²CIS minimum requirement is MATH 106 Intermediate Algebra. MATH 121 College Algebra and MATH 141 Statistics are required in B. Tech. IT Program.

³All graduates must have a minimum of 20 LA (liberal arts and sciences) credits

⁴Students pursuing a baccalaureate degree should select courses from the following GER areas when feasible. GER 2 Science (CHEM 107/108 Investigative Chemistry/ Lab recommended), GER4 American History; GER 5 Western Civilization; GER 6 Other World Cultures; GER 7 Humanities; GER 8 The Arts; or GER 9 Foreign Language.

⁵Program Electives are from Canino SOET, the Business Department (including ACCT 102 Managerial Accounting), and the GMMD Department. Students pursuing a B.Tech. in IT degree should take: CITA180 Intro to Programming, CITA 204 Systems Analysis and Design, and CITA 215 Database Applications and Concepts.

⁶ACCT101 Financial Accounting may be substituted for students interested in pursuing a business related minor or major.

⁷Social Science Elective – students pursuing a baccalaureate degree should select from GER 4, 5, or 6 – see note 4 above.

ADDITIONAL GRADUATION REQUIREMENTS

Each CITA course used to meet graduation requirements must have a grade of “C” or higher. A transfer student must complete at least two CITA courses (six credit hours) numbered 200 or above which are applicable to the degree.

Construction Technology: Management—AAS

This program prepares students for careers in construction by blending hands-on construction skills with project planning, management and estimating. Students are also exposed to accounting, bidding, drafting, and business organization and management. Graduates with the Construction Technology: Management, AAS (Associate of Applied Science) degree have the option of completing a four-year degree with two more years of study; Industrial Technology Management (B. Tech.) is one possible track.

STUDENTS IN THIS MAJOR:

- Learn fundamental construction techniques through hands-on experience and classroom teaching.
- Conduct construction material testing (eg: steel, soils, concrete) using industry-standard equipment.
- Experience an academic program that blends the fields of construction, business, and management.
- Develop computer software skills, project scheduling techniques, and construction methods utilized in the management of construction projects.

CAREER OPPORTUNITIES:

- Construction Project Manager Assistant
- Estimator
- Project Planning and Scheduling
- Construction Equipment Salesperson
- Residential Contractor
- Commercial Contractor
- Purchasing Agent
- Code Enforcement Officer
- Insurance Adjustor

CAREER OUTLOOK:

- Career opportunities currently exist at all levels of the construction industry.

- Infrastructure rehabilitation should maintain the need for construction technicians and assistant project managers.

RECENT EMPLOYERS OF SUNY CANTON GRADUATES:

- Atlantic Testing Laboratories
- Barrett Paving Materials Inc.
- Northeast Construction Services
- C & S Companies
- Tuscarora Construction
- Jeffords Steel Inc.
- CIVES Steel
- Many local construction companies

TRANSFER OPPORTUNITIES:

- SUNY Canton (B. Tech. in Industrial Technology Management)
- SUNY Alfred (BS, BT in Construction Management)

ADMISSION REQUIREMENTS:

- Students must be qualified to enter Applied College Mathematics (MATH 101) or Intermediate Algebra (MATH 106)

Students who do not meet the recommended high school math prerequisites may still be admitted to the College, but completing the program may require more than two years.

PROGRAM REQUIREMENTS:

(CURRICULUM 1162)

Semester I	Credits
SOET 101 Computer Usage for Technicians	1
FYEP 101 First Year Experience.....	1
CONS 112 Wood Structures.....	3
SOET 116 Intro. to Computer Drawing	2
BSAD 100 Intro to Business.....	3
ENGL 101 Composition and the Spoken Word .3	
MATH Math Elective ¹	<u>3</u>
	16

Semester II	
CONS 111 Commercial Structures	3
CONS 132 Construction Drafting.....	3

CITA 109 Intermediate Spreadsheets.....	1
PHYS 115 Basic Physics.....	4
General Elective.....	<u>3-4</u>
	14

Semester III

CONS 101 Elementary Surveying.....	4
CONS 222 Construction Estimating	2
CONS 280 Civil Engineering Materials	3
BSAD 201 Business Law I.....	3
ACCT 104 Survey of Accounting	<u>4</u>
	16

Semester IV

CONS 274 Construction Management.....	3
CONS 216 Soils in Construction ²	4
Humanities Elective (GER 7,8 or 9) .3	
Soc. Science Elective (GER 3,4,5, or 6) <u>3</u>	
	13

Total Required Program Credits = 60

¹ The student will be leveled into the appropriate MATH class. MATH 123 is the minimum level of mathematics required for the program. If entering with MATH 106, MATH 123 will be taken as the General Elective in semester 2. If leveled into MATH 123, a general elective will be taken in semester 2.

² Writing Intensive Course.

Student Learning Outcomes can be found at www.canton.edu/csoet/const_mgt.html.

ADDITIONAL GRADUATION REQUIREMENTS

Students must have completed a minimum of nine CONS credits at SUNY Canton. Student transfer records must be reviewed and approved by the program director.

Criminal Justice—AAS

The program offers three distinct learning tracts which allows the student the opportunity to tailor their coursework for future career aspirations:

- Law Enforcement
- Corrections
- Generalist

Students are provided a solid academic foundation that allows them to seamlessly transfer into any of our B. Tech majors in Criminal Investigation, Homeland Security or Criminal Justice: Law Enforcement Leadership.

STUDENTS IN THIS MAJOR:

- Acquire the basic knowledge for a broad view of criminal justice which could support either a career in criminal justice OR further academic study in his field.
- Have their needs met by choosing the delivery format for the courses that best fits their lifestyles. The coursework is available in both a traditional classroom format and in an online format.

CAREER OPPORTUNITIES:

- Police Officer
- Corrections Officer
- Private Security
- Loss Prevention Officer

CAREER OUTLOOK:

- U.S. Department of Labor forecasts that the growth rate until 2024 is approximately 4%. The average starting pay is approximately \$39,000 which is higher than the overall average pay of all occupations tracked by the D.O.L.

RECENT EMPLOYERS OF SUNY CANTON GRADUATES:

- Federal Bureau of Investigations (FBI)
- Secret Service
- U.S. Customs & U.S. Border Patrol

- New York State Department of Environmental Conservation
- New York State University Police
- New York State Police
- New York Department of Corrections
- Military Police of the Armed Forces
- United Parcel Service
- Pinkerton Security
- Sheriff's Department
- Municipal Police Departments
- Vermont State Police

TRANSFER OPPORTUNITIES:

- Fifty to sixty percent of AAS graduates seek baccalaureate degrees. The majority of these students remain at SUNY Canton and pursue one of the baccalaureate degrees due to the hands-on aspects of our B. Tech degrees.

ADMISSION REQUIREMENTS:

- Students must be prepared to take Intermediate Algebra (MATH 106)
- Students must be prepared to take Composition and the Spoken Word (ENGL 101).
- Transfer students must have at least a 2.0 GPA.

PROGRAM REQUIREMENTS:

(CURRICULUM 0640)

Semester I		Credits
JUST 101	Intro. to Criminal Justice.....	3
ENGL 101	Composition and the Spoken Word..	3
CITA 110	Intro. to Information Technology.....	3
	MATH Elective (GER MATH).....	3
PSYC 101	Introductory Psychology.....	3
		15
Semester II		
JUST 105	Correctional Philosophy.....	3
JUST 110	Criminal Law.....	3
SOCI 101	Introduction to Sociology.....	3
	Humanities Elective (GER 7).....	3
	Natural Science w/Lab (GER 2) ...	3-4
		15-16

EMPHASIS A: Law Enforcement

Semester III

JUST 111	Criminal Procedure	3
JUST 201	Critical Issues in Crim. Justice *	3
JUST 209	Law Enforce. Communications	3
	American History Elective (GER 4)..	3
	Lib. Arts Elective (any GER)	3
		15

Semester IV

JUST 203	Criminal Investigation.....	3
JUST 207	Police Services.....	3
JUST 210	Forensic Investigations.....	3
	Lib. Arts Elective (GER 5, 6, 8, 9)....	3
	Lib. Arts Elective (any GER)	3
		15

OR

EMPHASIS B: Corrections Professions

Semester III

JUST 111	Criminal Procedure	3
JUST 201	Critical Issues in Crim. Justice *	3
JUST 211	Diagnostic Eval of Offender	3
	American History Elective (GER 4)..	3
	Lib. Arts Elective (GER 5, 6, 8, 9)....	3
		15

Semester IV

JUST 215	Community Based Corrections	3
	Program Electives	6
PSYC 275	Abnormal Psychology	3
SSCI 181	Alcohol Drugs & Society.....	3
		15

OR

EMPHASIS C: Criminal Justice Generalist

Semester III

JUST 111	Criminal Procedure	3
JUST 201	Critical Issues in Crim. Justice *	3
JUST 209	Law Enforce. Communications OR	
JUST 211	Diagnostic Eval of Offender	3
	American History Elective (GER 4)..	3
	Lib. Arts Elective (any GER)	3
		15

SEMESTER IV

	Program Electives	9
	Lib. Arts Elective (GER 5, 6, 8, 9)....	3
	Lib. Arts Elective (any GER)	3
		15

* Fulfills writing intensive requirement.

GER = General Education Requirement

1 Intermediate Algebra (MATH 106) is the minimum level acceptable toward AAS degree. Survey of Mathematics (MATH 111) or College Algebra (MATH 121) is minimum for B.Tech. degrees.

--Introduction to Criminal Justice should be taken as soon as possible.

--Early American History (HIST 103) or Modern US History (HIST 105) is recommended for American History elective.

--A minimum of 60 credit hours with a 2.0 GPA is required to receive the AAS degree in Criminal Justice. Students must take all of the PROGRAM courses and all courses in Emphasis A, Emphasis B, OR Emphasis C. (NOT ALL THREE).

Early Childhood—AS

STUDENTS IN THIS MAJOR:

- Participate in student teaching field-based experiences in various child care settings, including: Head Start Programs, Universal Pre-K, and Kindergarten Public School Classrooms, Child Care Centers, Family Child Care Provider Homes, Nursery, and Pre-School programs.
- Enroll in a course of study offering 12 courses specific to Early Childhood Care and Education along with general liberal arts courses leading to an Associate of Science degree.
- Take part in professional development opportunities offered through seminars, trainings, workshops, and conferences.
- Have access to various learning resources, activity kits, and equipment in our state-of-the-art Early Childhood Undergraduate Teacher Center & Classroom located in Cook Hall.
- Prepare for rewarding careers in Early Care and Education or continue your academic studies by enrolling in our Bachelor of Business Administration in Early Childhood Care and Management, or transfer to various 4-year degree Programs.

PROGRAM DELIVERY:

The Associate of Science Degree in Early Childhood can be completed fully online, on campus, or a combination of both. Distance students can attend classes virtually in real-time or view recorded class sessions throughout the semester. Students can begin enrollment in fall or spring and attend part or full-time.

CAREER OPPORTUNITIES:

- Pre-School and Child Care Center Lead Teacher, Assistant Teacher
- Public School: Teacher Assistant
- Head Start: Lead Teacher, Asst. Teacher
- Self Employed: Child Care or Nursery School Owner
- Family Child Care Center Provider

CAREER OUTLOOK:

- U.S. Department of Labor projects employment of Child Care Teachers, Pre-school Teachers, and Teacher Assistants to grow by 10% from 2016-2026, faster than the average for all occupations.

- Certification requirements are increasing for Early Care and Education providers. Associate and Bachelor Degrees are necessary to work in lead positions in childcare facilities and Head Start programs.
- Changes in society and the workforce demand an increase in the availability of high-quality early childcare and education options for families and children from infancy to pre-kindergarten.

TRANSFER OPPORTUNITIES:

SUNY Canton, BBA in Early Childhood Care and Management.....Earn 2 degrees in 4 years!

SUNY Canton Early Childhood graduates attend:

- *SUNY Cobleskill, SUNY Plattsburgh, SUNY Oneonta, SUNY Cortland, SUNY Buffalo, SUNY Albany, SUNY Cobleskill*
- *SUNY Brockport, SUNY New Paltz, SUNY Geneseo, SUNY Potsdam, SUNY Fredonia, College of Saint Rose*

ADMISSION REQUIREMENTS:

- Students must meet entrance requirements and be eligible for enrollment in: Composition & the Spoken Word (ENGL 101).
- Transfer students must have a minimum 2.0 GPA for admittance to the ECHD major.
- Students who do not meet ECHD admission requirements may enroll in preparatory courses. Students must pass all *preparatory courses and have a minimum 2.0 GPA for admittance to the ECHD program.
- Graduates of BOCES Early Childhood Occupations programs *may* be eligible for 3–6 college credits toward the Early Childhood Program at SUNY Canton. Refer to the College catalog for a list of BOCES Programs for which we have articulation agreements.

PROGRAM REQUIREMENTS:

- Students are required to complete NYS Office for Children Trainings: Identification of Child Abuse & Neglect and

Foundations in Health, Safety & Nutrition [offered within our courses]

- Early Childhood students must complete a Health Clearance through the SUNY Canton Davis Health Center; have evidence of a recent physical exam, and updated immunizations.
- For off campus teaching experiences (ECHD 201) residential students will need to arrange for coordination of and/or transportation to their assigned placement sites. Distance/Online students will be complete student teaching experiences in centers and programs in close proximity to their residence and attend seminars virtually.

(CURRICULUM 1327)

Semester I		Credits
FYEP 101	First Year Experience	1
ECHD 101	Introduction to Early Childhood.....	3
ENGL 101	Composition & the Spoken Word....	3
PSYC 101	Introduction to Psychology.....	3
	Science Elec. w/lab (GER 2).....	4
	General Elective (GER 1-9).....	3
		17

Semester II		
ECHD 121	Wellness in Young Children.....	3
ECHD 131	Infants and Toddlers.....	3
ENGL 216	Children's Literature	3
PSYC 220	Child Development.....	3
	Math Elective (GER 1).....	3
		15

Semester III		
ECHD 125	Curriculum Development.....	3
ECHD 250	Children with Special Needs.....	3
ECHD 285*	Iss. & Policies in Early Care & Ed.*..	3
	History Elective (GER 4, 5 or 6).....	3
	Arts Elec. or Foreign Lang. (GER 8 or 9)	3-4
		15-16

Semester IV		
ECHD 201	Student Teaching Field Experiences w/Seminar	4
ECHD 204	Early Childhood Observation.....	3
ECHD 200	Planning Programs for Young Children	3
	General Elective (GER 1-9).....	3
	General Elective.....	3
		16

* *Fulfills writing intensive requirement.*

GER = *General Education Requirement*

NOTE: *Early Childhood students must meet seven out of ten General Education Requirements.*

Student Learning Outcomes can be found at www.canton.edu/business/early_childhood/.

Electrical Engineering Technology—AAS

The Electrical Engineering Technology (EET) program prepares students for a wide range of opportunities ranging from manufacturing and defense to power generation and computing. At completion, graduates receive the Associate in Applied Science degree and have considerable flexibility for continuing their education or commencing their career directly. Math skills and an interest in science are expected, and the student will receive extensive hands-on experience in a small class setting. Graduates are qualified to work as Engineering Technicians, or continue in the four year EET program (B. Tech.), and will have the flexibility to a number of elective courses including Mathematics as minor.

PROGRAM EDUCATIONAL OBJECTIVES

- (1) Provide industry with well qualified technicians for entry level positions in the Electrical Engineering Technology field;
- (2) Provide transferability for students who are interested in baccalaureate degree programs at SUNY Canton or other institutions with related programs;
- (3) Be ready to expand knowledge in engineering profession through continuing education, or other lifelong learning experiences;
- (4) Be committed to quality, timeliness and respect for diversity.

STUDENT LEARNING OUTCOMES

What students are expected to know and be able to do by the time of graduation:

- (1) An ability to apply knowledge, techniques, skills and modern tools of mathematics, science, engineering, and technology to solve well-defined engineering problems appropriate to the discipline;
- (2) An ability to design solutions for well-defined technical problems and assist with the engineering design of systems, components, or processes appropriate to the discipline;
- (3) An ability to apply written, oral, and graphical communication in well-defined technical and non-technical environments; and an ability to identify and use appropriate technical literature
- (4) An ability to conduct standard tests, measurements, and experiments and to analyze and interpret the results; and
- (5) An ability to function effectively as a member of a technical team.

CAREER OPPORTUNITIES:

More than 90% of the graduates go directly into positions like:

- Project Control Technician
- Electronic Maintenance Technician
- Production Technician
- Field Service Technician
- Systems Test Technician
- Quality Assurance Technician
- Field Project Technician
- Instrumentation Technician
- Electrical Power Technician
- Communications Technician

CAREER OUTLOOK:

- The demand for Electrical Engineering Technicians is immense. There simply are not enough qualified technicians entering the market place, and a large number of working technicians are approaching retirement age.

RECENT EMPLOYERS OF SUNY CANTON GRADUATES:

- Brookfield Power
- Novelis
- Schlumberger
- Siemens
- National Grid
- ALCOA
- Schneider Packing Equipment
- Corning
- New York Power Authority
- TRC
- C & S Engineers, Inc.
- NYSEG
- Verizon

BACHELOR'S DEGREE IN ELECTRICAL ENGINEERING

OPPORTUNITY:

- Graduate from the AAS degree in Electrical Engineering Technology may continue in the B. Tech degree program, and all courses are transferred into the Bachelor's Degree program to allow student to complete his/her studies in two years.

ACCREDITATION:

- Accredited by the Engineering Technology Accreditation Commission (ETAC) of ABET, 415 N. Charles Street Baltimore, MD 21201 – Telephone (410) 347-7700.

ADMISSION REQUIREMENTS:

- Students must be qualified to enter Pre-Calculus Algebra (MATH 123)
- Students who do not meet the required high school mathematics prerequisites may still be admitted to the College, but they will have to complete all mathematics requirements before admission to this program, or they may complete one year certificate before starting the degree program.

PROGRAM REQUIREMENTS: (CURRICULUM 0699)

Semester I	Credits
ELEC 101 Electric Circuits I	3
ELEC 109 Electric Circuits I Laboratory	1
ELEC 161 Electronic Fabrication.....	2
SOET 116 Intro to CAD and Design.....	2
ENGL 101 Composition & the Spoken Word....	3
MATH 123 Pre-Calculus Algebra	4
FYEP 101 First Year Experience	1
	16

Semester II	Credits
ELEC 102 Electric Circuits II	3
ELEC 129 Electric Circuits II Laboratory	1
ELEC 141 Industrial Controls	2
ELEC 165 Digital Fund & Systems	3
ELEC 166 Digital Fund & Systems Lab.....	1
English (Literature).....	3
MATH 161 Calculus I	4
	17

Semester III	Credits
ELEC 213 Microprocessors *	3
ELEC 215 Electrical Energy Conversion	4
ELEC 231 Electronic Circuits.....	4
ENGS 102 Programming for Engineers.....	2
PHYS 121/131 College Physics I OR University Physics I	3
PHYS 125/135 Physics Lab I.....	1
	17

Semester IV	Credits
ELEC 203 Engineering Technology Project.....	1
ELEC 225/383 Telecommunications OR Power Transmission & Distribution..	3
ELEC 332 Industrial Electronics.....	3
ELEC 243 Computer Auto Control Systems.....	2
PHYS 122/132 College Physics II OR University Physics II	3
PHYS 126/136 Physics Lab II.....	1
SOET 377 *Engineering Ethics	1
	18

* *Fulfills writing intensive requirement.*

Student Learning Outcomes can be found at www.canton.edu/csoet/elec_eng_tech/.

ADDITIONAL GRADUATION REQUIREMENTS

Students transferring in Electrical 200 level courses must complete a minimum of 12 credits of 200 level courses contained in the current Electrical Engineering Technology curriculum with a minimum GPA of 2.0 for all such credits taken.

Engineering Science—AS

The Engineering Science program prepares its graduates to complete a baccalaureate engineering degree with another two years of study. Applicable areas include mechanical, electrical, civil, and aeronautical engineering. A key difference with Engineering Science, as differentiated from other programs in the Canino School of Engineering Technology, is that this program provides a strong theoretical preparation rooted in calculus for students who seek to prepare for engineering design responsibilities. Graduates perform exceptionally well when transferring to engineering schools such as Clarkson, Cornell or RPI.

STUDENTS IN THIS MAJOR:

- Complete their first two years at SUNY Canton and then transfer to a four-year engineering school to complete their baccalaureate degree.
- Interact with faculty on a daily basis because of small class sizes.
- Are accepted by most four-year engineering schools with full junior status.
- Have the benefit of SUNY Canton's membership in the SUNY Two-Year Engineering Science Association (TYESA) of New York State. This membership assures that SUNY Canton's Engineering Science program is rigorous and allows for smooth transfer to four-year schools.

CAREER OPPORTUNITIES:

After transferring to and graduating from a four-year school, any engineering career is possible. Typical opportunities include:

- Aeronautical Engineer
- Civil Engineer
- Computer Engineer
- Electrical Engineer
- Engineering Management
- Mechanical Engineer
- Chemical Engineer

CAREER OUTLOOK:

- There are favorable job opportunities for engineering-related positions.
- Employment opportunities in engineering have been good for a number of years and are expected to continue.

TRANSFER OPPORTUNITIES:

In recent years, Engineering Science students have transferred to:

- Carnegie Mellon University
- Clarkson University
Dual Admission Available - Earn an Associates at SUNY Canton and a Bachelor's at Clarkson University.
- Cornell University
- Florida Institute of Technology
- Northeastern University
- Pennsylvania State University
- Rensselaer Polytechnic Institute
- SUNY Binghamton
- SUNY Buffalo
- Syracuse University
- University of Massachusetts
- University of North Carolina

ADMISSION REQUIREMENTS:

- Students must be qualified to enter Calculus I (MATH 161)

PROGRAM REQUIREMENTS:

(CURRICULUM 0530)

This program has been granted a SUNY General Education waiver which allows the program to require only five General Education Requirements. Care must be taken to select courses in areas which meet this requirement.

Semester I	Credits
ENGS 101 Introduction to Engineering.....	2
CHEM 150 College Chemistry I.....	4
ENGL 101 Composition & the Spoken Word....	3
MATH 161 Calculus I.....	4
PHYS 131 University Physics I.....	3
PHYS 135 University Physics Lab I.....	1
	<u>17</u>

Semester II	Credits
ENGS 102 Programming For Engineers.....	2
CHEM 155 College Chemistry II.....	4
English (Literature).....	3
MATH 162 Calculus II.....	4
PHYS 132 University Physics II.....	3
PHYS 136 University Physics Lab II.....	1
	<u>17</u>

Semester III	Credits
ENGS 201 Statics.....	3
ENGS 205 Nature & Properties of Materials.....	3
MATH 263 Calculus III.....	4
ECON 103 Principle of Microeconomics.....	3
Program Elective *.....	3
	<u>16</u>

Semester IV	Credits
ENGS 202 Dynamics.....	3
ENGS 263 Electric Circuits.....	3
ENGS 264 Electric Circuits Lab.....	1
Program Elective **.....	3
MATH 364 Differential Equations.....	4
	<u>14</u>

Student Learning Outcomes can be found at www.canton.edu/csoet/eng_sci.html.

General Technology–AAS

The General Technology (GT) curriculum serves needs of entering students in three broad ways. First, its curricular breadth and flexibility allows entering students to explore across a range of technology disciplines as they seek to identify a specific concentration path of interest. Second, GT enables students transferring from other academic programs or institutions to build upon academic work already accomplished. Third, this program is appropriate for students seeking a two-year degree in an unusual area of specialization for which dedicated programs may not conveniently exist (e.g. electronic testing, project planning & scheduling, quality control, plant operations & maintenance).

Graduates of this program may pursue employment upon graduation or continue their education with the pursuit of a subsequent baccalaureate (four-year) degree with a program such as Industrial Technology Management. This broad-based program is ideal for individuals with analytical capabilities seeking to pursue a path of study that serves the individual's particular interests well.

STUDENTS IN THIS MAJOR:

- Will have the flexibility to explore career interests in various technical disciplines.
- Will be able to focus their studies within their specific area(s) of interest.
- Will develop a strengthened preparation in mathematics, science, and technology.
- Are able to build upon academic work already completed in other related areas.

CAREER OPPORTUNITIES:

Employment opportunities are broad for technology and span the range of industry and commerce. Because of the broad flexibility of this program, it is important for the student and academic advisor to carefully plan the selection of program electives that will best serve the career interests of the

individual student. Opportunities in this market include:

- Manufacturing & Production
- Industrial Distribution
- Technical Sales and Services
- Pursuit of additional (four-year) education (e.g. Business, Information Technology, Industrial Technology Management)

ADMISSION REQUIREMENTS:

Incoming students will meet all general admission requirements as freshmen to SUNY Canton, having completed the NYS Geometry Regents or Math A plus one year. Transfer students will be evaluated individually by the program academic advisor. The mathematics requirements will ensure that entering students are prepared to commence studies at a minimum level of College Algebra (MATH 121) and College Physics I (PHYS 121).

PROGRAM REQUIREMENTS:

(CURRICULUM 2208)

Semester I	Credits
ENGS 101 Introduction to Engineering	2
Technical Design OR Drafting	2-3
ENGL 101 Composition and the Spoken Word..	3
MATH 123 Pre-Calculus Algebra	4
PHYS 121 College Physics I	3
PHYS 125 Physics I Lab	1
	15-16

Semester II	
ENGS 102 Programming for Engineers	2
MECH 128 Electromechanical Technology	3
Social Science Elective	3
Math Elective**	4
Science Elective w/lab	4
	16

Semester III	
Program Elective***	9
Math Elective **	3
Humanities Elective	3
	15

Semester IV	
Program Electives***	12
General Elective	3
	15

*Fulfills writing intensive requirement.

** College Algebra (MATH 121) or equivalent, & at least one calculus course are required. Entering students who are unprepared to enroll in MATH121 or equivalent may require extra time to graduate.

*** Program Electives are to be selected with the approval of the student's academic advisor from the following disciplines: ACHP, AREA, ASTR, AUTO, CHEM, CITA, CONS, ENGS, ESCI, TMMA, GEOL, GMMD, MECH, MFGT, MATH, MSPT, PHYS, and SOET.

Student Learning Outcomes can be found at www.canton.edu/csuet/general.html.

HVAC Engineering Technology–AAS

SUNY Canton is a leader in air conditioning education, and this program is well-suited for individuals with an interest in energy and technology. With energy costs at their current level, this program leads to employment opportunities across the U.S. and around the globe. It also provides excellent preparation for entry into baccalaureate programs such as Mechanical Technology, Alternative and Renewable Energy Systems or Industrial Technology Management at SUNY Canton. Students also pursue baccalaureate degrees at other institutions.

STUDENTS IN THIS MAJOR:

- Communicate effectively and professionally in the building environment through proper use of verbal, written, and graphic techniques.
- Develop mathematical skills in algebra, trigonometry, and calculus, using analytical problem solving methods.
- Be proficient and apply mathematics, fluid mechanics, thermodynamics, and principle of heat transfer to air conditioning designs.
- Employ logical and concise analytical techniques to solve technical problems.
- Demonstrate the capability to develop engineering drawings for HVAC projects.
- Develop skills using specific codes, ASHRAE standards and handbooks.
- Demonstrate a thorough knowledge of HVAC components and how to use as a system to maintain design conditions.

CAREER OPPORTUNITIES:

- Service Technicians
- HVAC Contractors
- Designers
- HVAC Sales
- Controls Specialists
- Facilities Management

CAREER OUTLOOK:

- All graduating students seeking employment in the past two years have accepted employment by the first of June after graduation.

RECENT EMPLOYERS OF SUNY CANTON

GRADUATES:

- Day Automation Systems
- Prax Air, Inc.
- Pro Air Plus
- Siemens
- T.P. Woodside, Inc.
- Bomac
- Hyde-Stone
- DeLaval
- GEMMA Power Systems

ACCREDITATION:

- Accredited by the Engineering Technology Accreditation Commission (ETAC) of ABET, 415 N. Charles Street Baltimore, MD 21201 – Telephone (410) 347-7700.

ADMISSION REQUIREMENTS:

- Students must be qualified to enter Pre-Calculus Algebra (MATH 123)

Students who do not meet the recommended high school math prerequisites will be admitted to either Heating and Plumbing Service or Air Conditioning Maintenance & Repair certificate programs. Students will be admitted into the Air Conditioning Engineering Technology program upon successful completion of either certificate program.

PROGRAM REQUIREMENTS:

(CURRICULUM 0444)

Semester I	Credits
ENGS 101 Introduction to Engineering	2
ENGL 101 Composition & Spoken Word.....	3
MATH 123 Pre-Calculus Algebra	4
SOET 116 Computer Drafting	2
PHYS 121 College Physics I.....	3
PHYS 125 Physics Lab I	1
	<hr/> 15

Semester II

MECH 103 Intro to HVAC-R.....	3
SOET 250 Introduction to 3D CAD and BIM..	2
MATH 161 Calculus I	4
Humanities Elective (GER 7, 8, 9) ...	3
PHYS 122 College Physics II	3
PHYS 126 Physics Lab II	1
	<hr/> 16

Semester III

ACHP 243 Air Conditioning I.....	3
ACHP 253 Domestic & Commercial Heating I *	4
ELEC 261 Electricity	4
ENGS 102 Programming for Engineers.....	2
MECH 241 Fluid Mechanics	3
MECH 242 Fluid Power Lab	1
	<hr/> 17

Semester IV

ACHP 264 Air Conditioning Syst. Design.....	1
ACHP 254 Domestic & Commercial II.....	4
CITA 220 Data Communications and Networking Technology.....	3
CITA 221 Data Communications and Networking Technology Lab	1
ELEC 141 Industrial Controls	2
GER Elective (GER 3, 4, 5, 6)	3
	<hr/> 14

* *Fulfills writing intensive requirement.*

Student Learning Outcomes can be found at www.canton.edu/csoet/air_cond.html.

ADDITIONAL GRADUATION REQUIREMENTS

Students must have completed while at SUNY Canton, 12 credits of 200 level courses, including ACHP 264, contained in the current HVAC ET curriculum and earning a minimum GPA of 2.0 for all such credit hours taken while under the direct advisement of the program faculty.

HVAC Trades–AOS

There's a growing demand nationwide for technicians specializing in heating, ventilation, air conditioning (HVAC) and refrigeration. Climate-control systems are becoming increasingly sophisticated, necessitating the need for advanced training.

Courses in the new major include hands-on labs specializing in the installation, troubleshooting and repair of HVAC systems, in addition to computers, motor controls, commercial refrigeration, and plumbing. It will also incorporate business and humanities courses to further prepare students for their professional careers.

With energy costs at their current level, this program leads to employment opportunities across the U.S. and around the globe. It also provides excellent preparation for entry into baccalaureate programs such as Sustainable Energy Technology or Industrial Technology Management at SUNY Canton. Students also pursue baccalaureate degrees at other institutions.

STUDENTS IN THIS MAJOR:

- Communicate effectively and professionally in the building environment through proper use of verbal, written, and graphic techniques.
- Develop mathematical skills in algebra, trigonometry, and calculus, using analytical problem solving methods.
- Be proficient and apply mathematics, fluid mechanics, thermodynamics, and principle of heat transfer to air conditioning designs.
- Employ logical and concise analytical techniques to solve technical problems.
- Demonstrate the capability to develop engineering drawings for HVAC projects.
- Develop skills using specific codes, ASHRAE standards and handbooks.
- Demonstrate a thorough knowledge of HVAC components and how to use as a system to maintain design conditions.

CAREER OPPORTUNITIES:

- Service Technicians
- HVAC Contractors
- Designers
- HVAC Sales
- Controls Specialists

RECENT EMPLOYERS OF SUNY CANTON

GRADUATES:

- Day Automation Systems
- Prax Air, Inc.
- Central New York Trane
- Siemens
- Thomas Associates
- T.P. Woodside, Inc.
- Galson Engineering
- Bomac
- Hyde-Stone
- NEPCO
- GEMMA Power Systems

ACCREDITATION:

- Accredited by the Engineering Technology Accreditation Commission (ETAC) of ABET, 415 N. Charles Street Baltimore, MD 21201 – Telephone (410) 347-7700.

ADMISSION REQUIREMENTS:

- Refer to the table of high school course prerequisites for admission.
- Students must be qualified to enter Intermediate Algebra (MATH 106)

PROGRAM REQUIREMENTS:

(CURRICULUM 2953)

Semester I	Credits
CONS 151 Building Trades - Blueprint Reading and Drafting.....	2
MATH 106 Intermediate Algebra	3
ENGL 101 Composition and the Spoken Word (GER 10)	3
HVAC 103 Heating Systems I.....	3
HVAC 104 Heating Lab I.....	2
SOET 101 Intro to Computer Usage.....	1
	14

Semester II	
HVAC 101 Refrigeration I.....	2
HVAC 102 Refrigeration I Lab	3
HVAC 105 Heating Systems II	3
HVAC 106 Residential & Light Commercial Installation	2
HVAC 110 Plumbing.....	3
Liberal Arts Elective.....	3
	16

Semester III	
CITA 108 Spreadsheets	1
HVAC 201 HVAC Electrical and Motor Control	2
HVAC 202 HVAC Electrical and Motor Control Lab.....	2
HVAC 205 HVAC Service, Troubleshooting & Repair.....	3
GER Elective.....	3
Humanities.....	3
	14

Semester IV	
ACHP 105 Refrigeration SYSTEM Design.....	2
AREA 210 Sustainable Building.....	3
HVAC 203 Commercial Refrigeration	2
HVAC 204 Commercial Refrigeration Lab II.....	3
GER Elective.....	3
GER Elective.....	3
	16

1 Mathematics level depends on previous preparation, Applied College Mathematics (MATH 101) is the minimum requirement.

Student Learning Outcomes can be found at www.canton.edu/csoet/hvac-aos/.

Individual Studies—AAS

STUDENTS IN THIS MAJOR:

- Enroll in one of the Schools: School of Business and Liberal Arts; Canino School of Engineering Technology; or School of Science, Health, and Criminal Justice.
- Develop a program consistent with a specific career objective.
- Have the opportunity to explore an unknown area.
- Benefit from the knowledge and skills obtained through life experiences.
- Earn an Associates in Applied Science after 60 credits hours.
- May transfer into baccalaureate degree programs.

CAREER OPPORTUNITIES:

Employment options are unlimited, students while working closely with an academic advisor can design their own programs.

RECENT EMPLOYERS OF SUNY CANTON GRADUATES:

- Burke's Construction
- Fleet Bank
- Dine-A-Mate, Inc.
- Builders Square
- Corning, Inc.
- Claxton-Hepburn Medical Center
- Potsdam Stone and Concrete
- Morris Protective Services

ADMISSION REQUIREMENTS:

- Student should be prepared to take Composition and the Spoken Word (ENGL 101).
- Transfer students must meet re-registration requirements.

TRANSFER OPPORTUNITIES:

- SUNY Canton
- SUNY Potsdam, Plattsburgh, Oswego, Cortland, Geneseo, and Brockport
- State University Centers at Albany, Buffalo, and Binghamton
- Clarkson University
- Niagara University
- St. Lawrence University

PROGRAM REQUIREMENTS:

(CURRICULUM 0688)

English/Humanities.....	6
Social Science	6
Natural Sciences and/or Mathematics.....	6
Applied Electives *.....	21
Liberal Arts Elective	3
General Electives	18
First Year Experience	1
	61*

**All students must take a writing intensive course.*

Student Learning Outcomes can be found at www.canton.edu/business/individual.html.

Liberal Arts and Sciences: General Studies—AA, AS

STUDENTS IN THIS MAJOR:

- Develop a program consistent with a specific career objective or select a concentration from academic areas of humanities, social sciences or natural sciences.
- Prepare for careers in teaching, law, journalism, public administration, human services, finance, insurance, pharmacy, physical therapy, and other fields requiring an understanding of the human condition and the ability to communicate ideas.
- Graduate and continue study in such disciplines as English, education, art, drama, music, communication, economics, history, psychology, sociology, and anthropology.
- Complete all or the majority of the courses required in the first two years of a baccalaureate program in the natural and physical sciences. Graduates have successfully transferred to pharmacy and physical therapy programs.
- Have the opportunity to cross-register at SUNY Potsdam, St. Lawrence University, and Clarkson University.
- Transfer to baccalaureate programs.

CAREER OPPORTUNITIES:

Employment options are unlimited, since in consultation with the academic advisor, students can design their own programs.

RECENT EMPLOYERS OF SUNY CANTON GRADUATES:

- Burke's Construction
- Fleet Bank
- Corning, Inc.
- Claxton-Hepburn Medical Center
- Potsdam Stone and Concrete

- Morris Protective Services
- New York State Department of Social Services

TRANSFER OPPORTUNITIES:

- SUNY Potsdam, Plattsburgh, Oswego, Cortland, Geneseo, and Brockport
- St. Lawrence University
- State University Centers at Albany, Buffalo, and Binghamton
- Clarkson University
- SUNY ESF
- SUNY Upstate Medical University at Syracuse

ADMISSION REQUIREMENTS:

- Prepared to take Composition & the Spoken Word (ENGL 101)
 - NYS English Regents score ≥ 75 ; or
 - Verbal SAT score ≥ 420 ; or
 - Reading and Writing ACT scores ≥ 17 ; or
 - Transfer student who has already passed a college-level English course.
- Prepared to take GER Math
 - NYS Geometry Regents or Math A plus one year; or
 - Already passed Intermediate Algebra or equivalent.

PROGRAM REQUIREMENTS:

DEGREE PROGRAMS

(CURRICULUM 0250)

AA DEGREE	Credits
ENGL 101 Composition & the Spoken Word	3
FYEP 101 First Year Experience	1
Literature/Humanities (GER 7)	3
Humanities Elective	3
Fine Arts OR Language (GER 8, 9)	3
American History (GER 4)	3
Western Civilization OR World History (GER 5, 6)	3

Social Science (GER 3)	3
GER 3, 4, 5, or 6 Elective	3
Mathematics (GER 1) ¹	3
Lab Science (GER 2) ²	4
Liberal Arts Electives	15
General Electives	15
	60-62⁴

AS DEGREE

ENGL 101 Composition & Spoken Word	3
FYEP 101 First Year Experience	1
Literature/Humanities (GER 7)	3
Fine Arts or Language (GER 8, 9)	3
American History (GER 4)	3
Western Civilization OR World History (GER 5, 6)	3
Social Science (GER 3)	3
Mathematics (GER 1) ¹	3
Lab Science (GER 2) ²	4
Liberal Arts Electives	6
General Electives	30
	60-62⁴

¹ Minimum level *Intermediate Algebra (MATH 106)* or *Survey of Math (MATH 111)*

² Science course must be a laboratory science.

⁴ Required: One writing intensive course in a liberal arts or science discipline

Student Learning Outcomes can be found at www.canton.edu/business/libarts.html.

Advisor Note:

- Transfer students: May transfer a 3 or 4 credit *Lab Science or Science [GER 2]
- Option to waive **FYEP 101

Mechanical Engineering Technology—AAS

Graduates of Mechanical Engineering Technology (MET) work in a wide range of industries with a broad array of career opportunities. From manufacturing (CNC Machinist) and construction to equipment testing and power generation, employment opportunities exist in CAD Design, product/system testing, quality improvement, and technical services support. The MET program is appropriate for individuals who like hands-on experience, enjoy technology, and aspire to the challenge of experimentation and problem solving.

STUDENTS IN THIS MAJOR:

- Practice and demonstrate hands on manufacturing skills related to machining, design and drafting, fluid power, mechanical design and electricity.
- Develop core skills in Science, Technology, Engineering and Mathematics to commence their career immediately upon graduation or to continue with the pursuit of a baccalaureate degree.
- Apply computer skills to design, interpret and analyze data, solve problems and prepare reports/presentations for professional communications.
- Apply the scientific and technical knowledge to design, test, troubleshoot and improve machines, tooling, processes and information flow that serve the manufacturing industry.

CAREER OPPORTUNITIES:

Typical job titles in which our graduates are employed are:

- Mechanical Engineering Technician
- Engineering Assistant
- Computer-Aided Drafting
- Designer
- Quality Management Technician
- Lab Technician
- Instructional Assistant
- Field Service Technician
- CNC operator/programmer

RECENT EMPLOYERS OF SUNY CANTON GRADUATES:

- Corning, Inc.
- CIVES Steel Co.
- FilterTech
- Viking-Cives, USA
- Schneider Packaging
- TRC
- Gleason Works
- Bombardier, Inc.
- Novelis

PLACEMENT:

- All graduates during the past five years have either started their careers or continued their education. Forty percent in industry, and sixty percent elected to continue their education with the pursuit of a baccalaureate degree.

TRANSFER OPPORTUNITIES:

- SUNY Canton (Alternative and Renewable Energy Systems, Industrial Technology Management, Mechanical Engineering Technology)
- SUNY Utica/Rome
- Rochester Institute of Technology
- SUNY Alfred
- SUNY Buffalo

ACCREDITATION:

- Accredited by the Engineering Technology Accreditation Commission (ETAC) of ABET, 415 N. Charles Street Baltimore, MD 21201 – Telephone (410) 347-7700.

ADMISSION REQUIREMENTS:

- Students must be qualified to enter Pre-Calculus Algebra (MATH 123)

Students who do not meet the recommended high school math prerequisites may be admitted; students may be admitted into Mechanical Engineering Technology upon completion of this prerequisite.

PROGRAM REQUIREMENTS: (CURRICULUM 0493)

Semester I		Credits
ENGL 101	Composition and The Spoken Word	3
ENGS 101	Introduction to Engineering	2
MATH 123	Pre-Calculus Algebra	4
MECH 121	Manufacturing Processes I	3
PHYS 121	College Physics I	3
PHYS 125	Physics Lab I	1
		<u>16</u>

Semester II		Credits
CONS 172	Technical Statics	3
MATH 161	Calculus I	4
	Program Elective	3
MECH 112	3D Modeling	3
PHYS 122	College Physics II	3
PHYS 126	Physics Lab II	1
		<u>17</u>

Semester III		Credits
CONS 272	Strength of Materials	3
ELEC 261	Electricity	4
MECH 241	Fluid Mechanics	3
MECH 242	Fluid Power Lab	1
	Program Elective*	3
	Social Science Elective	3
		<u>17</u>

Semester IV		Credits
ELEC 141	Industrial Controls	2
MECH 232	Machine Design	3
MECH 220	Engineering Materials*	3
	Program Elective**	3
	Humanities Elective	3
		<u>14</u>

* *Fulfills writing intensive requirement.*

** *Program Electives by advisement selected from ACHP, AREA, CITA, CONS, MATH, MECH, SOET offerings*

Student Learning Outcomes can be found at www.canton.edu/csoet/mech_eng.html.

ADDITIONAL GRADUATION REQUIREMENTS

Students must have complete the equivalent of one full-time semester hours (12 credit hours) under the direct advisement of the program faculty, in technically specialized courses offered by the program area. Students must maintain a minimum 2.0 GPA and complete the OSHA 10 hour safety training for graduation.

STUDENTS IN THIS MAJOR:

- Make judgments in practice, substantiated with evidence, that integrate nursing science in the provision of safe, quality care and that promote the health of patients within a family and community context.
- Minimize risk of harm to patients and providers through both system effectiveness and individual performance.
- Use information and technology to communicate, manage knowledge, mitigate error, and support decision-making.
- Implement one's role as a nurse in ways that reflect integrity, responsibility, ethical practices, and an evolving identity as a nurse committed to evidence-based practice, caring, advocacy, and safe, quality care for diverse patients within a family and community context.
- Function effectively within nursing and inter-professional teams, fostering open communication, mutual respect, and shared decision-making to achieve quality patient care.
- Advocate for clients and families in ways that promote their self-determination, integrity, and ongoing growth as human beings.
- Recognize the client or designee as the source of control and full partner in providing compassionate and coordinated care based on respect for client's preferences, values, and needs.
- Examine the evidence that underlies clinical nursing practice to challenge the status quo, question underlying assumptions, and offer new insights to improve the quality of care for patients, families, and communities.
- Use data to monitor the outcomes of care processes and use improvement methods to design and test changes to continuously improve the quality and safety of health care systems

- Integrate best current evidence with clinical expertise and patient/family preferences and values for delivery of optimal health care.

CAREER OUTLOOK:

- Nursing is the largest health care occupation.
- There is increasing diversity in nursing employment, and projections indicate large numbers of new jobs

CAREER OPPORTUNITIES:

- Hospitals and outpatient clinics
- Long-term care facilities
- Community health agencies
- Schools
- Correctional Facilities
- Military Service

TRANSFER OPPORTUNITIES:

- Graduates have a number of transfer options including: RN-MSN, RN-BSN, and BSN programs. Students may also elect to transfer into the SUNY Canton online RN-BS program.

ACCREDITATIONS:

- Accreditation Commission for Education in Nursing, 3343 Peachtree Road NE, Suite 850, Atlanta, Georgia 30326 404-975-5000.
- Registered by the NYS Education Department, Office of the Professions.

ADMISSION REQUIREMENTS:

Admission requirements can be found online at: www.canton.edu/sci_health/nurs/description.html

PROGRAM REQUIREMENTS:

(CURRICULUM 0622)

Semester I	Credits
NURS 101 Fundamentals of Nursing	6
NURS 103 Pharmacology I.....	1

NURS 105 Nursing Seminar.....	1
BIOL 217 Human Anatomy & Physiology I.....	4
ENGL 101 Composition & the Spoken Word.....	3
	15

Semester II

NURS 104 Pharmacology II	1
NURS 106 Maternal/Child Nursing.....	4.5
NURS 107 Mental Health Nursing.....	4.5
BIOL 218 Human Anatomy & Physiology II.....	4
PSYC 101 Introduction to Psychology.....	3
	17

Semester III

NURS 200 Pharmacology III.....	1
NURS 201 Medical-Surgical Nursing I.....	10
BIOL 209 Microbiology.....	4
PSYC 225 Human Development OR	
PSYC 220 Child Development**.....	3
	18

Semester IV

NURS 202 Medical-Surgical Nursing IV.....	10
NURS 203 Profes. Issues & Trends in Nursing*..	1
NURS 204 Pharmacology IV.....	1
	12

* *Fulfills writing intensive requirement.*

** *co-requisite for NURS 201, Pre-requisite for NURS 202*

Student Learning Outcomes can be found at www.canton.edu/sci_health/nursing/.

—*Enrolled students are required to purchase a standardized testing program. A tablet or laptop computer is required.*

—*CPR certification (Health Provider Status) is required prior to admission. Only American Heart Association CPR certification will be accepted.*

Students will complete clinical experiences in hospitals, long-term care facilities, and community agencies throughout Northern New York. Clinical hours may include day, evenings, and weekends. The college does not provide transportation to clinical.

—The New York State Education Department, Office of the Professions requires persons applying for licensure to answer questions related to criminal convictions and/or professional misconduct.

—Once enrolled in Fundamentals of Nursing (NURS 101), students must complete this Nursing program within four years. For extraordinary situations, permission to complete beyond four years must be granted by the Dean of the School of Science, Health, and Criminal Justice in consultation with the Nursing Department Director.

—Of the four clinical nursing courses (NURS 101, 102, 201, and 202) only one course may be repeated one time.

—A grade of C+ or better is required for successful completion of all nursing courses (NURS), and a grade of C or better is required for all co-requisite courses.

—Successful completion of all corequisite courses and a semester GPA of 2.0 or better is required to continue in the program.

Residency Requirement: Students must complete SUNY Canton's NURS 201, 202, 203, and 204 in order to meet the program's residency requirements.

Physical Therapist Assistant—AAS

STUDENTS IN THIS MAJOR:

- Assist the Physical Therapist in implementing a plan of care, utilizing various physical therapy interventions to promote healing and restore function.
- Develop professional behaviors required to be an effective member of the health-care team.
- Are eligible to take the National Physical Therapy Examination for the Physical Therapist Assistant after graduation.

CAREER OPPORTUNITIES:

- PTA's work in hospitals, nursing homes, rehabilitative centers, certified home health care agencies, private practices, and schools.

CAREER OUTLOOK

- According to the 2019 Occupational Outlook Handbook, employment for PTA's is projected to grow 30% between 2016 and 2026.

TRANSFER OPPORTUNITIES:

- Students can continue their studies in the Health and Fitness Promotion B. Tech program. The B. Tech program may assist students in meeting admissions requirements for a graduate or doctoral degree program or to enhance employment opportunities in the health and fitness field.

ACCREDITATION:

- The PTA program at SUNY Canton is accredited by the Commission on Accreditation in Physical Therapy Education (CAPTE), 1111 North Fairfax Street Alexandria, VA 22314; telephone: 703-706-3245; email: accreditation@apta.org; website: <http://www.capteonline.org>.

ADMISSION REQUIREMENTS:

The Physical Therapist Assistant Program is a selective admissions program. Admission requirements and details of the admissions process can be found online at www.canton.edu/sci_health/pta/

PROGRAM REQUIREMENTS:

(CURRICULUM 0489)

Semester I		Credits
PHTA 100	Intro. to Physical Therapy	2
PHTA 101	Fund PT Skills & Modalities.....	3
BIOL 217	Human Anatomy & Physiology I.....	4
ENGL 101	Expository Writing OR	
ENGL 102	Oral & Written Expression.....	3
PSYC 101	Introductory Psychology.....	3
		<u>15</u>
Semester II		
PHTA 102	Kinesiology.....	3
PHTA 103	Musculoskeletal Pathologies.....	4
PHTA 105	Musculoskeletal Assessment Techniques.....	2
BIOL 218	Human Anatomy & Physiology II...4	
PSYC 225	Human Development.....	3
PHTA 104	Clinical I (summer)	4
		<u>20</u>
Semester III		
PHTA 203	PTA Seminar I *	2
PHTA 204	Cardiopulmonary & Integumentary Pathologies	4
PHTA 205	Neuromuscular Pathologies	4
PHTA 206	Advanced PT Modalities.....	2
	Liberal Arts Elective.....	3
		<u>15</u>
Semester IV		
PHTA 207	** Clinical II.....	6
PHTA 209	** Clinical III	6
PHTA 210	PTA Seminar II	2
		<u>14</u>

* *Fulfills writing intensive requirement.*

** *Students must be prepared to work 40 hours per week and are responsible for their own transportation, meals, and housing as needed.*

Student Learning Outcomes can be found at www.canton.edu/sci_health/pta/.

—CPR certification (Health Provider Status) is required by the end of the first semester.

—Students may be required to submit to a drug screen and/or a criminal background check as part of clinical education requirements.

—To progress in the PTA curriculum a minimal grade of C in BIOL 217 & BIOL 218 and C+ in all curriculum courses prefixed with PHTA must be achieved.

—Of all PHTA prefixed courses, only one course may be repeated one time.

—The NYS Education Department Office of the Professions requires persons applying for licensure to answer questions related to conviction of a crime or professional misconduct.

Residency Requirement: Students must be matriculated in the curriculum for at least 15 hours of graded coursework. At least 12 of these credits must be prefixed with PHTA. The Program Director will determine the 12 credit requirement following a review of the student's academic transcript

Veterinary Science Technology—AAS

STUDENTS IN THIS MAJOR:

- Work with companion animals, farm animals and common laboratory animals.
- Gain hands-on experience in small laboratory sections.
- Will be eligible to take the Veterinary Technician National Licensing Examination (VTNE) upon graduation.
- Will be eligible to take the certification examination of the American Association of Laboratory Animal Science after six months of laboratory employment.
- Perform two 120 hour Preceptorships

CAREER OPPORTUNITIES:

Veterinary technicians provide professional technical support to veterinarians, biomedical researchers, and other animal care specialists. Technicians may work in:

- Clinical Practice
- Animal Shelters
- Diagnostic Laboratories
- Educational Institutions
- Pharmaceutical and Research Industry
- Veterinary Supply and Equipment Sales
- Zoo/Wildlife Medicine
- State and Federal Agencies
- Farms & Stables

CAREER OUTLOOK:

- Veterinary Technician has been listed as one of Money Magazine's "Top 10 Fastest Growing Career Fields."
- At the present time, there is a serious shortage of veterinary technicians throughout the country.

TRANSFER OPPORTUNITIES:

- Articulation agreement with Cornell College of Agriculture and Life Sciences undergraduate program in Animal Science for any student graduating with a 3.0 average and possessing the required prerequisite courses.
- Articulation agreement with Mercy College.
- SUNY Canton (Veterinary Services Administration, BBA)

TIME TO COMPLETE THE PROGRAM:

Once enrolled in Fundamental Veterinary Nursing Skills I (VSCT 101), students must complete the Veterinary Science program within four years. For extraordinary situations, permission to complete the Veterinary Science program beyond four years may be granted by the Dean of the School of Science, Health and Criminal Justice in consultation with the Veterinary Science Program Director.

ACCREDITATION:

- Full Accreditation—AVMA, 1931 N Meacham Rd., Suite 100, Schaumburg, IL 60173-4360. 847-925-8070

ADMISSION REQUIREMENTS:

Admission is selective and based on academic credentials. To be considered for admission, please refer to the requirements posted on our webpage at: www.canton.edu/sci_health/vet/description.html

The pre-exposure rabies vaccine is required in the program. This is administered in a series of three vaccinations and must be completed during or prior to the semester the student is enrolled in VSCT 115

PROGRAM REQUIREMENTS:

(CURRICULUM 0521)

Semester I	Credits
VSCT 101 Fundamental Vet. Nursing Skills I....	2
VSCT 103 Intro. to Animal Agriculture.....	2
BIOL 150 College Biology I.....	4
CHEM 150 College Chemistry I.....	4
ENGL 101 Expository Writing OR	
ENGL 101 Composition & the Spoken Word....	3
FYEP 101 First Year Experience.....	1
	16

Semester II	
VSCT 104 Veterinary Office Practices.....	1
VSCT 112 Veterinary Clinical Pathology I.....	3
VSCT 114 Animal Anatomy & Physiology.....	3
VSCT 115 Fundamental Vet. Nursing Skills II...2	
VSCT 212 Research Animal Techniques.....	1
VSCT 201 Veterinary Technology	
Preceptorship I	1

BIOL 209 Microbiology.....	4
Liberal Arts Elective	
(GER 1, 4, 5, 6, 7, 8, 9)	3
	18

Semester III

VSCT 202 Veterinary Clinical Pathology II.....	3
VSCT 203 Small Animal Medicine & Therapeutic Techniques.....	3
VSCT 204 Large Animal Medicine & Therapeutic Techniques.....	2
VSCT 205 Radiographic Techniques.....	2
VSCT 206 Anesthetic Principles.....	3
VSCT 207 Health & Disease of Farm Animals...3	
VSCT 209 Veterinary Technology	
Preceptorship II	1
	17

Semester IV

VSCT 210 Veterinary Microbiology.....	3
VSCT 211 Animal Hospital Practices and Procedures *.....	3
VSCT 213 Practical Nutrition.....	2
VSCT 214 Veterinary Pharmacology.....	2
PSYC 101 Introductory Psychology.....	3
	13

* *Fulfills writing intensive requirement.*

– *Of the courses with the VSCT prefix, any course may only be repeated one time.*

– *Students are required to earn a C or better in all specified curriculum courses prefixed with VSCT in order to progress in the program.*

– *The NYS Education Department Office of the Professions requires persons applying for licensure to answer questions related to a conviction of a crime or professional misconduct.*

Student Learning Outcomes can be found at www.canton.edu/sci_health/vet_tech/.

Residency Requirement: In order to graduate from the Veterinary Science Technology program, students must successfully complete SUNY Canton's VSCT 211 and at least 9 other hours of graded course work with a VSCT prefix in order to fulfill the residency requirement.

Electrical Construction & Maintenance—Certificate

The Electrical Construction & Maintenance (EC & M) program prepares students to work in building trades with the installation and testing of electrical power distribution and an emphasis placed on residential construction applications. Students are also introduced to commercial applications and building codes. At the successful completion of this one-year program, students will earn the EC&M certificate.

STUDENTS IN THIS CERTIFICATE PROGRAM:

- Install wiring systems and equipment in buildings.
- Connect electrical devices in accordance with the NEC (National Electrical Code).
- Perform routine maintenance on motors and transformers.
- Install motor control circuits.

CAREER OPPORTUNITIES:

- Electrical Apprentice
- Electrician
- Plant Maintenance Technician
- Electrical Supply Counter Person and Sales Support Person
- Electrical/Electronic Assembly
- Security Systems Sales and Service Representative
- Power Corporation Service Representative
- Entrepreneurship

CAREER OUTLOOK:

- The construction industry continues to exhibit a demand for skilled electrical technicians.

RECENT EMPLOYERS OF SUNY CANTON GRADUATES:

- International Brotherhood of Electrical Workers
- Niagara Mohawk Power Corporation
- Novelis
- Smith Building Supply
- NYSEG
- S & L Electric

TRANSFER OPPORTUNITIES:

- Approximately 50% of EC&M graduates choose to pursue further education full time at:
- SUNY Canton—AAS degree programs and other certificate programs
- Rochester Institute of Technology
- SUNY Utica/Rome, Oswego

Students completing two one-year Certificate programs in the Canino School of Engineering Technology can graduate with two Certificates and an Associate in Applied Science degree by completing the requirements of the Individual Studies (Eng) AAS program while pursuing the second technical certificate.

ADMISSION REQUIREMENTS:

- Students are expected to have demonstrated academic success in high school and/or prior college experience.

PROGRAM REQUIREMENTS:

(CURRICULUM 0955)

Semester I	Credits
ELEC 171 Elec. Constr. & Maintenance I.....	7
ELEC 173 Intro. to Nat. Electrical Code.....	3
MATH 101 Applied College Mathematics.....	3
SOET 101 Intro Computer Usage for Technicians.....	1
	14
Semester II	
ELEC 172 Elec. Constr. & Maintenance II.....	7
English (Writing).....	3
Sci/Tech Elective.....	3
General Elective.....	3
	16

**Mathematics levels depend on previous preparation. Students who are unprepared to enter MATH 101 will be required to first complete MATH 099 Foundation of Applied College Mathematics.*

Student Learning Outcomes can be found at www.canton.edu/csoet/ecm.html.

Those graduates who show sufficient interest and aptitude may qualify for entry into one of the associate degree programs.

ADDITIONAL GRADUATION REQUIREMENTS

While at SUNY Canton students must have completed course ELEC 172 and earn a minimum GPA of 1.75.

Gainful Employment information is available at: www.canton.edu/academics/ge/ecm.html

Practical Nursing—Certificate

STUDENTS IN THIS CERTIFICATE PROGRAM:

- Demonstrate appropriate care to clients with stable and predictable conditions.
- Understand client disorders and nursing care utilizing current evidence based practice.
- Demonstrate developmentally appropriate, respectful and effective therapeutic communication skills.
- Identify clinical scenarios and situations that fall outside of the PN scope of practice.
- Demonstrate, proper technique with nursing skills, use of client care equipment and technology in a cost effective manner.
- Comprehend client environmental factors, family support, and resources that may affect a client's health status.
- Demonstrate accountability for legal, ethical, and regulatory parameters within the scope of practice of the practical nurse.
- Operate effectively within multidisciplinary teams, fostering open communication, mutual respect, and shared decision-making to provide comprehensive client centered care.
- Collect data and health histories for individuals using standardized tools in an organized pattern, thereby contributing to nursing care plan.
- Demonstrate caring behaviors toward clients and his/her significant others, thereby assisting coping with stressful events and changes in health status.
- Implement standardized teaching tools to promote and maintain health and to reduce risks for clients experiencing common altered health states in the hospital and extended care facilities.
- Observe, reflect, and participate in self-performance and peer-to-peer teaching.

CAREER OPPORTUNITIES:

- Acute care
- Long-term care
- Clinic settings
- Physician Offices
- Hospice
- Community Health
- Mental Health

TRANSFER OPPORTUNITIES:

- Graduates of the Practical Nursing program are able to transfer into an associates degree or baccalaureate degree nursing programs.

ACCREDITATIONS:

- Candidacy status with: Accreditation Commission for Education in Nursing, 3343 Peachtree Road NE, Suite 850, Atlanta, Georgia 30326 404-975-5000.
- Registered by the NYS Education Department, Office of the Professions.

ADMISSION REQUIREMENTS:

Admission requirements can be found online at: www.canton.edu/sci_health/practical-reqs.html

PROGRAM REQUIREMENTS:

(CURRICULUM 0938)

Semester I		Credits
LPNC 100	Drug Dosage Calc. & Pharm.....	3
LPNC 101	PN Fundamentals.....	8
BIOL 217	Human Anatomy & Physiology I.....	4
ENGL 101	Composition & Spoken Word.....	3
		18
Semester II		
LPNC 102	PN Specialty Populations.....	3
LPNC 103	PN Medical-Surgical.....	8
BIOL 218	Human Anatomy & Physiology II.....	4
PSYC 101	Introduction to Psychology.....	3
		18

—Students must complete all LPNC courses with a minimal grade of C+ in order to graduate and corequisite courses with a grade of C or better.

—GPA of 2.0 or better is required to continue in the program.

—Of the two clinical practical nursing courses (LPNC 101, LPNC 103), only one may be repeated one time.

—Students will complete clinical experiences in hospitals, long-term care facilities, and community agencies throughout Northern New York. Clinical hours may include day, evening, and weekend hours. The college does not provide transportation to clinical sites.

Residency Requirements: Students must complete SUNY Canton's LPNC 102 and LPNC 103 in order to complete the program residency requirements.

—Enrolled students are required to purchase a standardized testing program. A tablet or laptop computer is required.

—CPR certification (Health Provider Status) is required prior to admission and throughout the program.

Gainful Employment information is available at: www.canton.edu/academics/ge/pn.html

Academic Minors

A minor is a course sequence within an area of study providing a degree of specialization within that area, a specialty within a discipline, or a specialty integrating several disciplines. Minors will contain a balance of introductory and advanced coursework. Minors are designed to be completed within the same time frame allowed for the completion of the baccalaureate degree. A minor must be declared while the student has at least 45 credit hours left to enroll in before qualifying for graduation. After matriculating in a program, students wishing to obtain a minor shall contact the coordinator of the minor to initiate the process. A minor will consist of a minimum of 18 credit hours, at least 9 of which will be upper division courses; a minimum of 12 credit hours of a minor must be completed in courses offered at SUNY Canton. At least 9 credit hours must not be required courses in the student's major program. major, students may be permitted to postpone their graduation if they wish to take extra course(s) to earn their minor. **IMPORTANT!** Before making that decision however, it is **strongly recommended** that students consult with a Financial Aid and/or Student Accounts Counselor.

ACADEMIC MINOR IN A BACCALAUREATE DEGREE

A minor must be declared while the student has at least 45 credit hours left to enroll in before qualifying for graduation.

ACADEMIC MINOR IN AN ASSOCIATE DEGREE

A minor must be declared while the student has at least 15 credit hours left to enroll in before qualifying for graduation.

ACCOUNTING

The Accounting Minor adds to the skillset and marketability of students preparing to enter the worlds of business and management. Accounting Minors advance their foundational accounting acumen by completing three required accounting courses (ACCT 300, ACCT 302, & ACCT 306) and three accounting electives that reflect their respective areas of interest. The Minor is available to any matriculated SUNY Canton student. Many students choose to pair enrollment in the Accounting Minor with enrollment in the Management, Finance, Legal Studies, or Health Care Management Program.

MINOR REQUIREMENTS:

	Credits
ACCT 300 Intermediate Accounting I.....	3
ACCT 302 Intermediate Accounting II.....	3
ACCT 306 Cost Accounting.....	3
<i>SELECT THREE COURSES</i>	
ACCT 242 Accounting for Government and Nonprofit Organizations	3
ACCT 310 Accounting Information Systems.....	3
ACCT 335 Individual Taxation.....	3
ACCT 430 Auditing	3
ACCT 440 Advanced Financial Accounting.....	3
BSAD 305 Public Budgeting and Fiscal Mgmt. ...	3
BSAD 365 Financial Statement Analysis.....	3

AGING IN SOCIETY

People are living longer, and the number of older persons is increasing. These trends are evident in American society, as well as in many developed countries around the world. In the U.S., life expectancy has increased, from approximately 45 years of age in 1900 to more than 75 years now. At the beginning of the 21st century, one in eight people in the U.S. was over 65. And

the age group growing fastest in our society and in many other countries is the "very old," people aged 85 and over.

This growth in our elderly population will continue into the future. By the middle of the 21st century, one in five Americans will be over 65, and there will be 15 to 18 million persons over the age of 85. These growth trends will result in a demand for both citizens and professionals with knowledge and expertise in the subject of aging. The area of Social Gerontology will offer expanded career opportunities for the disciplines and professions who will serve our older population (The Association for Gerontology in Higher Education, 2014).

MINOR REQUIREMENTS:

	Credits
SOCI/HLTH 104 Introduction to Gerontology ...	3
SOCI 101 Introduction to Sociology	3

SELECT FOUR COURSES

Only one additional 100 level course can be chosen; three must be upper level- 300 or above

HEFI 202 Health and Wellness Across the Lifespan.....	3
HLTH 103 Health Current Perspectives and Practical Applications	3
HLTH 212 Happiness, Health and Wellbeing.....	3
GRST 201 Introduction to Gender Studies.....	3
HUSV 201 Introduction to Human Services.....	3
PSYC 225 Human Development	3
SOCI 105 American Social Problems.....	3
SOCI 210 Sociology of the Family.....	3
SOCI 313 Women and Ageing.....	3

SOCI 320 Sociology of Health, Illness and Health Care	3
SOCI 330 Sociology of Gendered Lives	3
SSCI 315 Death, Dying and Bereavement.....	3

APPLIED PHYSICS

Psychology is the science of behavior and mental processes, and its applications are relevant to many different fields of study. The Minor in Applied Psychology is designed to complement the training and education students receive in their respective academic majors, particularly in terms of describing, predicting, understanding, and explaining human behavior. The minor is organized so that students have a choice regarding the content that is most applicable to their own interests (and major). The requirements are 18 credit hours, from the following designations:

MINOR REQUIREMENTS:

	Credits
PHYS 121 College Physics I OR	
PHYS 131 University Physics I	4
PHYS 122 College Physics II OR	
PHYS 132 University Physics II	4
PHYS 202 Modern Physics	3
PHYS 301 Introduction to Photonics	3

SELECT TWO COURSES

PHYS 330 Intro to Classical Mechanics	3
PHYS 340 Electromagnetism	3
PHYS 410 Solid State Science	3
PHYS 420 Intro to Quantum Mechanics.....	3
AREA 320 Experimentation and Measurement I3	
MECH 342 Thermodynamics.....	3

APPLIED PSYCHOLOGY

Psychology is the study of the mind and behavior. As a science and profession, psychology is relevant to any major that involves understanding, helping, communicating, and working with others, including (but not limited to) Nursing, Criminal Justice, Health and Fitness Promotion, Homeland Security, Sports Management, Legal Studies, Management, and Health Care Management.

The purpose of the Minor in Applied Psychology is to provide students pursuing other academic majors with the opportunity to: (1) broaden their understanding of psychological principles, theories, and methods; and (2) apply this understanding to their future career path. In particular, the focus of this minor is on socio-developmental processes and applications to real life and career settings.

MINOR REQUIREMENTS

	Credits
PSYC 101 Introduction to Psychology.....	3
Select two lower level courses:	
PSYC 225 Human Development	3
PSYC 275 Abnormal Psychology	3
HUSV 201 Introduction to Human Services.....	3
ABAP 245 Introduction to Applied Behavior Analysis	3

SELECT THREE UPPER LEVEL COURSES

PSYC 300 Cultural Psychology	3
PSYC 308 Personality & Individual Differences	3
PSYC 310 Counseling Theory & Practice.....	3
PSYC 315 Crisis Intervention	3
PSYC 340 Social Psychology.....	3
PSYC 406 Industrial Organizational Psychology3	3
PSYC 420 Counseling Skills & Procedures.....	3

Note: additional prerequisite PSYC 310

HEFI or PSYC 320 Psychology of Health and Fitness	3
HUSV 305 Professional and Ethical Responsibilities.....	3
HUSV 315 Mental Health Practice	3
JUST 331 Profiling and Behavioral Criminology.....	3
SSCI or PSYC 370 Research Methods.....	3

Note: additional prerequisite MATH 141

CORRECTIONS

The corrections minor provides an overview of interworking's of the corrections system, including challenges and opportunities present within both institutional corrections and community-based correctional environments. This minor is suited for students interested in preparing for career opportunities with the criminal justice system. Courses within this minor focus on understanding the care, custody and control aspects of working with offenders involved in the criminal justice system.

MINOR REQUIREMENTS

	Credits
JUST 105 Correctional Philosophy	3
JUST 211 Diagnostic Evaluation of the Offender.....	3
JUST 215 Community Based Corrections.....	3
JUST 313 Juvenile Justice.....	3
JUST 340 Legal Issues of the Penal System.....	3

SELECT ONE COURSE:

JUST 323 Multiculturalism in Criminal Justice.3	3
JUST 341 Corrections Management and Administration	3
JUST 353 Criminal Justice Technology	3

CRIMINOLOGY

This minor will provide students with an opportunity to further examine the relationship between victims, offenders and community members-at-large. An interdisciplinary approach is utilized to allow students the ability to examine this broad topic from the perspective of literature, psychology, and history while furthering theoretical studies in the field of criminal justice.

MINOR REQUIREMENTS

	Credits
JUST 101 Intro to Criminal Justice OR	3
LEST101 The American Legal System.....	3
JUST 310 Causes of Crime	3
JUST 350 Victimization.....	3

SELECT THREE COURSES

Students must choose three for a total of nine credit hours.

JUST 316 Sex Offenders	3
JUST 324 Serial Murderers and Their Victims ..	3

JUST 331 Profiling and Behavioral Criminology	3
ENGL 305 Perpetrators and Their Victims	3
ENGL 306 Irish Prison Literature.....	3
ENGL 349 Classic Detective Fiction.....	3
PSYC 275 Abnormal Psychology	3

CRIMINAL JUSTICE ADMINISTRATION

The Criminal Justice Administration minor provides an opportunity for students to acquire a general knowledge of the administrative duties within the Criminal Justice System. This minor is a blend of foundational courses in the areas of business, math and criminal justice; along with supplementing with upper level program electives which will enhance the student's understanding and ability better prepare them for supervisory positions in the field of criminal justice.

MINOR REQUIREMENTS

	Credits
BSAD 100 Introduction to Business.....	3
MATH 141 Statistics	3

SELECT FOUR COURSES

Students must choose four for a total of twelve credit hours.

BSAD 301 Principles of Management	3
JUST 321 Managing Law Enforcement Training.....	3
JUST 333 Managing Patrol Functions.....	3
JUST 335 Criminal Justice Agency Mgmt.....	3
JUST 344 Civil Liability for the CJ Administrator	3

CYBERSECURITY

The Cybersecurity minor program will equip students with the necessary skills to pursue a career with additional Cybersecurity knowledge/skills needed in various industries. For example, healthcare records represent an extremely attractive target for cyber criminals, containing as they do various bits of sensitive information like Social Security numbers all in one place. The challenge for professionals working in the healthcare industry is that they just improve data protection without impeding

Academic Minors

healthcare professionals' speedy access to potentially life-saving patient information.

MINOR REQUIREMENTS

	Credits
CITA 165 Survey of Cybersecurity	3
CITA 250 Information Security	3
CITA 352 Ethical Hacking and Penetration Testing.....	3
CITA 450 Cybersecurity Body of Knowledge....	3

SELECT ONE COURSE

Students must choose one for a total of three credit hours.

MATH 351 Discrete Mathematics	3
CITA 360 Cryptology in Theory and Practice ...	3
CITA 365 Digital Forensic Analysis.....	3
CITA 455 Access Control, Authentication, and PKI.....	3

SELECT ONE COURSE

Students must choose one for a total of three credit hours.

CITA 354 Incident Response and Disaster Recovery.....	3
CITA 356 Cryptology in Theory and Practice ...	3
CITA 440 Network Management AND	3
CITA 441 Network Management Lab	1

EARLY CHILDHOOD STUDIES

The Minor in Early Childhood Studies offers a broad course of study in early childhood history, theory, child development, teaching, programming, and the importance of high quality early care and education experiences, with a focus on children from infancy to age five. Students can select specific courses based on their area of interest.

Students will complete 18 credits. Nine credits must be upper level [300 or 400] courses.

MINOR REQUIREMENTS

	Credits
ECHD 101 Introduction to Early Childhood.....	3
PSYC 101 Introductory Psychology.....	3

SELECT FOUR COURSES

Student must complete 4 courses from those listed below; 3 courses must be 300 or 400-level courses.

ECHD 121 Wellness in Young Children: Promoting Health, Safety, and Nutrition...3	
ECHD 131 Infants and Toddlers	3
ECHD 250 Children with Special Needs.....	3
ECHD 285 Issues and Policies in Early Care and Education.....	3
EDUC 210 Principles of Education.....	3
PSYC 220 Child Development OR	
PSYC 225 Human Development.....	3
ECHD 301 Fostering Relationships in Early Childhood Programs	3
ECHD 340 Policies and Regulations in Early Childhood Settings.....	3
ECHD 401 DAP Learning Environments, Infants - Age 5	3
ECHD 402 Early Literacy and Language Development.....	3
ECHD 404 Positive Child Guidance	3
BSAD 340 Management Communications	3
HIST 375 History of Childhood and Youth in the United States	3

ECONOMICS

The Economics minor is applicable to all students who would like to broaden their knowledge of economics. It is a common minor for students majoring in business, management and finance. It provides students with analytical and problem-solving skills in applied economics fields such as economic development, economics of crime, environmental economics, financial economics, global economy, health economics, labor economics, managerial economics, public economics, and other areas. Six courses (18 credits) must include ECON 101, ECON 103, ECON 314, and ECON 315.

MINOR REQUIREMENTS

	Credits
ECON 101 Principles of Macroeconomics	3
ECON 103 Principles of Microeconomics.....	3
ECON 314 Managerial Economics.....	3
ECON 315 Global Economy.....	3

SELECT TWO COURSES

Any course with an ECON (and FSMA/ECON 330) designation may be used as an optional course in the minor. For students not in Finance, Principles of Banking and/or Global Finance, may be used as optional course(s) in the minor. At least one optional course must be at the upper level.

ENVIRONMENTAL TECHNOLOGY

As global awareness of environmental issues increases, the environmental sector has emerged as a leading discipline in the science and engineering fields. As the environmental market continues to grow, so does the demand for trained environmental engineers, environmental engineering technicians, and environmental scientists. The Environmental Technology minor is designed for students in complimentary disciplines to diversify their background, providing them with knowledge and skills in areas related to air, water, and soil. A minor in Environmental Technology provides students with a more in-depth understanding of environmental related standards and regulations, resource management, water and soil resources, characterization and treatment of water and soil, and field/lab techniques. The Environmental Technology minor provides a way for students to formally demonstrate competency in these areas and will make them competitive and highly sought after in today's market.

MINOR REQUIREMENTS:

A minimum of 19 credit hours is needed to complete the minor in Environmental Technology as follows:

	Credits
CONS 285 Engineering Geology OR	
ESCI 107 Earth Science OR.....	4
GEOL 103* Physical Geology	3

ELECTIVE COURSES

CONS 101 Elementary Surveying.....	4
CONS 314 Soil Mechanics.....	3
CONS 350 Intro to GIS OR	3
GEOL 340* Geographic Information Systems.....	4
CONS 385 Hydrology and Hydrogeology.....	4
CONS 386 Water Quality.....	4
CONS 387 Water and Wastewater Treatment.....	3
CONS 388 Environmental Law	2
CONS 485 Solid Waste Management	3
CONS 486 Soil and Groundwater Remediation..	3
CONS 487 Water Resources, Management, and Design.....	3

Future courses developed by SUNY Canton's Civil and Environmental Technology program or other related courses - will require approval by minor coordinator at SUNY Canton

**Course offered at SUNY Potsdam, through the Department of Geology*

Academic Minors

FINANCE

The Finance minor will complement the skills the student gains in his or her major discipline by providing a study of financial theory and practice associated with the allocation of financial resources in a business environment. This minor shall consist of a minor of 18 credit hours, at least half of which shall be upper division courses. A minimum of 12 credit hours of the minor must be completed in courses offered at SUNY Canton. At least 9 credit hours must not be required courses in the student's major program.

MINOR REQUIREMENTS

	Credits
ACCT 101 Foundations of Financial Acct.	3
FSMA 210 Introduction to Finance.....	3
FSMA 312 Financial Management	3
FSMA 315 Global Investment.....	3

SELECT TWO ELECTIVES

(one elective must be a 400 upper level course)

BSAD 120 Principles of Banking.....	3
ECON 314 Managerial Economics.....	3
BSAD 315 Financial Statement Analysis.....	3
ECON 315 Global Economy.....	3
FSMA 325 Financial Compliance and Regulations.....	3
FSMA 415 Global Finance	3
FSMA 420 Financial Derivatives.....	3
FSMA 422 Risk Management.....	3

FORENSIC SCIENCE

The Forensic Science minor provides an opportunity for students to delve further into the field while still completing a degree in their primary area of interest. The Forensic Science minor is a blend of applied courses providing the student with an overview of the various disciplines, including forensic chemistry, fingerprints, questioned documents, taphonomy, and the autopsy process.

MINOR REQUIREMENTS

	Credits
JUST 210 Introduction to Forensic Investigations.....	3
CHEM 100/101 Introduction to Chemistry OR..	
CHEM107/108 Forensic Chemistry	4

SELECT FOUR COURSES

JUST 300 Forensic Photography	3
JUST 301 Latent Prints and Impressions.....	3
JUST 320 Medicolegal Investigation of Death..	3
JUST330 Questioned Documents.....	3
JUST365 Digital Forensics	3
JUST370 Forensic Taphonomy	3
JUST410 Clandestine Graves	3

FRAUD EXAMINATION

The Fraud Examination Minor is attractive to students who wish to pursue a career in civil or criminal fraud investigation and white-collar crime investigations in the public or private sector. This minor provides students, particularly those in baccalaureate degree programs in Management, Finance, Legal Studies, Criminal Investigations and Criminal Justice: Law Enforcement Leadership, an opportunity to develop a degree concentration in fraud examination. A minimum of 12 credit hours of the minor must be completed in courses offered at SUNY Canton. At least 9 credit hours must not be required courses in the student's major program.

MINOR REQUIREMENTS:

	Credits
ACCT 245 Forensic Accounting	3
JUST 110 Criminal Law	3
JUST 485 Fraud Exam. and Investigation	3

SELECT THREE COURSES:

ACCT 430 Auditing	3
BSAD 319 Professional Ethics OR	
JUST 314 Ethics in Criminal Justice	3
ECON 305 Economics of Crime.....	3
FSMA 312 Financial Management	3
FSMA 325 Financial Compliance and Reg.	3
JUST 303 Investigative Interviews.....	3

GENDER STUDIES

The Gender Studies Minor is committed to broadening women's and men's knowledge and awareness of issues concerning or related to gender. From an interdisciplinary approach, the minor provides a variety of courses that emphasize the gender experience from both national and global perspectives.

MINOR REQUIREMENTS:

	Credits
GRST 201 Intro to Gender Studies	3

SELECT FIVE COURSES

(Three must be Upper Level -300 or higher)

ENGL 267 Masculinity Studies in American Literature & Culture.....	3
ENGL 304 LGBTQ Lives and Literature.....	3
ENGL 340 American Women Writers	3
HIST 204 U.S. Immigration History: Race, Class and Gender.....	3
HIST 304 U.S. Women's History	3
SOCI 210 Sociology of the Family	3
SOCI 300 Race and Ethnic Relations	3
SOCI 305 Gender in the Media	3
SOCI 313 Women and Aging.....	3
SOCI 330 Sociology of Gendered Lives.....	3

GRAPHIC AND MULTIMEDIA DESIGN

Students looking to enter the fields of news reporting, journalism and engineering can obtain additional skills in design, photo, and video that will enhance their marketability to prospective employers. Graphic and Multimedia Design minor students will have the opportunity to learn design and layout in the Adobe Suite of software including Photoshop, Illustrator and InDesign, as well as video production and web design and development.

MINOR REQUIREMENTS

	Credits
GMMD 102 Intro to Design.....	3
GMMD 201 Digital Photography	3
GMMD 302 Professional Photography.....	3
GMMD 331 Digital Illustration and Typography..	3

SELECT ONE ELECTIVE

GMMD 101 Intro to Media Studies.....	3
GMMD 211 Film Analysis	3
GMMD 330 Web Design and Development.....	3
GMMD 411 Digital Documentary Video	3
ARTS 301 Digital Storyboarding.....	3

**A given course may be used as either required or elective course, but not both.*

Academic Minors

HEALTHCARE MANAGEMENT

The Health Care Management minor is available to any SUNY Canton student interested a learning more about managing healthcare organizations. The minor allows students to explore the current financial, legal, and man-agement issues modern healthcare organizations face.

MINOR REQUIREMENTS:

	Credits
BSAD 310 Human Resource Management.....	3
HSMB 101 Intro to Health Services Mgmt.	3
HSMB 301 Public Health Issues.....	3
HSMB 307 Health Care Facility Administration .	3
SELECT TWO COURSES	
HSMB 302 Legal & Ethical Issues in Health Care.....	3
HSMB 301 Managed Care	3
HSMB 307 Health Care Financing.....	3

HOMELAND SECURITY

The Homeland Security Minor provides a survey of the issues in Homeland Security through the lens of the history of terrorism with applied courses supporting theoretical study in the discipline. While the focus of study is the responsibility of law enforcement in Homeland Security, other disciplines such as Intelligence analysis, terrorism & law enforcement response will be covered.

MINOR REQUIREMENTS:

	Credits
JUST 101 Intro to Criminal Justice OR	
LEST 101 The American Legal System.....	3
JUST 303 Investigative Interviewing OR	
ENGL 301 Professional Writing.....	3
JUST 326 Threats to Homeland Security.....	3
JUST 355 Public Safety Critical Incident Response	3
JUST 375 Methods of Terrorism Through the Ages.....	3
LEST 375 Law of Immigration & Border Control.....	3

HOSPITALITY MANAGEMENT

The U.S. Bureau of Labor Statistics (BLS, 2013) considers the travel and tourism industry as a “top 10 industry in the

U.S.” With the hospitality industry growth rate on the upswing, the importance of recruiting and retaining trained employees is a high priority. This minor allows students to build a secondary area of expertise in support of or in addition to their major discipline. This minor is also a pertinent supplement for students who wish to pursue a career in the hospitality industry.

* 9 credits of minor coursework must be at the upper-division level

MINOR REQUIREMENTS (18 CREDITS)

	Credits
BSAD 201 Business Law I OR	
BSAD 202 Business Law II	3
BSAD 206 Introduction to Hospitality Management	3
BSAD 302 Customer Service and the Guest Experience in Hospitality.....	3
BSAD 303 Global Tourism - Perspectives and Practices	3
BSAD 306 Food and Beverage Management	3
BSAD 407 The Meeting, Expositions, Events, and Conventions Industry	3

LEGAL STUDIES

A minor in Legal Studies will help students to reap the benefits and avoid the pitfalls of the law as it may apply to their chosen major.

MINOR REQUIREMENTS:

	Credits
LEST 101 The American Legal System.....	3
BSAD 201 Business Law I	3
LEST 340 Constitutional Law	3
SELECT THREE ELECTIVES (Two must be Upper Level -300 or higher)	
BSAD 202 Business Law II.....	3
LEST 221 Criminal Practice.....	3
LEST 320 Negligence and Intentional Torts.....	3
LEST 350 Civil Litigation	3
LEST 360 Family Law.....	3
LEST 370 Real Property.....	3
LEST 375 Immigration Law and Border Control.....	3
LEST 380 Wills, Estates and Trusts	3
LEST 388 Environmental Law	3
LEST 410 American Indian Law and Fed. Policy	3

MANAGEMENT INFORMATION SYSTEMS

The Management Information Systems Minor offers students the opportunity to broaden their disciplinary program with material and skills widely useful in the business world. Information technology has been the driving force behind the new economy. It has enabled companies to make tremendous strides in productivity, opened new markets and channels, and created new products and services. While one part of the information revolution has been advances in hardware and software, another major advance has been in how information is organized and used to make effective decisions. This program helps students to broaden their exposure to information technology and its use in business and industry.

MINOR REQUIREMENTS:

	Credits
MINS 300 Management Information Systems ...	3
MINS 305 Customer Relationship Management	3
MINS 315 Decision Support Systems	3
MINS 425 Enterprise Resource Planning	3
MINS 430 Data and Knowledge Management...3	

SELECT ONE COURSE

BSAD 345 Technological Innovations and Entrepreneurship	3
BSAD 372 E-Commerce	3
BSAD 373 International Business Management .	3
BSAD 375 Leadership and Change	3
CITA 330 Emerging Information Technology Applications.....	3
CITA 400 Quantitative Approaches to Management	3
CITA 460 Information Technology and Networked Economy.....	3

MARKETING MANAGEMENT

The Marketing Management Minor provides a path for students who wish to expand and enhance their marketing skill-set. The areas of focus include: advertising and promotion, consumer behavior, retail management, and sales. Students have the opportunity to customize their minor by selecting two elective courses. The Marketing Management Minor may be paired with any

Academic Minors

bachelor degree program offered at SUNY Canton, though it is best suited for business and sports management majors. Students are encouraged to enroll in the minor as early as possible to ensure efficient pairing of the Marketing Management Minor with their respective major.

MINOR REQUIREMENTS:

	Credits
BSAD 203 Marketing.....	3
BSAD 220 Principles of Retailing OR	
BSAD 222 Principles of Selling	3
BSAD 322 Advertising and Promotion.....	3
BSAD 325 Consumer Behavior.....	3

ELECTIVE COURSES (select two courses)

*BSAD 220 Principles of Retailing OR	
*BSAD 222 Principles of Selling	3
BSAD 330 Sales Force Management.....	3
BSAD 372 E-Commerce	3
BSAD 411 Marketing Research	3
BSAD 425 New Product Marketing	3
SPMT 307 Sports Marketing.....	3
BSAD 372 E-Commerce	3
BSAD 411 Marketing Research	3
BSAD 425 New Product Marketing	3
SPMT 307 Sports Marketing.....	3
SPMT 312 Sports Entrepreneurship	3
SPMT 412 Sports Sales and Sponsorships.....	3
SPMT 430 Advanced Sports Marketing and Sales	3

** A given course may be used as either a required or elective course, but not both*

MATHEMATICS

The study of mathematics develops the logic and reasoning skills that provide the tools for making decisions, interpreting observations, explaining natural phenomena, and solving problems. The Mathematics Minor provides a way for students to formally demonstrate competency in using mathematics. The minor is important for prospective employers and for use when students consider a transfer to other educational institutions. The Mathematics Minor is an important tool for the growing number of technology and business 4-year programs.

MINOR REQUIREMENTS:

A minimum of 20 credit hours is needed to complete the minor in Mathematics as follows:

CORE REQUIREMENTS	Credits
MATH 141 Statistics I.....	3
MATH 161 Calculus I.....	4
MATH 162 Calculus II.....	4

SELECT THREE COURSES (at least 2 must be MATH designated)

MATH 263 Calculus III	4
MATH 341 Statistics II.....	3
MATH 351 Discrete Mathematics	3
MATH 361 Linear Algebra	3
MATH 364 Differential Equations	4
MATH 371 Graph Theory.....	3
MATH 461 Advanced Calculus	4

**Business, computer, engineering, physics courses in which mathematics plays a significant role may be selected with approval by the mathematics department*

SOCIOLOGY

This minor focuses on the systematic study of human social institutions and social relationships. Includes instruction in social theory, sociological research methods, social organization and structure, social stratification and hierarchies, dynamics of social change, family structures, social deviance and control, and applications to the study of specific social groups, social institutions, and social problems.

Students will take a minimum of 18 credit hours from the categories below.

MINOR REQUIREMENTS

	Credits
SOCI 101 Introduction to Sociology.....	3
SSCI 370: Research Methods in Social Sciences ...	3

SELECT 1 LOWER LEVEL ELECTIVE

SOCI 105: American Social Problems.....	3
SSCI 181: Alcohol, Drugs & Society.....	3
SSCI 271: Contemporary Global Issues	3
SPMT 202: Sports in Society	3

Select 3 Upper Level Electives	
PSYC 300: Cultural Psychology	3
SSCI 315: Death, Dying and Bereavement	3
SOCI 300: Race & Ethnic Relations.....	3
SOCI 305: Gender in the Media.....	3
SOCI 313: Women & Aging.....	3
SOCI 320: Sociology of Health, Illness, Healthcare	3
SOCI 3/4@ Special Topics Courses: 391-395; 491-495.....	3

SUSTAINABILITY

Environmental Sustainability, the effort towards continuing economic, professional and national growth in a generational and environmentally responsible manner, is increasingly entwined with all professional fields and industries. Resource limitations, national/international demand and population growth will continue to assert its resulting implications on contemporary lifestyles and economy. Graduates who are well versed in sustainability concerns will be more competitive in the job market.

MINOR REQUIREMENTS

	Credits
ESCI 101 Introduction to Environmental Science	3
ESCI 102 Introduction to Environmental Science Lab.....	1
GMMD 421 Sustainability Design	3

SELECT FOUR ELECTIVES

(Two must be Upper Level - 300 or higher)

ANTH 102 Introduction to Cultural Anthropology	3
AREA 110 Intro To Alternative Energy	3
EADM 205 Risk & Hazard Impact Studies	3
ECON 201 Economics and Social Issues	3
GMMD 101 Introduction to Media Studies.....	3
HIST 101 History of Western Heritage	3
POLS 101 Introduction to Political Science.....	3
SOCI 105 American Social Problems	3
SOCI 250 Sociology of a Mass Media.....	3
SSCI 271 Contemporary Global Issues.....	3
BSAD 319 Professional Ethics.....	3
BSAD 325 Consumer Behavior.....	3
BSAD 375 Leadership and Change	3
ECON 320 Environmental Economics.....	3
ESCI 320 Weather, Climate and Climate Change.....	3
GMMD 302 Digital Photojournalism	3

VETERINARY SERVICE ADMINISTRATION

The Veterinary Service Administration Minor provides students with an interest in Business and/or Veterinary Technology with a background in Business and Accounting, then turns the focus to Veterinary Management specifically. This Minor allows stu-

dents with the desire to manage a veterinary clinic or other animal care facility to prepare themselves to undertake a position in this area of management.

MINOR REQUIREMENTS:

	Credits
ACCT 101 Foundation of Financial Accounting.....	4
BSAD 201 Business Law I.....	3
BSAD 310 Human Resource Management.....	3
VSAD301 Veterinary Practice Management	3
VSAD 302 Animal Care Institution Management	3
VSAD 402 Veterinary Business & Financial Management	3

WRITING AND COMMUNICATION

The Minor in Writing and Communication trains students in the written communication skills sought by employers and necessary for responsible citizenship. The coordinator will work with you to tailor a minor appropriate to your degree program, career plans, and personal interests.

Students will take a minimum of six of the courses designated below, with at least one course from each of the three areas:

MINOR REQUIREMENTS:

	Credits
HUMANITIES	
ENGL 202 Creative Non-Fiction.....	3
ENGL 216 Children's Literature	3
ENGL 221 Creative Writing.....	3
ENGL 315 Short Fiction: The Art of the Tale.....	3
ENGL 350 Flash Fiction.....	3
ENGL 351 Advanced Fiction Workshop	3
HUMA189 Acting and Improvisation	3
SPCH 104 Introduction to Speech.....	3

VISUAL COMMUNICATION/NEW MEDIA

ENGL 270 Media Writing.....	3
ENGL 314 Digital Graphic Storytelling.....	3
TCOM 200 Narrative in Video Games	3
TCOM 290 Mobile Media Stories and Games	3
TCOM 310 Identity in the Digital Age.....	3
TCOM 350 Electronic Literature: From Cybertext to Video Games	3
TCOM 360 Online Media and Popular Culture	3

PROFESSIONAL AND INTERCULTURAL COMMUNICATION

AMSL 101 Introduction to American Sign Language	3
ENGL 301 Professional Writing and Communication	3
ENGL 302 Global Englishes	3
ENGL 309 Journalism	3
ENGL 380 Intercultural Communication	3
FREN 101 Contemporary French I.....	3
LEST 330 Legal Writing.....	3
SPAN 101 Contemporary Spanish I.....	3
SPAN 102 Contemporary Spanish II	3

Other Programs

ENVIRONMENTAL SCIENCE AND FORESTRY—2+2 Cooperative Program with SUNY-ESF, Syracuse

SUNY Canton participates in a cooperative program with the SUNY College of Environmental Science and Forestry (ESF). By providing most of the required courses needed at ESF, this effort insures an easy transition into a student's junior (3rd) year at the College. SUNY Canton graduates attending ESF compete extremely well with students from other colleges.

Students enrolled in this program receive an AA degree in Liberal Arts and Sciences:

General Studies. A student attending SUNY Canton is able to obtain all the necessary required courses for the various pre-environmental programs during two years¹.

The ESF programs are: Aquatic and Fisheries Science, Conservation Biology, Environmental Biology, Environmental Science, Environmental Studies, Forest Ecosystems Science, Forest Resource Management, Landscape Architecture, Natural Resource Management, and Wildlife Science.

Students interested in this program need to apply for the Liberal Arts and Sciences: General Studies (Curriculum 0250) program. Call the Office of Admissions 315-386-7123/800-388-7123 for further details.

¹Some curricula may require cross-registration to complete requirements.

FOREST TECHNOLOGY—1+1 Cooperative Program with SUNY ESF, Wanakena

SUNY Canton participates in a cooperative one-plus-one program with the Ranger School at the SUNY College of Environmental Science and Forestry (SUNY-ESF). Students who select this career goal complete one year at SUNY Canton and one year at the Ranger School in Wanakena, where they will choose between three academic concentrations: Forest Technology, Land Surveying Technology, or Environmental and Natural Resources Conservation. The degree of Associate in Applied Science is awarded upon graduation from SUNY-ESF. Graduates are prepared to seek positions as forest technicians, land surveyors, or field/laboratory technicians, or to transfer to a four-year program at SUNY-ESF.

Students pursuing this program are admitted to SUNY Canton for the first year of enrollment and application must be made to SUNY-ESF for the second year. To learn more about the programs offered at Wanakena, visit www.esf.edu/rangerschool/ programs.

ADMISSIONS REQUIREMENTS:

- Prepared to take College Biology I —NYS Regents Biology score ≥ 75 ; or —Already passed Intro. to Biology
- Prepared to take at least Intermediate Algebra
- Prepared to take Expository Writing

The following is the recommended first-year course of study for transfer to SUNY College of Environmental Science and Forestry at Wanakena.

(CURRICULUM 0620)

Semester I	Credits
BIOL 150 College Biology I.....	4
ECON 101 Principles of Macroeconomics*.....	3
ENGL 101 Expository Writing.....	3
MATH 106 Intermediate Algebra OR	
MATH 121 College Algebra OR	
MATH 123 Pre-Calculus Algebra**.....	3-4
	13-14

Semester II

BIOL 155 College Biology II OR	
CHEM 155 College Chemistry II OR	
PHYS 121/125 College Physics I***.....	4
ENGL 202 Creative Non-Fiction OR	
Writing Intensive English.....	3
MATH 121 College Algebra OR	
MATH 123 Pre-Calculus Algebra OR	
General Elective.....	3-4
General Elective	
(GER 3,4,5,6,7)****.....	3
	16-17

* Students interested in Environmental & Natural Resources Conservation take POLS 101 or POLS 105 In place of ECON 101.

** Students interested In the Land Surveying option must take MATH 123 in Semester I or II.

*** Students interested in the Land Surveying Option must take PHYS 121/125 in Semester I or II.

**** HIST 103 or HIST 105 recommended as a GER elective.

Students planning to continue in the B.S. degree program in Forest Resources Management (SUNY-ESF) after earning an A.A.S degree in Forest Technology take BIOL 150, CHEM 150, ENGL 101, MATH 121, and PHYS 121 & PHYS 125 and MATH 121 in semester I; BIOL 155, ECON 101, ENGL 221, HIST 105, and MATH 161 in semester II.

POLICE ACADEMY PROGRAM

WAYS IN WHICH ONE MAY ENTER THE ACADEMY:

- Become a full-time student at SUNY Canton and enroll in the Criminal Justice curriculum with the Police Academy curriculum coordinator. The Academy is currently offered in the spring semester only. The Academy is worth up to 12 college credits toward the associate degree in Criminal Justice and 15 college credits toward the bachelor degree in Criminal Investigation or Law Enforcement Leadership for all full-time tuition-paying cadets.
 - Be hired and sworn as a full-time police officer of a law enforcement agency.
 - Be sworn in as a part-time police officer and carried on the Workmen's Compensation of the employing police agency.
 - Enroll as a non-degree student in Pre-Employment for Basic Course for Police Officers.
- * *Attending SUNY Canton is not a guarantee that you may attend the Police Academy. Entry is competitive, space is limited, and applicants must meet all entry requirements.*

ACADEMICS:

Student cadets must meet admissions requirements for full-time students and must have the approval of the Academy Director.

APPLICATION:

The application and all forms (available at www.canton.edu/academy) must be completed and returned to the Director of the Police Academy at SUNY Canton. A statement of physical fitness, signed by a physician, must accompany the application. Application for spring enrollment in the Academy should be submitted by October 1. Any deception on the application is grounds for rejection. A thorough background investigation may be conducted on the applicant after completing an oral interview by the Academy Board of Directors.

An applicant may not be admitted to the Academy if the investigation discloses unsuitability for a law enforcement career due to criminal behavior, alcohol or controlled substance abuse, poor driving record, lack of integrity, inappropriate financial problems, or other evidence of a bad attitude. Applying to the Academy is no guarantee of acceptance. If you realize you are not acceptable for hiring as a police officer, do not apply to the Academy. In case of doubt as to your suitability, ask your local police chief.

INTERVIEW:

The applicant will undergo at least one interview conducted by the law enforcement executives of the county. This interview will be conducted prior to completion of the background investigation and determines whether or not the applicant is accepted into the Academy.

PHYSICAL FITNESS:

Physical fitness should be a lifelong goal of a law enforcement officer and is stressed in the Academy. In order to be admitted to the Academy, the cadet must pass the current Cooper testing standards for police officers. If you know you are out of shape, do not wait until the Academy starts to begin to correct the condition.

COSTS:

Cost depends on your status upon entry. Veterans benefits and financial aid may apply. Check with the Financial Aid Office of the College.

- You pay the usual tuition rates as a full-time student including all fees. Costs of books and anticipated lab fees for student manuals totals approximately \$500.00 and uniforms (including boots) approximately \$200.00.

AGE:

Please inquire with the Director of the Police Academy.

MEDICAL FITNESS:

You must be medically fit to be a police officer. Individual police departments determine what is acceptable in regard to eyesight and injuries, such as trick knees and shoulders. It is your responsibility to obtain medical certification that you are fit to perform the physical training in the Academy. It is your responsibility to determine if your eyesight and any disabilities disqualify you from being hired as a police officer. In case of doubt, ask your local police chief.

- Graduation from the Academy is not a guarantee of a job in law enforcement. You must still meet all the criteria of the hiring law enforcement agency (i.e. score well in the civil service exam and be medically and morally fit).
- If you are not hired within two years, you may have to take the refresher course. The Academy will not substitute for the State Police, Environmental Conservation, or Park Police academies, or the academies of larger municipalities such as New York City, however your chances of employment are increased by successfully completing the Police Academy. The Academy curriculum and instructors are approved by the New York State Department of Criminal Justice Services.
- If you fail in the Academy either academically, physically, or through insufficient attendance, college policies regarding refunds apply. Pre-employment Phase 1 Cadets will not be certified as Police Officers by the State and/or College. If you are in the Academy for college credit and fail, the Criminal Justice curriculum coordinator will evaluate the work completed for credit on a case by case basis.

The Academy information along with the application form can be obtained from the college website: www.canton.edu/academy.

SUNY CANTON CORRECTIONS ACADEMY

The SUNY Canton Corrections Academy is offered every summer in conjunction with the St. Lawrence County Sheriff's Office and follows the New York State Division of Criminal Justice Services (DCJS) approved guidelines. The SUNY Canton Corrections Academy is open to individuals who have been hired by the St. Lawrence County Sheriff's Office and other surrounding county agencies, as well as all SUNY students who meet the eligibility guidelines. Completion of the academy as a student will provide you with 2 years of pre-certification eligibility for employment with county corrections within the state of New York. In order to become fully employed as a county corrections officer one must successfully complete and pass the NYS civil service exam.

ELIGIBILITY GUIDELINES

- Enrollment at a SUNY school (first priority provided to SUNY Canton students)
- GPA of 3.0 or higher
- At least 18 years of age

ACADEMY LOCATION

The academy is held on the SUNY Canton campus and all coursework will be completed in Wicks Halls in the classroom associated with University Police. Sign up early because space is limited.

DRESS CODE

- Black BDU pants
- Black dress shoes or boots
- Minimum (2) Corrections Academy t-shirts must be purchased prior to the first day (orders will begin in April and each shirt will cost \$11.00)

In order to attend the summer SUNY Canton Corrections Academy as a student, enrollment in JUST 431 - Culminating Experience in Corrections (4 credits) must be completed prior to the first day of the

academy. During the summer academy two additional upper level corrections related courses (6 credits) will also be offered online for a total of 10 credits (academy 4 credits + 2 upper division courses) that can be achieved and transferred back to your home institution. Enrollment in the two additional online corrections courses is optional and not required to participate in the academy.

SUNY CANTON LIVING ACCOMMODATIONS

Housing is available in Kennedy Hall at a cost of \$900 per person for the duration of the summer academy. This rate includes a single bedroom in an apartment-style suite with a shared full kitchen, living room and bathroom. The suites are furnished but do not include linens or kitchen items (dishes, pots, pans, etc.). The living room in each suite has air conditioning but the bedrooms are not air conditioned (a fan is recommended). If you would like to arrange housing please contact the Residence Life Office at 315-386-7513 or via email at reslife@canton.edu at least two weeks prior to the program.

SUNY CANTON FITNESS CENTER

The fitness center will be offering a pro-rated 5-week membership during the academy at a reduced rate of \$25.00. Membership can be obtained during the first day of coursework by visiting the fitness center located in the SUNY Canton Convocation, Athletic, and Recreation Center.

FINANCIAL AID FOR SUMMER STUDY

There is financial aid available for the summer sessions. In order to receive aid for summer, the following must be taken into consideration:

You must be admitted into a degree program. New students will not be eligible for summer financial aid (includes students admitted for Fall 2018).

All summer courses MUST be applicable to your current degree program in order to receive aid. Your academic advisor will assign you a summer registration code for scheduling access on UCanWeb.

Financial aid you receive in the summer may reduce your eligibility for aid during the academic year or in a subsequent year.

Taking courses at another college? To receive aid to help pay for them you must complete and submit a Consortium Agreement. To be aid eligible the course must transfer back into your degree program. Be prepared to pay for your course upfront and be reimbursed by aid later, not all schools participate in this process especially during summer. Be sure to check with the other school for their policy when signing up for the courses.

For academy related questions please contact Dr. Liz Brown, Chair of the Criminal Justice Department at (315)386-7504 or erickson@canton.edu OR Cpl. Rodney Votra, Programs Director / Training Coordinator, St. Lawrence County Sheriff's Office at (315)379-2414 or rvotra@stlawco.org

Send completed applications to:

Dr. Elizabeth Brown
SUNY Canton
34 Cornell Drive, Payson 117B
Canton, NY 13617

UB SCHOOL OF LAW DEGREE (3+3) - B.S. + J.D.

With our new 3+3 program, you can save one full year of tuition by earning your bachelor's degree at SUNY Canton and your law degree at University at Buffalo School of Law, in just six years (instead of seven). It's one of the most affordable paths to a law degree in the country!

ABOUT THIS MAJOR:

The program is open to a SUNY Canton student who has maintained a 3.5 GPA and completed three years of under-graduate work in Legal Studies or Applied Psychology. To become eligible, students must have an LSAT score at or above the median LSAT for the School of Law's previous year's

enrolled class (currently 153), complete the University at Buffalo School of Law application, and complete all required coursework toward the B.S. degree.

CAREER OPPORTUNITIES:

Holders of Juris Doctor degrees go on to careers including, but not limited to:

- Professional Litigators
- Corporate Counsel
- Wills, Estates, and Trusts Attorneys
- Judges
- Public Defenders
- Criminal Prosecutor
- Entrepreneurs
- Politicians

UPSTATE MEDICAL UNIVERSITY EARLY ADMISSION PROGRAM—

Joint Admission with SUNY Upstate Medical University at Syracuse

Upstate Medical University Early Admissions Program is an early admission program for high school seniors who excel in math and science and are committed to careers in the health professions. Students accepted into the program are guaranteed admission into an upper division bachelor/master's degree program at the SUNY Upstate Medical University at Syracuse after attending their first two years at SUNY Canton and completing all admission requirements.

THE UPSTATE MEDICAL UNIVERSITY EARLY ADMISSIONS PROGRAMS ARE:

- Cardiovascular Perfusion, *BS*
- Medical Biotechnology, *BS*
- Medical Technology, *BS*
- Medical Imaging Sciences, *BS or BPS*
- Physical Therapy, *DPT*
- Respiratory Care, *BS*
- Radiation Therapy, *BS or BPS*

Interested students need to apply for Liberal Arts and Sciences: General Studies (Curriculum 0250) program. Call the

Office of Admissions 315-386-7123 or 800-388-7123 for further details.

NOTES:

- All science courses must include laboratories.
- Upstate Medical University Early Admissions Program students are required to complete the associate degree and all requirements outlined in the program acceptance letter.
- Accepted students must demonstrate leadership qualities by getting involved in extracurricular activities at SUNY Canton.



Course Descriptions

This represents a listing of courses available to the campus at large. Courses fulfilling General Education Requirements of the ten SUNY knowledge and skill areas are designated as: GER 1-Mathematics; GER 2-Natural Sciences; GER 3-Social Sciences; GER 4-American History; GER 5-Western Civilization; GER 6-Other World Civilizations; GER 7-Humanities; GER 8-The Arts; GER 9-Foreign Language; GER 10-Basic Communication

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ABAP Applied Psychology.....	136	GMMD Graphic and Multimedia Design.....	179
ACCT Accounting.....	136	GRST Gender Studies.....	182
ACHP Air Conditioning.....	138	HEFI Health and Fitness Promotion.....	182
AGMT Agribusiness Management.....	139	HIST History.....	183
AMSL American Sign Language.....	140	HLTH Health-Related.....	185
ANTH Anthropology.....	140	HSMB Health Care Management.....	185
AREA Alternative and Renewable Energy Systems.....	140	HTMT Hospitality and Tourism Management.....	187
ARTS Arts.....	141	HUMA Humanities.....	187
ASTR Astronomy.....	142	HUSV Human Services.....	187
AUTO Automotive.....	142	HVAC Heating, Ventilation and Air Conditioning.....	188
BASK Academic Development.....	144	INTL Independent Study/Study Abroad.....	189
BIOL Biology.....	144	JUST Criminal Justice/Investigation/Law Enforcement.....	189
BSAD Business/Management.....	145	LEST Legal Studies.....	196
CHEM Chemistry.....	149	LPNC Licensed Practical Nursing.....	197
CITA Computer.....	150	MATH Mathematics.....	198
CIVL Civil Engineering.....	153	MECH Mechanical.....	200
CMGT Construction Management.....	154	MFGT Manufacturing.....	202
CONS Civil/Construction.....	155	MINS Management.....	202
CYBR Cybersecurity.....	159	MKTX Mechatronics.....	202
DHYG Dental Hygiene.....	159	MSPT Powersports.....	203
EADM Emergency Management.....	163	MUSC Music.....	203
ECHD Early Childhood.....	163	NCR Solar Ready Vets.....	204
ECON Economics.....	165	NURS Nursing.....	204
EDUC Education.....	167	PHSC Physical Science.....	205
ELEC Electrical.....	167	PHTA Physical Therapist Assistant.....	205
ENGL English.....	169	PHYS Physics.....	207
ENGM Mathematics for Engineering Applications.....	173	POLS Political Science.....	208
ENGS Engineering Science.....	174	PSYC Psychology.....	208
ESCI Environmental Science.....	174	SOCI Sociology.....	210
ESOL English as a Second Language.....	175	SOET School of Engineering Technology.....	210
FLHT Flight.....	175	SPAN Spanish.....	212
FREN French.....	175	SPCH Speech.....	212
FSAD Funeral Services.....	175	SPMT Sports Management.....	212
FSMA Finance.....	177	SSCI Social Science.....	215
FYEP First Year Experience.....	178	TCOM Technological Communication.....	215
GAME Game Design and Development.....	178	VAST Veterinary Assisting.....	216
GEOG Geography.....	179	VSAD Veterinary Management.....	217
GEOL Geology.....	179	VSCT Veterinary Technology.....	217

ABAP 135
PARENTING KNOWLEDGE AND SKILLS
Fall and Spring, 3 credit hours

This course examines the application of the natural science and technology of behavior to improvements both in knowledge of parenting and in child rearing skills. The range of advances in behaviorologically-based child rearing practices discovered since the 1950's is covered after reviewing scientifically uninformed practices used earlier. Behavior management-related skills for application in everyday public and personal situations involving children and their caregivers is included. Three hours lecture per week.

ABAP 245
INTRODUCTION TO THE SCIENCE AND TECHNOLOGY OF BEHAVIOR
Fall and Spring, 3 credit hours

In this course students will be introduced to applied behavior analysis; the separate and independent natural science discipline of WHY hu-man behavior happens. Students will learn to focus on understanding, explaining, predicting, controlling, and interpreting the environment, with emphasis on behavior functional relations, including the interactions of these relations with

genetics and physiology. The course covers both a.) the elementary terms, principles, methods, and concepts of behavior analysis, and b.) some basic contingency - change practices, derived from these principles, that lead to changes in behavior. Three lecture hours per week for fifteen weeks.

ACCT 101
FOUNDATIONS OF FINANCIAL ACCOUNTING
Fall and Spring, 4 credit hours

This course builds the underlying framework of financial accounting and serves as an Introduction

Course Descriptions: Accounting

to accounting concepts and financial reporting. Students will learn how to record business transactions in an accounting system, interpret financial statements, and communicate information for economic decision-making. Topics include accounting for sole proprietorships, partnerships, and corporations. A concentrated emphasis is placed on the accounting cycle, accruals and deferrals, notes and Interest, and internal controls. Four hours lecture per week.

ACCT 102 FOUNDATIONS OF MANAGERIAL ACCOUNTING *Fall and Spring, 3 credit hours*

The basic principles of accounting are continued with their application to management and internal users to assess company performance. Managerial accounting focuses on providing accounting related data for decision-making, production management, and product/service pricing. Further, students will examine: cost behavior and classification, job-order costing, process costing, activity-based costing, just-in-time, budgeting, and variance analysis. Three hours lecture per week. Prerequisite: Foundations of Financial Accounting (ACCT 101) or permission of instructor.

ACCT 104 SURVEY OF ACCOUNTING *Fall and Spring, 4 credit hours*

This course is designed for non-business majors who need to develop an understanding of fundamental accounting principles and their application in the business environment. The content surveys both financial and managerial accounting with an emphasis placed on how the information is used in decision making and problem solving. (Course may not be used for credit in any one of the following programs: Accounting, Business Administration, Finance, Legal Studies, and Health Care Management.) Four hours lecture per week.

ACCT 242 ACCOUNTING FOR GOVERNMENT AND NONPROFIT ORGANIZATIONS *Fall or Spring 3 credits hours*

Students will learn the concepts and practices of specialized accounting principles for nonprofit entities and state and local governments. Additionally, an emphasis will be placed on fund accounting, budgets, and financial reporting applicable to non-profit organizations. Three hours lecture per week. Prerequisites: Foundations of Managerial Accounting (ACCT 102) or permission of instructor.

ACCT 245 FORENSIC ACCOUNTING *Spring, 3 credit hours*

Forensic Accounting is concerned with the detection, prevention, and correction of financial fraud and white-collar crime activities. This course identifies areas of financial risk, develops internal control policies and procedures, as well as defines the role of the forensic accountant in the courtroom. Students will examine forensic accounting case studies, determine damage and valuation calculations,

and the effects of cybercrime on an organization. Heavy emphasis is placed upon the role of the Sarbanes-Oxley Act and ethical behavior in business transactions. Three hours lecture per week. Prerequisites: Foundations of Financial Accounting (ACCT 101) or Survey of Accounting (ACCT 104) or permission of instructor.

ACCT 300 INTERMEDIATE ACCOUNTING I *Fall, 3 credit hours*

Students will be presented with knowledge and skills basic to accounting theory and practice and advanced problems pertaining to the foundations of financial accounting. The essential interrelationship between accounting and the activities of business is stressed throughout the course. The presentation of accounting elements necessary for business decision-making such as operating, financing, investing, earnings management and revenue recognition enhance the learning experience and prepare students for an evolving accounting profession. Accompanying accounting problems and various financial statements challenge students to develop critical thinking skills and promote core competencies. International Financial Reporting Standards are discussed when relevant to help students understand how accounting practices differ from country to country and reflect the increasingly global nature of business. Three lecture hours per week. Prerequisites: Foundations of Managerial Accounting (ACCT 102) or permission of instructor.

ACCT 302 INTERMEDIATE ACCOUNTING II *Spring, 3 credit hours*

Accounting concepts and standards which expound upon the foundation provided by Intermediate I are carried forward in this course. This course provides an engaging and comprehensive learning experience that helps develop essential understanding, critical thinking, and analytical skills via accounting's Integral importance to an organization's decision-making capabilities and is presented as an essential element in business decision-making. Focus is placed on financing and investing activities such as: the behavior and classification of capital, acquisition management, general ledger requirements for the handling of non-current operating assets, handling of debt and equity securities, and accounting for common disclosures. Three lecture hours per week. Prerequisites: Intermediate Accounting I (ACCT 300) or permission of instructor.

ACCT 305 ACCOUNTING THEORY & PRACTICE *Fall/Spring, 3 credit hours*

This course is designed to assess and reinforce the skills necessary to enter the workplace as an entry-level employee in the field of accounting. The students will maintain a complete set of books and related financial statements, through an accounting cycle, both manually and electronically. Students will use previously prepared financial statements to make informed judgments, solve problems, identify and apply ethical positions and effectively commu-

nicate this information to others both orally and in writing. Three hours lecture per week. Prerequisites/ Corequisites: Intermediate Accounting I (ACCT 300), Introduction to Finance (FSMA 210), or permission of instructor.

ACCT 306 COST ACCOUNTING *Fall, 3 credit hours*

This course is designed to build upon the foundation students learned in Managerial Accounting thereby offering an advanced examination of cost classification and behavior (and their resulting effects on the financial statements), quantitative and qualitative decision-making acumen, and reporting cost accounting information to internal users of an organization. The student will learn the responsibilities of a cost accountant and distinguish those of a financial and a managerial accountant. Emphasis is placed on various cost models (e.g. job-order, process costing, activity based costing, just-in-time), preparing budgets, and analyzing variances to standards as essential tools to formulating and achieving management goals and objectives in both manufacturing and service enterprises. Three lecture hours per week. Prerequisites: Foundations of Managerial Accounting (ACCT 102), Information Technology (CITA 110), Intermediate Algebra (MATH 106), or permission of instructor.

ACCT 310 ACCOUNTING INFORMATION SYSTEMS *Spring, 3 credit hours*

Students utilize an accounting software system complimented by a manual accounting information system to complete a full accounting cycle. Heavy emphasis is placed on section 404 requirements of the Sarbanes-Oxley Act of 2002. The importance of proper documentation, internal controls, enterprise systems, and E-business sets the stage for this course. Students will prepare the necessary documents electronically and manually), journal entries, special journals, reconcile accounts, general financial statements, and close an entire accounting cycle. Three hours lecture per week. Prerequisites: Foundations of Managerial Accounting (ACCT 102), or permission of the instructor.

ACCT 335 INDIVIDUAL TAXATION *Fall, 3 credit hours*

This course is designed to introduce students to the Internal Revenue Code, preparation of federal and state tax returns for individuals and small businesses. The course prepares students to participate in the IRS Volunteer Income Tax Assistance (VITA) program. Three hours lecture per week. Prerequisites: Introduction to Information Technology (CITA 110), or permission of the instructor.

ACCT 410 INTERNATIONAL ACCOUNTING *Fall/Spring, 3 credit hours*

International Accounting is the study of an entity reported as either a multinational company or an entity whose reporting obligations to stake-

Course Descriptions: Accounting, Air Conditioning

holders are located in a country other than that of the reporting entity. A detailed investigation on the convergence of U.S. Generally Accepted Accounting Principles (GAAP) and International Financial Reporting Standards (IFRS) serves as a foundation for this course. Also discussed are the effects of financial reporting, international taxation, and international financial statement analysis on a multinational reporting entity. Employing and critiquing the use of global accounting and auditing standards will integrate the student's existing skills with domestic accounting standards. Three hours lecture per week. Prerequisites: Foundations of Managerial Accounting (ACCT 102), or permission of instructor.

ACCT 430 AUDITING

Fall, Spring, 3 credit hours

This course is designed to expose the student to the vocabulary, concepts, principles, and techniques of auditing. Emphasis is placed on the use of Generally Accepted Auditing Standards and their practical application to professional standards, ethics, internal controls, legal liability, audit planning, audit evidence, audit sampling, and the production of standard reports. Three hours lecture per week. Prerequisites: Intermediate Accounting I (ACCT 300) or permission of instructor.

ACCT 440 ADVANCED ACCOUNTING

Fall, Spring, 3 credit hours

This course completes the financial accounting sequence as learned in Intermediate Accounting. Advanced accounting issues address: consolidations, mergers and acquisitions, governmental and non-profit organizations, foreign currency transactions, and partnerships. Three hours lecture per week. Prerequisites: Intermediate Accounting I (ACCT 300) or permission of instructor.

ACCT 291-295, 391-395, OR 491-495 SPECIAL TOPICS IN ACCOUNTING

Fall/Spring, 1-4 credit hours

Special Topics in Accounting will generally include topics of current interest or topics not covered in courses currently offered by the Department or in combinations not currently available. Prerequisite: permission of the instructor.

ACHP 103 REFRIGERATION AND AIR CONDITIONING SERVICES I

Fall, 7 credit hours

The fundamentals of refrigerating and air conditioning equipment are the emphasis of this course. Students study the basic refrigeration cycle and the function of each component; compressor, condenser, evaporator and metering device. Use of hand and power tools is stressed in laboratory work. Students will cut, bend, solder, braze, flare, and swage copper tubing. Flowing nitrogen will be stressed during brazing operations. Four hours lecture, nine hours laboratory per week.

ACHP 104 REFRIGERATION AND AIR CONDITIONING SERVICES II

Spring, 7 credit hours

Applications of refrigeration and air conditioning systems are presented along with heat gain calculation, air distribution and filtration and controls. Complete systems including split DX air conditioners, heat pumps, and packaged systems are installed. Some sheet metal layout and fabrication is also performed. Four hours lecture, nine hours laboratory per week. Prerequisite: Refrigeration and Air Conditioning Services I (ACHP 103) or permission of instructor.

ACHP 105 REFRIGERATION SYSTEM DESIGN

Spring, 2 credit hours

The refrigeration system and its components are studied in detail. Components are sized and selected to meet application requirements and then system equilibrium is determined. Two hours lecture per week. Prerequisite: Refrigeration and Air Conditioning Services I (ACHP 103); Corequisite: Refrigeration and Air Conditioning Services II (ACHP 104) or permission of instructor.

ACHP 171 HEATING AND PLUMBING PRINCIPLES AND PRACTICE I

Fall, 7 credit hours

The fundamentals of heating equipment and practices; selection, use and care of hand and power tools; piping fabrication of copper, steel, cast iron and plastic pipe; oil burner boiler installation and service; drainage, waste and vent plumbing; basic sheet metal practice; well pumps and accessories. Four hours lecture, nine hours laboratory per week. Corequisites: Math, English, and Blueprint reading.

ACHP 172 HEATING AND PLUMBING PRINCIPLES AND PRACTICE II

Spring, 8 credit hours

Gas burner boiler installations with zoning; furnace installation and service; bathroom and kitchen plumbing installation; sheet metal layout and fabrication; heat loss and gain calculations; electrical schematics, controls, troubleshooting; duct sizing and installation. Five hours lecture, nine hours laboratory per week. Prerequisite: Heating & Plumbing Principles and Practice I (ACHP 171) or permission of instructor.

ACHP 181 INTRODUCTION TO ENVIRONMENTAL TECHNOLOGY

Spring, 3 credit hours

This course provides the student without a technical background an opportunity to explore the broad field of Environmental Technology. This includes basic problem solving as applied to situations occurring in everyday living environments. Current issues such as indoor air quality, CFC's, radon, and Legionnaires Disease are discussed and solutions presented through proper design. Each

student will be introduced to the various phases of building construction and maintenance so he or she will be able to make rational decisions with regard to building environmental conditions. Three hours lecture per week.

ACHP 243 AIR CONDITIONING I

Fall, 3 credit hours

The properties of air and water vapor mixtures are determined by calculation and by the use of psychometric charts. Air conditioning processes are studied leading to selection of systems. Cooling and refrigeration loads are calculated for commercial and residential structures. The performance of air conditioning systems and the use of instruments is covered in the laboratory. Two hours lecture, three hours laboratory per week. Prerequisite: Intro to HVAC-R (MECH 103) or permission of instructor.

ACHP 244 AIR CONDITIONING II

Spring, 3 credit hours

Cooling loads are calculated for various types of commercial structures. Computers are used to calculate loads. Air conditioning equipment and systems are studied to determine their application to meet load, comfort and energy conservation requirements. The laboratory portion of the course includes the determination, with instruments, of the performance characteristics of cooling coils, heating coils, a water chiller, cooling tower, etc. Two hours lecture, three hours laboratory per week. Prerequisite: Air Conditioning I (ACHP 243) or permission of instructor.

ACHP 253 DOMESTIC AND COMMERCIAL HEATING I

Fall, 4 credit hours

An application in heat transfer, including the technical considerations of designing residential and commercial heating systems. Particular emphasis is given to pipe and duct sizing. Includes the study of forced air and hot water heating equipment, air terminal devices, and hydronic terminal units. Laboratory will cover the use of data acquisition equipment utilized by the industry to commission systems. A writing intensive course. Three hours lecture, three hours laboratory per week. Prerequisite: Intro to HVAC-R (MECH 103) or permission of instructor.

ACHP 254 DOMESTIC AND COMMERCIAL HEATING II

Spring, 4 credit hours

This course is a continuation of ACHP 253 focusing on steam boiler selection, design and layout, selection of equipment and pipe sizing. Particular emphasis is given to commercial systems such as fans and pumps. The student will design the layout of control systems based zone and occupant levels. Laboratory covers modern methods of testing heating equipment and systems. Three hours lecture, three hours laboratory per week. Prerequisite: Domestic and Commercial Heating I (ACHP 253) or permission of instructor.

Course Descriptions: Air Conditioning, Agribusiness Mgmt.

ACHP 264

AIR CONDITIONING SYSTEMS DESIGN

Spring, 1 credit hour

Air conditioning systems are designed for specific buildings, equipment selected, working drawings made and specifications written. Three hours laboratory per week. Prerequisites: Introduction to 3D CAD and BIM (SOET 250), Air Conditioning I (ACHP 243), Domestic and Commercial Heating I (ACHP 253) or permission of instructor.

ACHP 306

ENERGY SYSTEMS TECHNOLOGY

Fall/Spring, 3 credit hours

The student will develop skills utilized in HVAC systems design, from the basic principles of heat transfer through detailed sizing and selection of various HVAC systems. Two hours lecture, two hours recitation per week. Prerequisites: Junior level status.

ACHP 323

HVAC EQUIPMENT AND SELECTION

Fall/Spring/Summer, 3 credit hours

This course includes the selection and layout of modern HVAC equipment for commercial buildings. Special concern is applied to ASHRAE Standards, codes and cost analysis. Three hours lecture per week. Prerequisites: Domestic and Commercial Heating II (ACHP 254), or permission of instructor.

ACHP 324

HVAC LOAD CALCULATION

Fall/Spring, 3 credit hours

This course introduces the student to the principles and methods of calculating the heating and cooling load of an HVAC system for residential and commercial buildings. The student learns how to design the HVAC systems following the codes and standards of ASHRAE publications. Energy efficiency and conservation are incorporated into the system design for optimal performance. The course is emphasized on computer-based calculations. Computer-assisted calculation and practice are carried out throughout the course. Three hours lecture per week. Prerequisite: Refrigeration I (ACHP 101); Corequisites: Thermodynamics (MECH 342), Heat Transfer (MECH 343), or permission of instructor.

ACHP 401

BUILDING AUTOMATION SYSTEMS

Fall, 3 credit hours

This course presents detailed study of building automation controls as applied in our modern facilities. Integration of building environmental control along with life safety, security, and maintenance functions are studied. The various proprietary protocol, as well as BACNET are presented. Digital and analog inputs to central and remote processors which in turn control devices to maintain building environmental conditions, safety, and security will be studied. Networking topics studied in prerequisite courses will be integrated into the application of these automation systems. Students will work with software to operate these systems as well as specify equipment to meet the goals within the facility. Three hours lecture per week. Prerequisite: Data

Communications and Networking (CITA 200), and Domestic and Commercial Heating I (ACHP 253) or permission from instructor.

ACHP 412

ENERGY ANALYSIS AND AUDIT

Fall/Spring, 3 credit hours

This course provides skills to perform an energy analysis of future commercial buildings and the audit of existing building through the study of energy standards and codes use in the United States. HVAC and architectural drawings are reviewed through case studies and actual buildings are audited providing students with the necessary skills to reduce energy cost in to the future of building development. Three hours lecture per week. Prerequisites: HVAC Load Calculation & Energy Code (ACHP 324), or permission of instructor.

ACHP 415

COMMISSIONING OF MECHANICAL SYSTEMS

Fall/Spring, 3 credit hours

This course explores the modern building practice of implementing a quality-oriented process for achieving, verifying, and documenting that the performance of facilities, systems, and assemblies. Students develop and analyze the owner's project requirements and translate these requirements into a commissioning plan. Students will transform the commissioning plan into an operational and maintenance plan for the building owner and operators. Three hours lecture per week. Prerequisite: HVAC Load Calculation & Energy Code (ACHP 324), or permission of instructor.

ACHP 291-295, 391-395, OR 491-495

SPECIAL TOPICS IN AIR CONDITIONING ENGINEERING TECHNOLOGY

Fall/Spring, 1-4 credit hours

Special Topics in Air Conditioning Engineering Technology will generally include topics of current interest or topics not covered in courses currently offered by the Department or in combinations not currently available. Prerequisite: permission of the instructor.

AGMT 305

AGRICULTURAL POLICY

Fall, 3 credit hours

This course introduces students to the role of government and other institutions in setting agricultural and food policy. It develops an understanding of the application of economic theory to agricultural problems and the policy decision process. Topics such as macroeconomic policies, farm policies, rural development policies, agricultural trade policy, environmental policy, food safety and security policy, and food assistance and nutrition policy are discussed. Prerequisites: Principles of Macroeconomics (ECON 101) and Principles of Microeconomics (ECON 103) and a minimum 45 credit hours, or permission of instructor. 3 lecture hours per week.

AGMT 310

AGRIBUSINESS MANAGEMENT

Spring, 3 credit hours

This course provides students with understanding of the size, scope and importance of the agribusiness food chain including agricultural producers, processors, distributors, farmers and ranchers. It examines marketing, financial, operations and human resource management principles applied to agribusiness firm. Topics such as organization of an agribusiness, economics for agribusiness managers, international agribusiness, financing agribusiness, evaluation of operating and investment decisions, production planning and management, and supply chain management for agribusiness are discussed. Prerequisites: Principles of Microeconomics (ECON 103) and Introduction to Finance (FSMA 210) or permission of instructor. Pre- or Co-requisite: Principles of Management (BSAD 301). 3 lecture hours per week.

AGMT 320

AGRICULTURAL MARKETS AND PRICE ANALYSIS

Fall, 3 credit hours

This course introduces students to the agricultural price analysis, agricultural market structures and agricultural marketing strategies. It utilizes the economic concepts to help students understand and develop practical agribusiness marketing strategies. Topics such as agricultural price seasonality, market adjustments, price analysis using supply and demand, equilibrium displacement models, food marketing channel, international agricultural trade, and agricultural futures and options markets are discussed. Prerequisites: Principles of Microeconomics (ECON 103), Marketing (BSAD 203) and MATH 141 Statistics, or permission of instructor. 3 lecture hours per week.

AGMT 310

AGRIBUSINESS MANAGEMENT

Spring, 3 credit hours

This course provides students with understanding of the size, scope and importance of the agribusiness food chain including agricultural producers, processors, distributors, farmers and ranchers. It examines marketing, financial, operations and human resource management principles applied to agribusiness firm. Topics such as organization of an agribusiness, economics for agribusiness managers, international agribusiness, financing agribusiness, evaluation of operating and investment decisions, production planning and management, and supply chain management for agribusiness are discussed. Prerequisites: Principles of Microeconomics (ECON 103) and Introduction to Finance (FSMA 210) or permission of instructor. Pre- or Co-requisite: Principles of Management (BSAD 301). 3 lecture hours per week.

AGMT 330

FARM BUSINESS MANAGEMENT

Spring, 3 credit hours

This course provides students with tools needed to measure management performance and financial

Course Descriptions: Agribusiness, AMSL, Anthropology, AREA

condition of the farm business. It develops decision-making skills in planning, organizing, directing and controlling farm business. Topics such as farm recordkeeping and accounting system, financial statement analysis, investment analysis, crop and livestock enterprise budgeting and analysis, risk management, income tax management, and machinery management are discussed. Prerequisites: Introduction to Business (BSAD 100), Principles of Microeconomics (ECON 103) and Introduction to Finance (FSMA 210) or permission of instructor. 3 lecture hours per week.

AGMT 385 AGRICULTURE LAW *Spring, 3 credit hours*

This course examines areas of law applicable to agriculture, including agricultural law; acquisition and disposal of farmland; farm tenancies; rights and limitations in the use and ownership of farmland; water law; environmental protection; protection of the productivity of agricultural land; and the law of sales and secured transactions in an agricultural context. Critical legal issues facing the industry and consumers will be discussed, including federal farm programs, the structure of farms and industrialized agriculture, migrant labor issues, farm animal welfare, as well as agriculture commercial law. Prerequisites: BSAD 201 or permission of instructor. 3 lecture hours per week.

AGMT 410 INTERNSHIP *Spring, 6-12 credit hours*

The Agribusiness Management Internship integrates classroom work and practical experience with cooperating businesses or agencies. The Internship allows seniors the opportunity to apply classroom learning in an agricultural management setting. It is a structured field experience in which an Intern, under the guidance of a supervisor, acquires and applies knowledge and skills while working in a responsible role. The internship site and completed documentation must be completed by the student and turned into the supervising faculty by the end of the semester prior to the start of the internship. Internship assignments and activities may include, but not be limited to, information gathering, research, drafting of documents, office management, and other tasks and responsibilities deemed necessary. Prerequisites: Senior status in the Agribusiness Management program. Student must have a GPA of 3.0 or higher before the internship begins, or permission of the instructor in consultation with the student's academic advisor. 40 hours per credit.

AGMT 450 CAPSTONE IN AGRIBUSINESS MANAGEMENT *Spring, 3 credit hours*

This multidisciplinary capstone course integrates materials from Agribusiness Management courses to allow students to gain practical skills and knowledge of the varied fields of Agribusiness and the role agribusiness managers have within the multiple systems. Students analyze and evaluate advanced Agribusiness

issues, i.e. impact from evolving Federal and State laws relating to Agribusiness facilities, providers, and consumers. Students also study contemporary challenges by incorporating knowledge gained through Agribusiness courses and required readings. Prerequisites: 90 credits earned, in Agribusiness Management; or permission of instructor. 3 lecture hours a week.

AMSL 101 INTRODUCTION TO AMERICAN SIGN LANGUAGE

Fall and Spring, 4 credit hours *GER 9*

American Sign Language (ASL) is the third most frequently used language in the United States after English and Spanish. This course introduces students to ASL: the visual-gestural language of the deaf. It incorporates non-verbal communication techniques: fingerspelling, basic vocabulary, grammar and syntax, and conversational skills. In addition, students gain an understanding of the deaf community, its history, culture, and the issues that impact the deaf community in the 21st century. Four lecture hours per week.

ANTH 101 INTRODUCTION TO PHYSICAL ANTHROPOLOGY AND ARCHAEOLOGY

Fall or Spring, 3 credit hours

This course provides an overview of the theory of evolution, comparative analysis of primates, natural selection, the genetic basis of variation, the fossil record leading to and including human evolution, and a look toward the future use of our species. Fundamental methods and theories in archaeology will also be covered. Three hours lecture per week.

ANTH 102 INTRODUCTION TO CULTURAL ANTHROPOLOGY

Fall and Spring, 3 credit hours *GER 3 & GER 6*

Cultural anthropology is an academic discipline that seeks to understand human cultural diversity, the reasons for that diversity, and its implications for peoples' so-cial and economic life, using research methodologies that seek to find out how people understand themselves, others, and appropriate ways of living in the world. The course introduces the discipline's core concepts and methodologies, and also explores classic themes and issues in the anthropological study of cultural and social issues and arrangements both in the United States and around the world. A writing intensive course. Three hours lecture per week.

ANTH 291-295, 391-395, OR 491-495 SPECIAL TOPICS IN ANTHROPOLOGY *Fall/Spring, 1-4 credit hours*

An introductory or more advanced exploration of subjects not covered or only partially covered by other courses in anthropology.

AREA 110 INTRODUCTION TO ALTERNATIVE ENERGY

Fall, 3 credit hours

Students will discuss the usefulness of various types of energies as they relate to the future of this planet. Topics will include passive and active solar systems, fuel cells, hydroelectric power, geothermal heat transfer, and wind energy. Three hours lecture per week.

AREA 210 SUSTAINABLE BUILDING *Spring, 3 credit hours*

This course is an introduction to building science. Basic topics are introduced such as air leakage, heating, cooling, and insulation. Students will also see different types of building construction and how they relate to building science. Three hours lecture per week.

AREA 224 RENEWABLE ENERGY ELECTRICAL CODE *Fall/Spring, 3 credit hours*

This course deals with the National Electrical Code (NEC) for renewable energy systems. The various aspects of the electrical code are studied to ensure proper system design and installations. Safety issues as related to the various sections of the code are emphasized. Three hours lecture per week. Prerequisites: Electricity (ELEC 261) or Electrical Construction and Maintenance I & II (ELEC 171 & ELEC 172) or permission of instructor.

AREA 300 FUEL CELLS *Fall/Spring, 3 credit hours*

Students will discover the science involved in the operation of fuel cells and technical applications of a fuel cell in providing electricity and heat. Topics explored are hydrogen as a fuel, energy efficiency, and operational characteristics of a fuel cell. In depth studies of proton exchange membrane, alkaline electrolyte fuel cells, and direct methanol fuel cells will teach students about the conversion of hydrogen fuel to useable forms of energy. Three hours lecture per week. Prerequisites: College Chemistry I (CHEM 105) or permission of instructor.

AREA 303 WIND TURBINES *Fall/Spring, 3 credit hours*

This course is an introduction to issues related to the production of electricity from wind power. The study of the atmospheric science necessary to locate wind turbines for the production of electricity will teach students how to interpret data. In addition, the study of design and control will allow for a comprehensive knowledge of all sub-components of a wind turbine. A complete analysis of all the technology utilized in the production of electricity will assist students in knowing the details involved in sizing and citing of wind turbines. Three hours lecture per week. Prerequisites: Electricity (ELEC 261) and Electrical Energy Conversion (ELEC 215) or permission of instructor.

Course Descriptions: Alt. & Renewable Energy, Arts

AREA 310 BIOFUELS

Fall/Spring, 3 credit hours

This course covers alternative, renewable fuels derived from biological sources and their applications as an energy source for homes, industry and transportation. Wood, urban, and agricultural solid waste are discussed as potential sources of energy conversion. In addition, the production of methane and alcohol based fuels and their roles as a transportation fuel will lead to a rediscovery of opportunities to replace fossil-based fuels. Bio-diesel and vegetable oil topics are necessary to show a true alternate energy source for internal combustion engines. Throughout this course, students will examine both advantages and disadvantages of biofuels as an energy source. Prerequisites: Intro. to Chemistry (CHEM 101) or junior level status or permission of instructor.

AREA 320 EXPERIMENTATION & MEASUREMENT I

Fall, 3 credit hours

In this laboratory course, students will learn experimental methods, instrumentation for engineering measurements, statistical estimates of experimental uncertainty, and calibration techniques. Students will perform laboratory experiments that are applicable to energy systems as well as to broader engineering applications. This course serves as the foundation for higher level lab and design courses in this curriculum. Three two-hour laboratories per week. Prerequisites: Fluid Mechanics (MECH 241), Programming for Engineers (ENGS 102), Statistics (MATH 141), or permission of instructor.

AREA 321 SOLAR ENERGY UTILIZATION

Fall, 3 credit hours

Solar Energy Utilization is an introductory course on solar energy with an emphasis on thermal processes. Topics include solar radiation, heat transfer, flat-plate collectors, thermal energy storage, and solar thermal applications. Three hours lecture per week. Prerequisite: Introduction to Thermodynamics (MECH 225) or permission of instructor.

AREA 322 PASSIVE SOLAR BUILDING

Spring, 3 credit hours

Passive Solar Building explores the use of solar energy to passively heat and cool buildings. Topics include solar radiation, building heating and cooling loads, energy efficient design and construction, passive solar heating, proper implementation of thermal mass, and passive cooling. Three hours lecture per week. Prerequisites: Introduction to Thermodynamics (MECH 225), Energy Systems Technology (ACHP 306), or permission of instructor.

AREA 323 PHOTOVOLTAIC SYSTEMS

Fall, 3 credit hours

Photovoltaic Systems examines the direct conversion of solar energy to electricity. Topics include photovoltaic (PV) cell physics, types of PV cells, PV

system components, and PV energy storage. Three hours lecture per week. Prerequisite: Introduction to Thermodynamics (MECH 225), or permission of instructor.

AREA 324/CMGT 324 SUSTAINABLE CONSTRUCTION

Fall, 3 credit hours

This course is an introduction to sustainable building design. It focuses on the application of building science to the design and construction of durable and functional buildings that optimize the balance between operating costs, construction costs, and life-cycle carbon footprint. Prerequisites: Junior level status or permission of the instructor.

AREA 424/CMGT 424 SUSTAINABLE BUILDING RATINGS AND CERTIFICATIONS

Fall, 3 credit hours

This course explores popular sustainable building rating and certification systems comparing their requirements, pros, and cons. The vitality and viability of these systems will be analyzed, compared, and discussed. Students will work as a group to perform a conceptual implementation and documentation of one of the rating systems. Examples of these ratings or certification systems include Energy Star, LEED, Green Globes, Living Building Challenge, Net Zero Energy, and Passive House Institute US. Prerequisites: AREA 324/CMGT 324 (Sustainable Construction).

AREA 340 GEOTHERMAL ENERGY

Fall/Spring, 3 credit hours

Applications of thermodynamics and heat transfer principles will explain how energy is transformed from geothermal energy to useable energy for large and small scale systems. Students will determine heating and cooling loads leading to the selection of the correct system installation to meet the demand. Correct system sizing and installation procedures will be explored along with the environmental issues related to geothermal energy production. Three hours lecture per week. Prerequisites: Introduction to Alternative Energy (AREA 110) or Introduction to Engineering (ENGS 101) or permission of instructor.

AREA 370 EXPERIMENTATION & MEASUREMENT II

Spring, 3 credit hours

In this laboratory course, students will perform engineering measurements to acceptable standards. They will also choose the method of measurement to achieve the accuracy necessary for use in alternative energy experiments. A hands-on approach will furnish practical knowledge of the operation of various alternative energy devices and diagnostic tools. The labs will reflect topics discussed in the AREA electives. Three two-hour laboratories per week. Prerequisites: Experimentation & Measurement I (AREA 320) or permission of instructor.

ARES 291-295, 391-395, OR 491-495 SPECIAL TOPICS IN ALTERNATIVE & RENEWABLE ENERGY SYSTEMS

Fall/Spring, 1-4 credit hours

An introductory or more advanced exploration of subjects not covered or only partially covered by other courses in alternative & renewable energy systems.

ARTS 101 INTRODUCTORY DRAWING

Fall/Spring, 3 credit hours *GER 8*

In this foundational course, students are introduced to the fundamental principles and processes of drawing. The creative process, observational drawing, and the fundamental principles and terminology of composition will all be covered. While the emphasis will be on representational drawing, abstraction, expression, and storyboarding will all be covered. No prior drawing experience is necessary. Two hours lecture, two hours laboratory per week.

ARTS 201 ART HISTORY: B.C. TO 16TH CENTURY

Fall/Spring/Winter/Summer, 3 credit hours
GER 7 & GER 8

This course is the first sequential course in the study of art history, covering the period from pre-history to the early Italian Renaissance. Emphasis will be placed on the development of the art and its relationship to the cultural, political, and social climate within the time it was produced. Students will develop basic terminology for compositional analysis of works and practice recognition and contextualization. Three hours lecture per week.

ARTS 202 ART HISTORY: 16TH TO 20TH CENTURY

Fall/Spring/Winter/Summer, 3 credit hours
GER 7 & GER 8

This course is the second sequential course in the study of art history, covering the period from the Italian Renaissance to the Modern Age. Emphasis will be placed on the development of the art and its relationship to the cultural, political, and social climate within the time in which it was produced. Students will develop basic terminology for compositional analysis of works and practice recognition and contextualization. Three hours lecture per week.

ARTS 203 ART AND SOCIETY

Fall/Spring/Winter/Summer, 3 credit hours
GER 8

Art and Society explores the development of the Fine Arts and its relationship to social, political, and economic structures of both contemporary and historical cultures. Through the research, discussion, and presentation of several case studies in historical and contemporary art practices, students will develop their critical awareness of interdisciplinary relationships in present and past cultures. This course explores the artistic practice and production of several cultural epochs as both a symptom and parameter of social-political trends/events. Students will develop their understanding of

Course Descriptions: Astronomy, Automotive

significant contemporary and historical issues and explore their bearing and relationship to the Fine Arts. Three hours lecture per week. Prerequisites: Composition & the Spoken Word (ENGL 101) or permission of instructor.

ARTS 204

INTRODUCTION TO PAINTING

Fall/Spring, 3 credits

GER 8

In introduction to painting students will Students practice basic approaches to watercolor, acrylic and oils, applying these techniques towards more accomplished works. Class work will include exercises, studies, and analysis of professional works. Students will develop ability to apply compositional terms and concepts in analysis of paintings. At the conclusion of the course, students will develop a portfolio of completed works. Two hours lectures, two hours studio laboratory per week.

ARTS 301

DIGITAL STORYBOARDING

Fall/Spring, 3 credit hours

GER 8

This course sequentially builds on the skills, techniques, and concepts introduced in ARTS 101 and GMMD 201. Through research, demonstrations and studio-based assignments, students will develop skills in conceptual schematics, sequential storyboarding, and digital illustration using industry current digital design software and digital tablets. The student projects will culminate in a portfolio of digital works. Two hours lectures, two hours studio laboratory per week. Prerequisites: Arts 101 Introductory Drawing OR GMMD 102

Introduction to Design OR GMMD 103 Introduction to Digital Design Software: Photoshop Basics

ASTR 101

ASTRONOMY OF THE SOLAR SYSTEM

Fall, 3 credit hours

GER 2

This course is an introduction to the science of astronomy and is a study of our immediate neighborhood in the universe, the solar system. Topics included are the appearance of the sky, the earth as a planet, light, telescopes and their applications, the physical nature of the planets, the motion and surface of the moon, lesser bodies in the solar system, origin and evolution of the solar system, and the possibilities for extraterrestrial life. Three hours lecture per week

ASTR 102

ASTRONOMY OF THE SOLAR SYSTEM LAB

Fall, 1 credit hour

GER 2

This is a laboratory course to accompany ASTR 101 – Astronomy of the Solar System. Laboratory exercises will both explore fundamental concepts and physical principles introduced in lecture such as the properties of light in the Introduction to Spectroscopy Lab, as well as give the students a feel for the work of a modern Astronomer with computer based simulation exercises. Two hours laboratory per week. Corequisite: Astronomy of the Solar System (ASTR 101) or permission of instructor.

ASTR 103

STELLAR ASTRONOMY

Spring, 3 credit hours

GER 2

This is a survey course examining the structure, of the observable universe. Focus is on the formation, evolution, and resulting classification of stars. Topics covered will include the history of astronomy, the sun, classification of stars, multiple star systems, birth and death of stars, gravitational collapse, pulsars, black holes, galaxies, quasars, and cosmology. Three hours lecture per week.

ASTR 104

STELLAR ASTRONOMY LAB

Spring, 1 credit hour

GER 2

This is a laboratory course to accompany ASTR 103 –Stellar Astronomy. Laboratory exercises will both explore fundamental concepts and physical principles introduced in lecture, as well as give the students a feel for the work of a modern Astronomer with computer based simulation exercises. Two hours laboratory per week. Corequisite: Stellar Astronomy (ASTR 103) or permission of instructor.

ASTR 291-295, 391-395, OR 491-495 SPECIAL TOPICS IN ASTRONOMY

Fall/Spring, 1-3 credit hours

Special Topics in Astronomy will generally include topics of current interest or topics not covered in courses currently offered by the department or in combinations not currently available. One-three hours lecture per week. Prerequisite: permission of instructor.

AUTO 101

AUTOMOTIVE SERVICE

Fall, 2 credit hours

Automotive Service is an introductory course in vehicle systems theory of operation and maintenance. Topics include automotive shop procedures involved in general maintenance of vehicles related to suspension, engine, and driveline. Safety and customer relations skills will also be stressed. Students who have successfully completed a high school vocational program in Automotive Mechanics/Technology may be eligible for transfer credit. Two hours lecture per week. Corequisite: Auto Service Laboratory (AUTO 111)

AUTO 102

DIESEL ENGINES

Spring, 2 credit hours (elective)

A course which considers the basic construction of the diesel engine. Topics will include classification of diesel engines, fuels, turbochargers, injection systems, and pre-heater systems. Laboratory will consist of hands-on experience in engine troubleshooting, parts identification, adjustments and testing. One hour lecture, two hours laboratory per week. This course is offered in the spring of even numbered years. Prerequisite: Auto Service & Lab (AUTO 101 & 111), or Powersports Service (MSPT 101), or permission of instructor.

AUTO 103

AUTOMOTIVE AIR CONDITIONING

Spring, 2 credit hours (elective)

A study of the component parts of automotive air conditioning systems, their function and operation. Laboratory will consist of hands-on experience in testing, evacuation, and charging of the system. Refrigerant identification, safety, and environmental issues are addressed, along with fundamentals of manual and automatic controls. One hour lecture, two hours laboratory per week. This course is offered in the spring of odd numbered years. Prerequisite: Automotive Electrical Systems & Lab (AUTO 112 & 122), or permission of instructor.

AUTO 104

BASIC WELDING

Fall/Spring, 2 credit hours

This course in welding will include all basic processes and procedures in joining and cutting ferrous and non-ferrous metals found in automotive/ industrial applications. Focus will include safety, proper techniques, and quality control. One hour lecture, two hours laboratory per week. Fall/Spring semesters, restricted to Automotive Technology students (Fall semester) or permission of the instructor.

AUTO 111

AUTO SERVICE LABORATORY

Fall, 1 credit hour

Topics include automotive shop procedures involved in general maintenance of vehicles related to suspension, engine, and driveline. Additional information addresses New York State inspection. Students who have successfully completed a high school vocational program in Automotive Mechanics/Technology may be eligible for transfer credit. Two hours laboratory per week. Corequisite: Automotive Services (AUTO 101) or permission of instructor.

AUTO 112

AUTOMOTIVE ELECTRICAL SYSTEMS

Fall, 3 credit hours

This course is a study of fundamental electrical circuits and relative theory as applied to the automobile. Series, parallel, series-parallel circuits, magnetism, direct and alternating current fundamentals; batteries, charging systems, starters, lighting systems, and basic electronics are studied. Three hours lecture per week. Prerequisite or Corequisite: Automotive Electrical Laboratory (AUTO 122).

AUTO 113

ENGINE PERFORMANCE I

Spring, 3 credit hours

With the completion of this course, the student will be able to diagnose a performance condition resulting from an engine mechanical, fuel or ignition problem. Students will analyze engine mechanical condition, such as cylinder compression, cylinder leakage, and valve timing issues. In the engine ignition and fuel delivery systems, students will diagnose using electronic computer based scanners, digital multimeters, oscilloscopes and other diagnostic devices. Three hours lecture

Course Descriptions: Automotive

per week. Prerequisite: Auto Service (AUTO 101) or Powersports Service (MSPT 101) and Automotive Electrical Systems (AUTO 112). Corequisite: (AUTO 114) Engine Performance I Laboratory, or permission of instructor.

AUTO 114 ENGINE PERFORMANCE I LABORATORY *Spring, 1 credit hour*

The laboratory component of this course consists of hands-on activities involving theories learned in the class-room. Students use service information, while testing systems with digital volt/ohm meters and computer scan-ners. Fuel and powertrain control systems are diagnosed with the latest tools available. With the completion of both components of Engine Performance I, (AUTO 113 and AUTO 114) students will be able to diagnose and re-pair a vehicle with a no-start condition resulting from a fuel or ignition problem. The student will be able to access vehicle computer information, including inputs, outputs, and miscellaneous tests. Three hours laboratory per week. Prerequisite Auto Service or Powersports Service (AUTO 101 & MSPT 101) and Automotive Electrical Systems (AUTO 112). Corequisite: Engine Performance I (AUTO 113) or permission of instructor.

AUTO 122 AUTOMOTIVE ELECTRICAL SYSTEMS LABORATORY *Fall, 1 credit hour*

The laboratory component of this course consists of hands-on activities involving theories learned in the classroom. Students use service information, both hard-copy and electronic. Testing involves batteries; series, parallel, and series-parallel circuits, as well as charging and starting systems component identification and service. Three hours laboratory per week. Corequisite: Automotive Electrical Systems (AUTO 112), or permission of instructor.

AUTO 141 AUTOMOTIVE BRAKE SYSTEMS *Spring, 3 credit hours*

This course consists of theory and operation of automotive brake systems. Topics include: Foundation brake components of disc and drum brake systems, hydraulic brake system components, and brake enhancements including antilock brake system and stability control. Three hours lecture per week. Prerequisite: Automotive Service & Lab (AUTO 101 & AUTO 111) or Powersports Service (MSPT 101). Corequisite: Automotive Brake Systems Laboratory (AUTO 144) or permission of instructor.

AUTO 144 AUTOMOTIVE BRAKE SYSTEMS LABORATORY *Spring, 1 credit hour*

This course is designed to teach entry level skills in the repair, replacement, and service of automotive brake systems. Brake service areas covered include disc brake, drum brake, parking break, brake hydraulic system, and brake component measuring

for tolerance. Services Include resurfacing rotors and drums, flaring hydraulic line. Three hours laboratory per week. Prerequisite or Corequisite: Auto Service Laboratory (AUTO 111), Automotive Brake Systems (AUTO 141), or permission of instructor.

AUTO 212 AUTOMOTIVE ELECTRICAL SYSTEMS II *Spring, 4 credit hours*

This course begins where Automotive Electrical Systems terminates. Topics covered include lighting, gauges, warning devices, driver information systems, horn and wiper operations, and electrical accessory diagnosis and repair. Three hours of lecture and three hours of laboratory per week. Prerequisites: Automotive Electrical Systems (AUTO 112). Corequisite: Automotive Computer Systems (AUTO 214) or permission of instructor.

AUTO 213 ENGINE PERFORMANCE II *Fall, 4 credit hours*

This course begins where Engine Performance I terminates. Sophisticated engine control systems are studied which include distributorless ignition, electronic spark control and emission controls. The student learns and applies knowledge of the integration of the above systems and the powertrain/engine control computer (PCM). Diagnosis and repair includes test equipment, such as digital volt/ohm meters, oscilloscopes, and interactive computer scanners. Students continually utilize the latest automotive reference materials in diagnosis and repair procedures. Three hours lecture, three hours laboratory per week. Prerequisites: Automotive Electrical Systems & Lab (AUTO 112 & 122), Engine Performance I & Lab (AUTO 113 & 114), or permission of instructor.

AUTO 214 AUTOMOTIVE COMPUTER SYSTEMS *Spring, 3 credit hours*

Review of electrical and electronic devices used in automobiles. Study of on-board diagnostic systems for both domestic and import vehicles. Diagnosis of computerized automotive systems. Three hours lecture, two hours laboratory per week. Prerequisites: Automotive Service Laboratory (AUTO 111), Engine Performance II (AUTO 213). Corequisite: Automotive Electrical Systems (AUTO 212) or permission of instructor.

AUTO 220 INTERNAL COMBUSTION ENGINES *Fall, 4 credit hours*

This course concerns the principles of operation of the gasoline internal combustion engine. Each student participates in an actual engine overhaul, including measuring to factory specifications and machining operations with the latest tools and equipment. Designed for Automotive Technology majors principally, applicants from other curricula will be interviewed by department personnel. Tool kit required. A writing intensive course. Two hours lecture, four hours laboratory per week. Prerequisites: Engine Performance I & Lab (AUTO 113 &

114), Composition & the Spoken Word (ENGL 101), Applied College Mathematics (MATH 101) or higher, or permission of instructor.

AUTO 221 AUTOMATIC TRANSMISSIONS *Spring, 4 credit hours*

Students study fundamental principles of automatic transmissions. Topics include torque converters, planetary gearsets, and hydraulics. Various power-flows are compared using specific transmissions as examples. Three hours lecture, three hours laboratory per week. Prerequisites: Engine Performance I & Lab (AUTO 113 & 114), Automotive Braking Systems & Lab (AUTO 141 & AUTO 144), or permission of instructor.

AUTO 225 MANUAL TRANSMISSIONS AND DRIVETRAIN *Fall, 3 credit hours*

Topics include transmission theory, design, and operation of manually shifted front-wheel and rear-wheel drive transmissions in automotive applications. Related topics necessary to include with transmissions also include axles, drive shafts, differentials, universal joints, transfer cases, and the manual and electronic controls associated with each. Students receive equal lecture and lab sessions. Two hours lecture per week, three hours laboratory per week. Prerequisites: Automotive Brake Systems (AUTO 141), Automotive Brake Systems Lab (AUTO 144), Basic Welding (AUTO 104), or permission of instructor.

AUTO 230 SERVICE MANAGEMENT AND OPERATIONS *Spring, 1 credit hour*

This seminar type course will meet to discuss topics such as satisfaction, shop management, management techniques, equipment purchase/utilization and dealership structure. Students will perform interviews and write about their findings. Each student will write five research papers from a list of topics concerning the automotive repair business. Weekly summaries from trade journals will be completed. These will relate to topics in Automotive Service Management. One hour lecture per week. Prerequisites: Engine Performance II (AUTO 213), or permission of instructor.

AUTO 241 SUSPENSION DESIGN AND SERVICES *Fall, 2 credit hours*

This course covers the theory of, diagnostic and service procedures used in suspension and steering systems. Two hours lecture per week. Prerequisite: Automotive Services & Lab (AUTO 101 & 111), or Powersports Service (MSPT 101). Corequisite: Suspension Design and Service Laboratory (AUTO 282) or permission of instructor.

Course Descriptions: Automotive, BASK, Biology

AUTO 253 SUBARU UNIVERSITY TRAINING *Spring, 1 credit hour*

Students who earned their way into Subaru-U by earning a grade of B or higher GPA and have an interest in employment at a Subaru dealership upon graduation, take on-line courses from Subaru to begin with. Subaru-U training Level 1 is non-manufacturer specific and reinforces SUNY Canton Automotive training at the 100 level. Subaru-U training Level 2 is specific to Subaru yet still reinforces SUNY Canton Auto-motive training at the 200 level. Level 1 and 2 are the prerequisites to Level 3 face-to-face training at Subaru training centers. Prerequisite: Automotive Services & Lab (AUTO 101 & 111), Automotive Electrical Systems & Lab (AUTO 112 & 122) or permission of instructor.

AUTO 282 SUSPENSION DESIGN AND SERVICE LABORATORY *Fall, 1 credit hour*

This course covers diagnostic, repair, and adjustment procedures used in suspension and steering systems. Proper use of suspension and steering tools and equipment is covered, including computerized alignment equipment. Three hours laboratory per week. Prerequisite: Auto Service & Lab (AUTO 101 & 111) or Powersports Service (MSPT 101). Corequisite: Suspension Design and Service (AUTO 241) or permission of instructor.

AUTO 291-295 SPECIAL TOPICS IN AUTOMOTIVE TECHNOLOGY *Fall/Spring, 1-4 credit hours*

Special Topics in Automotive Technology will generally include topics of current interest or topics not covered in courses currently offered by the Department or in combinations not currently available. Prerequisite: permission of the instructor.

BASK 051 COLLEGE SUCCESS STRATEGIES *Fall/Spring, 1 credit hour*

This course is designed to help students successfully make the transition to college while developing a sense of responsibility for their own learning. Students will practice a set of learning strategies focusing on such topics as time management, note-taking, textbook reading/memory improvement, goal setting, test preparation/taking, and critical thinking. Students will learn and demonstrate basic library research skill, computer skills, and explore/identify personal learning styles, values, career choice, and attitudes toward diversity. Two hours lecture per week. Required of all first-time EOP students. Credit in some certificates only.

BASK 060 FRESHMAN SEMINAR *Fall/Spring, 1 credit hour*

This course is designed to help students with the transition into college. Topics will include a study behavior inventory, goal setting, time management, campus resources, learning styles, test taking, note

taking, memorization strategies, and other information useful in becoming a successful college student. Two hours laboratory per week. Admission into this class is by permission of the instructor. Graduation credit for some certificates only.

BASK 291-295, 391-395, OR 491-495 SPECIAL TOPICS IN ACADEMIC DEVELOPMENT *Fall/Spring, 1-4 equivalent credit hours*

An introductory or more advanced exploration of topics not covered or only partially covered by other courses currently available. The course will be specified in the semester class schedule. Students may take two special topics courses for preparatory credit/credit as long as the topic is different.

BIOL 101 INTRODUCTION TO BIOLOGY *Fall/Spring, 4 credit hours* *GER 2*

A study of the major concepts in the life sciences presented for the non-major. Subjects covered include an overview of the basic concepts of plants and animals, including human biology, with attention given to cellular processes and the relationship between form and function. Three hours lecture, two hours laboratory per week. The laboratory includes dissection of a representative vertebrate. Intended for students receiving less than 75 on the New York State Regents Biology examination and/or students not in a science-related program. This course is not transferrable as college-level general biology.

BIOL 117 HUMAN REPRODUCTION *Winter/Summer, 3 credit hours* *GER 2*

This course will discuss human reproduction from a biological point of view. Topics will include anatomy, reproductive physiology, genetics, conception, embryology, pregnancy and parturition, and disease states. Consideration will be given to medical, psychological, sociological, and legal and ethical perspectives. Three hours lecture per week.

BIOL 150 COLLEGE BIOLOGY I *Fall, 4 credit hours* *GER 2*

An introduction to the fundamental biological concepts common to plants, animals, and microorganisms. Topics include the chemical and molecular basis of life, metabolism, cell biology, cellular reproduction, Mendelian and molecular genetics, gene regulation, DNA technology, and evolution. The laboratory includes the study of cells, osmosis, enzymes, cellular respiration, genetics, molecular techniques, and the dissection of a representative mammal. Three hours lecture, three hours laboratory per week. Prerequisite: New York State Regents Biology examination grade of 75 or above or Introduction to Biology (BIOL 101); and HS chemistry or Introduction to Chemistry (CHEM 101/100) or Investigative Chemistry (CHEM 107/108); or permission of instructor.

BIOL 155 COLLEGE BIOLOGY II *Spring, 4 credit hours*

This course consists of the study of the evolutionary history of biological diversity, plant form and function, animal development, and aspects of animal form and function including the immune system, nervous system, homeostasis and chemical signals. The laboratory includes structural and functional studies of representative plants and animals, bacterial transformation, photosynthesis, plant growth and development, animal tissues, and population dynamics. Three hours lecture, three hours laboratory per week. Prerequisite: College Biology I (BIOL 150) or permission of instructor.

BIOL 207 HUMAN ANATOMY *Spring, 4 credit hours*

This course is a detailed study of the human body with the emphasis on structure and general function. Included topics are cells, tissues, skeletal, muscular, digestive, circulatory, respiratory, reproductive, urinary, nervous, endocrine systems and sense organs. The laboratory includes study of cells, tissues, organ systems, and dissection of a representative mammal. The course is most suitable for students in health-related or biology curriculums requiring in-depth knowledge of the human body. Three hours lecture, three hours laboratory per week. Prerequisites: New York State Regents Biology examination score of 75 or above or Introduction to Biology (BIOL 101) or College Biology I (BIOL 150) or permission of instructor.

BIOL 209 MICROBIOLOGY *Fall/Spring, 4 credit hours* *GER 2*

A study of the basic characteristics of microbes, with an emphasis on disease causing organisms. Includes morphology, growth, physiology, and control. Laboratory techniques include microscopy, staining, aseptic techniques, culture media, isolation, and identification of microbes. Three hours lecture, two hours laboratory per week. Prerequisite: Introduction to Biology (BIOL 101) or College Biology I (BIOL 150) or Human Anatomy & Physiology I (BIOL 217) or permission of instructor.

BIOL 217 HUMAN ANATOMY & PHYSIOLOGY I *Fall/Spring, 4 credit hours* *GER 2*

This course is the first course in a sequence which studies the anatomy and physiology of the human body in detail. Topics covered in this first semester course include an introduction to the basic plan and organization of the body, basic biochemistry, basic cell structure and cell physiology and the anatomy and physiology of the integumentary, skeletal, muscular, and nervous systems. The laboratory sessions will explore detailed anatomy using models and specimens, and experimental physiological concepts. This course is appropriate for students in the Nursing, Physical Therapist Assistant, Dental Hygiene and other health-related fields that require a two-semester Anatomy and Physiology sequence.

Course Descriptions: Biology, Business/Management

Three hours lecture, three hours laboratory per week. Prerequisites: High School Biology Regents score of 75 or above or Introduction to Biology (BIOL 101); and High School Chemistry Regents score of 65 or above or Introduction to Chemistry (CHEM 101/100) or Investigative Chemistry (CHEM 107/108); or permission of instructor.

BIOL 218 **HUMAN ANATOMY & PHYSIOLOGY II** *Fall/Spring, 4 credit hours*

This is the second in a sequence of two courses that studies the detailed anatomy and physiology of the human body. Topics include the anatomy and physiology of the endocrine, cardiovascular, lymphatic, respiratory, digestive, urinary, and reproductive systems. May also cover the immune system, metabolism, fluid-electrolyte-acid-base balance, and pregnancy and development. The laboratory will include a dissection of the cat. Three hours lecture, three hours lab per week. Prerequisite: Anatomy & Physiology I (BIOL 217) or permission of instructor.

BIOL 310 **THE GENOME** *Winter/Spring/Summer, 3 credit hours GER 2*

This course covers the fundamental concepts of molecular genetics and heredity, as well as mutations, the genetics of sex and gender, the human genome, complex traits, genetic testing, gene therapy, and the near future of human genetics. Besides providing a basis for understanding the current state of human genetic knowledge, future discoveries, and novel applications, a major focus of the course is developing the sophistication necessary to sort out myths and misconceptions about human heredity. Three hours lecture per week. Prerequisites: College Biology I (BIOL 150) or Human Anatomy & Physiology I (BIOL 217) and junior level status, or permission of instructor.

BIOL 325 **BIOLOGY IN SOCIETY** *Fall/Winter/Spring/Summer, 3 credit hours GER 2*

This course is designed to develop critical thinking concerning the growing presence of biology in society. Students apply biological principles and the scientific method to problems and decisions confronting society. Students use and expand upon their basic biological knowledge of DNA, molecular biology and physiology to discuss the importance and ethical impact of the use of biology in society. General topics include DNA technology, stem cells, GMOs, and medical and forensic applications. Specific topics discussed may vary from one semester to the next as new issues or developments warrant. The central goal of the course is to have students leave as highly informed citizens with a greater understanding of the science behind current biological applications. Three hours lecture per week. Prerequisites: A grade of C or higher for one of the following courses or its equivalent: Introduction to Biology (BIOL 101), College Biology I (BIOL 150) or Human Anatomy and Physiology I or II (BIOL 217/218).

BIOL 335 **PATHOPHYSIOLOGY** *Fall/Winter/Spring/Summer, 3 credit hours GER 2*

This course focuses on the central concepts of cellular and tissue pathophysiology. A systematic survey is undertaken of genetic diseases, cancer, and the diseases of the immune, nervous, endocrine, hematologic, cardiovascular, lymphatic, pulmonary, renal, reproductive, digestive, musculoskeletal and integumentary systems. The etiology, pathophysiology, and clinical manifestations of diseases are discussed. Prerequisites: Microbiology (BIOL 209), and Human Anatomy and Physiology II (BIOL 218) or Animal Anatomy and Physiology (VSCT 144).

BIOL 291-295, 391-395, OR 491-495 **SPECIAL TOPICS IN BIOLOGY** *Fall/Spring, 1-4 credit hours*

Special Topics in Biology will generally include topics of current interest or topics not covered in courses currently offered by the Department or in combinations not currently available.

BSAD 100 **INTRODUCTION TO BUSINESS** *Fall and Spring, 3 credit hours*

This course is a survey of business, introducing the major operations of a business, including management, production, marketing, finance, and human resources management. The course also examines the economic, social, and political and global environment of business. This course will expose students to speakers from varying business disciplines throughout the semester. Three hours lecture per week.

BSAD 111 **INTRODUCTION TO PERSONAL FINANCE** *Fall, 3 credit hours*

This course is designed for freshmen and sophomore students and represents those standards of learning that are essential and necessary for all students. It helps the students to learn about decision making and personal financial goals, income and careers (the money you earn), savings, investing, and retirement planning (the money you keep), principles of money management (the money you spend). Three hours lecture per week.

BSAD 120 **PRINCIPLES OF BANKING** *Fall, 3 credit hours*

This course is an in depth introduction to the diversified services offered by the banking industry today, especially banking role in money creation and In the distribution of funds. Attention is paid to banking history, currency, deposits, negotiable instruments, loans, mortgages, security, and fraud. Three hours lecture per week.

BSAD 200 **BUSINESS COMMUNICATIONS** *Fall and Spring, 3 credit hours*

This course is designed to help develop strong oral and written communication skills. The student will be given opportunities to practice writing and editing professional correspondence. Additionally, the student will compose and deliver oral presentations. Assignments will include the use of inductive and deductive approaches to conveying a variety of messages and applying the rules for proper grammar and punctuation. Three hours lecture per week. Writing intensive course. Prerequisites: Composition & the Spoken Word (ENGL 101), keyboarding skill, and knowledge of Word, or permission of instructor.

BSAD 201 **BUSINESS LAW I** *Fall and Spring, 3 credit hours*

Text and case study of the American court system as well as the origin, nature and classification of law with emphasis on general contract specific law and the impact of negligence, torts and criminal law on business. Three hours lecture per week.

BSAD 202 **BUSINESS LAW II** *Fall and Spring, 3 credit hours*

Continuation of Business Law I. Areas of study includes bankruptcy and reorganization, labor law, administrative law, bailment and agency. hours lecture per week. Prerequisite: Business Law I (BSAD 201) or permission of instructor.

BSAD 203 **MARKETING** *Fall and Spring, 3 credit hours*

This course provides students with an introduction to marketing as a functional area of business. Students build an understanding of the marketing mix (price, product, promotion, and placement) and its role in contributing to successful business operations. Students explore the impact of legal, political, social, ethical, technological, economic, and competitive factors on marketing activities. Three lecture hours per week. Prerequisite: Foundations of Financial Accounting (AACT 101), or Introduction to Business (BSAD 100) or Introduction to Health Care Management (HSMB 101), or permission of instructor.

BSAD 204 **APPLIED BUSINESS STATISTICS** *Fall, 3 credit hours*

In this course, the students are introduced to the subject of business statistics to include the need for quantitative analysis in business, the basic procedures in problem solving, and the sources and types of data used by business firms using business application software. Basic probability concepts and normal probability distribution are used by the student to solve real world business problems, which involve business applications. Prerequisite(s): MATH 111/ MATH 121, AND CITA 110, AND ACCT 101/ ECON 103; OR permission of instructor.

Course Descriptions: Business/Management

BSAD 206

INTRODUCTION TO THE HOSPITALITY MANAGEMENT

Fall or Spring, 3 credit hours

This course introduces students to the hospitality industry, providing a general overview of trends and issues in key industry segments such as lodging, foodservice, tourism, recreation, and attractions, and MEEC (meetings, events, exhibitions, and conventions). The course also examines career and educational opportunities in the hospitality industry and provides a foundation for higher-level hospitality courses.

BSAD 215

SMALL BUSINESS MANAGEMENT

Spring, Fall, 3 credit hours

This course will examine the nature of small business and the people who are successful in starting them. Topics will include the requirements and steps of conducting a comprehensive pre-business feasibility study, the types of decisions faced by managers of small firms, and the application of business disciplines to these situations. The student will be required to formulate their own business plan. A writing intensive course. Three hours lecture per week. Prerequisite: Composition & the Spoken Word (ENGL 101), or permission of instructor.

BSAD 220

PRINCIPLES OF RETAILING

Fall, 3 credit hours

This course represents a pragmatic approach to the study of retailing. Students identify best practices in retailing by examining case studies of real-world retail businesses. Students explore retail management alternatives relating to buying, pricing, sales promotion, customer service, store design, and staffing. Three hours lecture per week. Prerequisites: 15 credits earned; or permission of instructor.

BSAD 222

PRINCIPLES OF SELLING

Fall, 3 credit hours

This course focuses on the personal selling process and is designed to benefit students across multiple disciplines, especially students wishing to develop a competency in sales. Students focus on the role of consumer behavior and effective communication as applicable to personal selling. Students identify and apply selling principles such as persuasive communication, negotiating, prospecting, preparing and delivering sales presentations, overcoming objections, and closing the sale. Three hours lecture per week.

BSAD 235

BUSINESS AND ACCOUNTING FIELD EXPERIENCE

Fall/Spring, 3 credit hours

This internship is designed as an elective course for students on a space-available basis who would like to obtain hands-on experience working with entrepreneurs and small business owners. The accounting portion of the internship is an academic program which integrates classroom work and prac-

tical experience with businesses and nonprofit organizations. The internship will be tailored to the Individual student's career interests and the needs of the supervisors and supervising organization. Prerequisite: Foundations of Managerial Accounting (ACCT 102) or permission of the instructor.

BSAD 241

INVESTMENT AND TRADING

Spring, 3 credit hours

This course is designed for students interested in securities markets. This course will provide an opportunity for students to blend the theory of investments with the practical demands of investment management. The course objectives include an understanding of the process of establishing a portfolio strategy with a real portfolio, gaining knowledge of the mechanics of trading, principles of equity valuation and technical analysis. Students actively manage a portfolio throughout the semester. Prerequisites: Foundation of Financial Accounting (ACCT 101), or Instructor's Permission.

BSAD 301

PRINCIPLES OF MANAGEMENT

Fall and Spring, 3 credit hours

This course applies key management concepts to all organizations; domestic and international, profit and non-profit, manufacturing and service, brick and mortar and virtual. It provides direction to the management philosophy, realities and imperatives for efficient and effective decision making, planning, organizing, leading, and controlling used for superior organizational performance. It equips students with skills and tools needed to contend the challenges encountered in domestic and/or global environment of the 21st century and the implication for IT. It allows students to transfer this knowledge to practice. Prerequisites: Introduction to Business (BSAD 100) or Introduction to Health Care Management (HSMB 101) or Introduction to Emergency Management and Disaster (EADM 201) or Business Law I (BSAD 201) or Business Communications (BSAD 200) and minimum 30 credit hours with 2.0 GPA or permission of instructor.

BSAD 304

BUSINESS FORECASTING AND APPLICATIONS

Spring, 3 credit hours

The objective of this course is to introduce various statistical forecasting techniques and their applications in business. Topics such as statistical inference and hypothesis testing, basic regression analysis, and forecasting model building are reviewed. Accounting, finance and economics data are used to show illustrate how these techniques are used to make real world decisions. Prerequisites: Small Business Statistics (BSAD 204) grade C or better.

BSAD 305

PUBLIC BUDGETING & FISCAL MANAGEMENT

Fall, 3 credit hours

This course exposes students to the technical, political, and administrative elements of the fed-

eral, state, and local budgeting process. Topics will include budget formulation, execution, evaluation, and the theoretical basis for decision making that is integral to that process. Three hours lecture per week. Prerequisites: Principles of Macroeconomics (ECON 101) or Principles of Microeconomics (ECON 103); Composition & the Spoken Word (ENGL 101); College Algebra (MATH 121), or Statistics (MATH 141); or permission of instructor.

BSAD 306

FOOD AND BEVERAGE MANAGEMENT

Spring, 3 credit hours

This course discusses the roles and responsibilities of food and beverage management in the hospitality industry. Emphasis is placed on restaurant and bar operations in the hospitality industry including resort, hotel and conference activities. The receiving process and storage of food and beverages are emphasized, along with compliance of federal regulations regarding food and beverage operations. Sustainability in food and beverage management are addressed. Three hours lecture per week. Prerequisites: Intro to Business (BSAD 100) AND Foundations of Financial Accounting (ACCT 101) OR Survey of Accounting (ACCT 104); or permission of instructor.

BSAD 310

HUMAN RESOURCE MANAGEMENT

Fall/Spring, 3 credit hours

This course provides a foundation for the study of human capital management. Topics include job analysis and design, recruiting, training, motivating employees, performance appraisals, current doctrine on employee's rights, responsibilities, and compensation issues. Three lecture hours per week. Prerequisites: Introduction to Business (BSAD 100) or Business Law I (BSAD 201) or Fundamentals of Emergency and Disaster Management (EADM 201) or permission of instructor.

BSAD 319

PROFESSIONAL ETHICS

Fall/Spring, 3 credit hours

This course acquaints students with the major frameworks for ethical decision making in the professions based on Kantian, Utilitarian and Aristotelian ethics and principles: of consequence, liberty, opportunity, need, and justice. The course examines ethical questions that can arise in professional practice, the relationship between professionals and clients, as well as, the connection between ordinary and professional morality. Students use analyze and synthesize ethical theories that affect thinking, policy formulation, and professional conduct. A writing intensive course. Three hours lecture per week. Prerequisites: Composition & the Spoken Word (ENGL 101) and junior level status, or permission of instructor.

BSAD 322

ADVERTISING AND PROMOTION

Spring, 3 credit hours

Students explore the fundamentals of advertising and promotion and apply this knowledge in creating

Course Descriptions: Business/Management

an advertising plan and integrated brand promotion (IBP) strategy for a real world product. In addition to traditional advertising media, special attention is given to progressive advertising media, such as: the Internet, social media, mobile marketing, and other forms of digital marketing. The social and economic role of advertising and promotion is explored in relationship to such established disciplines as psychology and sociology. Two lecture hours and two hours recitation per week. Prerequisites: Marketing (BSAD 203), or Introduction to Media Studies (GMMD 101) and Introduction to Design (GMMD 102); and 45 credits earned; or permission of the instructor.

BSAD 325 **CONSUMER BEHAVIOR** *Fall, 3 credit hours*

Students explore consumer behavior and its internal and external influencers. Emphasis is placed on the consumer decision making process. Consumer behavior is analyzed as a key component in developing effective product design, positioning, and promotional strategies. Students also examine the role of consumer lifestyle data in segmenting the market into target markets. Three hours lecture per week. Prerequisites: Marketing (BSAD 203) and 45 credit hours, or permission of instructor.

BSAD 330 **SALES FORCE MANAGEMENT** *Spring, 3 credit hours*

Students explore the principles of sales force management. The course is designed to benefit students across multiple disciplines, especially students planning to pursue a career in sales. Emphasis is placed on the following principles of sales force management: formulating and evaluating sales strategy, recruitment, training, motivation, performance evaluation, and sales force structure. Three hours lecture per week. Prerequisite: Marketing (BSAD 203) and 45 credits earned, or permission of the instructor.

BSAD 335 **ADVANCED BUSINESS** **AND ACCOUNTING FIELD EXPERIENCE** *Fall and Spring, 3 credit hours*

This advanced business internship program offers hands-on experience working with small business entrepreneurs in a confidential and professional environment. Students have the opportunity to apply their educational, organizational and time management skills in solving real life business issues. Prerequisite: Completion of 45 credits and permission of instructor.

BSAD 340 **MANAGEMENT COMMUNICATIONS** *Spring and Fall 3 credit hours*

This course introduces students to the foundations of effective management communication. It focuses on communicating strategically and persuasively in a professional environment. Skills such as advocacy, framing issues clearly and strategically, preparing a team for communicating in

a competitive environment, facilitating meetings, and adapting arguments to audiences' needs are developed. A writing intensive course. Three hours lecture per week. Prerequisites: Composition & the Spoken Word (ENGL 101) and junior level status or the permission of the instructor.

BSAD 345 **TECHNOLOGICAL INNOVATIONS AND** **ENTREPRENEURSHIP** *Fall/Spring, 3 credits*

Technology entrepreneurship is a spirited approach to business leadership that involves identifying high-potential, technology-intensive commercial opportunities, gathering and analyzing resources such as talent and capital, and managing rapid growth and significant risks using principled decision-making skills. It is a recent global phenomenon that has driven vital changes in society by empowering individuals to seek opportunity in technological and business solutions when presented with what others see as insurmountable problems. This course will introduce the fundamentals of technology entrepreneurship. It is aimed at guiding students who may be starting their own businesses in the future or working for a high-growth company. Three hours lecture per week. Prerequisites: Principles of Macroeconomics (ECON 101), Introduction to Finance (FSMA 210) and Introduction to Information Technology (CITA 110) or permission of instructor.

BSAD 355 **MANAGEMENT OF TECHNOLOGY** *Fall and Spring, 3 credit hours*

In this course students explore strategic management of technology, patterns of technological change, technological transitions and technological innovations within organizations. The conceptual framework of the course is an evolutionary process perspective on technology management. Students examine the scope of technology management in relation to: design, production, finance, marketing, accounting, sales, distribution and human relations. Three hours lecture per week. Prerequisites: 45 credit hours or permission of the instructor.

BSAD/SOET 361 **PROJECT MANAGEMENT** *Fall, 3 credit hours*

This course is an introduction to projects and project management as it pertains to industry. Students will be introduced to principles of project selection, project planning and scheduling, duties of a project manager, project organization, implementation and termination. Three lecture hours per week. Prerequisites: Junior standing or permission from instructor.

BSAD 365 **FINANCIAL STATEMENT ANALYSIS** *Fall/Spring, 3 credit hours*

This course explores both the underlying theory and practical applications of financial reporting and analysis. Students will expand their existing knowledge of financial statement preparation developed

from their accounting coursework extending their critical thinking acumen into forecasting and various valuation models. Within this course an emphasis of the importance of using financial statements as a source of information to evaluate historical and future economic performance is the overarching learning objective. Discussion of the convergence of Generally Accepted Accounting Principles and International Financial Reporting Standards occur when appropriate. Three hours lecture per week. Prerequisites: Foundations of Managerial Accounting (ACCT 102) or Survey of Accounting (ACCT 104); Statistics (MATH 141) and junior level standing, or permission of instructor.

BSAD/SOET 370 **ENGINEERING ECONOMICS** *Fall or Spring, 3 credit hours*

This course emphasizes the strong correlation between engineering design and manufacturing of products/systems and the economic issues they involve. The basic concepts of the time value of money and economic equivalence is applied throughout the course. Each engineering problem/project progressively incorporates different cash flows, the cost of funds, capital, operational and maintenance costs, salvage value, depreciation, amortization, and taxation. Students learn to apply different economic analysis methods- like present worth, annual-equivalent worth, rate-of-return, life-cycle cost, cost/benefit etc. - in evaluating the economic viability of a project, as well as the comparison of mutually exclusive alternatives. The course also introduces concepts of replacement decisions, capital-budgeting decisions, and project risk and uncertainty, and exposes students to specific issues of economic analysis of the private sector versus the public sector. Applications to a variety of engineering fields' actual cases are stressed throughout the course. Three lecture hours per week. Prerequisites: College Algebra (MATH 121), or Pre-Calculus Algebra and Trigonometry (MATH 123). Additionally, students must have at least junior status or permission of instructor.

BSAD 372 **ELECTRONIC COMMERCE** *Spring, 3 credit hours*

This course is designed to provide an overview of e-commerce models, applications, decisions, and issues. Major topics associated with e-commerce such as security, privacy, intellectual property rights, authentication, encryption, acceptable use policies, and legal liabilities are examined. In addition, e-commerce business and revenue models, startup strategies, the evolution of social commerce, and additional emerging technologies are explored. Three hours lecture per week. Prerequisites: Introduction to Information Technology (CITA 110) and Composition & the Spoken Word (ENGL 101), and junior level standing, or permission of instructor.

BSAD 373 **INTERNATIONAL BUSINESS** **MANAGEMENT** *Fall/Spring, 3 credit hours*

This course enhances the student's ability to

Course Descriptions: Business/Management

operate in a global market. This course ground the student in global marketing, strategy, human resource management. Students develop a strong understanding of international culture and ethical issues when taking a local business global. This course teaches students to use an organization's global resources and logistics to enable to organization's global strategy. Prerequisites: Composition & the Spoken Word (ENGL 101) and Principles of Macroeconomics (ECON 101) or permission of instructor.

BSAD 375 **LEADERSHIP AND CHANGE** *Fall and/or Spring, 3 credit hours*

This course will prepare the students with the theory, tools, and competency to harness modern leadership principles in a challenging organizational environment. In this course students will study leadership paradigms including the trait, skill, style, behavioral, situational, and contingency leadership models as well as power, leader-follower relations, ethics, and diversity. Students will acquire skills to revolutionize organizations, its environment, culture, and overcome organizational crisis. Three hours lecture per week. Prerequisites: Principles of Management (BSAD 301) or permission of instructor.

BSAD 400 **OPERATIONS/PRODUCTION** **MANAGEMENT** *Fall, Spring, 3 credits*

This course focuses on the study of modern theory and practice relating to the operations function in both manufacturing and service organizations. Topics include forecasting, materials and capacity planning and quality control. Case studies are used to examine and analyze the manufacturing and service environments in terms of operational planning, the use of teams and teamwork and decision making problems that confront management. Fundamentals of the analytical method are introduced to help solve problems in the design, operation and control of systems. Three hours of lecture per week. Prerequisites/Corequisites: Microeconomics (ECON 103), Principles of Management (BSAD 301), Foundations of Financial Accounting (ACCT 101) and Statistics (MATH 141) or permission of instructor.

BSAD 406 **CUMULATIVE EVALUATION - BBA IN** **MANAGEMENT** *Fall and Spring, 3 credit hours*

This course integrates the program material from the BBA in Management into a summative evaluation through company simulation software. Students incorporate knowledge of human resource management, operations management, managerial economics, professional ethics, business strategy, accounting and finance, and management of technology by running a virtual company. Three lecture hours per week. Prerequisite/corequisite: Completion of a minimum of 90 credit hours in the Bachelor Business Administration in Management Degree.

BSAD 407 **THE MEETING, EXPOSITIONS, EVENTS,** **AND CONVENTIONS (MEEC) INDUSTRY** *Fall or Spring, 3 credit hours*

This course presents the scope, components, development and future of the Meetings, Expositions, Events and Conventions (MEEC) industry. Industry structure, specific areas related to food service management, exhibitions and events operations, and the techniques and procedures required for producing successful and sustainable events will be covered. Pre-Requirement(s): Introduction to the Hospitality Management (BSAD 206), or permission of the instructor.

BSAD 410 **SENIOR PROJECT** *Fall/Spring, 6-12 credits*

Students will complete a senior research project specifically addressing issues facing the management environment today. Under the guidance of a faculty mentor, the student will submit a research proposal, conduct research, prepare a thesis style report, and present a defense to a thesis committee. Prerequisites: Senior status in the BBA in Management Program or permission of the instructor.

BSAD 411 **MARKETING RESEARCH** *Fall/Spring, 3 credit hours*

This course provides student with an understanding of the research methods used by marketing researchers to obtain information to guide marketing decisions. Students will develop an understanding of the theories and techniques of planning, conducting, analyzing and presenting market studies. Students will study different methodologies with emphasis on primary research including questionnaire design. Three lecture hours per week. Prerequisites: Marketing (BSAD 203) and Statistics (MATH 141), or permission of instructor.

BSAD 420 **APPLIED ORGANIZATIONAL** **MANAGEMENT** *Fall and Spring, 3 credit hours*

This course emphasizes individuals' and groups' behavior in organizations. The rationale for the existence of organizations is discussed with the strategic objectives of improving productivity, performance, effectiveness and efficiency to accomplish goals. Theories of human behavior in organizations will be examined. Additional topics covered will include group development, group decision making and problem solving, leadership roles, power and politics within organizations. Other important areas of analysis will be the norms and values of groups, group power influence, coalition formulation and organizational culture. Three hours lecture per week. Prerequisites: Introduction to Business (BSAD 100) and junior level status or permission of instructor.

BSAD 421/SOET 421 **SIX SIGMA AND LEAN MANUFACTURING** *Spring, 3 credit hours*

This course discusses the origin and implementa-

tion of six sigma processes into manufacturing. The course investigates both the management and leadership of successful continuous improvement projects. The course introduces the students to the DMAIC process and applies the DMAIC process to class projects. The course aids in student preparation toward a green belt in six sigma. Three hours lecture per week. Pre-requisites: Statistics (MATH 141), Principles of Management (BSAD 301), or Quality Improvement (MECH 350).

BSAD 425 **NEW PRODUCT MARKETING** *Fall, 3 credit hours*

This course requires students to integrate concepts from previous marketing courses to develop a comprehensive marketing strategy. Through market analysis students identify market opportunities for new product development and formulate an effective marketing strategy to move their product from concept to launch. The course culminates with a marketing strategy competition where each group is evaluated based on the content of their final report, project presentation, and feasibility of their marketing strategy. Student work on their project in groups modeled after a consulting group. Two lecture hours and two recitation hours per week. Prerequisites: Advertising and Promotion (BSAD 322) or Consumer Behavior (BSAD 325), and 60 credits earned; or permission of the instructor.

BSAD 430/SOET 430 **SYSTEMS ANALYSIS** *Fall and Spring, 3 credit hours*

This course will enable students to learn and apply the skills a systems analyst needs to improve organizational processes. It will allow them to see the viewpoints and necessary inputs of all the stakeholders of an information system. The students will focus on the assessment of the users' interaction with technology and business functions, and on the analysis of data flow and its conversion into information. A familiarity with MS Office (or similar product) is expected. Three lecture hours per week. Prerequisites(s): Junior/Senior status; GER math.

BSAD 449 **STRATEGIC POLICIES & ISSUES** *Fall and Spring, 3 credit hours*

This course will define the criteria for critical business decision making. Students will examine strategic issues in international and domestic organizations, use core concepts and analytical tools, and assess the impact of political, economic, and legal factors on business operations and strategies. Real case study of headline issues will be used to provide insights and focus attention on the special demands of competition, competitive advantage, and winning strategy execution. Three lecture hours per week. Prerequisite: Microeconomics (ECON 103), Introduction to Finance (FSMA 210), Principles of Management (BSAD 301), and Marketing (BSAD 203), and junior level status or permission of instructor.

Course Descriptions: Business/Management, Chemistry

BSAD 450 BUSINESS INTERNSHIP *Fall and Spring, 6-15 credits*

The Business Internship is an academic program which integrates classroom work and practical experience with cooperating businesses. It is a structured field experience in which an intern acquires and applies knowledge and skills, while working in a responsible role within a business environment. Internship assignments and activities may include, but limited to, information gathering, research, data analysis, planning, organization, implementation, evaluation, and other tasks and responsibilities deemed necessary. Forty hours per week per credit hour. Prerequisites: Senior status in the BBA in Management program and Grade Point Average of 3.0 or higher before the internship begins or permission of instructor in consultation with the student's advisor.

BSAD 291-295, 391-395, OR 491-495 SPECIAL TOPICS IN BUSINESS *Fall/Spring, 1-4 credit hours*

Special Topics in Business will generally include topics of current interest or topics not covered in courses currently offered by the Department or in combinations not currently available. Prerequisite: permission of the instructor.

CHEM 100 INTRODUCTION TO CHEMISTRY LABORATORY

Fall/Spring, 1 credit hour *GER 2*

This is a laboratory course to accompany CHEM 101. The activities and experiments in this course are hands-on applications of the concepts covered in CHEM 101. It is designed for those students who have had little or no chemistry laboratory experience. Students must enroll in both CHEM 101 and CHEM 100 simultaneously, unless they have previously passed one of the courses. Students must also pass both CHEM 101 and CHEM 100 to receive Natural Science General Education credit. Two hours laboratory per week. Corequisite: Introduction to Chemistry (CHEM 101), or permission of instructor. If a student withdraws from CHEM 101 prior to the last day to withdraw, withdrawing from this course is required.

CHEM 101 INTRODUCTION TO CHEMISTRY *Fall/Spring, 3 credit hours* *GER 2*

This is an overview of chemistry which will include atomic structure, English-metric unit conversions, chemical nomenclature, the mole concept, stoichiometry, chemical reactions, states of matter, thermodynamics, gas laws, modern atomic theory and acid-base theory. It is designed for those students who have little or no chemistry background. Students must enroll in both CHEM 101 and CHEM 100 simultaneously, unless they have previously passed one of the courses. Students must also pass both CHEM 101 and CHEM 100 to receive Natural Science General Education credit. Three hours lecture per week. Conditions: For students who did not pass the NYS Chemistry Regents exam (<65), or who did not take HS chemistry.

Prerequisite: Beginning Algebra (MATH 100) or high school equivalent. Corequisite: Introduction to Chemistry Laboratory (CHEM 100), or permission of instructor.

CHEM 107 INVESTIGATIVE CHEMISTRY *Spring, 3 credit hours*

GER 2

This is a basic introduction to chemistry designed to cover topics and methods used in forensic science. Topics covered include atomic structure, measurements and conversions, inorganic and organic nomenclature, the mole concept, chemical reactions and stoichiometry, solution chemistry, acid-base theory, physical behavior of gases, calorimetry, chemical kinetics, dynamic equilibrium, and nuclear chemistry. Also included is the chemistry of explosions, the nature of drug molecules and how they relate to addiction, and the use of DNA in analyzing evidence. It is designed for those students who have little or no chemistry background. Conditions: For students who did not pass the NYS Chemistry Regents exam (<65) or who did not take HS chemistry. Three hours lecture per week. Prerequisite: Beginning Algebra (MATH 100) or high school equivalent, or permission of instructor. Corequisite: Investigative Chemistry Lab (CHEM 108). A student cannot receive credit for both CHEM 101 and CHEM 107.

CHEM 108 INVESTIGATIVE CHEMISTRY LABORATORY

Spring, 1 credit hour *GER 2*

This course is a laboratory course to accompany Investigative Chemistry (CHEM 107). The course provides scientific laboratory experiences in chemistry relevant to forensic science. Each exercise involves the collection of data, manipulation of the collected data, and analysis of the data. Experiments include density of plastic material, chromatographic analysis of ink, types of chemical reactions, factors that affect the rate of chemical reactions, detection of common gases, spectroscopic analysis of analgesics, qualitative analysis of blood and urine, breathalyzer test, detection of blood, heat capacity of building materials, fingerprint development methods, and detection of gunshot residue. Two hours laboratory per week. Corequisite: Investigative Chemistry (CHEM 107), or permission of instructor. A student cannot receive credit for both CHEM 108 and CHEM 100. If a student withdraws from CHEM 107 prior to the last day to withdraw, withdrawing from this course is required.

CHEM 150 COLLEGE CHEMISTRY I *Fall, 4 credit hours*

GER 2

This is the first semester of a two-semester college level course in chemistry. Topics include atomic structure, the periodic table and its properties, moles, chemical reactions, stoichiometry, aqueous solutions, gas laws, gases in the atmosphere, thermochemistry, wave nature and quantum values of electrons, electron configuration and nuclear chemistry. Prerequisites: NYS Chemistry

Regents Exam of 65 or above OR Introduction to Chemistry (CHEM 101/100) OR Investigative Chemistry (CHEM 107/108), and Intermediate Algebra (MATH 106) or high school equivalent, or permission of instructor.

CHEM 155 COLLEGE CHEMISTRY II *Spring, 4 credit hours*

This is the second semester of a two semester college level course in chemistry. Topics include: bonding, intermolecular forces, solutions, chemical kinetics, chemical equilibrium, acids and bases, entropy and free energy concepts. Prerequisites: College Chemistry I (CHEM 150) or permission of instructor.

CHEM 301 ORGANIC CHEMISTRY I *Fall, 4 credit hours*

Organic Chemistry I the first semester of a two semester sequence of organic chemistry. The lecture portion of the course will include chemical bonding, acid/base theory, thermodynamics, kinetics, organic structure, isomerism, stereochemistry, nomenclature principles, and the chemistry of several organic chemical functional groups. The laboratory portion of the course will include methods of purification/separation of organic chemicals, chemical kinetics, instrumental analysis techniques, and several organic syntheses. Three hours lecture, three hours laboratory per week. Prerequisite: (CHEM 155)(College Chemistry) or permission of instructor.

CHEM 302 ORGANIC CHEMISTRY II *Spring, 4 credit hours*

This course is a continuation of Organic Chemistry I. The lecture portion of the course will include oxygen containing functional groups, aromaticity, benzene and its derivatives, carbanions, nitrogen containing functional groups, heterocyclics, and nuclear magnetic resonance spectroscopy, infrared (IR) spectroscopy, UV-Vis spectroscopy, and mass spectroscopy. The laboratory portion of the course will be comprised of organic syntheses and qualitative organic analysis. Three hours lecture, three hours laboratory per week. Prerequisite: (CHEM 301) (Organic Chemistry) or permission of instructor.

CHEM 430 BIOCHEMISTRY *Fall, 3 credit hours*

This course provides an introduction to the structure and function of biological macromolecules, bioenergetics, and transfer of genetic information. Emphasis will be on protein structure and function, enzyme catalysis, an overview of energy metabolism, and the maintenance and expression of genetic information. Three hours lecture per week. Prerequisite: Organic Chemistry II (CHEM 302) or permission of instructor.

Course Descriptions: Computer

CHEM 291-295, 391-395, OR 491-495

SPECIAL TOPICS IN CHEMISTRY

Fall/Spring, 1-4 credit hours

Special Topics in Chemistry will generally include topics of current interest or topics not covered in courses currently offered by the Department or in combinations not currently available.

CITA 100 COMPUTER FLUENCY

Fall/Spring, 3 credit hours

This course provides computing knowledge through the introduction of basic computing concepts by simulating a computer gaming environment and project based activities. The course is intended for students who do not meet the minimum academic requirements to enter either the Computer Information Systems or Information Technology majors but desire to pursue a major in one of those programs. Three hours lecture per week.

CITA 101 LIBRARY/INFORMATION LITERACY

Fall/Spring, 1 credit hour

This course will focus on the organization, use, and retrieval of information, both within and outside of the library. Students will gain an understanding of the characteristics of information and be able to locate and critically evaluate it. Instruction will focus on both print and electronic information resources. Two hours lecture per week for seven weeks.

CITA 103 INTRODUCTION TO WORLD WIDE WEB

Fall/Spring/Summer, 1 credit hour

This course will introduce students to the World Wide Web (WWW) and Microsoft Outlook. This course will offer instruction on how to use Internet Explorer and Microsoft Outlook for searching information on the Internet, send and receive e-mail, maintain a contact list, keep a calendar, and schedule meetings and events. Two hours lecture per week for seven weeks.

CITA 104 INTRODUCTION TO DATABASE

Fall/Spring/Summer, 1 credit hour

This course introduces the student to the fundamentals of database programs. Students will be exposed to the creation, maintenance and organizing of a database. The students will also create listings and reports. Two hours lecture per week for seven weeks. Prerequisite: Students are expected to possess a working familiarity with the Windows operating environment. A basic knowledge of word processing is helpful.

CITA 105 INTERMEDIATE DATABASE

Fall/Spring, 1 credit hour

This course is designed to increase the students' knowledge of database fundamentals using an industry standard database package as the instructional platform. The student will learn to do more advanced querying of the database, create and use

custom forms, create and use custom reports, use the briefcase wizard, create action queries and macro writing. Two hours lecture per week for seven weeks. Prerequisite: Introduction to Database (CITA 104) or permission of instructor.

CITA 106 INTRODUCTION TO WORD PROCESSING

Fall/Spring/Summer, 1 credit hour

This course is designed to help the student attain the necessary skills and knowledge needed for effective operation of word processing software and equipment. This course will introduce concepts of word processing equipment, input, output, storage and retrieval, distribution and software. Major emphasis will be put on hands-on experience. Two hours lecture per week for seven weeks.

CITA 107 INTERMEDIATE WORD PROCESSING

Fall/Spring, 1 credit hour

This course is designed to help the student attain advanced skills and knowledge needed for effective operation of word processing software and equipment. Major emphasis will be put on hands-on experience in learning how to design letterheads and newsletters, understanding the merging process, and creating tables. Two hours lecture per week for seven weeks. Prerequisite: Introduction to Word Processing (CITA 106) or permission of instructor.

CITA 108 INTRODUCTION TO SPREADSHEETS

Fall/Spring/Summer, 1 credit hour

A course designed to introduce the student to the fundamentals of spreadsheets using Microsoft Excel® as the instructional platform. Students will create worksheets with literal and numeric data. The numeric data will be constants and/or formulas. Students will also learn and use the relative and absolute cell reference system in formulas. Printing of spreadsheets creating line, bar, and pie graphs will also be included. Two hours lecture per week for seven weeks. Prerequisite: None. Knowledge of Windows would be beneficial.

CITA 109 INTERMEDIATE SPREADSHEETS

Fall/Spring, 1 credit hour

This course is designed to increase knowledge of spreadsheet fundamentals using an industry standard spreadsheet package as the instructional platform. The student will learn to work with lists, pivot tables, object linking and embedding, developing a complete worksheet application and macro writing. Two hours lecture per week for seven weeks. Prerequisite: Introduction to Spreadsheets (CITA 108) or permission of instructor.

CITA 110 INTRODUCTION TO INFORMATION TECHNOLOGY

Fall/Spring/Summer, 3 credit hours

This course is an introduction to information technology focusing on microcomputer applications

and application software. It includes word processing, spreadsheet, database, electronic presentation and an introduction to HTML. Personal computer terminology, hardware system components, operating systems, and current web applications are covered. Hands-on experience is utilized throughout. A student who completes CITA 110 may not receive credit for any of the following one-credit courses in a degree program: CITA 106 Introduction to Word Processing, CITA 108 Introduction to Spreadsheets, nor CITA 112 Introduction to Electronic Presentations. Successful completion of this course will fulfill the SUNY Canton Computer Competency graduation requirement. Two hours lecture, two hours laboratory per week.

CITA 111 WEB PAGE DEVELOPMENT

Fall/Spring, 2 credit hours

This course will introduce students to the development process of web pages. The student will learn how to create and edit text (HTML) with a web authoring tool. They will learn how to use a draw/graphics software program to create, edit and use various types of graphic images (.GIF & .JPEG) to help maintain the "surfer's" interest. The student will learn how to setup and maintain hyperlinks to various sites and within the original document. Also, the student will learn how to create and use tables, image maps, thumbnails and animated GIFs. Two hours lecture per week with occasional lab and coding projects. Prerequisite: Introduction to World Wide Web (CITA 103) or permission of instructor.

CITA 112 INTRODUCTION TO ELECTRONIC PRESENTATIONS

Fall/Spring, 1 credit hour

This course is designed to show the student how to use desktop presentation software to prepare professional-looking presentations, combining text, charts and graphics. The students will also learn how to create typical business charts using a spreadsheet and enhancing those charts with additional software. You will experiment with animation using a drawing program, and create a presentation using various types of charts and show it to the entire class. Two hours lecture per week for seven weeks.

CITA 152 COMPUTER LOGIC

Fall/Spring, 3 credit hours

This course provides a background in number systems, logic gates & logic circuit basics, programming concepts, relational and logical operators, and problem solving skills used in computing. It introduces students to programming concepts and program design through the study of a programming language with a reduced set of instructions. Three hours lecture per week. Prerequisite: Intermediate Algebra (MATH 106) or permission of instructor.

Course Descriptions: Computer

CITA 163 SURVEY OF INFORMATION TECHNOLOGY

Fall/Spring, 3 credit hours

An introductory survey of Information Technology (IT) and IT terminology. Emphasis is given to current and emerging technologies. Topics include: computer system components, communications and networks including the Internet, basic concepts in programming languages, information system development, IT impact on society, security, privacy, and ethics. Three hours lecture per week.

CITA 170 COMPUTER CONCEPTS AND OPERATING SYSTEMS

Fall/Spring, 3 credit hours

A study of the terminology and concepts associated with computer systems hardware and software. Topics will include: system hardware components, memory organization and management, operating systems, troubleshooting fundamentals, hardware security and software security etc. Corequisite: Computer Concepts and Operating Systems Lab (CITA 175). Three hours lecture per week.

CITA 171 OPERATING SYSTEM USE AND ADMINISTRATION

Fall/Spring, 3 credit hours

This is a project intensive course covering current operating systems. The projects in this course are designed to give students an overview of operating systems, and encompass the major aspects of operating systems. This course may be used as a first step for students wishing to obtain industrial certification for current operating systems. Three hours lecture per week in a computer classroom. Corequisite: Computer Concepts and Operating Systems (CITA 170); or permission of instructor.

CITA 175 COMPUTER CONCEPTS AND OPERATING SYSTEMS LAB

Fall/Spring, 1 credit hour

This laboratory course is to accompany the lectures of CITA 170 Computer Concepts and Operating Systems course. Students will disassemble and reassemble PCs, become familiar with hardware components, learn to collect information about the computer system, install and configure system software, and test and troubleshoot the system to apply the various concepts covered in the course. Corequisite: Computer Concepts and Operating Systems (CITA 170). Two hour laboratory per week.

CITA 180 INTRODUCTION TO PROGRAMMING

Fall/Spring, 4 credit hours

This course develops methodologies and techniques for program creation and implementation. Writing high-quality, internally-documented, well-structured programs utilizing appropriate data structures is emphasized. Although the primary language for demonstrating programming theory is C, the various techniques will also be presented

using several different languages to show the commonality of the theories. Four hours lecture per week. Prerequisite: Computer Logic (CITA 152) or permission of instructor.

CITA 202 COMPUTER USER SUPPORT CONCEPTS AND SKILLS

Fall/Spring, 3 credit hours

People interested in becoming a computer support specialist or systems administrator must have strong problem-solving, analytical, and communication skills because troubleshooting and helping others are vital parts of the job. This course prepares the support specialist to maintain customer satisfaction by focusing on the needs of the customer, establishing credibility and trust, and by handling the most difficult customer scenarios. Emphasis is given to problem solving and troubleshooting, team dynamics, and interpersonal communication skills. It also provides a broad overview of the back-office operations of a help desk, and exposes the student to common industry tools and technologies used in providing exceptional customer support. A writing intensive course. Three hours lecture per week. Prerequisite: One computer related course or permission of instructor.

CITA 204 SYSTEMS ANALYSIS AND DESIGN

Fall/Spring, 3 credit hours

A course designed to guide the student through the evolution of a system, an analysis of the present flow of information; and the specifications, selection and implementation of information processing systems. The scope of a system development study will transcend mere knowledge of specific systems to include a study of the total management system. Two hours lecture, two hours laboratory per week. Prerequisites: Introduction to Programming (CITA 180), or Database Systems with Web Applications (CITA 215), or permission of instructor.

CITA 215 DATABASE SYSTEMS WITH WEB APPLICATIONS

Fall/Spring, 3 credit hours

Database management systems are studied in the context of a SQL-based product. Topics include: logical organization versus physical organization; relational, network and hierarchical models; normalization; installation and administration of a database server; and the creation of a web-based user-interface to manipulate tables. A term project is assigned. Two hours lecture, two hours laboratory per week. Prerequisite: Computer Logic (CITA 152) or permission of instructor.

CITA 220 DATA COMMUNICATIONS AND NETWORK TECHNOLOGY

Fall/Spring, 3 credit hours

A study of terminology, hardware and software associated with data communications and network technology. Areas of study will include design principles for human-computer dialogue, selection

criteria for communications devices, the technology of data transmission, techniques and message protocols for line control and error processing, local area networks, networking concepts, network topologies and access control, network performance, network services and design issues, and network media and access methods. Design, configuration, operation and maintenance questions are explored. Topics will include end-user perspective, network operating systems, cabling, hardware protocols, software and applications, design, and administration. This course should be taken concurrently with Data Communications and Network Technology Lab (CITA 221). Three hours of lecture per week. Prerequisites: Computer Concepts and Operating Systems (CITA 170), Operating System Use and Administration (CITA 171), Intermediate Algebra (MATH 106); Corequisite: Data Communications and Network Technology Lab (CITA 221); or permission of instructor.

CITA 221 DATA COMMUNICATIONS AND NETWORK TECHNOLOGY LAB

Fall/Spring, 1 credit hour

This laboratory course is to accompany the lectures of CITA 220 Data Communications and Network Technology course. Students will obtain hands-on experience on data communications and network technology throughout this course. Two hours laboratory per week. Prerequisites: Computer Concepts and Operating Systems (CITA 170), Operating System Fundamentals (CITA 171), Intermediate Algebra (MATH 106); Corequisite: Data Communications and Network Technology (CITA 220); or permission of instructor.

CITA/CYBR 250 INFORMATION SECURITY

Spring, 3 credit hours

An introduction to various technical and administrative aspects of Information Security and Assurance. Students are exposed to the spectrum of Information Security activities, methods, methodologies, and procedures. Coverage will include inspection and protection of information assets, detection of and reaction to threats to information assets, and examination of pre- and post-incident procedures, technical and managerial responses and an overview of Information Security planning and staffing functions. Three hours lecture per week. Prerequisite: Data Communications and Network Technology (CITA 220) or permission of instructor.

CITA 260 INTRODUCTION TO WIRELESS TECHNOLOGY

Spring, 3 credit hours

This course introduces various aspects of wireless technology including wireless networks, authentication, protocols, security, installation considerations, and standards. Projects to determine signal strengths from different antenna types and locations are assigned. Three hours lecture per week. Prerequisite/ Corequisite: Data Communications and Network Technology (CITA 220) or permission of instructor.

CITA/MINS 300
MANAGEMENT INFORMATION SYSTEMS
Fall/Spring, 3 credit hours

Students learn the concepts underlying the design, implementation, control, evaluation, and strategic use of modern, computer-based information systems for business data processing, office automation, information reporting, decision-making, and electronic commerce. The major emphasis of the course will be on the managerial and strategic aspects of information technology. Three hours lecture per week. Prerequisites: Introduction to Business and 45 semester hours or permission of instructor.

CITA/MINS 307
CUSTOMER RELATIONSHIP MANAGEMENT
Fall/Spring, 3 credit hours

This course provides information systems tools for building a customer-focused organization based on customer data and information. The course focuses on using current data to enhance relationships with customers, gathering data for future marketing endeavors and providing strategic guidance to the organization. The course provides insights into customer life-cycle management, customer lifetime value and measuring customer profitability. Three hours lecture per week. Prerequisites/Corequisites: Management Information Systems (CITA/MINS 300) or permission of instructor.

CITA 310
WEB SERVER ADMINISTRATION
Fall, 3 credit hours

A comprehensive survey of all aspects of Web server administration. Students gain hands-on experience by actually installing and administering their own web servers in a lab environment. Topics include: server installation and configuration, site planning, supporting dynamic content with CGI's and ASP's server maintenance and site security. Two hours lecture, two hours laboratory per week. Prerequisite: Data Communications and Network Technology (CITA 220) or permission of instructor.

CITA/MINS 315
DECISION SUPPORT SYSTEMS
Fall/Spring, 3 credit hours

This course provides insights into customer life-cycle management, customer lifetime value, and measuring customer profitability. This course enables the student to turn raw data into information to help an organization's managers make decisions. Students will develop decision making analytical models to provide organizational leaders with potential outcomes and their effects. Students will study the network's role in distributed systems, distributed systems development tools, and distributed systems issues. Students will apply data-mining techniques supporting knowledge-management decisions. Three hours lecture per week. Prerequisites/Corequisites: Management Information Systems (CITA/MINS 300) or permission of instructor.

CITA/MINS 320
INTRODUCTION TO DATA MINING
Spring, 3 credit hours

This course is designed to provide a systematic introduction to the basic principles, methods, and applications of data mining. Students will gain knowledge on how data mining techniques work, how they can be applied across different domains by using these methods in real world. Topics include but are not limited to: decision trees, association rule discovery, clustering, classification, neural networks, and nearest neighbor analysis. Three hours lecture per week. Prerequisite: Statistics (MATH 141) or permission of instructor.

CITA 325
BUSINESS INTELLIGENCE SUITE
Fall, 3 credit hours

This course exposes the students to a set of Microsoft Business Intelligence tools: Excel, SQL Server, Reporting Services, and PowerBI. These technologies provide skills on organization, strategy, performance, and competitiveness. Students examine how these tools are used in various fields. Three hours lecture per week. Pre-Requisite: Introduction to Information Technology (CITA 110), Database Systems with Web Applications (CITA 215), and Statistics (MATH 141).

CITA 330
EMERGING INFORMATION TECHNOLOGY APPLICATIONS
Spring, 3 credit hours

A comprehensive survey of emerging information technology applications. This course covers Web application development with XML, multimedia topics including graphics, audio, animation, video, presentations, desktop publishing, Web publishing, and input technologies including speech, and writing recognition. The course will also include additional continuously updated topics on most current state-of-the-art IT applications. Two hours lecture, two hours laboratory per week. Prerequisite: junior level status in a 4-year program or permission of instructor.

CITA 342
VISUAL PROGRAMMING AND DEVELOPMENT TOOLS
Fall, 3 credit hours

An introduction to the development of computer applications using rapid development tools such as Visual Basic or Visual C++. Emphasis will be on designing and managing graphical user interfaces, procedures, file management, debugging and testing. Two hours lecture and two hours lab per week. Prerequisite: Introduction to Programming (CITA 180) or Programming for Visual Arts and Design (GMMD 121).

CITA 352
ETHICAL HACKING AND PENETRATION TESTING
Spring, 3 credit hours

This course introduces students to a wide range of topics related to ethical hacking and penetration

testing. The course provides an in-depth understanding of how to effectively protect computer networks. The topics cover the tools and penetration testing methodologies used by ethical hackers and provide a thorough discussion of what and who an ethical hacker is and how important they are in protecting corporate and government data from cyber attacks. Three hours lecture per week. Prerequisites: Information Security (CITA 250) or permission of instructor.

CITA/JUST 365
DIGITAL FORENSIC ANALYSIS
Spring (every other year), 3 credit hours

This course is designed to prepare the student to complete forensic analysis of digital media and to understand the process and technical challenges of internet investigations. The course looks specifically at how to obtain evidence from digital media, how to process network messages and logs while preserving the evidentiary chain, and how to adhere to the legal requirements of the search and seizure of digital media and related equipment and information. Two hours lecture and two hours laboratory per week.

CITA 380
INTEGRATED PROGRAMMING FOR ENGINEERS
Spring, 3 credit hours

This course develops methodologies and techniques for program creation and implementation to solve mathematical and engineering problems. The students will be exposed to solving mathematical problems such as simultaneous equations and to performing engineering data acquisition from local sources as well as remote sources using high-level programming languages, scripting languages, and commercial off-the-shell products such as MATLAB. 2 hours of lecture/week, and 2 hours of recitation/week. Prerequisites: Data Communications and Network Technology (CITA 220), Engineering Strength of Materials (ENGS 203), Calculus III (MATH 263). (prior programming and networking knowledge preferred).

CITA 385
COBOL FOR BUSINESS AND ACCOUNTING
As required, 3 credit hours

This course provides students with the knowledge and experience to write and modify programs written in the COBOL programming language. Classroom exercises use real world scenarios so students will gain an understanding of where COBOL fits in the business world. One 2-hour lecture / one 2-hour lab each week. Prerequisite: CITA152 or permission of the instructor.

CITA 400
QUANTITATIVE APPROACHES TO MANAGEMENT
Spring, 3 credit hours

This is the study of the decision-making process and how quantitative methods are used to find solutions to business problems. Computer software tools will be used to analyze and process data. Op-

Course Descriptions: Computer, Civil Engineering

opportunities, problems and decisions that confront managers are analyzed and solutions are developed. Topics covered include, but are not limited to: cost-volume-profit analysis, forecasting, decision theory, linear programming, probability concepts and applications, inventory control, queuing theory, and game theory. Two hours lecture, two hours laboratory per week. Prerequisite: Statistics (Math 141) or permission of department.

CITA 420 PROGRAMMING FOR THE WEB *Fall, 3 credit hours*

This is a course on programming languages and techniques for Web development. Topics include server side programming, creating dynamic, database driven content, and developing Web based client/server database applications. Two hours lecture, two hours laboratory per week. Prerequisites: Web Server Administration (CITA 310) and Emerging Information Technology Applications (CITA 330), or permission of instructor.

CITA/MINS 425 ENTERPRISE RESOURCE PLANNING *Fall/Spring, 3 credit hours*

This course provides information systems tools to ensure a comprehensive resource planning system for all functions of businesses. The course will discuss the development and employment of enterprise resource planning for marketing, accounting, supply chain management, and human resources. Content will focus on practical applications of enterprise resource planning to ensure businesses get the greatest returns on information systems investment. Three hours lecture per week. Prerequisites/Corequisites: Management Information Systems (CITA/MINS 300) or permission of instructor.

CITA/MINS 430 DATA AND KNOWLEDGE MANAGEMENT *Fall/Spring, 3 credit hours*

This course focuses on the development of a knowledge-management system using an organization's tacit and explicit knowledge to execute its strategy. The course explores practices entailed in developing a knowledge infrastructure, managing the interaction of people and technology, valuing knowledge assets, leveraging teams, and transferring knowledge across organizations. Three lecture hours per week. Prerequisites/Corequisites: Management Information Systems (CITA/MINS 300) or permission of instructor.

CITA 440 NETWORK MANAGEMENT *Fall, 3 credit hours*

An advanced study of network management concepts, architectures, protocols, models, tools, systems, and applications. The course concentrates on the implementation of the Simple Network Management Protocol (SNMP). Students are also introduced to the use of the Desktop Management Interface (DMI) standard and Web-based Management. Three hours lecture per week. Prerequisite: Data Communications and Network Technology (CITA 220) or permission of instructor.

CITA 441 NETWORK MANAGEMENT LAB *Fall, 1 credit hour*

This laboratory course is to accompany the lectures of CITA 440 Network Management course. Students obtain hands-on experience on various network management tools, protocols, applications, and systems throughout this course. Two lab hours per week. Prerequisites: CITA 221 Data Communications and Network Technology Lab.

CITA 450 CYBERSECURITY BODY OF KNOWLEDGE *Spring, 3 credit hours*

This laboratory provides a comprehensive, trustworthy framework of practices for assuring cybersecurity. It helps future security professionals understand how the various roles and functions within cybersecurity practice can be combined and leveraged to secure an organization. The course content is derived from the Department of Homeland Security's Essential Body of Knowledge (EBK) for IT Security and the International Information System Security Certification Consortium's Common Body of Knowledge (CBK). Three hours lecture per week. Prerequisites: Information Security (CITA 250) or permission of instructor.

CITA 460 INFORMATION TECHNOLOGY AND NETWORKED ECONOMY *Fall, 3 credit hours*

This course examines the fundamental concepts and components of Information Technology from both managerial and professional end user perspective. The course will also explore the foundations of information systems to the demands of electronic commerce, connectivity, and networked economy. Three hours lecture per week. Prerequisite: senior status in a four-year program or permission of instructor.

CITA 479 INFORMATION TECHNOLOGY INTERNSHIP ORIENTATION *Fall/Spring, 1 credit hour*

This course is designed as the precursor to the Senior Culminating Experience for seniors in the Canino School of Engineering Technology BT programs. Seniors will meet on a weekly basis with faculty to discuss resume preparation, job interviewing, locating and establishing internships, and internship requirements. The course will include an overview of transitional steps going from student to employee. This course is a prerequisite to Canino School of Engineering Technology internships. One hour lecture per week. Prerequisites/Corequisites: All upper-level Canino School of Engineering Technology core courses. Students must have completed 6 semesters of a Bachelor of Technology program.

CITA 480 INTERNSHIP IN INFORMATION TECHNOLOGY *Spring, 6 to 12 credit hours*

Supervised field work in a selected business, industry, government or educational setting. Stu-

dents carry out a planned program of educational experiences under direct supervision of an owner, manager or supervisor of information technology in an organization. Each intern will be supervised by a member of the faculty on a regular basis. Written and oral reports of work experience activities will be required. Evaluation will be based on the quality of experiences gained from the internship. Approximately 300 hours of supervised activity of the 6 credit section and approximately 600 hours for the 12 credit section. Prerequisites: 9 credits of upper division CITA courses or permission of instructor.

CITA 481 SENIOR PROJECT IN INFORMATION TECHNOLOGY *Fall/Spring, 6 credit hours*

The course is an alternative course for students in Information Technology program who cannot find a 12-credit Internship position. The course requires extensive project development work to integrate the specialized skills and knowledge presented throughout other courses in the Information Technology curriculum. Under the guidance of a faculty mentor, the student prepares a project proposal, conducts literature review and project implementation, submits a project report, and makes an oral presentation. Approximately 225 project activity hours. Student needs to maintain the activity log and the faculty member is responsible for monitoring the student activity. Prerequisites: Information Technology Internship Orientation (CITA 479), and senior level status in Information Technology program, or permission of the program director.

CITA 291-295, 391-395, OR 491-495 SPECIAL TOPICS IN COMPUTING *Fall/Spring, 1-4 credit hours*

Special Topics in computers will generally include topics of current interest or topics not covered in courses currently offered by the department or in combinations not currently available. Prerequisite: permission of the instructor.

CIVL 242 FLUID MECHANICS LAB *Fall, 1 credit hour*

This laboratory course will provide experiential supplements to the Fluid Mechanics Lecture MECH 241; and experiential and computational activities which will demonstrate and investigate practical applications of fluid mechanics theories in the Civil Engineering realm. Two hours of lab per week. Co-requisite: MECH 241 (Fluid Mechanics).

CIVL 339 STRUCTURAL ANALYSIS LAB *Spring, 1 credit hour*

Students in this class will apply structural analysis software to perform a 3D frame structure analysis. Prerequisites: CONS 336 (Structural Analysis), or permission from the instructor.

Course Descriptions: Civil Engineering, Construction Management

CIVL 381 INTRODUCTION TO ARCHITECTURAL ENGINEERING

Fall, 3 credit hours

This course introduces the functional parts and systems that make up a building as well as their interactions in delivering required sustainable and resilient performance. There is a general overview of professional design services and documents of architecture and engineering disciplines that encompasses foundations, structures, building enclosures, heating and air conditioning, electrical, plumbing and fire safety systems. Concepts of building performance and aspects of pertinent building codes and standards are also discussed. This course incorporates basic principles of building science, green construction, and professional ethics. Prerequisites: CONS 272 (Strength of Materials for Technicians), or ENGS 203 (Engineering Strength of Materials), or permission from the instructor.

CIVL 384 ENGINEERING GEOLOGY

Spring, 4 credit hours

This course introduces engineers to earth processes and phenomena that impact the design, construction, and performance of engineered structures. Students learn to identify common earth materials, study the mechanical properties of rocks, and learn how earth materials respond to stress and strain resulting from natural forces and engineered structures. The impact of weather, erosion, landforms, structural deformation, earthquakes, and coastal processes on engineered structures are studied. The natural stability of slopes and mass movement hazards that impact the design and construction of structures are discussed. Additional topics include, but are not limited to: the development and composition of earth, geologic time, geologic mapping, an introduction to soil mechanics, and an introduction to surface water and groundwater principles. Laboratory exercises reinforce lecture material; and provide students with skills required by field engineers. Three hours of lecture per week, two hours of laboratory per week. Prerequisites: College Algebra (MATH 121); or Pre-Calculus (MATH 123); or Technical Math I (Math 135) or permission of instructor.

CIVL 480 CO-OP IN CIVIL AND ENVIRONMENTAL ENGINEERING TECHNOLOGY

Fall/Spring, 3 credit hours

This course provides students with an opportunity to receive program credit for real world learning experience through internship placement with a private/public organization in a field related to the student's degree, academic objectives, and career goals. This course requires students to have an active position that requires them to apply knowledge already obtained in their degree program and/or expand their knowledge and skills in the civil and/or environmental engineering technology industries. (40 hours of Internship) Prerequisites: 45 earned credits, consent of academic advisor, and approval by the Dean of CSOET.

CMGT 100 INTRODUCTION TO CONSTRUCTION MANAGEMENT

Fall, 3 credit hours

This course is an introduction to concepts/terminology in the construction industry, business aspects of running a construction project, communication methods in construction, career planning and options for a career in Construction Management, project management protocols, ethical issues in construction, job site conduct protocol and other attributes of working in the construction industry. In class exercises and assignments emphasize teamwork skills, time management, communication skills, development of properly formatted deliverables, and basic problem solving eg. unit conversions, area and volume calculations plus critical thinking skills. Prerequisites: Pre-Calculus (MATH 123) or higher, or permission of the instructor. Co-requisites: Pre-Calculus (MATH 123) or higher.

CMGT 200 PLANS AND SPECS

Spring, 3 credit hours

This course reviews the structure of building codes and the way that they are enforced. Students learn about the origin of codes and how they have changed over time, from early fire codes to today's green codes. It also provides more specific information on ICC's (International Code Council) family of codes and the consensus code development process used to create and update them. The construction related print reading portion of the course is designed to assist students in reading and understanding commercial prints. Students learn how to navigate efficiently through a complex set of commercial prints, interpret symbols, read schedules, learn abbreviations, and use plans to work on construction related projects for all of the various trades in a commercial building. (Two-hours of lecture per week and two-hours of lab per week.)

CMGT 300 CONSTRUCTION MANAGEMENT

Spring, 3 credit hours

Construction management fundamentals and their applications to the conduct of a construction business will be studied in this course. Topics include: estimating for the construction manager, CPM (critical path method) scheduling methods and expediting field operations, material management and jobsite laydown. Case studies are employed to assist students with understanding complex problems that arise during the management and administration of complex projects. Prerequisites: 45 credits or more, or permission of the instructor.

CMGT 301 SCHEDULING AND PLANNING

Fall, 4 credit hours

This course focuses on the logical progression through a construction project. Students learn about precedence diagramming, activity duration times based on productivity analysis, resource allocation, and network schedules. Computer scheduling

software is introduced and used during the weekly lab sessions to create, update and assign resources to projects. Students perform schedule compression and time - cost trade-off analysis to determine ways in which to accelerate and or cut project cost. Prerequisites: (CMGT 300) Construction Management or (ENGS 101) Intro to Engineering; and (CMGT 322) Commercial Estimating 1, or (CONS 222) Construction Estimating; or permission of the instructor. (Two-hours of lecture per week, and four-hours of lab per week.)

CMGT 304 LIGHT CONSTRUCTION

Fall, 3 credit hours

This course introduces the materials, construction and design considerations typically employed in residential and commercial buildings. Topics include: site considerations, foundations, wall systems, roof systems and finish systems. Materials include soils, concrete, masonry, wood and steel. The course is intended for students who did not take CONS 111 and CONS 112. Prerequisites: (ENGS 101) Intro to Engineering or (CMGT 100) Intro to Construction Management or (CMGT 300) Construction Management, or permission of the instructor.

CMGT 305 HEAVY CONSTRUCTION

Spring, 3 credit hours

This course introduces students to construction equipment operating characteristics, economics, and production rate estimation. Heavy construction methods and procedures associated with excavation, hauling equipment, aggregate production, and mass earthwork operations are reviewed. Prerequisites: (ENGS 101) Intro to Engineering or (CMGT 100) Intro to Construction Management or (CMGT 300) Construction Management, or permission of the instructor.

CMGT 308 RENEWABLE AND SUSTAINABLE MATERIALS

Spring, 3 credit hours

This course examines renewable and sustainable materials being used today in the construction industry. Students learn about the history and evolution of materials used in construction; and about the new sustainable materials available in today's market (types of materials, material application and selection, material performance, installation, service life, and maintenance). Students learn how to conduct cost-benefit analysis on different renewable and sustainable materials when deciding whether to use these materials in a project. Sourcing and planning for these materials is reviewed. Additional topics are: sustainable building design using green materials and methods and technologies for construction of sustainable transportation systems, including roads, bridges, tunnels, and hardscapes, as well as water, storm, and wastewater systems. Prerequisites: (CMGT 371) Statics and Strength of Materials for Construction or (CONS 272) Strength of Materials for Technicians or (ENGS 203) Engineering Strength of Materials; or permission of the instructor.

Course Descriptions: Civil/Construction

CMGT 314 SOILS IN CONSTRUCTION

Spring, 3 credit hours

Students learn about soil types, soil properties, soil classification, basic soil property tests, how to conduct site and subsurface investigations. Introductory concepts of hydrogeology are introduced, students learn to measure and calculate hydraulic conductivity, and site dewatering techniques are discussed. Other site work related topics include: the compaction control process, slope stability and erosion control, excavation safety and support systems, and roadway subgrade materials and testing; types of shallow foundations, deep foundations, and retaining structures and aspects of their construction as related to soil work. Prerequisites: (MATH 123) Pre-Calculus or higher; or permission of instructor. Co-requisites: (CMGT 315) Soils In Construction Laboratory.

CMGT 315 SOILS IN CONSTRUCTION LAB

Spring, 1 credit hours

Students learn about soil types, soil properties, soil classification, and basic soil property tests in applied laboratory sessions, soil testing methods and solve analytical problems. Students learn and practice basic reporting styles used in industry. If a student has obtained their ACI (American Concrete Institute) certifications in aggregate testing (Aggregate Testing Technician - Level 1 certification) and aggregate/soils base testing (Aggregate/Soils Base Testing Technical certification) and can provide formal certifications, they can receive content credit for this course. (Three hours of lab per week) Prerequisites: (CMGT 314) Soils In Construction, or permission of instructor. Co-requisites: (CMGT 314) Soils In Construction.

CMGT 322 COMMERCIAL ESTIMATING I

Spring, 3 credit hours

In this course students will be introduced to estimating the costs of construction with a focus primarily on quantity take-off from construction plans. Student are also introduced to unit pricing of labor and material, assemblies and square foot estimates, and computer-assisted estimating. Prerequisites: Have earned 45 credits, or permission of instructor. (One-hour of lecture per week and 4 hours of lab per week)

CMGT 323 COMMERCIAL ESTIMATING II

Fall, 3 credit hours

The student who is already familiar with estimating is challenged to perform more sophisticated work. Electronic Takeoff and Pricing software is employed extensively in the estimate of costs for complex commercial projects. In addition to material, labor and equipment, estimation of indirect costs are included. A large scale estimating project is required as part of this course. (One hour of lecture per week and 4 hours of lab per week) Prerequisites: (CMGT 322) Commercial Estimating I; or permission of instructor.

CMGT 380 CONSTRUCTION MATERIALS

Fall, 2 credit hours

This course examines properties, common applications and methods for properly selecting and utilizing the materials typically used in the constructed environment. The materials studied include aggregates, Portland cement concrete, masonry, and asphalt. Significant time will be given to aggregate testing and data analysis for use in concrete and concrete mix design. Prerequisites: 15 credits earned and (MATH123) Pre-Calculus or higher; or permission of instructor. Co-requisites: (CMGT 381) Construction Materials Laboratory.

CMGT 381 CONSTRUCTION MATERIALS LAB

Fall, 1 credit hours

This laboratory course develops awareness with and expertise in conducting standardized field and laboratory tests on common civil engineering materials. The materials studied include aggregates and Portland cement concrete. Several concrete mix designs will be prepared and tested for fresh and hardened concrete properties. Students learn to analyze and interpret laboratory test data. If a student has obtained their ACI (American Concrete Institute) certifications in concrete field testing (Concrete Field Testing Technician - Grade I certification) and concrete laboratory testing (Concrete Lab Testing Technician -Level 1 certification and Concrete Strength Testing Technician certification), can provide formal certifications, and can receive content credit for this course. Prerequisites: (CMGT 380) Construction Materials; or permission of instructor. Co-requisites: (CMGT 380) Construction Materials.

CMGT 389 CONSTRUCTION CONTRACTS AND LAW

Fall, 3 credit hours

Legal aspects associated with the conduct of a construction project are investigated in this course. Topics include: risk and liability to the owner and general contractor under various delivery methods, typical provisions of a contract, public-owner laws, assignment of responsibility for change orders, bonding and insurance, and the effect of unethical practices on the contract award process. Case studies are employed to illustrate concepts. Prerequisites: (CONS 274) Construction Management or (CMGT 300) Construction Management, and 45 credits or more; or permission of instructor.

CMGT 403 OPERATIONS MANAGEMENT

Spring, 3 credits

This course provides an introduction to operations management (OM) specific to a construction organization. This course aims to familiarize students with the major operational issues that confront construction managers including efficient planning of the work, productivity, materials management and quality issues. Case studies provide examples of successful OM practices and pitfalls of poor OM. Prerequisites: (CMGT 300) Construction Management or (CONS 274) Construction Management; and (CMGT 301) Scheduling and Planning, or permission of the instructor.

ment or (CONS 274) Construction Management; and (CMGT 301) Scheduling and Planning, or permission of the instructor.

CMGT 406 VALUE ENGINEERING

Fall, 3 credit hours

This course introduces students to value engineering (VE). Students learn the VE methodology, its role in the decision-making process, and application on construction projects. Students use VE tools in project-based decision making. Students also learn how to analyze projects and lower costs using the VE method. Prerequisites: (CMGT 300) Construction Management or (ENGS 101) Intro to Engineering; and (CMGT 322) Commercial Estimating I or (CONS 222) Construction Estimating, or permission of the instructor.

CMGT 410 CONSTRUCTION LAYOUT

Spring, 3 credit hours

Site layout is an integral part of all construction projects and can have a significant impact on time, money, and construction efficiency. Students learn how to apply their skills in surveying, print reading, and construction management to develop and manage a site layout for each phase of a construction project. Students learn how to lay out the location of structures and other features on the site, check dimensions of structures as they are built, document completed work, and verify that the project is progressing in accordance to the design plans and specifications. (Two hours of lecture per week and two hours of lab per week). Prerequisites: (CONS 203) Advanced Surveying, (CMGT 200) Building Codes and Commercial Print Reading, and (CMGT 300) Construction Management; or permission of the instructor.

CMGT 480 INTERNSHIP IN CONSTRUCTION MANAGEMENT

Fall/Spring, 3 credit hours

This course provides students with an opportunity to receive program credit for real world learning experience through internship placement with a private/public organization in a field related to the student's degree, academic objectives, and career goals. This course requires students to have an active position that requires them to apply knowledge already obtained in their degree program and/or expand their knowledge and skills in the construction industry. (40 hours of internship) Prerequisites: 45 earned credits, consent of academic advisor, and approval by the Dean of CSOET.

CONS 101 ELEMENTARY SURVEYING

Fall, 4 credit hours

Course consists of both lecture and laboratory periods. Lectures include the developmental history of the surveying profession, along with the underlying principles of basic theory and practice. Realistic exercises involving linear and angular measurements, leveling, field-book recording, construction

Course Descriptions: Civil/Construction

layout, and traversing are performed in the outside laboratory. Computation of errors, adjustments for instrument misalignment and weather are included in the laboratory exercises. Conversion of measurements and use of the Metric (S.I.) system is also included. Students have ample opportunity for hands-on training with the extensive variety of equipment utilized in the course. Field parties are of limited size and offer "one-on-one" instruction opportunity. Three hours lecture, three hours laboratory per week. Prerequisites/Corequisites: Technical Math (MATH 135), Pre-Calculus Algebra (MATH 123) or College Algebra (MATH 121), or higher or permission of instructor.

CONS 111 COMMERCIAL STRUCTURES *Spring, 3 credit hours*

The study of construction materials, practices, equipment, and terminology used in commercial construction. Lectures and laboratory periods develop theory and practice in excavation, foundation form work, masonry walls, concrete, erection of steel frame buildings, commercial wall and roof systems, interior and exterior wall finishes. Field trips to be arranged when practical. Two hours lecture, three hours laboratory per week.

CONS 112 WOOD STRUCTURES *Fall, 3 credit hours*

The study of construction materials, practices, equipment and terminology used in buildings requiring wood framing. Lectures and laboratory periods develop theory and practice in layout and assembly of wood framing of floors, walls, roofs and trusses, and siding materials. Construction of a 2-stall garage and/or small storage shed will serve as an application of wood framing and exterior finish fundamentals. Students will perform an individual research project with a written report. One or more field trips will be arranged. Two hours lecture, three hours laboratory per week.

CONS 132 CONSTRUCTION DRAFTING *Spring, 3 credit hours*

An introduction to the fundamental principles of engineering and architectural drafting and to the basic idea that all people involved in engineering/Architecture and/or construction will communicate with CADD drawings of some nature. The student will demonstrate a basic understanding of orthographic projection, perspective and isometric views, descriptive geometry, good CAD practices. A variety of construction prints will be utilized to create the ability to deal with all varieties of drawings commonly emanating from architectural engineering firms and those found on construction job sites. Throughout the course, CAD concepts are reinforced through the use of AutoCAD and software. One hour lecture, four hours laboratory per week.

CONS 151 BUILDING TRADES—BLUEPRINT READING AND DRAFTING *Fall, 2 credit hours*

Instruction includes understanding the fundamental concepts in freehand sketching and instrument drawing needed for communication in the construction industry. Orthographic projection, pictorials and perspective drawing techniques will be introduced. A variety of drawings will be studied in order to become familiar with information contained on them and how they are interpreted. CERTIFICATE/AAS ELECTIVE CREDIT ONLY. One hour lecture, two hours laboratory per week.

CONS 172 TECHNICAL STATICS *Fall/Spring, 3 credit hours*

Provides application of Newton's First and Third Laws of motion in the force analysis of statically determinate structures such as pinned connections, trusses, beams, frames, and cables. The determination of centroids and moment of inertia is also covered. The course requires extensive application of geometry, trigonometry and algebra. The course provides fundamentals that are used in strength of materials and structural analysis. Prerequisites: Pre-Calculus Algebra, College Algebra (MATH 121), College Physics I (PHYS 121), or more advanced MATH or PHYS may be substituted. 2 - one hour lectures, 1 - two hour recitation per week.

CONS 203 ADVANCED SURVEYING *Fall, 3 credit hours*

This course emphasizes fundamentals of field and office procedures used in the construction industry. Major topics covered are: traverse computations, coordinate geometry, intersections, topographic survey and mapping, area determinations by coordinates, horizontal and vertical control necessary for mapping and building layout, horizontal (circular) curves and vertical (parabolic) curves. The student uses modern surveying equipment in field sessions, including total stations, automatic levels and lasers, geographic positioning satellite receivers and integrated mapping and surveying software for data analysis and map compilation. One (1) hour lecture per week; One (3) hour field lab per week; One (2) hour computer session per week. Prerequisite: Elementary Surveying (CONS 101).

CONS 216 SOILS IN CONSTRUCTION *Spring, 4 credit hours*

Students learn about soil types, soil properties, soil classification, and basic soil property tests. Students learn how to conduct site and subsurface investigations. Introductory concepts of hydrogeology are introduced, students learn to measure and calculate hydraulic conductivity, and site dewatering techniques are discussed. Other site work related topics include: the compaction control process, slope stability and erosion control, excavation safety and support systems, and roadway subgrades materials and testing. Students learn about types of shallow foundations, deep foundations, and retain-

ing structures and aspects of their construction as related to soil work. The laboratory component of the course explores soil testing methods and analytical problems related to lecture topics. Students learn and practice basic reporting styles used in industry. This is a writing intensive course. Three hours lecture and three hours lab per week Prerequisite: College Algebra (MATH 121); or Pre-Calculus Algebra (MATH 123); or Technical Math I (MATH 135); and sophomore status, or permission of the instructor.

CONS 222 CONSTRUCTION ESTIMATING *Fall, 2 credit hours*

An introduction to estimating the costs of construction. Includes quantity take-off from construction plans, unit pricing of labor, material, and equipment, and extensions based on unit prices derived from industry accepted resources such as RS Means and Timberline. The CSI Master format is introduced as a method of approach and organization. One hour lecture, two hours laboratory per week. Prerequisites: Intermediate Algebra (MATH 106) or Technical Math 1 (MATH 135); and Computer Usage for Technicians (SOET 101), or Introduction to Engineering (ENGS 101); or Introduction to Spreadsheets (CITA 108); or permission of instructor.

CONS 226 BRIDGE BUILDING *Spring, 1 credit hour*

Students are challenged to an intercollegiate bridge building competition that includes design, fabrication, and construction. Participating students gain practical experience in structural design, fabrication processes, construction planning, organization, and teamwork. Students will essentially design and construct a 21-foot long steel bridge that is both light and strong, and capable of supporting 2,500 pounds. The class will use their bridge design to represent SUNY Canton's entry in the regional competition. Students meet for 45 hours per semester with classes scheduled according to the demands of the competition. Prerequisites: enrollment in a Canino School of Engineering Technology curriculum and permission of the instructor.

CONS 233 STRUCTURAL DRAFTING *Fall, 3 credit hours*

An introduction to the preparation of drawings typically used in the structural design industry. The greatest emphasis is on the creation of structural steel details. Detailing of timber and reinforced concrete structures will also be presented and performed. The lab work engages the student with "AutoCad Revit" for structures. Building Information Modeling (BIM) is introduced. Some structural design is required. One hour lecture, four hours laboratory per week. Prerequisites: Introduction to Computer Aided Drafting and Design (SOET 116) or equivalent introductory course in the use of CADD, and Strength of Materials for Engineering Technicians (CONS 272), or permission of instructor.

Course Descriptions: Civil/Construction

CONS 272 STRENGTH OF MATERIALS FOR TECHNICIANS

Fall/Spring, 3 credit hours

The concepts of stress and strain are introduced and, in combination with statics principles, are used in the analysis of structural elements. Material properties such as ultimate strength, yield strength, elastic modulus, shear strength, torsional strength, and compressive strength are investigated using physical testing. The process of selecting structural elements such as pins, bolts, tension members, compression members, beams and shafts based on strength and factor of safety is presented and practiced. 2 - one hour lectures and 1 - two hour recitation per week. Prerequisites: A grade of C or better in: Technical Statics (CONS 172), or Statics (ENGS 201), Calculus I (MATH 161).

CONS 274 CONSTRUCTION MANAGEMENT

Spring, 3 credit hours

Construction management fundamentals and their applications to the conduct of a construction business. The basics of estimating, scheduling methods and expediting field operation, along with construction contracts are studied. Three hours lecture per week.

CONS 280 CIVIL ENGINEERING MATERIALS

Fall, 3 credit hours

This course examines the important properties, common applications and methods for properly selecting the materials typically used in the constructed environment. The laboratory develops awareness with and expertise in conducting standardized field and laboratory testing on common civil engineering materials. The materials studied include aggregates, Portland cement concrete, masonry and asphalt. Two, one-hour lectures and one, 3-hour lab per week. Prerequisites: College Algebra (MATH 121), Pre-Calculus Algebra (MATH 123), Technical Math I (MATH 135) or permission of instructor.

CONS 304 REINFORCED CONCRETE DESIGN

Spring, 3 credit hours

In this course, the fundamentals of cast-in-place reinforced concrete design by the strength design method are introduced. Students design slabs, beams, girders, columns and footings in accordance with current version of American Concrete Institute Code 318. Computations are done by manual methods and spreadsheets. Students are introduced to design software. In the lab, students work through the complete design of a small multi-story commercial building. Two hours lecture, two hours recitation per. Prerequisites: Structural Analysis (CONS 336) and Civil Engineering Materials (CONS 280) or permission of instructor.

CONS 316 FOUNDATION DESIGN

Spring, 3 credit hours

Principles of soil mechanics are taught: stress distribution, consolidation and settlement, shear strength, and lateral earth pressure. Students apply concepts of soil mechanics to foundation design. Soil-supported foundations for buildings and structures are discussed, which include different foundation types, design methods, design considerations and criteria, and installation techniques. Students learn about shallow foundations, deep pile and drilled shaft foundations, retaining structures, and slope stability. Two hours lecture, two hours recitation per week. Prerequisites: Soils in Construction (CONS 216), and Strength of Materials (CONS 272), and Calculus I (MATH 161), or permission of the instructor.

CONS 322 HYDRAULICS

Spring, 4 credit hours

The basics of fluid mechanics and their application to civil engineering technology are considered. The course focuses on water as the fluid. Major topic areas covered are: fluid properties, buoyancy, hydrostatic pressure, resultant force and center of pressure on submerged surfaces, application of the continuity equation to flow in a closed conduit, pressure measurement, flow measurement and flow control in open channels, use of the rational method in determination of peak discharge and storm sewer design. Three hours lectures, 1- three-hour laboratory per week. Prerequisites: Technical Statics (CONS 172) or Statics (ENGS 201) or permission of instructor.

CONS 324 STRUCTURAL STEEL DESIGN

Fall, 3 credit hours

An introduction to the theory, analysis and design of the elements that comprise structural steel buildings. Instruction follows the specifications and selection techniques provided in the American Institute of Steel Construction (AISC) Manual of Steel Construction. Subject areas include determination of controlling load combinations, analysis and selection of tension members, analysis and selection of flexural members, analysis and selection of compression members, fastener strength and connection design and combined bending and axial stresses (beam-columns). Two hours lecture, two hours recitation per week. Prerequisites: Materials Testing (MECH 221), Structural Analysis (CONS 336), or permission of instructor.

CONS 336 STRUCTURAL ANALYSIS

Fall, 3 credit hours

The course analyzes statically determinate and indeterminate structures. Additional topics of influence lines, moving loads, member forces and stresses, deflections, flexibility and stiffness analyses are explored using computer applications. 2 – one hour lectures and 1 – two hour recitation per week. Prerequisites: C or better in Strength of Materi-

als for Technicians (CONS 272) or Engineering Strength of Materials (ENGS 203); and Calculus II (MATH 162).

CONS 338 ADVANCED MECHANICS OF MATERIALS

Spring, 3 credit hours

This course includes analysis of statically indeterminate structures and deflections using the principle of virtual work. Special topics in stress analysis such as internal loads due to temperature, torsion, unsymmetrical bending circumferential stresses, buckling and beams on an elastic foundation are included. The finite element method is introduced. Two - one hour lectures and One - two hour recitation. Prerequisites: Structural Analysis (CONS 336) or permission of instructor.

CONS 350 INTRODUCTION TO GEOGRAPHIC INFORMATION SYSTEMS

Spring, 3 credit hours

The course introduces students to GIS terminology, the concept of relational databases, spatial data models, topology, raster data and vector data. Data entry methods including quality control and metadata are discussed. The student is introduced to spatial analysis applications including terrain analysis, cartographic modeling and visualization. Students apply knowledge in the laboratory using GIS software. Two hours lecture, three hours laboratory per week. Prerequisites: Intermediate Spreadsheets (CITA 109); or Junior status; or permission of the instructor.

CONS 366 STRUCTURAL STEEL DETAILING

Fall, 3 credit hours

An acquaintance with the properties, dimensions, and characteristics of present day shapes and forms is achieved by making detail and erection drawings reflecting present day fabrication and erection procedures for structural steel. Mill practices, tolerances, and billings are considered. Proper drafting techniques are observed. Selection and detailing of beams, girders, columns, and connections is carried out. Drawing prints of columns and connections is carried out. Drawing prints are made for checking purposes from the pencil drawings. The AISC handbook is used extensively as a reference. One hour lecture, four hours laboratory per week. Prerequisites: Structural Steel Design (CONS 324), Computer Drafting (SOET 116), or permission of instructor.

CONS 368 BUILDING ELECTRICAL AND MECHANICAL SYSTEMS

Offered as needed, 3 credit hours

An introduction to the major components that comprise the electrical and mechanical (HVAC) systems in a commercial building. Students study and interpret construction plans associated with these systems. Water supply, waste, drain and vent calculations are performed. Students are required to perform heat and energy calculations. Issues

Course Descriptions: Civil/Construction

that impact building environmental health and indoor air quality are presented. Alternative energy approaches to heating, cooling and providing power to buildings are introduced. Three hours lecture per week. Prerequisites: College Algebra (MATH 121) or permission of instructor.

CONS 370 TIMBER DESIGN *Fall, 3 credit hours*

The dimensional features, structural properties and behavior under load of wooden structural members are presented. Students learn standard methods for the analysis and design of timber-framed structural elements including beams, joists, rafters, posts (columns), braces, gussets and fasteners. Load and Resistance Factor Design and Allowable Strength Design are employed. Use and selection of engineered lumber products such as glulams and laminated veneer lumber is included. Two hours lecture, four hours recitation per week. Prerequisites: Structural Analysis (CONS 336), or permission of instructor.

CONS 372 HIGHWAYS AND TRANSPORTATION *Spring, 3 credit hours*

This course covers the design of horizontal and vertical highway alignments in accordance with American Association of State Highway and Transportation Officials (AASHTO) requirements from survey data, topographic maps and traffic data. Analysis of alternate plans using benefit cost ratios based on road user costs and first costs are included. Setting of traffic light timing for optimum traffic flow and design of parking is introduced. Three hours lecture per week. Prerequisites: Advanced Surveying (CONS 203), Civil Engineering Materials (CONS 280), or permission of instructor.

CONS 375 STRUCTURAL ENGINEERING DESIGN *Spring, 3 credit hours*

This course is an introduction to the design of structural steel, reinforced concrete and wood. This course is taught on the basis of statically determinate structures. Students are introduced to the Load and Resistance Factor (LRFD) and Allowable Stress Design (ASD). Analysis and selection of tension members, columns and beams is incorporated. Two 1-hour lecture and one 2-hour recitation per week. Prerequisites: Civil Engineering Materials (CONS 280) and Strength of Materials for Technicians (CONS 272) or permission of instructor.

CONS 385 HYDROLOGY AND HYDROGEOLOGY *Fall, 4 credit hours*

This course includes the study of surface and groundwater systems, with an emphasis on civil and environmental engineering related topics. Surface water topics include: principles of hydrology, hydrologic cycle, surface water environments, surface water flow, flood hazard analysis, watershed management and river engineering, and drainage basins. Specific groundwater topics include: principles of

hydrogeology, aquifers, aquitards, groundwater flow regimes, well construction and testing, porosity and permeability of earth materials, and aquifer property testing and analysis. Laboratory and field exercises are used to introduce students to technologies and analytical methods used by industry to understand surface and groundwater systems. Three hours lecture, two hours laboratory per week. Prerequisites: Engineering Geology (CONS 285) or Civil Engineering Materials (CONS 280) or Soils in Construction (CONS 216); and Calculus I (MATH 161); or permission of the instructor.

CONS 386 WATER QUALITY *Fall, 4 credit hours*

Water is one of Earth's most valuable resources. The quality of water is essential to human health, the environment, and industrial/engineering use. This course provides students with the knowledge to determine the quality of water and how it is impacted by contaminants. Course content expands upon concepts of basic chemistry to study areas of aqueous chemistry that relate to water quality analysis. Specific topics include the physical, chemical, and biological characteristics of water and the significance and interpretations of water quality properties. The fate of contaminants in natural and engineered environments are studied. Environmental and engineered systems are modeled in order to study contaminant fate and reaction kinetics. Laboratory sessions use standard water quality testing practices that are currently used in industry. Three hours lecture, three hours laboratory per week. Prerequisites: Calculus I (MATH 161), College Chemistry I (CHEM 150), or permission of the instructor.

CONS 387 WATER AND WASTEWATER TREATMENT TECHNOLOGIES *Spring, 3 credit hours*

The treatment of water is necessary to achieve the required quality necessary for a desired end-use. End-use may include, but is not limited to, drinking water, medical use, and industrial use. The treatment of wastewater streams is necessary to achieve an effluent stream suitable for disposal or possible additional processing for reuse. This course explores different chemical and physical methods of treatment for water and wastewater streams. Course content expands upon concepts learned in basic chemistry courses. Specific topics include the physical, chemical, and biological treatment processes of water and wastewater streams. Students learn design concepts and system operations for water and wastewater treatment plants. There is also a discussion of related water and wastewater quality standards and regulations. Laboratory sessions demonstrate standard water and wastewater treatment practices that are currently used in industry. Two hours lecture, three hours laboratory per week. Prerequisites: College Chemistry I (CHEM 150) and Calculus I (MATH 161) or permission of the instructor.

CONS 432 CIVIL DRAFTING AND DESIGN *Fall/Spring, 3 credit hours*

This course covers the design of infrastructure for land development and the preparation of plans and specifications to construct it. Students design and prepare drawings for water supply, storm sewers, sanitary sewers, roads and site grading and drainage using CAD software. Two hours lecture, three hours laboratory per week. Prerequisites: Hydraulics (CONS 122), Hydrology and Hydrogeology (CONS 385), Soils in Construction (CONS 216), Highways and Transportation (CONS 372), or permission of instructor.

CONS 472 ADVANCED HIGHWAY DESIGN *Spring, 3 credit hours*

This course focuses on the design of pavements in consideration of subgrade conditions and anticipated traffic load and on drainage of roads to meet design storm conditions. Topics include thickness design of pavements, techniques for subgrade improvement, geotextiles, and design of culverts for design storm conditions. Three hours lecture per week. Prerequisites: Hydraulics (CONS 122), Hydrology and Hydrogeology (CONS 385), Soils in Construction (CONS 216), Highways and Transportation (CONS 372), or permission of instructor.

CONS 477 CAPSTONE PROJECT *Spring, 3 credit hours*

This course provides a learning experience that allows a student to propose, design, and implement a project. This could be a study of a problem and solution of specific equipment, new project design, improvement of an existing product, and many others. All projects must be approved by course faculty. Three hours lecture per week. Prerequisites: Completion of seven semester coursework or permission of the program director.

CONS 485 SOLID WASTE MANAGEMENT *Spring, 3 credit hours*

This course will introduce students to the governing, management, science, and engineering that impacts solid waste. The role of the federal government in the management of municipal solid waste is discussed, in conjunction with state solid waste legislation. Different types of solid waste streams (e.g. household waste, construction and demolition waste) and their characteristics will be examined. Students learn how to plan municipal solid waste management programs. A significant portion of the course will be spent on solid waste landfill engineering and design (e.g. liner systems, covers, leachate collection and treatment systems, groundwater flow and monitoring, gas migration and collection). Construction and operational principles of landfills are discussed. Opportunities for reduction, reuse, and recycling of solid waste are discussed as one solid waste management technique. Three hours of lecture per week. Prerequisites: Hydrology and Hydrogeology (CONS 385), Soils in Construction (CONS 216) or permission of instructor.

CONS 486 SOIL AND GROUNDWATER REMIEDIATION

Fall/Spring, 3 credit hours

Students learn about the different types and characteristics of soil and groundwater contaminants. Remedial methods and technologies for soil and groundwater contamination are examined. There is review and discussion of federal and state guidance, regulations, and other pertinent legislation. Three hours of lecture per week. Prerequisites: Hydrology and Hydrogeology (CONS 385); and College Chemistry I and lab (CHEM 150); and Engineering Geology (CONS 285) or Civil Engineering Materials (CONS 280) or Soils in Construction (CONS 216); or permission from the instructor

CONS 487 WATER RESOURCES ANALYSIS, MANAGEMENT, AND DESIGN

Spring, 3 credit hours

This course includes advanced open channel hydraulics, advanced surface water hydrology and groundwater, and well hydraulics. Management of water resources including reuse and alternative supplies is discussed. Conveyance and distribution water, as well as wastewater and stormwater collection and engineering are discussed. Students perform calculations by hand or with spreadsheets and are introduced to public domain water resources software and the Arc-Hydro data model for Geographic Information Systems. Three hours lecture per week. Prerequisites: Hydraulics (CONS 322), Hydrology and Hydrogeology (CONS 385), Introduction to Geographic Information Systems (CONS 350), or permission of instructor.

CONS 291-295, 391-395, OR 491-495 SPECIAL TOPICS IN CIVIL/ CONSTRUCTION ENGINEERING TECHNOLOGY

Fall/Spring, 1-4 credit hours

Special Topics in Civil/Construction Engineering Technology will generally include topics of current interest or topics not covered in courses currently offered by the department or in combinations not currently available. Prerequisite: permission of the instructor.

CYBR 165 SURVEY OF CYBERSECURITY

Fall, 3 credit hours

This course is an introductory survey of Cybersecurity and its terminology. Emphasis is on current and emerging technologies. Topics include: overview of computer system components, communications and networks including the Internet, and their security features; basic concepts in programming languages, information system development, and their security solutions; IT impact on society, security, privacy, and ethics. Three hours lecture per week.

CYBR 354 CYBER INCIDENT RESPONSE AND DISASTER RECOVERY

Fall, 3 credit hours

This course presents methods to identify vulnerabilities within computer networks and the countermeasures that mitigate risks and damage. It covers market-leading content on contingency planning, effective techniques that minimize downtime in an emergency, and ways to curb losses after a breach in case of a network intrusion. Three hours lecture per week. Prerequisites: Information Security (CITA 250) or permission of instructor.

CYBR 356 CYBERSECURITY DEFENSE AND COUNTERMEASURES

Fall, 3 credit hours

This course provides a thorough guide to perimeter defense fundamentals, including intrusion detection and firewalls. It covers advanced topics such as security policies, network address translation (NAT), packet filtering and analysis, proxy servers, virtual private networks (VPN), and network traffic signatures. This course examines the latest technology, trends, and techniques including virtualization, IPv6, and ICMPv6 structure, making it easier to stay on the cutting edge and one step ahead of potential security threats. Three hours lecture per week. Prerequisites: Information Security (CITA 250) or permission of instructor.

CYBR 360 CRYPTOLOGY IN THEORY AND PRACTICE

Fall/Spring, 3 credit hours

This course provides a background in the characteristics of different cryptology schemes. It introduces students to protocols and key establishment methods required for certificates and public-key infrastructure. Three lecture hours per week. Prerequisites: Data Communications and Network Technology (CITA 220) or Permission of the instructor.

CYBR 368 CYBERCRIME LAW & POLICY

Spring, 3 credit hours

This course provides students with an understanding of cybercrime law and policy, both in the US and internationally while touching upon the broader concepts of cyberspace and cybersecurity. The course provides a basic understanding of the US Constitution and an introduction to US law relating to cybercrimes, which target computers and networks, as well as those which use computers to commit more conventional crimes such as fraud and theft. The course also gives students an understanding of criminal law concepts such as intent, evidence, conspiracy, and privacy rights, and will review some important US Supreme Court cases related to cybercrime. Students also consider international law, cyber terrorism, national security and cyberwar.

Pre-requisites: 45 completed credits or permission of instructor.

CYBR 450 CYBERSECURITY BODY OF KNOWLEDGE

Spring, 3 credit hours

This course provides a comprehensive, trustworthy framework of practices for assuring cybersecurity. It helps future security professionals understand how the various roles and functions within cybersecurity practice can be combined and leveraged to secure an organization. The course content is derived from the Department of Homeland Security's Essential Body of Knowledge (EBK) for IT Security and the International Information System Security Certification Consortium's Common Body of Knowledge (CBK).

Prerequisites: CYBR/CITA 250 Information Security.

CITA 455 ACCESS CONTROL, AUTHENTICATION, AND PUBLIC KEY INFRASTRUCTURE

Fall, 3 credit hours

This course defines the components of access control, provides a business framework for implementation, and discusses legal requirements that impact access control programs. It looks at the risks, threats, and vulnerabilities prevalent in information systems and IT infrastructures and how to handle them with risk mitigation strategies and techniques. Access control systems and stringent authentication are presented as ways to mitigate risk. It also covers Public Key Infrastructure (PKI) components and how the various components support e-business and strong security services. Three hours lecture per week. Prerequisites: Cryptology in Theory and Practice (CITA 360) or permission of instructor.

CYBR 485 CYBERSECURITY PRACTICE

Fall/Spring, 6 credit hours

This course is an internship course which integrates classroom work and practical experience for senior level students in Cybersecurity B.S. program. It is a structured field experience in which an intern acquires and applies knowledge and skills while working in a responsible role. Working with a supervisor, the student will perform prescribed work within an administrative or operational setting. The internship will be tailored to the individual student's career interests and the needs of the supervising organization.

Pre-requisite: senior status in B.S. Cybersecurity.

DHYG 140 PRE-CLINICAL DENTAL HYGIENE THEORY

Fall, 2 credit hours

This course is an introduction to dental hygiene theory including the dental hygiene process of care with emphasis on professionalism, basic instrumentation skills and patient assessment processes. A minimum grade of "C" is required. Department policy requires the student to achieve 75% proficiency in all dental hygiene courses to proceed to the next level of study. Students must be matriculated in the Dental Hygiene Program. Two hours of lecture per week. Corequisites: Pre-Clinical Dental Hygiene (DHYG 141) or permission of instructor.

Course Descriptions: Dental Hygiene

DHYG 141 PRE-CLINICAL DENTAL HYGIENE

Fall, 2 credit hours

This course prepares students to perform the specific skills outlined in the Dental Hygiene Process of Care. Emphasis is placed on professionalism, infection control, basic instrumentation skills and patient assessment processes. Patient assessment processes include conducting a medical history interview, documentation of vital signs, head and neck cancer screening exams, caries detection, assessment of deposits and an evaluation of the periodontium. This will be accomplished through lab demonstrations and clinical practice on manikin and/or lab partners, culminating with two patient experiences. All students must submit a comprehensive health history to the clinic coordinator prior to sitting as a practice patient in the clinic. A minimum grade of "C" is required. Department policy requires the student to achieve 75% proficiency in all dental hygiene courses to proceed to the next level of study. Students must be matriculated into the Dental Hygiene program, have CPR/AED and First Aid certification. Eight hours lab per week. Students must reserve 2 hours of additional time each week to be spent further developing their clinical skills. Corequisites: Pre-Clinical Dental Hygiene Theory (DHYG 140), or permission of instructor.

DHYG 142 PREPARATION FOR THE PATIENT APPOINTMENT

Fall, 1 credit hour

This course introduces the student to the OSHA infection control protocols that are designed to reduce the transfer of pathogens in the clinical setting. It also enables students to practice preparing the dental unit and treatment room for patient care. Students will learn and practice the technique for assessing vital signs, including pulse, respiration, and blood pressure, and to perform a head and neck cancer screening examination. This will be accomplished through lab demonstrations and clinical practice on a lab partner. Students must attend 2 hours of clinical practice each week. Prerequisites: Must be matriculated in the Dental Hygiene program, or permission of instructor.

DHYG 145 DENTAL RADIOLOGY

Fall, 3 credit hours

Students will study the production, characteristics, and legal significance of x-rays and their use in the dental setting, the safety measures necessary for the protection of the operator and the patient, the exposure, processing, mounting and storage of films, errors in technique and their methods of corrections. A minimum grade of "C" is required. Students must be matriculated into the Dental Hygiene program. Two hours lecture, two hours laboratory per week.

DHYG 147 HEAD & NECK ANATOMY

Spring, 2 credit hours

Students study the structure and anatomical systems of the head and neck and are exposed to

selected body systems. Emphasis will be placed upon aspects of those systems and structures that have dental significance. This course provides the foundation for conducting a cancer screening exam in the clinical setting and the administration of local anesthesia as part of dental hygiene care. A minimum grade of "C" is required. Two hours of lecture per week. Prerequisite: Matriculation in the Dental Hygiene program or permission of instructor.

DHYG 150 DENTAL HYGIENE THEORY I

Spring, 2 credit hours

This course elaborates and expands upon the theories presented in Pre-Clinical Dental Hygiene Theory (DHYG 140); and introduces additional information required when rendering individualized patient care. Specific topics will include dental considerations for patients with chronic diseases taking medications that may impact one's dental health, recording and reading dental charts, recognizing varying levels of dental disease and determining appropriate interventions. Emphasis will be placed on instrument sharpening and utilization of the ultrasonic scaler to aid in effective removal of deposits. Students must also register for DHYG 151. A minimum grade of "C" is required to proceed to the next level of study. Two hours of lecture each week. Corequisites: Clinical Dental Hygiene I (DHYG 151), or permission of instructor.

DHYG 151 CLINICAL DENTAL HYGIENE I

Spring, 3 credit hours

This course is a continuation of Pre-Clinical Dental Hygiene (DHYG 141). Students will be assigned to eight (8) hours of patient care in the clinic each week and a total of 42 lab hours where the student will learn dental charting, instrument sharpening, how to utilize a rotary handpiece and ultrasonic scaler, apply fluoride and a topical anesthetic, practice management of various medical emergencies and accurately document a patient record. In clinic the student will develop their skills when assessing, planning and implementing care for the child, teen, adult and geriatric patient including the exposure of radiographs. Emphasis is placed on the healthy patient as well as patients with gingivitis and periodontitis. Although the department has a database of patients to work with, the student is responsible for recruiting new patients. A minimum grade of "C" or better is required to proceed to the next level. Prerequisite: Dental Hygiene matriculation, current professional level CPR/AED certification and malpractice insurance. Corequisite: Dental Hygiene Theory I (DHYG 150), or permission of instructor.

DHYG 155 INFECTION CONTROL

Fall, 1 credit hour

This course provides an introduction to the microbial world. Students will receive an overview of the infectious diseases the dental team is potentially exposed to while providing treatment in the dental office, with a strong emphasis on hepatitis, tubercu-

losis, HIV, and the herpes viruses. Students will be presented with the rationale for practicing infection control procedures; including the use of appropriate PPE, proper equipment asepsis, and instrument processing. Students will also gain experience developing various aspects of an office safety program and a quality assurance log. OSHA regulations and CDC guidelines provide the foundation for course content. A minimum grade of "C" is required. One hour of lecture per week. Prerequisite: Dental Hygiene matriculation or permission of instructor.

DHYG 156 ORAL ANATOMY

Fall, 2 credit hours

This is a hybrid course that blends traditional classroom time with online instruction. This course examines the structure and function of teeth and associated oral tissues and structures. In lab, the student has an opportunity to practice identifying teeth, landmarks in the oral cavity, describing gingiva, classifying occlusion, as well as individual and group malrelationships. A minimum grade of "C" is required. Students must be matriculated in the Dental Hygiene program. One hour lecture, two hours laboratory per week. Corequisite: Pre-Clinical Dental Hygiene (DHYG 141) or permission of instructor.

DHYG 159 DENTAL HEALTH EDUCATION

Spring, 2 credit hours

This course provides the necessary background for developing communication skills during individualized instruction in the clinic and group presentations within the community. Students will learn to assess the needs of a diverse population of patients; and will utilize that assessment information to critically develop a dental hygiene diagnosis and appropriate preventive treatment plan for a variety of patients. Throughout this course, students will be exposed to various preventive strategies that can be used to promote and maintain oral health. The student is expected and to develop either a patient education brochure that can be used chairside or design a bulletin board for the clinical area that portrays a preventive message to the observer. Minimum grade of "C" is required. Two hours lecture per week. Corequisite: Clinical Dental Hygiene I (DHYG 151) or permission of instructor.

DHYG 160 DENTAL PATHOLOGY

Spring, 2 credit hours

This course provides the student with a background in both oral and general pathology. A survey of pathologic foundations in the diagnosis process, normal and abnormal conditions of tissues of the body and the mouth, and correlation of physical and dental health in preparation for patient care in the clinical setting. A minimum "C" grade is required. Two hours lecture per week. Prerequisites: Matriculation in the Dental Hygiene program or permission of instructor.

Course Descriptions: Dental Hygiene

DHYG 161 HISTOLOGY & EMBRYOLOGY

Fall, 1 credit hour

This course provides the foundation for assessing a patient's oral health status in the clinical setting. During the assessment phase of care, the hygiene student must be capable of distinguishing normal, a variant of normal or a developmental abnormality from a pathology. This course contains basic, general histological information with a focus on oral tissues and oral facial development. A minimum "C" grade is required. One hour of lecture per week. Prerequisite: matriculation in the Dental Hygiene program or permission of instructor.

DHYG 190 RADIOGRAPHIC INTERPRETATION

Spring, 2 credit hours

This course is a continuation of Dental Radiology (DHYG 145). Students will learn to identify and interpret landmarks, dental materials, periodontal conditions, pathologies, decay and patient positioning errors seen radiographically on periapical, bitewing and panoramic radiographs. Students will work in small groups in lab to learn conventional panoramic radiology technique and exposure, as well as, develop their radiographic interpretation skills. A minimum grade of 75% is required in both lecture and lab prior to averaging grade for a total course grade. A minimum "C" grade is required. One hour of lecture and two hours of lab per week. Prerequisites: Matriculation in the Dental Hygiene program or permission of instructor. Corequisites: Clinical Dental Hygiene I (DHYG 151) or permission of instructor.

DHYG 215 PAIN MANAGEMENT

Fall, 1 credit hour

This course is designed to prepare the dental hygiene student with the necessary theory to appropriately treatment plan and successfully administer topical anesthesia, local infiltration anesthesia and/or nitrous oxide analgesia to increase patient comfort and control pain when providing dental hygiene services. This course is taught in a seminar format and includes fifteen hours of classroom instruction. Prerequisite: matriculation in the Dental Hygiene program, or permission of instructor.

DHYG 220 PERIODONTOLOGY

Fall, 2 credit hours

Emphasis is placed on the structural anatomy of the periodontium, microbiology of plaque biofilm, and the pathology of periodontal disease. The student will learn to identify risk factors for periodontal disease, the various components of a comprehensive periodontal chart, treatment modalities utilized in the management of periodontally involved patients, appropriate maintenance intervals, as well as the criteria for determining appropriate referral to a periodontal specialist. A minimum "C" grade is required. Two hours lecture per week. Prerequisite: matriculation in the Dental Hygiene program or permission of instructor. Corequisite: Dental Hy-

giene II Lecture/Lab (DHYG 250), Clinical Dental Hygiene II (DHYG 251).

DHYG 221 DENTAL PHARMACOLOGY

Fall, 2 credit hours

General concepts of drugs and drug action are discussed in this course. Special emphasis will be given to drugs used in dentistry that may alter dental treatment. The course includes specific mechanisms of action and clinical applications of therapeutic agents which affect the central and peripheral nervous systems, the heart, the circulatory and renal systems, the respiratory and GI systems, and the endocrine system. Drugs to treat cancer and various infections are also discussed. Special consideration will be given to the topic of drugs for the pregnant patient and the student will examine important drug interactions. Two hours lecture per week. Prerequisites: Matriculation in the Dental Hygiene program or permission of instructor.

DHYG 240 DENTAL MATERIALS THEORY

Fall, 2 credit hours

This course provides a general overview of the chemical and physical properties and structure of materials in dentistry. A combination of lectures, powerpoints and web assigned activities will prepare the dental hygiene student to develop the skills outlined in the NYS Dental Hygiene Practice Act. Skills will be practiced in the lab setting on a typodont and/or peers so all students must also be concurrently registered for a DHYG 241 lab. A minimum grade of "C" is required to proceed to the next level of study. Two hours lecture per week. Corequisite: Dental Materials Lab (DHYG 241) or permission of instructor.

DHYG 241 DENTAL MATERIALS LAB

Fall, 1 credit hour

This course enables the dental hygiene student to develop the skills outlined in the NYS Dental Assisting and Dental Hygiene Practice Acts. Skills are learned on a typodont in the lab prior to partner and/or patient practice in the clinical setting. Students will learn the foundation for these skills in Dental Materials Lecture (DHYG 240). A minimum grade of "C" is required to proceed to the next level of study. Three hours laboratory per week. Corequisite: Dental Materials Theory (DHYG 240) or permission of instructor.

DHYG 250 DENTAL HYGIENE II LECTURE/LAB

Fall, 2 credit hours

This course provides an opportunity for the dental hygiene student to practice and master proper technique when managing pain during a dental hygiene appointment. Successful completion of this course will enable the student to qualify for NYS certification in local anesthesia. Emphasis will also be placed on the following dental hygiene skills: extrinsic stain removal, utilization of the intraoral camera, digital radiography, utilization of

desensitizing agents, management of geriatric and culturally diverse patients, advanced instrumentation techniques utilized when providing hygiene services for periodontally involved patients. One hour lecture, three hours of laboratory per week. Corequisites: Matriculation in the Dental Hygiene program, Clinical Dental Hygiene II (DHYG 251), or permission of instructor. A minimum grade of "C" is required to proceed to the next level of study.

DHYG 251 CLINICAL DENTAL HYGIENE II

Fall, 3 credit hours

This course is a continuation of Clinical Dental Hygiene I (DHYG 151) with continued emphasis on the dental hygiene process of care. Students will not only provide continued care for patients treated in the second semester but will also assess, plan and implement care for patients with advanced periodontal disease. Students are also expected to demonstrate more efficient time management skills so they are prepared to enter the workforce. Students will attend 12 hours of clinic each week. A minimum grade of "C" is required to proceed to the next level of study. Students must have CPR/AED certification. Corequisites: Dental Hygiene II Lecture/Lab (DHYG 250), or permission of instructor.

DHYG 256 MEDICAL EMERGENCIES IN THE DENTAL OFFICE

Fall, 1 credit hour

This course discusses the steps taken to reduce the risk of medical emergencies in the dental office; prepares the student to identify the early signs of various medical emergencies, and summarizes the steps taken to properly manage emergency situations while waiting for a paramedic to arrive on the scene. A minimum grade of "C" is required to proceed to the next level of study. One hour lecture per week.

DHYG 260 COMMUNITY DENTAL HEALTH

Spring, 2 credit hours

This writing intensive course is an introduction to the philosophy of community dental health and explores principles of community based oral health program assessment, planning, implementation, and evaluation. In addition, fluoridation, epidemiology of dental diseases, and the use of biostatistical methods and materials for research program planning and assessment are discussed. A minimum "C" grade is required to graduate. Prerequisite: matriculation in the Dental Hygiene program, or permission of the instructor. Corequisite: Clinical Dental Hygiene III (DHYG 270).

DHYG 270 CLINICAL DENTAL HYGIENE III

Spring, 4 credit hours

This course is a continuation of DHYG 251 Clinical Dental Hygiene II with emphasis on individualized comprehensive dental hygiene care for the periodontally involved patient. Students will administer topical and local anesthesia to manage patient discomfort during scaling and root

Course Descriptions: Dental Hygiene

planning procedures. Each student will also have an opportunity to administer a locally delivered antimicrobial agent. Instructional labs will be utilized to acquire practice managing patients in specialty practices and alternative practice settings such as nursing homes. Students will also expand upon the pain management skills taught in DHYG 251 through the administration of nitrous oxide analgesia. Students must have current CPR/AED certification and malpractice insurance. A minimum "C" graduate is required to graduate. Three hours teaching laboratory; 12 clinical hours per week. Matriculation in the Dental Hygiene program or permission of instructor.

DHYG 280 ETHICS & JURISPRUDENCE *Spring, 1 credit hours*

This course is designed to show the relationship between the law and the dental profession; and to provide the hygiene student with the necessary skills to practice within the law. All students will complete a child abuse recognition training that will fulfill the necessary prerequisite requirement for licensure in NYS. Students will not only recognize signs of abuse but will become familiar with the reporting protocols. All students will develop a resume and will have an opportunity to partake in a mock interview. The course will conclude with discussions on marketing and practice management techniques that will prepare students for entry into the workforce. A minimum "C" graduate is required to graduate. One hour lecture per week. Prerequisite: matriculation in the Dental Hygiene program or permission of the instructor.

DHYG 285 SENIOR SEMINAR *Spring, 1 credit hour*

This capstone course emphasizes case based learning, which involves the integration of theory, knowledge, and research and the practical application to patient care. Students will review cases and apply the knowledge accumulated in their two years of dental hygiene studies to plan and manage care for the pediatric, geriatric, adult, periodontal, and the medically compromised patient. The course is designed to prepare students for the dental hygiene licensing exams. All students will participate in a pretest and a mock national examination. Prerequisites: matriculation in the Dental Hygiene program or permission of the instructor.

DHYG 290 SPECIAL NEEDS PATIENTS *Spring, 1 credit hour*

This course will heighten the hygiene student's understanding of the dental needs of patients with varying medical conditions as well as those with physical, sensory and emotional conditions that can impact a patient's oral health and require modified care during the dental appointment. Understanding the dynamic oral-systemic link will enable the student to develop appropriate treatment plans and provide individualized, patient centered care for all patients. A minimum grade of "C" is required. One

hour lecture per week. Prerequisite: matriculation into the Dental Hygiene program or permission of the instructor.

DHYG 310 CONTEMPORARY ISSUES IN DENTAL HYGIENE *Spring, 3 credit hours*

This course examines current societal and professional issues and their impact on dental hygiene practice. The student will discuss the Healthy People 2020, including issues, trends, disparities and opportunities. Students will examine the roles of the dental hygienist and discuss the dental hygienists' role in increasing access to dental care. Students will research and compare traditional and alternative practice models, and propose changes to improve dental care delivery. This is a writing intensive course in which the student will prepare a manuscript for publication following ADHA author guidelines. Three hours lecture per week. Prerequisite: Junior level status in Dental Hygiene or permission of instructor.

DHYG 340/BSAD 340 MANAGEMENT COMMUNICATIONS *Fall/Spring, 3 credit hours*

This course introduces students to the foundations of effective management communication. It focuses on communicating strategically and persuasively in a professional environment. Skills such as advocacy, framing issues clearly and strategically, preparing a team for communicating in a competitive environment, facilitating meetings, and adapting arguments to audiences' needs will be developed. Three hours lecture per week. Prerequisites: Composition and the Spoken Word (ENGL 101) and junior level status or the permission of the instructor.

DHYG 350 CURRENT ISSUES IN PERIODONTICS *Fall, 3 credit hours*

Students taking this course will research and discuss current studies in periodontology and related disciplines to identify factors which may modify theory or practice. Focus will be placed on the relationship of periodontal health to systemic health, current concepts in etiology, risk factors, assessment, and treatment. Three hours lecture per week. Prerequisite: Junior level status in Dental Hygiene.

DHYG 360 DENTAL HYGIENE TEACHING METHODOLOGY *Fall, 4 credit hours*

This course provides the dental hygienist with the background to become an effective classroom and clinical instructor. Students will discuss the current philosophy of dental hygiene education and the American Dental Associations' accreditation requirements regarding course syllabi, instructional objectives, learning experiences, evaluation procedures and remediation policies. Students will explore the various learning styles and classroom techniques that can be utilized to incorporate all

learning styles, motivate the learner and enhance the learning process. Four hours lecture per week. Prerequisite: Junior level status in Dental Hygiene.

DHYG/NURS 370 RESEARCH METHODS IN THE HEALTH SCIENCES *Fall/Spring, 3 credit hours*

This course provides an intense comprehensive study of the scientific research process utilized in the social and health sciences. Students will be trained to be critical consumers of published research and will be expected to complete a research project. Topics that will be covered include the underlying theory of research; and data management and presentation. Three hours lecture per week. Prerequisite: Must be enrolled in RN-BS program or BS in Dental Hygiene Program, Statistics (MATH 141) or equivalent course work, and Composition & the Spoken Word (ENGL 101); or permission of the instructor. Additionally, students must have at least junior level status or permission of the instructor.

DHYG 385 ORIENTATION TO INTERNSHIP *Fall, 1 credit hour*

An internship is required to complete degree requirements for the Bachelor of Technology in Dental Hygiene. This course is a prerequisite course that will provide students with a clear sense of direction and will enhance success in DHYG 390. The instructor will discuss best practices when searching for internship opportunities as well as the fundamentals for developing an internship contract that meets SUNY Canton guidelines. Students are expected to identify their anticipated goals, write reflective statements and develop a template for their internship portfolio. To be completed the semester before entering the Internship. One hour lecture per week.

DHYG 390 DENTAL HYGIENE INTERNSHIP *Spring, 6 credit hours*

This internship course enables students to acquire practical experience in a variety of professional settings that draw on concepts and skills gained from the academic experience. Students will develop new knowledge and skills by taking an active role in the cooperating organization. Students will develop an internship contract based on personal interests and career aspirations. Internship proposals must be presented and approved prior to registration for the course. Students must complete a minimum of 240 hours of internship study. Prerequisite: Must have completed three semesters of the Bachelor of Technology in Dental Hygiene program, and Orientation to Internship (DHYG 385), or permission of instructor.

DHYG 291-295, 391-395, OR 491-495 SPECIAL TOPICS IN DENTAL HYGIENE *Fall/Spring, 1-4 credit hours*

An introductory or more advanced exploration of subjects not covered or only partially covered by other courses in dental hygiene.

Course Descriptions: Emergency Management, Early Childhood

EADM 201 FUNDAMENTALS OF EMERGENCY MANAGEMENT: HISTORY, PERSPECTIVES, AND THEORIES

Fall, 3 credit hours

This course presents the theories, principles, and approaches to emergency management. The philosophy of Comprehensive Emergency Management (CEM) will be discussed with the four attendant steps of: mitigation, preparedness, response, and recovery. An analysis of past disasters will be presented along with their impacts on policy formation leading up to the current FEMA all-hazards approach. The role, duties, and importance of the Emergency Manager will be discussed throughout the semester. Finally, a brief review of basic legal issues involving emergency management will be presented. A writing intensive course. Three hours lecture per week.

EADM 205 RISK & HAZARD IMPACT STUDIES

Fall and Spring, 3 credit hours

The course focuses on a generalized technical understanding and an awareness of various types of natural hazards. Central to the course is the understanding of technical cooperation regarding hazard and vulnerability assessments, inclusion of hazard mitigation measures in the formulation of investment projects, use of geographic information systems for mapping and analysis, and urban watershed planning for hazard and resource management. The course includes some, but not all, of the disaster mitigation and integrated development planning. A writing intensive course. Three hours lecture per week.

EADM 220 DISASTER MANAGEMENT & PREPAREDNESS

Spring, 3 credit hours

The course presents new and innovative methods for preparing communities and organizations to address general and substantial risk of disasters and emergencies in the workplace. It encompasses the tactics used by safety experts and additionally focuses on expanded proactive measures to safeguard lives and assets from natural disasters to acts of terrorism. Focuses of the course include planning, assessing and responding to potential threats, decreasing potential harm and recovery considerations at the community and organizational level. A writing intensive course. Three hours lecture per week.

EADM 222 COMMUNITIES: PREPAREDNESS & DEFENSE

Spring, 3 credit hours

The course prepares participants to help reduce the growing toll (deaths and injuries, property loss, environmental degradation, business and economic disruption) associated with disasters in the United States by providing an understanding of these processes and technologies (hazards risk management process) that organize preparedness and response in a constructive framework that may be applied at all levels of communities and govern-

ment service organizations. Presents a natural and technological risk analysis, applies the four phases of Comprehensive Emergency Management (CEM), and stresses development of personal and community emergency plans. A writing intensive course. Three hours lecture per week.

EADM 307 LEGAL ISSUES IN EMERGENCY AND DISASTER MANAGEMENT

Spring, 3 credit hours

This course provides a general overview of the major legal and liability issues in emergency management. The focus is on the legal environment within which emergency managers operate, including their roles in rule-making, policy administration, and their potential personal legal liability for discretionary actions. Three hours lecture per week. Prerequisites: Composition & the Spoken Word (ENGL 101), and Risk and Hazard Impact Studies (EADM 205) or permission of instructor.

EADM 400 INCIDENT COMMAND: SYSTEM COORDINATION & ASSESSMENT

Fall, 3 credit hours

The Incident Command System (ICS) is the nationally recognized effective system for managing emergencies and disasters. Several states and federal agencies have adopted ICS as their standard for emergency management. ICS provides education and training for those who are not first responders (i.e., law enforcement, fire, or emergency medical services personnel) who may be called upon to function in an ICS environment. The course includes a large number of scenarios, examples, and opportunities for students to apply what they have learned. Three hours lecture per week. Prerequisite: Risk & Hazard Impact Studies (EADM 205) or permission of the instructor.

EADM 430 SIMULATED DISASTER TRAINING

Fall, 3 credit hours

This course is designed for students to acquire the knowledge and skills necessary to develop, conduct, and evaluate activities and exercises. Students will assess and evaluate an exercise in actual emergency and/or disaster situations. Three hours lecture per week. Prerequisites/Corequisites: Management Communications (BSAD 340) and Incident Command: System Coordination & Assessment (EADM 400) or permission of instructor.

EADM 435 DISASTER SIMULATION

Spring, 6 credit hours

The course is a highly structured applied interactive educational and training simulation experience that requires the student to participate in sequential exercises that focus on the application of skills and abilities in emergency and disaster management. Students will create an operational scenario, assess its application, calculate applicable scenario coordination, and conduct the evaluation of exercise(s) participant performance associated with an actual

emergency and/or disaster situation. Participants are required to develop, conduct, and evaluate these activities through the use of phased proficiency exercise applications. Six hours lecture per week. Prerequisite: Simulated Disaster Training (EADM 430) or permission of instructor.

EADM 480 INTERNSHIP IN EMERGENCY AND DISASTER MANAGEMENT

Fall or Spring, 1, 3, 6 or 9 credit hours

The EADM internship is an academic program integrating classroom work and practical experience with cooperating agencies. The internship allows seniors the opportunity to apply classroom learning in emergency and disaster response associated agencies. It is a structured experience in which an intern acquires and applies knowledge and skills, while working in a responsible role. Three lecture hours per week. Prerequisites: Incident Command: System Coordination & Assessment (EADM 400), senior level status in the Emergency Management program, or permission of instructor.

EADM 485 SENIOR PROJECT

Fall or Spring, 3, 6, or 9 credit hours

Students will complete a senior research project specifically addressing issues in the emergency and disaster management arena. Under the guidance of a faculty mentor, the student will submit a research proposal, conduct research, prepare a thesis style report, and present a defense to a thesis committee. Three lecture hours per week. Prerequisite: Incident Command: System Coordination & Assessment (EADM 400), senior level status in the Emergency Management program, or permission of instructor.

ECHD 101 INTRODUCTION TO EARLY CHILDHOOD

Fall, 3 credit hours

GER 3

An overview of the history, theories, and philosophies that form the foundation of Early Care and Education. All aspects of development (physical, cognitive, social-emotional, and communication) are presented and studied within an ecological context (family, community, culture, society). Specific emphasis is placed on understanding the various roles/responsibilities early childhood educators have in fostering the well-being and development of young children from birth-5 years. Three hours lecture per week.

ECHD 121 WELLNESS IN YOUNG CHILDREN: PROMOTING HEALTH, SAFETY, NUTRITION, AND DEVELOPMENT

Spring, 3 credit hours

In this course, students will develop the knowledge and skills necessary for ensuring the well-being of the young child. The course focuses on the role of the teacher in creating and incorporating health, safety, and nutrition programs and activities in early childhood settings to support children's development, healthy lifestyle practices, and learning. Three hours lecture per week.

Course Descriptions: Early Childhood

ECHD 125 CURRICULUM DEVELOPMENT *Fall, 3 credits hours*

In this course, students will examine curriculum methods in early care and education. Students will create and implement thematic lessons and activities to promote the skill development of the whole-child. Special emphasis will be given to the process of curriculum development, developmentally appropriate methods, child-centered planning, and active play-based learning experiences for young children. Three hours lecture per week. Prerequisite: Introduction to Early Childhood (ECHD 101). or permission of instructor.

ECHD 131 INFANTS AND TODDLERS *Spring, 3 credit hours*

In this course students, will gain an understanding of the developmental milestones and needs of the young child from infancy to age three. This course will explore the core competencies of the infant-toddler caregiver and the caregiver and family relationship. Students will identify and apply best practices for providing optimal high quality care for infants and toddlers. Three hours lecture per week.

ECHD 200 PLANNING PROGRAMS FOR YOUNG CHILDREN *Spring, 3 credit hours*

In this course, students will gain knowledge of key components that make up a high-quality early childhood setting. Students will examine the importance of a program philosophy, family involvement, home-school communication, learning centers, scheduling, and state child care licensing regulations. Principles of program planning related to high quality early care and education, administration, and leadership will be applied. Three hours lecture per week. Prerequisite: Introduction to Early Childhood (ECHD 101) or permission of instructor.

ECHD 201 STUDENT TEACHING FIELD EXPERIENCES *Spring, 4 credit hours*

This course is an off campus practicum in early childhood. Students are assigned to a licensed group childcare center, family childcare program, pre-k, or kindergarten setting. Students are required to complete an 80-hour student teaching experience in two group settings with children ages birth - 36 months and children ages 3 - 5 years. Under the direct supervision of an assigned mentor, students will apply knowledge and skills acquired through coursework with a focus on child observation, development, implementation of age appropriate curriculum plans, and activities. Students will attend a weekly 50-minute seminar and participate in workshops led by the student teaching college supervisor. Prerequisite(s): Introduction to Early Childhood (ECHD 101); Well-ness in Young Children (ECHD 121); Curriculum Development (ECHD 125); Infants and Toddlers (ECHD 131). Co-requisite: Early Childhood Observation (ECHD

204). Minimum 2.0 overall GPA and permission of the ECHD Program Coordinator

ECHD 204 EARLY CHILDHOOD OBSERVATION *Spring, 3 credit hours*

This course examines the importance of observation, assessment, and documentation of young children's development from birth to age five. Students will be introduced to and apply various forms of assessment methods, and understand the value of such assessments as a tool for informing teaching practices, and developing appropriate curriculum goals to ensure optimal growth and learning for young children. Co-Requisite: ECHD 201: Student Teaching Field Experiences. ECHD majors only. Prerequisite(s): Introduction to Early Childhood (ECHD 101); Curriculum Development (ECHD 125); Infants and Toddlers (ECHD 131); Children with Special Needs (ECHD 250); Child Development (PSYC 220).

ECHD 250 CHILDREN WITH SPECIAL NEEDS *Fall, 3 credit hours*

GER 3

In this course, students will examine various special needs of young children. Students will gain knowledge of inclusive practices, teaching modifications, prevention and intervention strategies, and support services for children, families, and the community. Assessment, identification, and general knowledge of the special needs of all children will be examined, as well as social policies and initiatives to support teachers, families, and children. Three lecture hours per week. Prerequisite(s): None.

ECHD 285 ISSUES & POLICIES IN EARLY CARE & EDUCATION *Fall, 3 credit hours*

In this course, students will draw from academic, life and coursework to explore current issues and policies in the field of early education and care. Social issues impacting the well-being of children, families and the community will be explored. Students will research issues and investigate approaches to resolving some of these challenges. Three hours lecture per week. Writing intensive course. Prerequisite(s): ENGL 101; ECHD 101 or SOCI 101 or PSYC 101 or permission of instructor.

ECHD 301 FOSTERING RELATIONSHIPS IN EARLY CHILDHOOD PROGRAMS *Spring, 3 credit hours*

This course explores the importance and benefits of establishing a partnership between teacher, parent, and the early care and education program. Topics will include ways in which to create and build a sense of community, the importance of open communication, and understanding diverse families and parental needs. Forms of parent engagement and involvement, and the benefits of creating reciprocal and respectful relationships for all involved in the care and development of the young child will be studied. Students will examine their role in assist-

ing families with understanding child development, play-based curriculum, appropriate expectations, and additional topics to ensure a collaborative, supportive, and enjoyable childcare experience for children, teachers, and families. Pre-Requisite(s): Introduction to Early Childhood (ECHD 101)

ECHD 302 MULTI-CULTURAL EARLY CHILDHOOD CURRICULUM *Fall or Spring, 3 credit hours*

This course examines the role and responsibility of the early childhood professional in creating a culturally responsive and inclusive classroom environment. Anti-bias curriculum methods, activities, multi-cultural literacy, and meaningful ways to create a welcoming and supportive environment that honors and celebrates families, children, and teachers will be studied. This course will examine inclusive policies, and emphasize the importance of supporting children's social learning regarding acceptance, tolerance, and respect for self and others. Pre-Requisite(s): Introduction to Early Childhood (ECHD 101); Curriculum Development (ECHD 125) or permission of instructor.

ECHD 303 PHYSICAL ACTIVITY INDOORS AND OUT *Fall or Spring, 3 credit hours*

This course examines the importance of physical activity for the developing child. Students will research the value of such active play experiences, and the effect physical engagement has on learning, and health. Students will explore ways to incorporate movement activities into classroom schedules and lessons to best meet the needs of the young child. The outdoor space, viewed as an extension of the classroom, will be studied. Students will create and engage in movement activities throughout the course. Pre-Requisite(s): Composition & The Spoken Word (ENGL 101); Introduction to Early Childhood (ECHD 101); Introductory Psychology (PSYC 101) or permission of the instructor.

ECHD 304 STEM IN THE EARLY YEARS *Fall or Spring, 3 credit hours*

This course focuses on integrating STEM (Science, Technology, Engineering, and Math) in early childhood settings and curriculum. Young children acquire STEM skills through exploration, inquiry, and active engagement. Topics will include methods for promoting scientific discovery and learning, integrating science and technology, developing mathematical concepts, and facilitating active experimentation and engagement in the early childhood classroom. Basic components of STEM and effective ways to incorporate STEM into curriculum and everyday activities with young children will be studied. Pre-Requisite(s): Composition & The Spoken Word (ENGL 101)

Course Descriptions: Early Childhood

ECHD 340 POLICIES AND REGULATIONS IN EARLY CHILDHOOD SETTING

Fall, 3 credit hours

This course examines childcare licensing regulations. Students will gain knowledge of state mandated policies and procedures pertaining to health and safety, children's programming, staffing, and the physical environment. Students will research and develop policies according to state childcare mandates, and apply methods of childcare program evaluation, assessment, and accreditation criteria throughout the course. Prerequisite(s): Introduction to Early Childhood (ECHD 101); Wellness in Young Children (ECHD 121); Planning Programs for Young Children (ECHD 200); or permission of Instructor.

ECHD 401 DEVELOPMENTALLY APPROPRIATE PRACTICE: LEARNING ENVIRONMENTS INFANTS - AGE 5

Spring, 3 credit hours

This course focuses on creating quality early learning environments for infants, toddlers, and preschoolers. Students will research and apply concepts of developmentally appropriate practice related to purposeful and intentional curriculum activities and learning centers within the early care and education environment. Students will gain knowledge of the value of play-based learning centers that engage, challenge, and promote the development of the young child. Pre-Requisite(s): Introduction to Early Childhood (ECHD 101), Curriculum Development (ECHD 125), Children with Special Needs (ECHD 250), 45 credit hours or permission of instructor.

ECHD 402 EARLY LITERACY AND LANGUAGE DEVELOPMENT

Fall or Spring, 3 credit hours

This course expands on students' knowledge of language and literacy development in young children. Students explore the four broad interrelated areas of early childhood language arts – speaking (oral), listening, writing, and reading. The course provides strategies for enhancing language/literacy experiences in a literacy –rich environment that engages children in developmentally appropriate language arts experiences. Pre-Requisite(s): Composition & The Spoken Word (ENGL 101).

ECHD 403 FAMILY CHILD CARE DEVELOPMENT AND MANAGEMENT

Fall or Spring, 3 credit hours

This course examines the Family Child Care profession. Students are introduced to state policies and regulations for establishing a quality early care and education home-based center. Students will gain an understanding of the challenges and rewards of this unique small business. Topics include policy, procedures, and contract development, multi-age curriculum planning, and home-based child care space design, to best meet the needs of the child

care provider, and families and children served. Pre-Requisite(s): Introduction to Early Childhood (ECHD 101); Wellness in Young Children: Promoting Health, Safety, Nutrition, and Development (ECHD 121) or permission of instructor.

ECHD 404 POSITIVE CHILD GUIDANCE

Fall, 3 credit hours

This course provides students with an understanding of how to meet the needs of the developing young child, and the behavioral challenges typically associated with this unique stage of development. Students will examine acceptable methods and approaches to assist young children with problem solving skills and self-control that are positive and developmentally appropriate. The course will focus on individual and classroom strategies and solutions for establishing, and maintaining, a positive and cooperative classroom. Prerequisite(s): Intro. to Early Childhood (ECHD 101), Infants and Toddlers (ECHD 131), Children with Special Needs (ECHD 250) Intro. to Psych. (PSYC 101), Child Development (PSYC 220) or permission of instructor.

ECHD 405 EARLY CHILDHOOD MENTOR: TEACHER AS TRAINER

Fall, 3 credit hours

This course explores the Early Childhood Program Administrator's role as both mentor and facilitator of teacher development. Students will gain an understanding of quality professional training for early care and education providers that are meaningful and relevant in promoting the professional competencies of the individual and program quality. Various professional development models and training practices will be studied and applied. Pre-Requisite(s): Completion of 45 credit hours or permission of instructor.

ECHD 409 ORIENTATION TO CULMINATING EXPERIENCE: EARLY CHILDHOOD CARE AND MANAGEMENT

Fall, 1 credit hour

This course prepares students for their internship experience or senior capstone project in Early Childhood Care and Management. Students will become familiar with the process for selecting and securing an internship site, the necessary skills and behaviors to be successful, and internship requirements. Students will learn how to prepare an appropriate resume and cover letter, and receive guidance on interviewing techniques. If a student selects the senior capstone project, the course will provide information on requirements to satisfy the completion of the project. Students will begin the planning phase of the capstone assignment. Pre-Requisite(s): Senior level status, or permission of the instructor.

ECHD 410 INTERNSHIP: EARLY CHILDHOOD CARE AND MANAGEMENT INTERNSHIP

Spring, 3-12 credit hours

This internship course provides the student with practical experience in an early childhood care and management setting. Students will integrate principles of management and administration and concepts and skills learned throughout their BBA course of study in a childcare facility. The internship will be tailored to the individual career interests of the student and the needs of the supervising organization. Internship proposals must be presented and approved prior to course registration. Pre-Requisite(s): Orientation to Culminating Experience: Early Childhood Care and Management (ECHD 409), senior level status in Early Childhood Care and Management and an overall 2.50 GPA, or permission of the instructor.

ECHD 411 CAPSTONE PROJECT: EARLY CHILDHOOD CARE AND MANAGEMENT

Spring, 3-15 credit hours

Students will complete a senior research project based on their area of interest in Early Childhood Care and Management and career goal. Under the guidance of a faculty mentor, the student will submit a research proposal, conduct research, prepare a thesis style report, and present a defense to a thesis committee. Pre-Requisite(s): Orientation to Culminating Experience: Early Childhood Care and Management (ECHD 409) and senior level status In Early Childhood Care and Management; 2.50 overall GPA, or permission of the instructor.

ECHD 420 EARLY CHILDHOOD PROGRAM DEVELOPMENT AND MANAGEMENT

Fall, 3 credit hours

This course focuses on the role and responsibilities of the child care program administrator. Students will gain an understanding of the complexities, demands, and rewards of such a position. Topics will include organizational and personnel management, human relations, quality programming and evaluation, and professional standards associated with leading an early care and education center. Pre-Requisite(s): Completion of 45 credit hours or permission of the instructor.

ECHD 291-295, 391-395, OR 491-495 SPECIAL TOPICS IN EARLY CHILDHOOD

Fall/Spring, 1-4 credit hours

Individual courses of instruction of variable credit (1–4 credits) may be offered each semester. These courses are designed to expand on topics in specific areas of early childhood. Prerequisite: depends on the nature of each course.

ECON 101 PRINCIPLES OF MACROECONOMICS

Fall and Spring, 3 credit hours **GER 3**

This course is the study of the market economy, role of government, income determination, business cycle, inflation, unemployment, banking system,

Course Descriptions: Economics

monetary and fiscal policy, population, economic growth, and international trade within a market economy. Three hours lecture per week.

ECON 103 PRINCIPLES OF MICROECONOMICS

Fall and Spring, 3 credit hours **GER 3**

This course provides a study of supply, demand, elasticity, theory of the firm, market structures, government regulation, marginal productivity theory, and selected contemporary economic issues. Three hours lecture per week. Prerequisite: Macroeconomics (ECON 101) or GER Math or permission of instructor.

ECON 105 SURVEY OF AMERICAN ECONOMIC HISTORY

Fall or Spring, 3 credit hours **GER 4**

Fundamental tools of economics will be used to explain important events and issues in the history of the United States. Topics to be surveyed include the United States' growth and transformation into an industrialized nation, development and transitions in American labor, consumers and culture, the rise of corporate America, changes in the role of government, economic regulations, monetary and fiscal policy, the origins of major institutions and their economic impact, and increased global awareness. Three hours lecture per week.

ECON 120 INTRODUCTION TO LABOR STUDIES

As Needed, 3 credit hours

Within an historical context, this course examines the economic, social and technical forces that shape labor conditions in the USA. Among the topics covered are: the changing nature of work under capitalism, collective bargaining, theory and value of workplace skills, and the impact of economic globalization on labor. Three hours lecture per week.

ECON 201 ECONOMICS AND SOCIAL ISSUES

As Needed, 3 credit hours **GER 3**

This course applies basic economic concepts to contemporary social issues. The current real world public policies surrounding these issues will be examined, as well as the impact such policies have on society. Three hours lecture per week.

ECON 301 REGIONAL ECONOMIC DEVELOPMENT IN AFRICA

Fall and Spring, 3 credit hours **GER 3**

This course provides an analytical study of economic development of one specific African region. Topics to be covered include inequality, poverty, economic growth, demography, fertility, mortality, migration, employment, education, health, trade, globalization, food production, nutrition, environment, and sustainable development. Different African regions (Central Africa, East Africa, North Africa, Southern Africa, and West Africa) will be studied on a cycle. Students may take one "Regional Economic Development In Africa" for

Gen Ed. 6 credit. Students may take two "Regional Economic Development in Africa" for elective credit. Three hours lecture per week. Prerequisites: Macroeconomics (ECON 101), or Microeconomics (ECON 103), or Introduction to Sociology (SOCI 101), or Statistics (MATH 141) or permission of the instructor.

ECON 305 ECONOMICS OF CRIME

Fall or Spring, 3 credit hours

This course examines the behavior of criminals and uses economic concepts to analyze crimes of violence, crimes against property, and the markets for illegal goods and services. Topics to be covered include costs of crime to society and its various stakeholders, prostitution and drug crimes, issue of decriminalization and legalization, allocation of resources to and within the criminal justice system, crime prevention strategies, and efficiency and effectiveness of the use of punishment as a form of crime deterrence. In addition, it uses an economic understanding of crime and crime behavior to develop public policy options. Three lecture hours per week. Prerequisites: Principles of Macroeconomics (ECON 101) or Principles of Microeconomics (ECON 103), and a minimum 45 credit hours, or permission of instructor.

ECON 310 ECONOMICS OF HEALTH CARE

Fall and Spring, 3 credit hours

This course introduces students to the discipline of health economics and applies economic concepts to the health care sector. Topics to be covered include the demand for health care, health production and costs, health care markets models, health insurance markets, managed care, structure, conduct and performance of pharmaceutical, physician, and hospital services industries. In addition, the role of government in health care markets and various healthcare reforms proposed in the U.S. and overseas is discussed. Three hours lecture per week. Prerequisites: Principles of Macroeconomics (ECON 101) or Principles of Microeconomics (ECON 103), and Statistics (MATH 141) OR Research Methods in Health Sciences (NURS/DHYG 370) OR Research Methods in Social Sciences (SSCI 370)

ECON 314 MANAGERIAL ECONOMICS

Fall and Spring, 3 credit hours **GER 3**

Global case studies from the private, public and nonprofit sectors are utilized to illustrate the application of economic theory and quantitative methods to managerial decision making. Students engage in problem solving exercises that integrate various principles of business, statistics and economics to determine market forecast, pricing strategy, resource usage, and production level. Three hours lecture per week. Prerequisites: Foundations of Financial Accounting (ACCT 101) and student must have met the General Education Requirement in Math, or Principles of Microeconomics (ECON 103), or permission of instructor.

ECON 315 GLOBAL ECONOMY

Fall and Spring, 3 credit hours **GER 6**

Students examine the historical development of the global economy and the increasing interdependence of economies, governments, and public policy. Economic theories in international trade, finance and monetary policy are explored within the context of globalization. Contemporary global economic issues such as the environment, income distribution, and development are analyzed using case studies from various nations. Three hours lecture per week. Prerequisites: Principles of Microeconomics (ECON 103) or at least 30 college credits with a 2.0 GPA or permission of instructor.

ECON 320 ENVIRONMENTAL ECONOMICS

Spring, 3 credit hours

Issues and policies involving renewable and nonrenewable energy, natural resource management, pollution control, global climate change, and sustainable development are explored through traditional neoclassical economics as well as through the contemporary approach of ecological economics. Three hours lecture per week. Prerequisites/Corequisites: Principles of Macroeconomics (ECON 101) or Principles Microeconomics (ECON 103), GER Math and a minimum of 45 college credits with a GPA of 2.0 or better, or permission of the instructor.

ECON 330/FSMA 330 FINANCIAL MARKETS AND INSTITUTIONS

Fall and Spring, 3 credits

This course provides an understanding of financial markets and financial institutions that operate within the financial markets. It introduces the financial markets where flow of funds occur through financial markets instruments, such as bonds, money markets, mortgage markets, foreign exchanges, stocks and derivatives (futures, forward, options, and swaps). It focuses on financial institutions, such as the Federal Reserve, commercial banks, thrifts, insurance companies, investment banks, finance companies, mutual funds, and pension funds. In addition, it provides a comprehensive introduction to risk management within the framework of financial services industry. Three hours lecture per week. Prerequisites: Principles of Macroeconomics (ECON 101) or Principles of Microeconomics (ECON 103), and a minimum 45 credit hours, or permission of instructor.

ECON 370 ENGINEERING ECONOMICS

Spring, 3 credits

This course will expose students to economic theory through the use of mathematical modeling with a focus on economic decision making for engineers. Microeconomics topics will include supply and demand market analysis, and profitability. Macroeconomics topics will include the aggregate market, economic indicators, fiscal policy and monetary policy. The course will include segments of the engineering economic analysis covered in

Course Descriptions: Education, Electrical

the Professional Engineering exam such as the application of different economic analysis methods utilized in evaluating the viability of a project and its alternatives, concepts of replacement decisions, capital-budgeting decisions, and project risk and uncertainty. Students will be exposed to specific issues of economic analysis of the private sector versus the public sector. Three lecture hours per week for fifteen weeks. Pre-requisite(s): College Algebra (MATH 121).

ECON 291-295, 391-395, OR 491-495 SPECIAL TOPICS IN ECONOMICS *Fall/Spring, 1-4 credit hours*

An introductory or more advanced exploration of subjects not covered or only partially covered by other courses in economics.

EDUC 210 PRINCIPLES OF EDUCATION *Fall, 3 credit hours*

This course provides an overview of the historical, sociological, and philosophical foundations of education in North America. Students will explore the characteristics and needs of children, and the goals and objectives of early childhood and elementary education. A study of the nature of knowledge and learning, teaching theories and strategies based on effective instructional models, philosophies of teaching, the changing educational role of the teacher, and attitudes, values and professional ethics relating to educators. The course will examine pedagogy, and the importance of evaluation, assessment, and accountability in teaching and education. May include observations in classroom settings. Prerequisites/Corequisites: 30 college credits including Composition & the Spoken Word (ENGL 101) with a cumulative GPA of 2.0.

EDUC 300 THE PEDAGOGY & TECHNOLOGY OF ON-LINE LEARNING *Fall or Spring, 3 credit hours*

This course will provide the student with fundamental information with which to design and deliver an effective Online Distance Learning course. Topics include: current e-Learning research, pedagogical skills to impact the specialized knowledge/content, teacher-student interactions, applying technology-based web 2.0 tools, and building an online course. Three hours lecture per week. Prerequisites: Junior level status and 2.5 GPA, with prior education courses or teaching experience, or permission of instructor.

EDUC 291-295, 391-395 OR 491-495 SPECIAL TOPICS: EDUCATION *Fall/Spring, 1-4 credit hours*

An introductory or more advanced exploration of subjects not covered by other courses currently available. These courses are designed to expand on topics in specific areas of education or current issues in the professional field of education.

ELEC 101 ELECTRIC CIRCUITS I *Fall, 3 credit hours*

This course focuses on direct current (DC) circuit analysis with enough strength to prepare students for upper level courses in the electrical engineering technology program. Students will analyze resistive, capacitive and inductive circuits and laws/theorems including Kirchhoff's Superposition, Thevenin's, Norton's, and Maximum Power Transfer. Students will develop computational skills. Three hours lecture per week. Corequisite: Pre-Calculus (MATH 123) or College Algebra (MATH 121) or permission of instructor.

ELEC 102 ELECTRIC CIRCUITS II *Fall/Spring, 3 credit hours*

A continuation of Electric Circuits (I), stressing the understanding of AC analysis that involves resistive, capacitive, and inductive circuits. Also, impedance, resonance, filters and transformers are covered. Students will analyze circuits of various configurations and enhance computational skills. Three hours lecture per week. Prerequisite: Electric Circuits I (ELEC 101/109) and Pre-Calculus (MATH123) or permission of instructor.

ELEC 109 ELECTRIC CIRCUITS I LABORATORY *Fall/Spring, 1 credit hour*

An introductory laboratory course stressing the understanding of basic concepts and principles of direct current/voltage by analyzing resistive, capacitive and inductive circuits through practical laboratory application. Students will also study circuits using circuit analysis software. Two hours laboratory per week. Corequisite: Electric Circuits I (ELEC 101) and Pre-Calculus (MATH 123) or College Algebra (MATH 121) or permission of instructor.

ELEC 129 ELECTRIC CIRCUITS II LABORATORY *Fall/Spring, 1 credit hour*

A continuation of Electric Circuits I Laboratory, stressing the understanding of AC analysis that involves resistive, capacitive, and inductive circuits. Also, impedance, resonance, filters and transformers are covered. Students will perform ac circuit experiments using laboratory test equipment. Two hours laboratory per week. Prerequisites/Co-Courses: Electric Circuit (1) ELEC 101 and ELEC 109, or permission of instructor.

ELEC 141 INDUSTRIAL CONTROLS *Spring, 2 credit hours*

A hands-on study of devices and systems used in the control of industrial machinery. The student is introduced to the theory and use of electromechanical control circuits by use of traditional "hardwire circuits." The programming of the Allen-Bradley Micrologix 1000 type of programmable logic controller (PLC) is practiced. An introduction to sequencer systems that enable complex control and monitoring of machines is given. Emphasis is on

learning the ability to program the equipment for effective control. 2-two hour laboratories per week. Prerequisite: Electric Circuits I and Laboratory (ELEC 101/109), and Co-requisite: Digital Fundamentals and Systems and Lab (ELEC165/166), or Basic Electricity (ELEC 261) with an introduction to three phase systems, basic logic gates, binary and hexadecimal number systems, or permission of instructor.

ELEC 161 ELECTRONIC FABRICATIONS *Fall, 2 credit hours*

Stresses practical fabrication techniques used in electronic and communication industries. Procedures focus on the basics of hand smoldering, wiring, installing, testing, and troubleshooting methods used in assembly and repair of electronic equipment. Topics include terminating voice, video, and data cables and also design and fabrication of a single sided printed circuit board. One hour lecture, two hours laboratory per week.

ELEC 165 DIGITAL FUNDAMENTALS & SYSTEMS *Fall/Spring, 3 credit hours*

This course covers topics include: number systems, logic operations and codes, logic gates, Boolean algebra and logic simplification, combinational logic analysis, functions of combinational logic, latches, flip-flops, counters and shift registers. Semiconductor memories (SRAM, DRAMS, PROMS, EPROMS, and EEPROMS) and Digital to Analog and Analog to Digital Converters are also covered. Three hours of lecture per week. Prerequisites or Corequisites: Electric Circuits 1 and Laboratory (ELEC 101/109), or permission of instructor.

ELEC 166 DIGITAL FUNDAMENTALS & SYSTEMS LABORATORY *Fall/Spring, 1 credit hour*

A digital laboratory course with emphasis on topics such as: Adder/Subtraction Circuit, Code Converters, Multiplexers and Demultiplexers, JK Flip-Flop Circuits, Counters, Shift Registers, Timers, Memories Devices, Analog to Digital and Digital to Analog Converts, and Digital Circuit Troubleshooting. Two hours of laboratory per week. Corequisites or Prerequisites: Electric Circuits I/Lab (ELEC 101/109), and Digital fundamentals and Systems (ELEC 165) or permission of instructor.

ELEC 171 ELECTRICAL CONSTRUCTION AND MAINTENANCE I (Certificate Program) *Fall, 7 credit hours*

Instruction includes fundamentals of residential applications for AC circuits, use of electrical test instruments and the National Electric Code. Laboratory projects include wiring installations plus projects related to the theoretical concepts listed. CERTIFICATE/A.A.S. ELECTIVE CREDIT ONLY. Three hours lecture, eight hours laboratory per week.

Course Descriptions: Electrical

ELEC 172 **ELECTRICAL CONSTRUCTION AND MAINTENANCE II (Certificate Program)** *Spring, 7 credit hours*

Continuation of Electrical Construction and Maintenance I. Includes additional instruction in basic AC system theory, three phase circuits, motors-motor control, transformer theory-connections. Laboratory projects include diagnosis of electrical equipment, motors-motor starters, transformer connections and raceway installations for Commercial Electrical applications. CERTIFICATE/A.A.S. ELECTIVE CREDIT ONLY. Three hours lecture, eight hours laboratory per week. Prerequisite: Electrical Construction and Maintenance I (ELEC 171), Applied College Mathematics (MATH 101) or Intermediate Algebra (MATH 106), Introduction to Computer Usage for Technicians (SOET 101), or permission of instructor.

ELEC 173 **INTRODUCTION TO THE ELECTRICAL CODE (Certificate Program)** *Fall, 3 credit hour*

This course will cover the basics of understanding the National Electrical Code, with electrical drawing illustrations. Topics include circuit, over-current protection devices, box and wire sizing, with service entrance design. A final project will include a residential electrical design in accordance with the National Electric Code. Three hours lecture per week for fifteen weeks.

ELEC 203 **ENGINEERING TECHNOLOGY PROJECT** *Spring, 1 credit hour*

Senior project (capstone) course that gives the student an opportunity to think, design, construct, and present a finished product based on knowledge/experience from previous or current courses such as electronic circuits, telecommunications, microprocessors, and industrial controls. Each team is expected to do a classroom presentation on the final project. Examples of design project: High Power Emergency Power Supply (Alternative Energy), Industrial Monitoring System (using sensing devices), and Electronics/Communication Systems. All project proposals must be approved by course instructor. Three hours laboratory per week. Prerequisites: Electrical Energy Conversion (ELEC 215), Industrial Controls (ELEC 141), Electronic Circuits (ELEC 231), Senior level in AAS program, or permission of instructor.

ELEC 213 **MICROPROCESSORS** *Fall/Spring, 3 credit hours*

The 8085 8-bit microprocessor instruction set and the internal hardware register structure are studied. The basic operation of Fetch and Execute operations are examined. The PIC micro family microcontrollers will be introduced to provide the student with hardware and software experience in working with these devices. The student will use a crossassembler to generate the software programs to be written for the microcontrollers. The RS-232C

Serial data transmission interface is also studied. Two hours lecture, three hours laboratory per week. Prerequisite: Digital fundamentals and Systems and Digital fundamentals and Systems Laboratory (ELEC 165/166) or permission of instructor.

ELEC 215 **ELECTRICAL ENERGY CONVERSION** *Fall/Spring, 4 credit hours*

Fundamentals of Electricity, Magnetism, and Circuits related to generation of electrical power are discussed. The study of construction and operation of direct current generators and motors. The principles of operation of three-phase induction motors and alternating current generators are presented. Topics also include linear motor and single phase motor principles and operation. Single-phase transformer theory and three phase circuits are also covered. Hands-on laboratory experiments are performed to reinforce the theory for each of the covered topics. Three hours lecture and three hours laboratory per week. Prerequisites: Calculus I (MATH 161), Electric Circuits II and Laboratory (ELEC 102/129) or permission of instructor.

ELEC 225 **TELECOMMUNICATIONS** *Fall, 3 credit hours*

An intermediate course designed to give students theoretical and hands-on experience in telecommunications technology. Topics include how information is processed and transmitted, medium of transmission, Switching Hierarchy of North America (PSTN), wave propagation, line devices, Modulations, Multiplexing, Noise, Error detection, correction, and control, Transmission lines, ISDN/DSL. Two hours lecture and two hours laboratory per week. Prerequisite: Electronic Circuits (ELEC 231), Calculus I (MATH 161), or permission of instructor.

ELEC 231 **ELECTRONIC CIRCUITS** *Fall, 4 credit hours*

Basic theory and circuit applications of silicon, germanium, zener, light emitting (LED) and Schottky diodes, bipolar and field effect transistors (FET) are presented. The student is introduced to half wave and full wave DC power supplies and associated ripple filters. Zener and Active Voltage Regulators circuits are studied. The basic operation of Metal Oxide; Semiconductor Field Effect Transistors (MOSFET) is also presented. Basic types of bipolar transistor AC amplifiers (CE, CB, CC) and their FET counterparts are discussed. Three hours lecture and three hours lab per week. Prerequisites: Electric Circuits I and Laboratory (ELEC 101/109), Electric Circuits II and Laboratory (ELEC 102/129), Calculus I (MATH 161), or permission of instructor.

ELEC 243 **COMPUTER-AUTOMATED CONTROL SYSTEMS** *Spring, 2 credit hours*

An introduction to some of the control hardware/software systems in use in industry today.

The student is introduced to the architecture of the Arduino platform using the ATmega 328P microcontroller to the extent that various control functions can be Identified and modified. Programs are developed for computer interfaces for motor-control circuits to provide speed control using the Pulse Width Modulation technique. Programs for stepper motor interfaces are also developed. Programs are written to implement a digital voltmeter with a PC screen display. One hour lecture, three hours laboratory per week. Prerequisites: Electronic Circuits (ELEC 231), Industrial Controls (ELEC 141), Microprocessors (ELEC 213) or permission of instructor.

ELEC 261 **ELECTRICITY** *Fall, 4 credit hours*

Fundamentals of direct and alternating current circuits, resistance, inductance, capacitance, magnetism are presented. Also basic machine theory as it applies to both direct and alternating current types is covered. The theory and operation of transformers and the theory of control devices such as relays, contactors and switches is studied. Three hours lecture, three hours laboratory per week. Prerequisite: College Algebra (MATH 121) or Pre-Calculus Algebra (MATH 123) or permission of instructor.

ELEC 332 **INDUSTRIAL POWER ELECTRONICS** *Fall, 3 credit hours*

This course is designed to prepare students with industrial electronics skills necessary to function as technologist. Topics include: Solid States Devices, Photo-Electronics, Inverters, Operational Amplifier circuits including integrator and differentiator applications, Operational Amplifiers circuits including integrator and differentiator applications, Open/Closed Loop Feedback Systems, SCRs, TRIACs, Thyristors, Photosensitive devices, Optically Coupled Devices, Motor Direction Control Inverter Circuits, and techniques used to develop line voltages and frequencies for Variable Speed AC Inductions Motors. Note: Credit is given to a student who has taken ELEC 232 with a (C) grade or better. Two hours lecture, two hours laboratory per week. Prerequisites: Electronic Circuits (ELEC 231), Calculus I (MATH 161) or permission of instructor.

ELEC 343 **ADVANCED CIRCUIT ANALYSIS** *Fall, 3 credit hours*

An advanced course designed to give students upper level circuit analysis experience. Topics include: Resistive Circuits, Nodal and Loop Analysis, Two-Port Networks, Application of Laplace Transform, Electric circuit theory is introduced with emphasis on mathematical definitions of circuit elements. Network analysis techniques are presented within the framework of direct and alternating current theory. Transient forced and complete responses of circuits involving resistance and capacitance are analyzed via differential and integral calculus. Circuit design using Operational Amplifiers. Three hours of lecture per week. Prerequisites: Electric Circuits II and Laboratory (ELEC 102/129), MATH 162 or permission of instructor.

Course Descriptions: Electrical, English

ELEC 375 **FIBER OPTIC COMMUNICATIONS** *Spring/Fall, 3 credit hours*

This course focuses on the transmission of information using fiber optics technologies. Topics include: Optical Fiber, Amplifiers, Transmitters, Receivers, Transceivers, Detectors, Modulation, Multiplexing, Optical Networks, Optical Sources and Demodulation. Two hours lecture, two hours laboratory per week. Prerequisites: Electronic Circuits (ELEC 231), MATH 162 or permission of instructor.

ELEC 379 **DIGITAL SIGNAL PROCESSING APPLICATIONS** *Fall/Spring, 3 credit hours*

This course will introduce the basic concepts and techniques for processing discrete-time signal on a computer using software. Digital Signal Processing (DSP) is concerned with the representation, transformation and manipulation of signals on a computer. DSP has become an important field, and has penetrated a wide range of application systems, such as consumer electronics, digital communications, medical imaging and so on. By the end of this course, the students should be able to understand the most important principles in digital signal processing (DSP). The course emphasizes understanding and implementations of theoretical concepts, methods and algorithms. Three hours lecture per week. Prerequisites: Calculus II (MATH162), Programming for Engineers (ENGS102), Digital Fundamentals & Systems (ELEC165), or permission by program director

ELEC 380 **LAN/WAN TECHNOLOGY** *Spring, 3 credit hours*

This course will cover topics including: Network topologies and connectivity devices, TCP/IP protocol suite and internet protocol addressing, networks and subnetworks, network-layer protocols, internet control message protocol, transport layer protocol, internet protocol version 6, configuration and domain name protocols, and Integrated Services Data Networks (ISDN). Two hours lecture, two hours laboratory per week. Prerequisites: Telecommunications (ELEC 225) or permission of instructor.

ELEC 383 **POWER TRANSMISSION AND DISTRIBUTION** *Fall/Spring, 3 credit hours*

This course in electrical power generation and transmission will emphasize on those aspects that concern engineers and technologists in the performance of their tasks. Topics covered include: Hydropower, Thermal, Nuclear, and Wind Power Generating Stations, Transmission and Distribution of Electrical Energy, Protective Relays, Direct Current Transmission, HVDC Light Transmission System, Power Stability, and Cost of Electricity. Two hours lecture, two hours laboratory per week. Prerequisites: Electrical Energy Conversion (ELEC 215), Calculus I (MATH 161) or permission of instructor.

ELEC 385 **ELECTRONIC COMMUNICATIONS I** *Spring, 3 credit hours*

This is the first of a two series of courses to prepare students for modern telecommunications industry. Topics covered include: Noise, Transmission Lines, Wave Propagations, Error Checking, Communication Transmitters/Receivers, Coding Techniques, and Computer Communications. Two hours lecture, two hours laboratory per week. Prerequisites: Telecommunications (ELEC 225) Electronic Circuits (ELEC 231), Calculus II (MATH 162) or permission of instructor.

ELEC 386 **ELECTRONIC COMMUNICATIONS II** *Fall, 3 credit hours*

This course is the continuation of Electronic Communications (I), and is designed to prepare students for modern telecommunications industry. Topics include: Wireless digital communications, Optical communications, Cell phone communications, CDMA, OAS, Wireless technologies, Microwave and lasers, Antennas, and Waveguide and Radar. Two hours lecture, two hours laboratory per week. Prerequisites: Electronic Communications I (ELEC 385), MATH 162 or permission of instructor.

ELEC 405 **SATELLITE COMMUNICATIONS** *Fall/Spring, 3 credit hours*

This course will emphasize on hardware and the basic operating techniques of every major supporting subsystem, the reliability analysis that allow satellites to operate for years without maintenance. Topics include: Propulsion, Structure, Thermal control, Reliability, Spacecraft testing, Spacecraft attitude, System performance, Telemetry, Tracking, and Command. Three hours lecture per week. Prerequisites: Electronic Communications I (ELEC 385) or permission of instructor.

ELEC 416 **MICROELECTRONICS CIRCUIT DESIGN** *Fall/Spring, 3 credit hours*

Analyzing and designing analog electronic circuits, digital electronic circuits, and the foundations of electronic circuit design. Topics covered include: Operational amplifier circuit design, Integrated circuit biasing and active loads, analysis of differential and multistage amplifiers, Feedback and stability, and Operational Amplifier Integrated Circuits. Two hours lecture, two hours laboratory per week. Prerequisites: Industrial Power Electronics (ELEC 332), Electronic Circuits (ELEC 231), MATH 162 or permission of instructor.

ELEC 436 **BIOMEDICAL ELECTRONICS** *Fall, 3 credit hours*

This course is designed to give students theoretical and hands-on experience in biomedical instrumentation and measurement. Topics covered include: Medical Instrument Transducers, Bio-potential Amplifiers, The pacemaker, Ultrasonic

Equipment, Central Station Monitor, Electroencephalograph and Filtering, Electrosurgical Units and Laser Surgery, and Catheters and Blood Pressure Monitoring Devices. Two hours lecture, two hours laboratory per week. Prerequisites: Microelectronics Circuit Design (ELEC 416), Calculus II (MATH 162), or permission of instructor.

ELEC 477 **CAPSTONE PROJECT** *Spring, 3 credit hours*

A learning experience by allowing students to propose, design and implement a project. This could be a study of a problem and solution of specific equipment, new product design, improvement of an existing product (re-engineering). All projects must be approved by course faculty and capstone committee. As part of this course, all students must take the exit examination before graduation. A writing intensive course. Independent Project. Prerequisites: Completion of seven semester coursework or permission of instructor.

ELEC 488 **ELECTRICAL POWER SYSTEMS** *Spring, 3 credit hours*

This course covers advanced topics in AC and DC transmission such as the per unit concept of transformer and generator analysis, transient stability of power systems etc. Students learn power-flow and economic power dispatch by using both analytical techniques and power system simulators. Basic knowledge of power system control is provided by covering the topics of supervisory control and data acquisition (SCADA), protective relaying etc. The course address the energy economics, efficiency and ethics of dynamic pricing and smart meters. The course also delivers topics on smart grid supply that integrate renewable and distributed generation (i.e. photovoltaic and wind). Two lecture hours and two lab hours per week. Prerequisites: Electrical Energy Conversion (ELEC 215), Power Transmission and Distribution (ELEC 383), or Permission of the instructor.

ELEC 292-295, 391-395, OR 491-495 **SPECIAL TOPICS IN ELECTRICAL TECHNOLOGY**

Fall/Spring, 1-4 credit hours

Special Topics in Electrical Technology will generally include topics of current interest or topics not covered in courses currently offered by the department or in combinations not currently available.

ENGL 097 **INTRODUCTION TO ACADEMIC READING AND WRITING** *Fall and Spring, 4 equivalent credits*

This course is intended to provide the literacy skills required in an academic setting. Students read and respond to a variety of academic texts. The course includes fundamental rhetorical strategies for academic writing and an overview of basic writing mechanics and grammar. Additional tutorials with the class instructor, the Writing Center, EOP and/or Student Accessibility Services tutors may

Course Descriptions: English

be required. A minimum grade of C Is required for progression to ENGL 101. This course may be taken simultaneously with ENGL101. Leveled by placement text score. Four lecture hours per week.

ENGL 101 COMPOSITION & THE SPOKEN WORD *Fall and Spring, 3 credit hours* GER 10

This course is designed to help students communicate effectively orally and in writing. Students develop critical thinking skills, rhetorical knowledge, basic research skills culminating in a research paper, knowledge of conventions, and communication ethics.

ENGL 109 APPROACHES TO LITERATURE *Fall/Spring, 3 credit hours* GER 7

This course is designed to acquaint students with different kinds of literature—plays, short stories, novels and poems—and with various methods of understanding literature. Students will read a wide variety of literary works and will be encouraged to employ proper literary terminology in writing about them. Emphasis will be on intelligent interpretation and on the relationships between literary themes and everyday life. Three hours lecture per week.

ENGL 201 WRITING IN THE ARTS AND SCIENCES *Spring, 3 credit hours*

This course is for students who wish to continue improving their writing skills. They are given the opportunity to read and write about various topics in Humanities, Social Science, Business, Economics, and Science. Using a variety of materials including advertisements, films, television, imaginative and scientific literature, art, newspapers, and journal articles students analyze, investigate, interpret, and formulate ideas through their own writing. Additionally, students further familiarize themselves with the library and research techniques. Three hours lecture. Prerequisite: Composition & the Spoken Word (ENGL 101) or permission of the instructor.

ENGL 202 CREATIVE NON-FICTION *Fall and Spring, 3 credits*

This course provides opportunities for student to continue developing and refining skills in writing from the basics of Composition & the Spoken Word. Through their study of creative non-fiction forms and conventions—memoirs, nature writing, lyrical essays, magazine features, webpage content, digital or textual literacy narratives etc.—students learn to write essays that are not only persuasive but enjoyable for both reader and writer. Each student design writing situations according to interests and develops imaginative essays of creative nonfiction. A liberal arts writing intensive course. Three hours lecture per week. Prerequisites: Composition & the Spoken Word (ENGL 101) OR an equivalent course OR permission of instructor.

ENGL 203 WORLD LITERATURE: B.C. TO 16TH CENTURY

Fall and/or Spring, 3 credit hours GER 7

This course examines global literature by tracing patterns of difference and points of contact between literatures developed in various regions throughout the world. Works read will be discussed in the context of their originating culture as well as in relation to Western modes of understanding literature. Three hours lecture per week.

ENGL 204 WORLD LITERATURE: 17TH TO 20TH CENTURIES

Spring, 3 credit hours GER 7

This course examines global literature by tracing patterns of difference and points of contact between literature developed in an era defined by colonial expansion and postcolonial nation building. Works read will be discussed in the context of their originating culture as well as in relation to Western modes of understanding literature. Three lecture hours per week.

ENGL 205 SURVEY OF ENGLISH LITERATURE I *Fall, 3 credit hours* GER 7

This survey course begins with Old English literature from 450 AD and extends through 1800 AD. Students study the primary writers and their representative works. Relevant historical, social, and political background, cultural changes, and developments of each period are also examined. Three hours lecture per week. Prerequisites: Composition & the Spoken Word (ENGL 101).

ENGL 206 SURVEY OF ENGLISH LITERATURE II *Spring, 3 credit hours* GER 7

This survey course begins with a study of English literature from the Romantic through the Post-Victorian period. Students study the important writers and their representative works. The historical, social, and political background for each period and the cultural changes and developments of the eras is also examined. Three hours lecture per week.

ENGL 207 LITERATURE OF THE EARLY AMERICAN REPUBLIC: COLONIZATION AND REVOLUTION, 1640-1830 *Fall, 3 credit hours* GER 7

This course is designed to acquaint students with the early emergence of a distinctively American literature. Students explore the roots of American literature and how the literature makes us the Americans we are today. Works by major American writers such as Bradford, Bradstreet, Franklin, Jefferson, Paine, Murray, Wheatley, Sedgwick, Irving, and others comprise the foundation of the course. The historical, social and political background for each period is examined with a particular eye for the intersections between Native, European, and African voices. Three hours lecture per week. Prerequisites: Composition & the Spoken Word (ENGL 101).

ENGL 208 AMERICAN LITERATURE COMES OF AGE: 1830-1920

Spring, 3 credit hours GER 7

This course is designed to acquaint students with significant American authors from the pre-Civil War era and continues to 1920. Students study Important American writers such as Whitman, Dickinson, Poe, Melville, Hawthorne, Twain, Jacobs, Freeman, Chopin, Cather, Fitzgerald, and others. The historical, social, and political background for each period and the cultural changes and developments of the eras are also examined. Three hours lecture per week. Prerequisites: Composition & the Spoken Word (ENGL 101) .

ENGL 211 THE AMERICAN NOVEL OF THE TWENTIETH CENTURY *Spring, 3 credit hours* GER 7

This course explores the interaction between historical events, social change, and economic factors that affected the American way(s) of life as they are reflected in the novels of writers such as Edith Wharton, F. Scott Fitzgerald, Ernest Hemingway, John Steinbeck, William Faulkner, Richard Wright, Toni Morrison, Alice Walker, Leslie Marmon Silko, Sandra Cisneros, and others. The novels may be augmented by a variety of print and digital media.

ENGL 213 WAR AND LITERATURE *Spring, 3 credit hours* GER 7

Focusing on American wars from World War II to the present, this course examines war and a range of human responses to the war experience as reflected through literature. Theories originating in the social sciences and historical information are included to enhance understanding of the literature. Prerequisites: Composition & the Spoken Word (ENGL 101). Three hours lecture per week.

ENGL 214 CONTEMPORARY AMERICAN FICTION *Spring, 3 credit hours* GER 7

Through the writings of current authors, students examine literary trends and their relationship to social, political, cultural phenomena in America. Students are given an opportunity—through their own writing and class discussion—to explore contemporary ideas, values, and attitudes expressed in the literature. Three hours lecture per week.

ENGL 215 MULTICULTURALISM IN AMERICAN LITERATURE *Spring, 3 credit hours* GER 7

This course examines multiculturalism in the United States as reflected in its literature of the twentieth and twenty-first centuries. Works will be selected to highlight the diversity of American life including, but not limited to, race/ethnicity, gender, social class, sexual orientation, nationality/immigrant status, religion, and family structure. Students should increase their understanding of the multicultural nature of American society and the ex-

Course Descriptions: English

istence of cultural traditions and practices that exist independently of those of the dominant American “mainstream” or overculture. Three hours lecture per week. Prerequisite: Composition & the Spoken Word (ENGL 101) or permission of the instructor.

ENGL 216 CHILDREN'S LITERATURE

Fall, 3 credit hours **GER 7**
This is a survey course of traditional and modern literature written for young children. Emphasis is on critical appreciation and understanding of literary qualities appealing and valuable to children. A writing intensive course. Three hours lecture per week. Prerequisite: Composition & the Spoken Word (ENGL 101), or permission of the instructor.

ENGL 217 COMIC BOOKS AS LITERATURE

Spring, 3 credit hours **GER 7 & GER 8**
Comic books as literature? Certainly, skeptics will scoff at the idea. However, in recent years, comic books have become accepted as a respected form of literature by scholars, critics, and faculty alike. Students in this course examine the academic value of comic books and graphic novels through study of their history, similarity to other forms of literature, their own specialized literary and artistic techniques, and development as compelling narratives. A writing intensive course. Three hours lecture per week, combination of lecture, discussion, and in-class small group activities. Prerequisites include Composition & the Spoken Word (ENGL 101) or an accepted transferred writing course, or permission of instructor.

ENGL 218 SCIENCE FICTION WORKSHOP

Spring **GER 7 & GER 8**
Students explore the form by reading a wide range of science fiction stories that represent the standard indications of literary quality (i.e. characterization, plot, setting, point of view, style, theme, etc.). After a survey of the form, students will write science fiction stories of their own that incorporate the various literary qualities inherent in the genre and constructively respond to peers' writing in a workshop format. Three hours lecture. Prerequisite: Composition & the Spoken Word (ENGL 101) or permission of the instructor.

ENGL 219 THE ADIRONDACKS: LIFE AND LITERATURE

Fall and/or Spring, 3 credit hours
This course provides the opportunity to explore various aspects of life and literature set in the Adirondack forest preserve. A wide variety of readings, films, slides and presentations present the opportunity to sharpen awareness of what the Adirondacks are and how they have shaped and influenced life and literature in America. Three hours lecture per week.

ENGL 220 AMERICAN LITERATURE IN MODERN ERA 1920-PRESENT

Fall or Spring, 3 credit hours **GER 7**
This course is designed to acquaint students with significant American authors starting from 1920 and continuing to the present. Students study important American writers such as Baldwin, Steinbeck, Updike, Ginsberg, Roth, Larsen, Hurston, Porter, Millay, Hughes, Plath, and others. The historical, social, and political background for each period and the cultural changes and developments of the eras are also examined. Three hours lecture per week. Prerequisites/Corequisites: Composition & the Spoken Word (ENGL 101).

ENGL 221 CREATIVE WRITING

Fall and Spring, 3 credit hours **GER 8**
This course is an introduction to creative writing and its publication. Students hone their written communication skills through the discipline of creative writing, as well as develop a deeper understanding of the literary arts. Emphasis is placed upon the writing of poems and short stories, but other forms of creative work may be utilized and discussed. We cover basic technical problems and formal concepts of creative writing. Students also study works by accomplished writers to see how those writers define and master their craft. At the end of the semester, students seek publication of their work in various formats. This writing intensive course meets 3 hours per week. Prerequisites: Composition & the Spoken Word (ENGL 101), and one literature course, or permission of instructor.

ENGL 224 SURVEY OF NATIVE AMERICAN LITERATURES

Fall, 3 credit hours **GER 6**
Introductory survey of expressive and essayist literature by selected Native American authors from the United States and Canada. Works will be chosen to reflect the diversity of Native American thought and experience as revealed through literature. Emphasis is on contemporary short fiction and poetry, but readings include essays, drama and the novel. Discussion of cultural context encompasses the oral tradition(s) and relevant political and social history. Audiovisual media and Internet resources will supplement lectures and discussions. Three hours lecture per week. Prerequisite: Composition & the Spoken Word (ENGL 101) or permission of instructor.

ENGL 225 AFRICAN AMERICAN LITERATURE

Fall or Spring, 3 credit hours **GER 7**
This course focuses on African American authors from the Colonial Era to the present. Topics include recurring themes and concerns, cultural pressures, historical contexts, intellectual currents and literary innovations. Students study major African American writers such as Zora Neale Hurston, Richard Wright, Langston Hughes, Rita Dove, Toni Morrison, Alice Walker, James Baldwin and others. Three hours

lecture per week. Prerequisites: Composition & the Spoken Word (ENGL 101) or permission of instructor.

ENGL 264 LIVING WRITERS SERIES

Fall and Spring, 3 credit hours **GER 7**
Students read and discuss works by a selected group of contemporary authors. After reading a given work, students meet and engage authors in a question and answer session followed by a public reading. This course includes an introduction to close reading skills, analysis of the elements of literary style in fiction, poetry, and creative non-fiction. Through intensive class discussion, writing workshops, and oral presentations, the students learn how to articulate ideas clearly and are introduced to the basic elements of creative writing in three genres. Three hours lecture per week. Prerequisites: Composition & the Spoken Word (ENGL 101) or permission of instructor.

ENGL 265 WRITING IN THE HUMANITIES THEMATIC INQUIRY

Spring, 3 credit hours **GER 7**
Students explore questions about the humanities and are introduced to several disciplines within the humanities. Through writing about a common theme, students analyze, evaluate, and interpret texts, films, art and/or music that reflects this common theme. Citation and integration of external sources will be expected. This is a writing intensive course for students in General Studies or for students interested in transferring to a liberal arts program, especially in the humanities. Three hours lecture per week. Prerequisites: Composition & the Spoken Word (ENGL 101); completion of 24 credits towards the major of General Studies; or permission of instructor.

ENGL 266 THE MODERN ISLAMIC WORLD THROUGH FILM AND LITERATURE

Fall or Spring, 3 credit hours **GER 6**
This course introduces the student to the history, cultures, and politics of the modern Islamic world with a special emphasis on film and literature. Readings will include poets such as Rumi and Hafiz as well as novelists such as Mahfouz and Farah. Films will include those of such Persian and Arab directors as Majidi, Kiarostami, and Chahine. Three lecture hours per week. Prerequisites: Must have passed Composition & the Spoken Word (ENGL 101).

ENGL 267 MASCULINITY STUDIES IN AMERICAN LITERATURE AND CULTURE

Fall or Spring, 3 credit hours
This course explores the ways in which gender, and in particular the broad concept of masculinity, arises from and impacts American literature and culture. Students examine novels, short stories, creative nonfiction, theatrical productions, and films, as well as excerpts from prominent gender studies scholars. Students also increase their understanding

Course Descriptions: English

of how masculinity functions and shapes American culture, as well as develop a critical and theoretical lens for reading and interpreting literary works. Through the study of masculinity and masculinities, students leave the course with nuanced knowledge of the complex Implications of gendered men and women. Three lecture hours per week. Prerequisites: Composition & the Spoken Word (ENGL 101).

ENGL 270 MEDIA WRITING

Fall, 3 credit hours

This course introduces the creative practices and theories of writing/designing for various electronic and digital media platforms. Through critical practice, students learn to integrate concepts and techniques in order to produce portfolio websites, illustrated proposals, presentations, and digital games for various public audiences. Class workshops and collaborative projects focus on writing and software skills; research, design and technical resources; and issues such as copyright/fair use. Students learn digital communication skills by utilizing industry design frames such as CAT (Conceptual, Aesthetic, Technical), experience design, user experience, information design, and information architecture, which then serve as building blocks for subsequent technological communications courses. Three lecture hours per week. Prerequisite: Composition & the Spoken Word (ENGL 101) or permission of the instructor.

ENGL 301 PROFESSIONAL WRITING AND COMMUNICATION

Fall/Spring, 3 credit hours

This course is designed to advance student's communication skills for the global marketplace. Emphasis is on technical writing, business writing, and publishing. Students design and produce technical documents, including, but not limited to, job-search documents, memos, reports, and proposals, responding to specific audiences and purposes in the business world. Students should be familiar with desktop publishing and electronic presentations. A writing intensive course. Three hours lecture per week. Prerequisites: Composition & the Spoken Word (ENGL 101) and completion of at least 45 credit hours; or permission of instructor.

ENGL 302 GLOBAL ENGLISHES

Fall, 3 credit hours

GER 7

This course provides opportunities for students to deepen their understanding of the English language: its history, its status and functions in different areas of the world, and its variations. Promoting an inclusive and pluralistic concept of Englishes rather than the inaccurate notion of a singular English, students develop explicit knowledge about how language works, and how people learn and use language not only as a tool for communication but as a component of social and cultural identity. Students emerge from this course better equipped to navigate situations requiring crosscultural communication at the university and beyond. A writing

intensive course. Prerequisite(s): Composition and the Spoken Word (ENGL 101) and 45 credit hours. Three hours lecture per week.

ENGL 304 LGBTQ LIVES AND LITERATURE

Spring, 3 credit hours

GER 7

This course explores the social, cultural, and political themes in the histories of individual lives as well as communities that are categorized as "LGBTQ": lesbian, gay, bisexual, transgender, and queer (a term that is by nature flexible and which is used by many who feel that they in some way fall outside of "norms" of gender identification, gender expression, and/or sexual orientation). Focusing mainly on literature from the U.S. and the United Kingdom, works from the genres of short story, poetry, the novel, creative nonfiction, theatrical productions, and film are supplemented by information and insights offered by anthology of critical essays as well as texts harvested from contemporary news sources. This is a Writing Intensive Course. Three lecture hours per week. Prerequisites: Composition & the Spoken Word (ENGL 101) and 30 credit hours.

ENGL 305 PERPETRATORS & VICTIMS: CRIME AND VIOLENCE IN LITERATURE

Fall, 3 credit hours

Students examine the impact of crime and violence in American culture as reflected in literature. Analysis focuses on both perpetrators and victims of crime and violence. Literary genres may include, but are not restricted to, True Crime, fiction, memoir, the graphic novel, and poetry. Three hours lecture per week. Prerequisites: Composition & the Spoken Word (ENGL 101), one literature course, and 30 credit hours earned with a cumulative GPA of 2.0, or permission of instructor.

ENGL 306 IRISH PRISON LITERATURE

Fall or Spring, 3 credit hours

GER 7

This course uses works of literature to assist students' understanding of Ireland, the British Empire and the history of modern imprisonment. Along with the church, the university and the army, the prison is one of the central institutions in Irish history, and literature has traditionally been a means by which prisoners protest, resist, and critique their harrowing experiences. This course examines work written by men and women during and after their incarceration. A writing intensive course. Three hours lecture per week. Prerequisites: Composition & the Spoken Word (ENGL 101); completion of 45 credit hours with a minimum 2.0 GPA

ENGL 307 DISABILITY AND LITERATURE

Spring, 3 credit hours

GER 7

Historical and contemporary poetry, short stories, novels, memoirs, and other fiction and non-fiction life writings are analyzed for portrayals of people who have physical, developmental, or mental health impairments and/or disabilities. Topics include historical changes in what is considered

"normal," stereotypes as limiters of opportunity, comparison of literary portrayals of disability with reality as presented in autobiographical narratives, and others. An overview of the medical and social construction models of disability is included. Three lecture hours per week. Prerequisites: Composition & the Spoken Word (ENGL 101) and one literature course and 30 credit hours earned.

ENGL 309 JOURNALISM

Fall or Spring, 3 credit hours

This course provides a general introduction to journalistic principles and practice in gathering and writing news. Students write a variety of news story types with the goal of developing an array of publishable writing samples to present at a job interview. Fundamentals of English grammar and mechanics are reinforced through regular editing exercises. Ethical issues related to mass media are considered. Online journalism is explored, as well as alternative forms of media writing, including broadcast writing, advertising and public relations. A writing intensive course. Prerequisites: Composition & the Spoken Word (ENGL 101) and junior status, or permission of the instructor.

ENGL 310 WRITING YOUR LIFE: FORM & FUNCTION IN MEMOIRS

Spring, 3 credit hours

GER 8

Memoirs are an author's commentary on his or her life, experiences and the times in which he or she lives. Writers record important events based upon their own observations and knowledge of events and/or personalities that they feel have significantly influenced their lives. In this writing intensive course, students study a variety of literary forms within the memoir genre, and they create memoirs of different forms from their own life experiences. Students recognize that both concrete details and abstract ideas in memoirs represent universal truths and create poems and stories that reflect both. Three hours lecture per week. Prerequisites: Composition & the Spoken Word (ENGL 101), one literature course, and 30 credit hours earned with a cumulative GPA of 2.0, or permission of instructor.

ENGL 314 DIGITAL GRAPHIC STORYTELLING

Spring, 3 credit hours

This course explores the graphic narrative through the digital medium. Students explore the literary, architectural, interactive, and design elements of graphic narratives by reading and engaging novels, memoirs, and narrative games written from the 1970s to the present. In order to create effective graphic narrative texts, students critique several seminal graphic works and then apply their knowledge of this visual medium to their own narratives. The class will design original graphic works in various software platforms using both literary and design frameworks. Units include: memoir, graphic medicine, digital/online comics, and interactive narrative games. Through close textual analysis, peer critique, and iterative thinking/practice, students

Course Descriptions: English, Mathematics for Engineering

learn to create digital projects that use Image/text to tell stories and analyze literature. Projects may include: digital theory comix, graphic essays, graphic narrative maps in Google Earth, and video essays. Three lecture hours per week. Prerequisites: Composition & the Spoken Word (ENGL 101).

ENGL 315 SHORT FICTION: THE ART OF THE TALE *Spring, 3 credit hours* **GER 8**

The short story genre is explored by reading selections from various writers around the world. Students also write their own short stories in order to gain perspective on the literary form of the short story, the range of ideas expressed within that form, and the creative process used to produce that form. Three hours lecture per week. Prerequisites: Composition & the Spoken Word (ENGL 101) and one lower-level literature course and 30 credit hours earned.

ENGL 317 WORLD POETRY *Spring, 3 credit hours* **GER 6**

Students in this course explore the vast wealth of non-Western poetry. We draw from the historical canon of writings, but we have distinctly modern concerns in this class. Our wide reading helps us understand divergent (and poetic) cultural issues, such as Japanese anime cartoons, Islamic world views, global hip hop and graffiti, and post-colonial literature. While all our readings will be in English, our consideration of the linguistic and political concerns of translation allows us to analyze the dynamic interchange between local cultures and globalization. Three hours lecture per week. Prerequisites: Composition & the Spoken Word (ENGL 101), and one lower-level literature course, or permission of instructor.

ENGL 320 NATIVE AMERICAN AUTOBIOGRAPHY *Fall and/or Spring 3 credit hours* **GER 6**

This course is a survey of the means by which Native American people have recorded their lives. Texts are selected from precontact pictorial and oral autobiographical narratives through contemporary written texts, film, and electronic media. Historical context is provided in lecture materials. Emphasis is on works published since 1980. Three hours lecture per week. Prerequisites: Composition & the Spoken Word (ENGL 101) and one lower level literature course AND 30 credit hours earned or permission of instructor.

ENGL 325 CONTEMPORARY YOUNG ADULT LITERATURE *Spring, 3 credit hours*

This course is an exploration of contemporary young adult novels as a genre of literature. Of particular interest are the historical development, current trends, enduring characteristics of young adult literature, and its influence on readers. Various works are analyzed according to critical perspectives. Readings include a number of subgenres, i.e. ad-

ventures, mysteries, humor; fantasy, science fiction, the people and places of history, and modern social issues. Three hours lecture per week. Prerequisites: Composition & the Spoken Word (ENGL 101), one literature course, and 30 credit hours earned with a cumulative GPA of 2.0, or permission of instructor.

ENGL 340 AMERICAN WOMEN WRITERS *Fall or Spring, 3 credit hours*

This course is designed to acquaint students with significant American women writers, such as Wheatley, Bradstreet, Harper, Dickinson, Alcott, Gilman, Stowe, Yeziarska, Wharton, Stein, Moore, Sexton, Plath, Cisneros, Morrison, Erdrich, and others. The historical, social, and political backgrounds for each author and their works are also examined, with an introduction to basic concepts of cultural criticism and gender studies. Works are selected to highlight the diversity of American women, including, but not limited to, race/ethnicity, gender, social class, sexual orientation, nationality/immigration status, religion, and family structure. Focus can be multi-genre or on one specific genre, at the discretion of the instructor. Prerequisite: Composition & the Spoken Word (ENGL 101) and completion of at least 45 credit hours, or permission of instructor.

ENGL 349 CLASSIC DETECTIVE FICTION *Spring, 3 credit hours* **GER 7**

This course explores the genre of detective fiction from its origins in the nineteenth century to the present day. Course content and time periods may vary by semester. Students learn literary elements of detective fiction, examine the development of the detective as a literary figure and detective fiction as a genre, and analyze depictions of the law and legal system. Course may include, but is not limited to, British and American detective fiction by Poe, Collins, Conan Doyle, Chesterton, Sayers, Hammett, Christie, Chandler, MacDonald, James, Rendell, Cross, Elizabeth Peters, Ellis Peters, Perry, George, and King. Three lecture hours per week. Prerequisites: Composition & the Spoken Word (ENGL 101) and one lower-level literature course and 45 credit hours earned.

ENGL 350 FLASH FICTION *Fall, 3 credit hours* **GER 8**

The Flash Fiction story (also called short-shorts; micro; sudden; or lightning fiction) lies somewhere between prose and poetry. Students taking this course explore the form by reading a wide range of Flash Fiction stories that represent the best in terms of literary quality (i.e. characterization, plot, setting, point of view, style, theme, etc.), and by creating stories of their own that incorporate the various literary qualities inherent in the genre. Three lecture hours per week. Prerequisites: Composition & the Spoken Word (ENGL 101), one literature course, and 30 credit hours earned with a cumulative GPA of 2.0, or permission of the instructor. Creative Writing (ENGL 221) is strongly suggested as a prerequisite.

ENGL 351 ADVANCED FICTION WORKSHOP *Spring, 3 credit hours*

This course is a writing intensive fiction workshop where students hone the knowledge and skills they have developed in previous creative writing and literature courses. As an advanced workshop this course is intended for students already producing creative work and is meant to provide a disciplined, creative environment where students focus on the craft of writing fiction. Students read and discuss published stories while also providing constructive oral and written feedback on the writing of their peers in a workshop setting. Students produce multiple works of fiction over the course of the semester which are revised and submitted in a final portfolio. At the end of the course, students seek publication of their work. Three lecture hours per week. Prerequisites: Creative Writing (ENGL 221) OR Short Fiction: Art of the Tale (ENGL 315) OR Flash Fiction (ENGL 350), OR permission of the instructor

ENGL 380 INTERCULTURAL COMMUNICATION *Fall and Spring, 3 credit hours*

In this course, students advance intercultural communication skills necessary in a multicultural global marketplace. The focus is on oral, nonverbal, and written communication patterns across cultures, diverse cultural values, global etiquette, business and social customs, and intercultural negotiation models. Three lecture hours per week. Prerequisites: Composition & the Spoken Word (ENGL 101) and completion of 45 credit hours, or permission of the instructor.

ENGL 291-295, 391-395 OR 491-495 SPECIAL TOPICS IN ENGLISH *Fall/Spring, 1-4 credit hours*

Special Topics in English will fulfill the general English component of the distribution requirement of the College. It may be repeated for credit depending on the content of the course. It is not a course offered on a regular basis within the department. The intent of a special topics course is to offer an educational experience which is topical, not available within the regular curricular offerings, and may even be offered interdepartmentally depending on the nature of the course.

ENGM 101 INTRODUCTORY MATHEMATICS FOR ENGINEERING APPLICATIONS *Fall/Spring, 3 credit hours*

This course provides an overview of the salient math topics most heavily used in the core engineering and engineering technology courses. These include algebraic manipulation of equations, trigonometry, vectors and complex numbers, and systems of equations. All topics are presented within the context of engineering application, and reinforced through extensive examples of their use in the core engineering or technology courses. Two one-hour lectures and one two-hour laboratory. Pre-requisite: MATH 106 or permission of instructor

Course Descriptions: Engineering Science, Environmental Science

ENGS 101 INTRODUCTION TO ENGINEERING *Fall/Spring, 2 credit hours*

The course introduces students to the various engineering disciplines, professional organizations and ethical aspects of professional expectations. Engineering analysis introduces problem-solving, engineering computations, manual sketching, and work presentation. Hands-on challenges engage the student in the design process, team work and critical thinking. Local expectations regarding written communication and oral presentations are presented and reinforced through projects. Two, two-hour laboratories per week. Corequisite: Pre-Calculus Algebra (MATH 123) or College Algebra (MATH 121) or higher or permission of instructor.

ENGS 102 PROGRAMMING FOR ENGINEERS *Spring, 2 credit hours*

This course provides an introduction to computer programming using equation solving software. Students will learn the skills necessary to create predictive models and solve basic engineering problems as well as methods for graphically presenting results and data using said software. The skills taught in this course will assist in the analysis of engineering problems in more advanced course work. Two hour labs are held twice every week. Prerequisites: Pre-Calculus Algebra (MATH 123) with a C or better.. Two, two-hour recitation in computer laboratory per week.

ENGS 201 STATICS *Fall, 3 credit hours*

A vector approach to particle equilibrium, equivalent force systems, rigid body equilibrium and analysis of structure. Additional topics include friction, centroids and centers of gravity and moments of inertia. Three hours lecture per week. Prerequisites: Calculus II (MATH 162), University Physics I (PHYS 131), or permission of instructor.

ENGS 202 DYNAMICS *Spring, 3 credit hours*

This course is a vector approach to the solution of dynamics problems involving rectilinear motion, curvilinear motion, kinetics of particles, kinematics of rigid bodies, and plane motion of rigid bodies. Newton's laws, Work and Energy, Impulse and Momentum, and Energy and Momentum Principles are used in the solutions. Three hours lecture per week. Prerequisite: Statics (ENGS 201) or permission of instructor.

ENGS 203 ENGINEERING STRENGTH OF MATERIALS *Spring, 3 credit hours*

This course is designed to introduce elementary analysis of deformable bodies subjected to various loading including strength, deformation and stability analyses. Students will also be introduced to more advanced concepts in order to use sound judgment

regarding the design of structures and components. Three hours lecture per week. Prerequisite: Material Science (ENGS 205), Statics (ENGS 201), or permission of instructor.

ENGS 205 MATERIALS SCIENCE *Fall, 3 credit hours*

The underlying atomic and crystalline structure of materials is studied and how these structures affect their engineering properties. The mechanical, electric, chemical, magnetic and thermal properties of metals, ceramics, polymers and composites are examined. Three hours lecture per week. Prerequisite: College Chemistry I (CHEM 150), Calculus II (MATH 162), and University Physics II (PHYS 132), or permission of instructor.

ENGS 263 ELECTRIC CIRCUITS *Spring, 3 credit hours*

Electric circuit theory is introduced with emphasis on mathematical definitions of circuit elements. Network analysis techniques are presented within the framework of direct and alternating current theory. Transient forced and complete responses of circuits involving resistance, inductance and capacitance are analyzed via differential and integral calculus. Three hours lecture per week. Prerequisites: Calculus II (MATH 162), University Physics II (PHYS 132), or permission of instructor.

ENGS 264 ELECTRICAL CIRCUIT LABORATORY *Spring, 1 credit hour*

Basic concepts and principles of direct current and DC voltage are stressed in this introductory laboratory. Students will analyze resistive, capacitive and inductive circuits through practical laboratory application. Students will also study circuits using circuit analysis software. Two hours laboratory per week. Pre/Co requisite – Electric Circuits (ENGS 263) or permission of instructor.

ENGS 302 ENGINEERING DYNAMICS II *Fall, 3 credit hours*

In this second dynamics course, students learn about planar two-dimensional rigid body kinematics, kinetics of rigid bodies—force and acceleration, work and energy, and impulse, momentum, and three-dimensional motion. An introduction to vibrations is also provided. Three hours lecture per week. Pre-requisite(s): Dynamics (ENGS 202).

ENGS 341 ENGINEERING FLUID MECHANICS *Fall, 3 credit hours*

Students in this course develop knowledge of fluid mechanics under static and dynamic applications. Properties of fluids, pressure, fluid statics, Bernoulli's, fluid kinematics, differential representation of conservation of mass and momentum, dimensional analysis, flow rate, minor losses in piping systems, and an introduction to the Navier-Stokes equations are addressed. Three hours lecture per

week. Pre-requisite(s): Engineering Statics (ENGS 201), Calculus III (MATH 263) and Differential Equations (MATH 364).

ENGS 350 MECHANICS OF MACHINE ELEMENTS *Fall, 3 credit hours*

Students in this course develop fundamentals of mechanics of machine design. Students apply their knowledge of statics, strengths, and materials to the designing of machine components. Three hours lecture per week. Pre-requisite(s): Engineering Strengths of Materials (ENGS 203).

ENGS 291-295, 391-395, OR 491-495 SPECIAL TOPICS IN ENGINEERING SCIENCE *Fall/Spring, 1-4 credit hours*

Special Topics in Engineering Science will generally include topics of current interest or topics not covered in courses currently offered by the department or in combinations not currently available.

ESCI 101 INTRODUCTION TO ENVIRONMENTAL SCIENCE *Fall/Spring, 3 credit hours* *GER 2*

This course is an overview of environmental science that includes sustainability, natural resources, population growth and demographics, urbanization, food resources, renewable and non-renewable energy, species extinction, land degradation, water and air pollution, climate change, wastes, and environmental health hazards. It is designed for students who have little or no background in environmental science. Three hours lecture per week. Prerequisites: Composition and the Spoken Word (ENGL 101) or an 80 grade on the NYS ELA exam; or permission of instructor.

ESCI 102 INTRODUCTION TO ENVIRONMENTAL SCIENCE LABORATORY *Fall/Spring, 1 credit hour*

This laboratory course accompanies ESCI 101. It is designed for those students who have little or no background in environmental science and is intended to convey basic knowledge of environmental science using simple laboratory exercises. Prerequisites: Composition and the Spoken Word (ENGL 101) or an 80 grade on the NYS ELA exam; or permission of instructor.

ESCI 105-LECTURE ESCI 106-LAB ENERGY RESOURCES *Spring, 3-4 credit hours* *GER 2*

This course examines the physical, economic, and political interactions of the following energy resources: fossil fuel, nuclear power, biomass and solar energy. Three hours lecture per week. If lab is elected, an additional two hours laboratory per week is required. Recommended prerequisite: students have high school algebra or equivalent.

Course Descriptions: Environmental Science, French, Funeral Services

ESCI 107

EARTH SCIENCE

Spring, 4 credit hours

GER 2

This course introduces earth processes and phenomena. The birth of the universe, our solar system, and the earth are explored. The internal composition and structure of the Earth is studied. Factors that affect the structure of the earth are examined: continental drift, plate tectonics, and crustal deformation. Students learn about common earth materials that make up the Earth. The impact of weathering, erosion, running water, and glaciers on the earth's surface and landforms is studied. Additional topics will include, but are not limited to: earthquakes, volcanoes, mass movement, geologic time, and geologic mapping. Lecture related exercises/assignments, laboratory exercises, readings, and review questions help students learn and understand the course material. This course includes a laboratory section. Three hours lecture, two hours laboratory per week. Students cannot receive credit for both ESCI 107 and GEOL 101.

ESCI 110

INTRODUCTION TO METEOROLOGY

Fall/Winter/Spring/Summer, 3 credit hours

This is an introductory meteorology course with topics covering the structure of the atmosphere, meteorological measurements, air movement, air masses and fronts, violent storms and climate. Three hours lecture per week.

ESCI 320

WEATHER, CLIMATE, AND CLIMATE CHANGE

Spring, 3 credit hours

This course is an introduction to the science behind weather and climate. It will focus on the composition, structure, and disturbances of the atmosphere. The energy balance and role of water include discussions of solar radiation and the water cycle. The difference between weather and climate will be illustrated with a discussion of global climate change. The most current reports from the UN Intergovernmental Panel on Climate Change (IPCC) and the US Global Change Research Program (USGCRP – National Climate Assessment) will be reviewed. Three lecture hours per week. Prerequisites: One semester college level science.

ESCI 291-295, 391-395, OR 491-495

SPECIAL TOPICS IN ENVIRONMENTAL SCIENCE

Fall/Spring, 1-4 credit hours

Special Topics in Environmental Science will generally include topics of current interest or topics not covered in courses currently offered by the department or in combinations not currently available.

ESOL 096

ACADEMIC COMMUNICATION

Fall and Spring, 4 credit hours

This course is designed to help first-semester international or English language learners to enhance communication skills required in American academic contexts. Students will develop critical

reading skills and academic writing skills with an overview of grammar and mechanics. Concurrent focus is on building oral fluency and expanding academic vocabulary. Four hours lecture per week. This course is an alternate to Introduction to Academic Reading and (ENGL 097) or Basic Writing (ENGL 098) for ESL students. Leveled by placement test score.

FLHT 101

INTRODUCTION TO DRONES: REGULATIONS AND USE

Fall/Spring, 2 credit hours

This course is designed to give students an introduction to drones and to prepare them for the remote drone pilot exam. The course covers the five knowledge areas on the exam, which are regulations, the national airspace system, weather, loading and performance, and operations.

FREN 101

CONTEMPORARY FRENCH I

Fall, 4 credit hours

GER 9

This course will introduce the student to the sound system and grammatical structure of the French language. The focus will be on developing skills in the areas of aural comprehension, speaking, reading, and writing. By the end of the semester, the student will have a basic understanding of grammar, including word formation, verb conjugations, idiomatic expressions, and cognates. This course will also discuss various cultural aspects of the French-speaking world. Four hours lecture per week. This course is only for the true beginner or for students who have had less than three years of high school French. Students who have taken more than three years of high school French within the last three years can enroll in this course only with the permission of the instructor

FSAD 111

STUDY OF FUNERALS, PAST, PRESENT AND FUTURE

Fall, 3 credit hours

This course discusses the role of funeral directors and other death-related professions in contemporary American society. Terminology, duties, and responsibilities of the funeral director during the removal of the deceased, the wake, funeral, and committal service are extensively covered. Historical methods of preservation and memorializing the dead will be reviewed and discussed. Religious, historical and present day funeral customs in this and other countries are examined. Each student will review his or her own personal response to death and pre-arrange his or her own funeral. Each student will write an obituary for themselves or someone they know. Three hours lecture per week.

FSAD 115

THANATO-CHEMISTRY

Fall, 2 credit hours

This course provides a survey of the basic principles of chemistry as they relate to Funeral Service. The focus is on the chemical principles and interactions involved in sanitation, disinfection, public health, and embalming practice.

FSAD 121

ANALYTICAL EMBALMING TECHNIQUES

Spring, 3 credit hours

This is the first of three embalming courses required to graduate from the program. It outlines the definitions of death, the public health considerations, ethical performance, necessary instruments and the chemical principles involved in decomposition and preservation. A "C" or better is required in this course to continue in the Funeral Services Program. Course may only be repeated once. Two hours lecture, three hours laboratory per week. Prerequisites: matriculated in the Funeral Services Administration program, and must possess a Blue Card obtained from the NYS Department of Health, Bureau of Funeral Directing.

FSAD 129

CLINICAL PRACTICUM

Spring, 2 credit hours

Students are required to work in an approved funeral home for a minimum period of five weeks. During this period, students are expected to relate the theoretical background they have acquired to the practical functions of a funeral director. Faculty will contact the student and the funeral director periodically during the practicum by personal visits and/or phone conversations. Students are expected to serve this practicum without pay. Prerequisite: Analytical Embalming Techniques (FSAD 121) with a C or higher; must possess a Blue Card from NYS Department of Health, Bureau of Funeral Directing or comply with specific regulations governing Internship/Practicum experiences. Non-students doing their Practicum in another State must comply with that State's regulations and requirements.

FSAD 205

MORTUARY HYGIENE

Fall, 3 credit hours

This course focuses on the diseases which present serious challenges for embalmers. Awareness and recognition of potential infection based upon observed pathological signs is an important means of reducing the occupational hazards related to mortuary practice. Modes of disease transmission, resistance or susceptibility to infection, and exploitable weaknesses of microbes support the working knowledge of disease protection which the modern embalmer must possess.

FSAD 211

EMBALMING AND ASEPTIC TECHNIQUES

Fall, 4 credit hours

Usually taken subsequent to FSAD 121, this course focuses on unique and special problems encountered by the embalmer in professional practice. Historical perspective describes the changes in embalming practice over the millennia. Embalming laboratory design and construction is discussed in detail. OSHA compliance within the embalming theater is covered and practiced. Microbiology of pathogens and techniques of infection control are a major aspect. Course may be repeated once. Three hours lecture, three hours laboratory per week. Final

Course Descriptions: Funeral Services

grade of "C" or better is required to continue in the program. Prerequisite: Analytical Embalming Techniques (FSAD 121), and must possess a Blue Card obtained from the NYS Department of Health, Bureau of Funeral Directing.

FSAD 214 FUNERAL HOME MANAGEMENT I

Fall, 3 credit hours

The study of management techniques and procedures that are necessary for successful operation of a small business with the major emphasis on funeral home management. Three hours lecture per week. Prerequisite: Study of Funerals, Past, Present and Future (FSAD 111) or permission of instructor.

FSAD 225 PROFESSIONAL FUNERAL PRACTICE

Spring, 3 credit hours

Casket and vault construction and composition are extensively covered. Merchandising methods of funeral service goods such as caskets, vaults, and memorial tributes are explored and practiced. Professional Ethics with special attention given to the Federal Trade Commission's Funeral Rule, are learned and practiced. Three hours lecture per week. Prerequisite: Study of Funerals, Past, Present and Future (FSAD 111) or permission of instructor.

FSAD 307 HUMAN RESPONSE TO DEATH

Spring, 4 credit hours

This course is a survey of the psychological, philosophical, and sociological components of human loss and grief. The understanding of bereavement is demonstrated through verbal and written communication and counseling exercises. The laboratory component gives the student the opportunity to conduct moot funerals and engage in mock counseling sessions as part of their basic training. The overall intent is the delivery of optimum services to the client. Three hours lecture, two hours laboratory per week. Prerequisite: Death, Dying and Bereavement (SSCI 315), and Professional Funeral Practice (FSAD 225), or permission of instructor.

FSAD 308 INTRODUCTION TO INTERNSHIP

Spring, 1 credit hours

An internship is required to complete degree requirements in Funeral Services Administration. This course is taken in a semester prior to the Internship. Students locate a suitable site, construct a memorandum of understanding with a preceptor at that site, and create a learning contract. A liability insurance binder through the college must be established. Goals and objectives, a grading rubric, and communication methods for the experience are determined cooperatively by student, preceptor, and faculty supervisor. One hour per week. Prerequisite: Completion of 75 credit hours toward graduation including Clinical Practicum (FSAD 129), or permission of instructor.

FSAD 321 ADVANCED EMBALMING PRACTICE

Spring, 3 credit hours

Designed to improve the skills and knowledge base of students and practicing licensed personnel, this course focuses on the less common techniques applied in unusual situations. Waterless embalming, regional freezing procedures, mummification, alternative machinery, and special purpose chemicals will be explored. Unique embalming situations are addressed such as long-term storage, entombment vs. burial, decomposed bodies, stillbirths, religious limitations, anatomical embalming, and fragment treatment in anticipation of delayed final disposition. Perfection of techniques of sterile procedure, eye enucleation, terminal disinfection, and personal protection is expected. Three hours lecture, three hours laboratory per week. Prerequisites: Analytical Embalming Techniques (FSAD 121), Embalming and Aseptic Techniques (FSAD 211), Clinical Practicum (FSAD 129) or current embalmer's license; must possess a Blue Card from NYS Department of Health, Bureau of Funeral Directing or comply with specific state regulations governing student embalming experiences.

FSAD 322 FUNERAL HOME MANAGEMENT II

Spring, 3 credit hours

This course addresses the practical problems facing funeral managers in contemporary society such as marketing strategies, pricing methods, creative personnel management, alternative memorial activities, prearrangement sales, financial assessment techniques, aftercare, transition planning, expansion of facilities, and establishment of consortia of funeral homes. Recruitment and training of non-licensed staff, compliance methods, salary incentives, and record keeping which meet legal requirements are included as well. The student will study a particular aspect of the management of the funeral home at which they work as a special project. Three hours lecture per week. Prerequisites: Funeral Home Management I (FSAD 214), Introduction to Business (BSAD 100) or permission of instructor.

FSAD 323 RESTORATIVE ART

Spring, 4 credit hours

This course utilizes special instruments, materials and techniques for restoring the dead human body damaged as a result of disease and/or trauma. Numerous pathological conditions are reviewed and the most appropriate methods to restore a natural appearance are developed. Various trauma conditions are also explored to develop competence in a wide range of potential situations. Because there are many different methods and procedures that may be employed, treatment plans and assessment of results are major topics. This course also explores the basics of color theory that is applied to both the restoration of a deceased human being and the proper use in the funeral home. Three hours lecture, two hours laboratory per week. Prerequisites: Human Anatomy (BIOL 207), Embalming and Aseptic Techniques (FSAD 211), or permission of instructor.

FSAD 401 FUNERAL SERVICE LAW

Spring, 3 credit hours

Deals with the statutory laws and practices pertaining to funeral service. The student will trace the laws that governing the practice of funeral directing and their legal responsibilities to the consumer. Knowledge will be gained concerning the legal status of a dead human body, mental anguish, negligent acts by the funeral director and/or embalmer, mutilation laws, and other matters relating to the practice of funeral directing. Three lecturing hours per week. Prerequisite: BSAD 201 Business Law I and restricted to major or permission from the instructor.

FSAD 406 BEREAVEMENT COUNSELING

Spring, 3 credit hours

Building upon the rudimentary counseling skills developed in FSAD 307 this course addresses deeper and more varied emotional problems stemming from loss. Utilization of theories of grief from several authorities and application of a range of counseling techniques to individual situations makes this a useful approach to delivery of human services. Anticipatory grief, hospice, disenfranchised loss, child death, suicide, homicide, absent grief, and extended grief are major topics. Application of the skills developed is limited to the funeral home setting. The student will observe and describe the progress of a person who has suffered a recent loss as an original research project. Three hours lecture per week. Prerequisite: Human Response to Death (FSAD 307), and Death, Dying, and Bereavement (SSCI 315) or permission of instructor.

FSAD 420 CURRENT ISSUES IN FUNERAL SERVICE

Fall/Summer, 3 credit hours

As the field of funeral service continues to change in response to societal demands, this class provides the opportunity to keep abreast of these developments. Topic areas will include: public health, government regulation, funeral home management, religious and secular rites and rituals. Major focus will be on the effects that changes might have on the grief process, societal readjustment following death, and creative ways for funeral service practitioners to address the future. Historical perspective will be utilized as a predictive tool in assessing society's new outlook on loss and recovery. The student will create a baccalaureate paper that consists of breath, depth and application section.. Three hours lecture per week. This is a Writing Intensive Course. Prerequisites: senior level status In the Funeral Services Administration program, or current licensure as a practicing funeral director or permission of instructor.

FSAD 440 INTERNSHIP IN FUNERAL SERVICES ADMINISTRATION

Fall/Spring/Summer, 7 credit hours

Students will spend at least 40 hours per week for eight weeks in this experiential course. They will

Course Descriptions: Funeral Services, Finance

perform the standard duties of funeral director trainees in the areas of funeral directing and embalming. Additionally they will participate in a project determined during the Introduction to Internship course held in a previous semester. Successful completion of the course is based on assessment of supervising faculty and funeral home preceptor according to the assessment plan detailed in FSAD 308. Prerequisites: Introduction to Internship (FSAD 308), and senior status; must possess a Blue Card from NYS Department of Health, Bureau of Funeral Directing and comply with specific regulations governing Internship/Practicum experiences. Students doing their Internship in another State must comply with that State's regulations and requirements.

FSAD 445 MORTUARY COMPLIANCE *Fall/Spring/Summer, 2 credit hours*

This course is taken during the last semester of the Mortuary Science curriculum, which ensures compliance with all Health Department regulations, and federal and state laws pertaining to funeral directing in a state where the student intends to practice. These topics are exhaustively clarified and validated through extensive and focused specialized testing including the National Board Examination. Prerequisites: Human Response to Death (FSAD 307), Funeral Service Law (FSAD 401), or permission of instructor. Last course prior to graduation.

FSMA 210 INTRODUCTION TO FINANCE *Fall and Spring, 3 credit hours*

This introductory course covers fundamental elements of business finance. Discussions include the concepts of financial analysis, time value of money, security evaluations, risk and return, capital budgeting, and other issues in corporate decision making. Three hours lecture per week. Prerequisites: Introduction to Spreadsheets (CITA 108) or Introduction to Information Technology (CITA 110), and GER Math or Foundations of Financial Accounting (ACCT 101), or permission of instructor.

FSMA 220 INTRODUCTION TO INVESTMENTS *Spring, 3 credit hours*

This course offers an introduction to investments including investment analysis, portfolio management, and capital markets. It is designed to provide the basic concepts and principles of investing, the course examines investment policies, types of securities, factors that influence pricing changes, timing purchases/sales, preparing investment programs to meet objectives, investment risk and return, and portfolio balancing. Instruction also includes an overview of the securities markets and their behavior, including sources of information about the various instrument traded and procedure of trades. Three hours lecture per week. Prerequisites: ACCT 101, ECON 101, and FSMA210; or permission of the instructor.

FSMA 301 PERSONAL FINANCE *Spring, 3 credit hours*

This course provides broad coverage of personal financial decisions. Topics covered includes basic financial planning, tax issues, managing savings and other liquid accounts, credit management, insurance, managing investments and retirement planning. Knowledge of financial products, analytical tools, and economic analysis are cultivated in the context of setting personal financial goals and measuring progress. Three lecture hours per week. Prerequisites: Junior level status in Financial Services or permission of instructor.

FSMA 312 FINANCIAL MANAGEMENT *Spring, 3 credit hours*

This course is a continuation of Introduction to Finance (FSMA 210). Topics on portfolio theory, efficient market theories, Capital Asset Pricing Model are further elaborated and applied to make capital budgeting, capital structure, and dividend policy decisions within corporations. Special topics on agency conflicts, mergers and acquisitions, and corporate risk management will also be discussed. Three hours lecture per week. Prerequisite: A minimum grade of C in Introduction to Finance (FSMA 210) is required or permission of instructor.

FSMA 315 GLOBAL INVESTMENT *Fall, 3 credit hours*

The primary objectives of this course are to provide the students with a fundamental knowledge of domestic/international financial markets, financial securities and how they are valued and traded in order to achieve a desired investment objective, from both a theoretical perspective and the perspective of investment managers. Special attention is given to application of the basic concepts to the three major capital markets: stock, bond and financial derivatives markets. Three lecture hours per week. Prerequisites: Foundations of Financial Accounting (ACCT 101), Business Law I (BSAD 201), Introduction to Finance (FSMA 210) and Principles of Macroeconomics (ECON 101), or permission of instructor.

FSMA 320 INVESTMENT ANALYSIS AND PORTFOLIO THEORY *Fall, 3 credit hours*

The course provides a foundation for selecting financial assets and form sound investment decisions. Lectures cover both traditional and modern approaches to security selection, investment analysis and portfolio management, with emphasis on investment strategy and investment performance evaluation. The major topics to be covered include portfolio analysis, company/industry analysis, optimal portfolio selection, efficient transactions, performance evaluation and investment ethics. Current topics, such as options, futures, swaps and other financial instruments are also explored. Three lecture hours per week. Prerequisites: Financial

calculator, Introduction to Finance (FSMA 210) or permission of instructor.

FSMA 325 FINANCIAL COMPLIANCE AND REGULATION *Fall, 3 credit hours*

The role of regulatory and compliance professionals in the financial service industry is currently undergoing enormous change and development. This course takes an interdisciplinary approach incorporating economics, ethics, finance, law and public policy in surveying the specific goals and objectives of the financial regulatory and compliance function. The course is designed with the practitioner in mind with an emphasis on the anticipation and prevention of regulatory and compliance problems before they occur. Three lecture hours per week. Prerequisites: Introduction to Finance (FSMA 210), Business Law I (BSAD 201), Principles of Macroeconomics (ECON 101), or permission of instructor.

FSMA 330/ECON 330 FINANCIAL MARKETS AND INSTITUTIONS *Fall, 3 credits*

This course provides an understanding of financial markets and financial institutions that operate within the financial markets. It introduces the financial markets where flow of funds occur through financial markets instruments, such as bonds, money markets, mortgage markets, foreign exchanges, stocks and derivatives (futures, forward, options, and swaps). It focuses on financial institutions, such as the Federal Reserve, commercial banks, thrifts, insurance companies, investment banks, finance companies, mutual funds, and pension funds. In addition, it provides a comprehensive introduction to risk management within the framework of financial services industry. Three hours lecture per week. Prerequisites: Principles of Macroeconomics (ECON 101) or Principles of Microeconomics (ECON 103), and a minimum 45 credit hours, or permission of instructor.

FSMA 415 GLOBAL FINANCE *Spring, 3 credit hours*

This course covers issues related to both international financial markets and the financial operations of a firm within the international environment. Major topics include the international monetary systems, foreign exchange regime, management of foreign exchange exposure, international financial management, taxation of international income, and international mergers and acquisitions. Three hours lecture per week. Prerequisites: Global Investments (FSMA 315) or permission of instructor.

FSMA 420 FINANCIAL DERIVATIVES *Spring, 3 credits*

This course examines the dramatic growth of the derivatives markets in the last two decades. This growth, triggered by deregulation, globalization,

Course Descriptions: Finance, First Year Experience, Game Design

increased uncertainty and volatility, has empowered enterprises to successfully manage their financial price risk. Topics to be covered include: the use of derivatives for risk protection, cash flow modification, arbitrage, and investment. Three hours lecture per week. Prerequisite: junior level status in Financial Services or permission of instructor.

FSMA 422 **RISK MANAGEMENT** *Fall, 3 credits*

The goal of this course is to provide students with a good conceptual framework for analyzing risk and making risk management decisions in a corporate setting. It focuses on the ways in which individuals and corporations assess, control, and transfer risk. Issues such as what risk is, how it can be measured and transferred, why individuals and corporations care about risk, and how effective risk management programs can be designed and implemented will be examined. Three hours lecture per week. Prerequisite: Financial Derivatives (FSMA 420) or permission of instructor.

FSMA 429 **ORIENTATION TO CULMINATING EXPERIENCE**

Fall and Spring, 1 credit hour

This course is intended as the precursor to the senior culminating experience in the Financial Services bachelor's program. Seniors meet with faculty on a weekly basis to discuss resumé preparation, job interviewing techniques, identifying and securing internships and internship requirements. This course is a prerequisite to Finance Internship (FSMA 480). Fifteen lecture hours to include: lecture, discussion, internship preparation and review. Prerequisite: Senior status in Financial Services program.

FSMA 460 **SENIOR PROJECT**

As Needed, 3-15 credit hours

This course is an alternative to FSMA 480. It is designed for students who are unable to complete a 15-credit internship. Students will complete a senior research project specifically addressing issues under the umbrella of financial management. Under the guidance of a faculty mentor, the student will submit a research proposal, conduct research, prepare a thesis style report, and present a defense to a thesis committee. This course may be repeated for credit up to a maximum of 15 credit hours. 37.5 project hours per credit hour. Prerequisites/Corequisites: Introduction to Culminating Experience (FSMA 429) and senior level status in the Finance program or permission of instructor.

FSMA 480 **FINANCE INTERNSHIP**

Fall and Spring, 6-15 credit hours

Financial service internship is a culminating experience in which the student will be expected to integrate and apply concepts gained in previous course work to actual financial service area. In conjunction with a field supervisor at the host organization, the student will perform prescribed work within an ad-

ministrative setting. The internship will be tailored to the individual student's career interests and the needs of the supervisor and supervising organization. Such internship assignments may include, but are not limited to, information gathering, analysis, planning, implementation, evaluation, and other tasks and responsibilities as required by the sponsor. A writing intensive course. This course can be taken multiple times up to a maximum of 15 credit hours. Prerequisites: Orientation to Culminating Experience (FSMA 429) and senior level status in the Finance program, or permission of instructor.

FSMA 291-295, 391-395, OR 491-495 **SPECIAL TOPICS IN FINANCE**

Fall/Spring, 1-4 credit hours

Special Topics in Finance will generally include topics of interest or topics not covered in courses offered by the department or in combinations not currently available.

FYEP 101 **FIRST YEAR EXPERIENCE**

Fall/Spring, 1 credit hour

This course is designed to introduce, acclimate and connect students to the college campus. In-depth discussions, specialized topics and a final presentation tied to a common First Year Experience theme will assist students in formulating professional goals and achieving academic success. One hour of lecture per week.

GAME 110 **FUNDAMENTALS OF GAME DESIGN**

Fall/Spring, 3 credits

This is a broad survey course that focuses on understanding the industry, the game-development cycle, aspects of design and mechanics, statistics and an introduction to programming. Students will analyze games in the context of mechanical balance, narrative development, UI elements and level design. Further, they will study the mechanical property of games, including transitive and intransitive properties, numeric relationships, and balancing of game variables. Students will learn about careers in the game industry, and also explore the challenges and rewards of independent game entrepreneurship. As part of their studies, students will listen to successful indie game developers dissect the strengths and (more importantly) weaknesses of their own products. Major projects will include the development of a board game prototype, design and implementation of an escape room, creation of a sprite-sheet and two elementary mobile games.

GAME 130 **2D PROGRAMMING**

Spring, 3 credits

This course is meant for new programmers, regardless of language, who are not familiar with the concepts of Object Oriented Programming. This course begins with the fundamentals of basic programming using Python, including data types, logic flow control, conditions, loops, file I/O, functions, classes and objects. It explores game-related concerns such as the game loop, rules, and game object

design and implementation. Other topics include an overview of programming language principles, simple analysis of algorithms and extensive bug testing. Prerequisite: GAME 110 (Fundamentals of Game Design).

GAME 210 **OBJECT-ORIENTED DESIGN FOR GAME DEVELOPMENT**

Fall, 3 credits.

This course includes programming assignments and a game design project, which will give students an opportunity to practice different roles inside a game development team, and help them to gain practical knowledge of developing game projects through using object-oriented software design pipelines. Two lecture hours and one two-hour recitation per week. Prerequisite: Game Design and Prototyping (GAME 130).

GAME 230 **3D MODELING AND TEXTURING FOR GAMES**

Spring, 3 credits.

This course provides an introductory overview of the critical elements of digital figure modeling and texturing. The students will practice the learned 3D modeling and texturing knowledge, algorithms, and skills through finishing a final project. Two lecture hours and one two-hour recitation per week. Prerequisite: Object-Oriented Design for Game Development (GAME 210).

GAME 240 **3D GRAPHICS FOR GAME DEVELOPMENT**

Spring, 3 credits.

Students gain knowledge and hands-on skills of 3D graphics, and they also learn the rigors of an object-oriented language used in common game design and development. Two lecture hours and one two-hour recitation per week. Prerequisite: Object-Oriented Design for Game Development (GAME 210).

GAME 250 **GAME MECHANICS AND DYNAMICS**

Spring, 3 credits.

Students learn about the design process and project management including consumer expectations, marketing requirements and budget limitations. Two lecture hours and one two-hour recitation per week. Prerequisite: Object-Oriented Design for Game Development (GAME 210).

GAME 350 **AESTHETICS AND IMMERSION**

Fall, 3 credits.

This course explores designing visuals, adding sound and creating experiences that are more than just functional. It focuses on artistry and design of the experience of the game. Students examine how and why the user connects to the game and how to create that connection. Students study the aesthetics of games and how to create games that immerse players. Two lecture hours and one two-hour recitation per week. Prerequisite: 3D Modeling and Texturing for Games (GAME 230).

Course Descriptions: Game Design, Geography, Geology, GMMD

GAME 360 **GAMES JOURNALISM** *Fall/Spring 3 Credits*

This course explores both the history and practical application of games journalism. The focus of the class is to help students understand how and why games journalism serves the people who play, make, market and publish games. Students will be asked to develop an understanding of the industry's history and will have a chance to meet and interview members of the games press. Students will also practice a variety of journalistic tasks, including writing a feature, blogging news and live-streaming gameplay. Although the focus of the class is to introduce students to the perspective of a games journalist, they will also learn how to pitch stories and write self-promotional emails on behalf of their own games. Prerequisites: GAME 110 (Fundamentals of Game Design); 45 credit hours or permission of instructor.

GAME 370 **DIGITAL MEDIA AND INTERACTION** *Spring, 3 credits.*

This course explores how digital media is created and utilized within computer games, virtual reality, and simulations. Students develop a video game, including storyboards, design documents, game development, and a playable demo. Two lecture hours and one two-hour recitation per week. Prerequisite: Aesthetics and Immersion (GAME 350).

GAME 390 **GAME CAPSTONE I** *Fall, 3 credits.*

This course is an orientation to the capstone experience course in the Game Design and Development program, allowing students to develop skills in group communication and teamwork as they plan, a culminating research project. Two lecture hours and one two-hour recitation per week. Prerequisite: Digital Media and Interaction (GAME 370).

GAME 450 **MOBILE GAME DEVELOPMENT** *Fall, 3 credits.*

This course is an introduction to mobile application frameworks, including user interface, sensors, event-handling, data-management and network communication. Two lecture hours and one two lab hours per week. Prerequisite: Digital Media and Interaction (GAME 370).

GAME 470 **EMERGING GAMING APPLICATIONS** *Spring, 3 credits.*

This course explores features of the future of gaming, such as immersive gaming, virtual reality, computer graphics, real-time visualization, secondary screens for gaming, smart-glasses, cross-play, open-source gaming, game development, augmented reality, as well as mobile gaming and cloud gaming. Through learning the course, the students will have a big picture of the features of the future gaming and the trend of gaming industry development. Two lecture hours and one two-hour recitation per week.

GAME 490 **GAME CAPSTONE II** *Spring, 3 credits.*

This course is a capstone experience course in the Game Design program, allowing students to develop skills in group communication and teamwork as they plan, design, develop, produce and defend a culminating research paper. Three two-hour labs per week. Prerequisite: Game Capstone I (GAME 390).

GEOG 101 **INTRODUCTION TO GEOGRAPHY** *Spring, 3 credit hours* **GER 3**

This course provides a survey of two major themes in geography—the physical landscape and the distribution and interrelationships of human activities over the globe. Special emphasis is given to developing a geographical perspective to address economic, population and social problems at local, regional and global levels. Three lecture hours per week. Social Science elective.

GEO 101 **PHYSICAL GEOLOGY** *Fall/Spring, 3 credit hours* **GER 2**

This course includes a general look at the earth including its composition and structure on a large scale. The processes that cause changes in and on the earth will also be studied. Topics will include: the study of minerals and rocks, the origin and type of rocks, the rock cycle and the identification of many of the common rocks and minerals. Other major topics include: geological time, weathering, erosion, glaciers, running water, volcanoes, earthquakes, plate tectonics and geological work. Three hours lecture per week.

GEO 291-295, 391-395, OR 491-495 **SPECIAL TOPICS IN GEOLOGY** *Fall/Spring, 1-4 credit hours*

Special Topics in Geology will generally include topics of current interest or topics not covered in courses currently offered by the department or in combinations not currently available.

GMMD 101 **INTRODUCTION TO MEDIA STUDIES** *Fall/Spring, 3 credit hours* **GER 7**

This course will introduce students to the process of media analysis. Emphasis will be placed on key terms for adopting a critical eye towards mass media and the development of media literacy in both traditional (print, radio, film, television) and emerging (digital and web-based) forms. Three hours lecture per week.

GMMD 102 **INTRODUCTION TO DESIGN** *Fall/Spring, 3 credit hours* **GER 8**

Introduction to Design is a studio-based class investigating the tools, materials, and foundational concepts of design. Introduction to Design will present the methodology and critical awareness for problem solving inherent in all design fields. Through the discussion, examination and execution of a variety of design exercises, students will

develop their understanding of visual composition and design theory. While the course exercises focus on 2-D graphic design, this broad introduction to design theory develops the creative problem solving skills integral to all fields of design. Two hours lecture, two-hours studio/lab per week.

GMMD 103 **INTRODUCTION TO DIGITAL DESIGN SOFTWARE: PHOTOSHOP BASICS** *Fall/Spring, 3 credit hours*

In GMMD 103 students learn how to use the industry standard software Adobe Photoshop to create/edit digital imagery and enhance digital photographs. Photoshop is explained through the teaching of its tools and the underlying principles that govern them. Along with providing an overview of the software this course serves as a starting point in understanding the Adobe software collection suite and its role in the design industry. Two hours lecture, two hours laboratory per week.

GMMD 111 **DIGITAL VIDEO EDITING** *Fall/Spring, 3 credit hours*

This course introduces students to the technical and creative aspects of non-linear video editing. The course-work will cover information pertaining to video file formats and codecs, basic functions of non-linear software, and methods of storytelling. Students will learn to encompass different editing techniques to express meaning and create visually stimulating sequences. Three hours lecture per week.

GMMD 121 **PROGRAMMING FOR VISUAL ARTS** *Fall/Spring, 3 credit hours*

This course is an introductory course in programming languages and applications for visual art, design, and interactivity. Based in the Processing language, coursework focuses on visual production and the use of outside and sensor data to produce visual work. Students will be exposed to theoretical work on installations, performances and interaction design, as well as technical knowledge to better enable the student to building interactive media and spaces. Two hours lecture, two hours studio per week. Prerequisite: CITA 152 Computer Logic.

GMMD 200 **DIGITAL PHOTOGRAPHY** *Fall/Spring, 3 credit hours*

Hands-on activities and studio/lab will permit each student to investigate the applications of applied digital and hybrid photography. Students will develop competency in digital image capture, processing, and critical evaluation. Through technical studio assignments, critiques, and presentations, students will increase their skills in image printing, manual camera operation and using computer imaging software. Students will also develop critical awareness of composition and the relationship of digital photography to other media. Students who take GMMD 200 cannot take GMMD 201 Landscape Photography. Two hours lecture, Two hours studio/lab.

Course Descriptions: Graphic and Multimedia Design

GMMD 201 LANDSCAPE PHOTOGRAPHY

Fall/Spring, 3 credit hours **GER 8**

Hands-on activities and studio/lab will permit each student to investigate the applications of applied digital and hybrid photography. Students will develop competency in digital image capture, processing, and critical evaluation. Through technical studio assignments, critiques, and presentations, students will increase their skills in image printing, manual camera operation and using computer imaging software. Students will also develop critical awareness of composition and the relationship of digital photography to other media. Two hours lecture, two hours studio/laboratory per week.

GMMD 211 FILM ANALYSIS

Fall/Spring, 3 credit hours **GER 8**

As an introduction to the art of film, this course will present the concepts of film form, film aesthetics, and film style, while remaining attentive to the various ways in which cinema also involves an interaction with audiences and larger social structures. Throughout the course, we will closely examine the construction of a variety of film forms and styles—including the classical Hollywood style, new wave cinemas, experimental films, and contemporary independent and global cinemas. We will pay particular attention to the construction of film images, systems of film editing, film sound, and the various ways in which film systems can be organized (narrative, non-narrative, genres, etc.) There is a required weekly film screening. Three hours lecture per week. Prerequisites: Composition & the Spoken Word (ENGL 101) or permission of instructor.

GMMD 240 PROFESSIONAL PRACTICES

Fall/Spring, 3 credit hours

Professional Practice is an experiential survey of various design professionals and their working environments. Students will leave the classroom and attend several lectures and professional visits, experiencing first-hand the work flow, professional practices and client interaction of designers in their workplaces. Students will complete several assignments based on their research and first-hand experience with several design careers, including the preliminary work in arranging for their GMMD internship. Three hours lecture per week. Prerequisite: GMMD Major, 45 credits with a 3.0 GPA, or 60 credits with a 2.5, or permission of the instructor.

GMMD 301 3-D DESIGN

Fall/Spring, 3 credit hours

3-D design bridges the concepts of design with the basic methodologies and concepts of three dimensional fabrication and composition. The course will challenge students to further develop and employ problem solving methodology to a variety of basic conceptual and practical problems in 3-Dimensional space. The course emphasizes the basic sculptural methodologies, including subtractive and additive processes, assemblage, construction, carv-

ing, casting, molding, armature, and kinetics/mechanics. The ability to move between 2-dimensional and 3-dimensional conceptualization/realization is the primary focus of this class. Two hours lecture, 2 hours studio/lab per week. Prerequisite: Introduction to Design (GMMD 102).

GMMD 302 PROFESSIONAL PHOTOGRAPHY

Fall/Spring, 3 credit hours

Building upon the introductory skills of GMMD 201, this course is designed for students who are interested in the professional applications of photography. Students experience a variety of advanced concepts, techniques, and approaches designed to help them enhance their abilities to create and use the digital photographic image in narrative, creative, documentary, commercial, and editorial form. The classroom lectures will emphasize versatile techniques and creative problem-solving strategies. Through practical assignments, students will develop their skills and awareness in on-location photography, constructing and presenting visual narratives, ethics and issues, the creative license in commercial applications, and the ability to meet the demands of providing photography as a service. Particular emphasis will be placed on the exploration of advanced techniques, including advanced lighting, advanced post-processing, photography as a design tool, and product photography. Prerequisites: Digital Photography (GMMD 200) and Introduction to Design (GMMD 102), or permission of instructor.

GMMD 303 EXPERIMENTAL DIGITAL PHOTOGRAPHY

Spring, 3 credit hours

This course builds sequentially on the introductory skills developed in GMMD 201. Through lectures, tutorials, and hands-on laboratory exercises, students will expand their capabilities in digital image capture, processing, printing and presentation. Experimental techniques and approaches in digital imaging will be emphasized. In addition to broadening technical and conceptual capabilities, through research and laboratory projects students will achieve a more sophisticated understanding of contemporary digital media and begin to locate their work in relation to contemporary fine arts and media. Three hours lecture per week. Prerequisites: Introduction Design (GMMD 102) and Digital Photography (GMMD 200), or permission of instructor.

GMMD 311 VIDEO EFFECTS AND POST PRODUCTION

Fall/Spring, 3 credit hours

This course is an introductory course that will include broadcast and film standards, equipment function, and basic aesthetics. The coursework will focus on properly utilizing camera specifications, basic lighting concepts, and audio equipment settings. Students will learn aesthetic techniques and be expected to combine those techniques with their knowledge of the basic equipment. Three hours lecture per week. Prerequisite: Junior level status.

GMMD 313 STUDIES IN GENRE FILM

Fall/Spring, 3 credit hours **GER 8**

This course will provide an opportunity to study one film genre in depth. Emphasis will be on thematic cultural analysis of the genre's role in contemporary society. Different topics will be offered on a cycle, including the following:

GMMD 313a: Documentary Film - Nonfiction cinema has been defined as factual description of events and people in the historical world, but every aspect of this definition has also been contested or subjected to multiple interpretations. This course aims at sifting through documentary films as they relate to issues of exposition and position—the reflection of a true image and the reflection of a viewpoint.

GMMD 313b: Horror in Film - Monsters, vampires and other horrors portray anxieties, whether personal or cultural. They have been a central point of film production from the earliest days of cinema in Germany and beyond. Beginning with the 1922 German classic *Nosferatu*, the course will survey the horror story in film and literature. The course will introduce students to the techniques of film studies and cultural studies while seeking to analyze the particular anxieties embodied in each film.

GMMD 313c: The Film Western - This course will examine the wide cultural journeys of the Western genre in its various forms: as Wild West ideology, as spaghetti Western, as nostalgia, as an exploration of genre, and as a critique of American values.

GMMD 313d: History of the American Comic Film - This course examines the narrative and formal style of various American film directors and comedians. The course will examine comic theory as well as investigating perennial themes in American comedies.

GMMD 313e: Science Fiction in Film - This film will examine the cultural preoccupations of the science fiction film. We will screen and discuss films demonstrating the history of the form, from the silent era to the present. We will concentrate especially on the ways filmmakers use these films to visualize fears about current scientific and technological issues.

Three hours lecture per week. Prerequisites: Film Analysis (GMMD 211) or a literature course. Students may take one genre for Gen Ed. credit. Students may take multiple genres for elective credit.

GMMD 317 CULTURE AND COMMUNICATION

Fall and Spring, 3 credit hours

This course provides students with tools to analyze communication resources. The course emphasizes the use of multimodal communication in contemporary popular culture, and considers resources ranging from photography, film, television, music, fashion and subcultures. Students develop detailed analysis of cultural resources through methods derived from semiotics and communication studies. Three hours lecture per week. Prerequisites: Composition & the Spoken Word (ENGL 101); Intro to Media Studies (GMMD 101) and at least 30 credit hours or permission of the instructor.

Course Descriptions: Graphic and Multimedia Design

GMMD 330 **WEB DESIGN AND DEVELOPMENT** *Fall/Spring, 3 credit hours*

Students will be introduced to basic code, web development strategies, and current industry standards. Students will learn how to create and edit HTML and CSS with web authoring tools. Special emphasis will be placed on file management and image design. The course culminates in a final project utilizing the design process. Three hours lecture per week. Prerequisites: Introduction to Design (GMMD 102) and Introduction to Programming (CITA 180) or equivalent, or permission of the instructor.

GMMD 331 **DIGITAL ILLUSTRATION AND** **TYPOGRAPHY** *Fall/Spring, 3 credit hours*

This course emphasizes the acquisition of software skills in vector based graphics. Students explore digital workflow, visual communication, and the design process in relation to illustration, and logo and graphic identity. Three hours lecture per week. Prerequisites: Introduction to Design (GMMD 102), and Digital Photography (GMMD 200), or permission of the instructor.

GMMD 332 **3D PRINTING AND DESIGN** *Spring, 3 credit hours*

This is an immersive course in fused filament fabrication (3d printing) and design. Students will develop their applications of 3-dimensional design through CAD drawing and applications in additive manufacturing. Skills that will be developed include technical knowledge of FFF machines, experience in fabrication with a variety of materials (ABS, PTEG, PLA, NYLON) and digital mesh optimization/repair. Throughout the course students will develop an analytical approach to iterative design and 3D problem solving, preparing for applications in rapid prototyping, on-demand manufacturing, virtual reality, and product customization. Two hours lecture per week, Two studio hours per week.

GMMD 337 **DESIGN THINKING** *Spring, 3 credit hours*

This course develops innovative thinking skills related to “wicked” human-oriented problems. Students examine cases and propose resolutions following the five-stage design thinking process of Empathy, Define, Ideate, Prototype, and Test. Cases involve the development and implementation of new products, processes, and services. Three hours lecture per week. Pre-requisite(s): Composition & The Spoken Word (ENGL 101) and GER 1 Math.

GMMD 351 **3D ANIMATION** *Spring, 3 credit hours*

Description: This course is an overview of the techniques and history 3D animation, including character design, modeling, storyboarding, rigging and animating a scene. Students engage in hands-on

projects involving the development of hand-drawn and computer-generated animation. Emphasis is placed on understanding the place of animation in the context of the film, television, internet, and gaming industries, project management, and the development of a personal animation style. Prerequisites: Introduction to Design (GMMD 102) and Digital Photography (GMMD 200).

GMMD 401 **MULTIMEDIA PRODUCT DESIGN** *Fall/Spring, 3 credit hours*

This course provides an experimental and experiential approach to integrating content with new media techniques and processes. Students will use computers as creative tools to explore narrative, immersion, virtuality, visuality, and networked public sphere, with an eye towards integrating theoretical understanding of these concepts with the needs of particular design projects. Students also develop planning and organizing skills for experimental interactivity and imaging projects. Three hours lecture per week. Prerequisites: Visual Programming and Development Tools (CITA 342), Digital Photojournalism (GMMD 302), Digital Experimental Photography (GMMD 303) or permission of instructor.

GMMD 408 **PORTFOLIO DEVELOPMENT AND MEDIA** **STRATEGIES** *Fall/Spring, 3 credit hours*

This course explores issues of marketing on social media platforms as well as personal branding and portfolio development. Emphasis is placed on research, production and design of professional portfolios and interpretive materials in multiple contexts, and the maintenance of appropriate online presence. The ethics of digital media production and issues related to copyright and compensation are also addressed. Three hours lecture per week. Prerequisite: ENGL 301 Professional Communication

GMMD 411 **DIGITAL DOCUMENTARY VIDEO** *Fall/Spring, 3 credit hours*

This course explores the practice of documentary filmmaking. Students will discuss basic tools and principles of film narration and montage as well as the technical and compositional aspects of using archival, found and produced footage. Through lectures, critiques, research and studio exercises, students will explore the creative process of interpreting, representing, and affecting the sociological and environmental relationships by means of the moving image. Three hours lecture per week. Prerequisite: Introduction to Design (GMMD 102) and Digital Photography (GMMD 201) or permission of instructor.

GMMD 412 **EXPERIMENTAL DIGITAL VIDEO** *Fall/Spring, 3 credit hours*

This course builds upon the technical, compositional and production techniques learned in GMMD 301 and GMMD 102. Through tutorials,

studio assignments, critiques, and research, students will utilize advanced techniques and conceptual approaches to produce and critique several digital video works. Students will combine the elements of performance, scripting, sound, computer graphics, and video techniques, as well as have in-group discussions about student- and professional-produced films. Three hours lecture per week. Prerequisites: Digital Photography (GMMD 201) and Introduction to Design (GMMD 102), or permission of instructor.

GMMD 420 **ANIMATION TECHNIQUES** *Fall/Spring, 3 credit hours*

This course develops an overview of the techniques and history of 2D and 3D animation, including stop-motion and tweened animation. Students engage in hands-on projects involving the development of hand-drawn and computer-generated animation. Emphasis is placed on understanding the place of animation in the context of the film, television, internet, and gaming industries, project management, and the development of a personal animation style. Three hours lecture per week. Prerequisites: Digital Illustration and Typography (GMMD 331), Experimental Digital Video (GMMD 412), Experimental Digital Photography (GMMD 303), or permission of the instructor.

GMMD 421 **SUSTAINABILITY DESIGN** *Spring, 3 credit hours*

Sustainability Design is a cross disciplinary study of the issues and efforts surrounding ecological crisis and the move towards sustainability in contemporary design. In this seminar course, students will investigate sustainability issues through lectures from several disciplinary angles, including the sciences, legal studies, economics, humanities and engineering. Following study and discourse around the problems and goals of sustainability, students will work with faculty to develop a semester long independent project pursuing some of these goals. Three hours lecture, two hours lab per week.

GMMD 432 **VIRTUAL WORLDS** *Spring, 4 credit hours*

This course examines gaming concepts, nonlinear narrative, delivery systems and software for the entertainment or educational software industries. Working with 2D and 3D visual concepts, virtual reality, interactivity and sound the student will develop media for the entertainment industry. Environments, characters, gaming strategies, role playing concepts, navigation and feedback will be part of the information presented within the course. Four lecture hours per week. Prerequisites: Visual Programming and Development Tools (CITA 342), or permission of instructor.

Course Descriptions: Gender Studies, Health and Fitness Promo

GMMD 440 **ORIENTATION TO CULMINATING** **EXPERIENCE IN GMMD**

Fall/Spring, 1 credit hour

This course is the precursor to the culminating experience in the Graphic and Multimedia Design program. The culminating experience will consist of an internship, a group or individual project or a combination of both. Seniors will meet with faculty on a weekly basis to discuss resume preparation, job interviewing techniques, on-the-job training, identifying and securing internships, internship requirements and performance assessment/evaluation. Students prepare their portfolio for either an internship or group/individual project. Students, who chose the group/individual project for their culminating experience will meet with faculty to develop research proposals. One hour lecture per week. Prerequisites: Successful completion of all core GMMD courses years 1-3 or permission of instructor.

GMMD 443 **ARTS MANAGEMENT INTERNSHIP**

Fall and/or Spring, 4 or 8 credits

Students focus on the challenges of negotiation, public relations, and management. Students will explore a variety of management situations in broadcasting, galleries, museums, and theaters and design agencies. Students apply classroom skills in an organizational environment. Working with a faculty and on-site supervisor, the students perform and reflect on prescribed work. Students complete a supervised internship in an appropriate internship setting commensurate with the student's career interests and at the appropriate baccalaureate level. 40 hours of internship work per credit hour. Prerequisites: GMMD 440: Orientation to Culminating Experience in GMMD Co-course, GMMD 442 Graphic and Multimedia Design Individual Project or GMMD 443 Arts Management Internship or permission of instructor.

GMMD 444 **MULTIMEDIA PRODUCT DESIGN II**

Spring, 4 credits

This course is a capstone experience course in the Graphic and Multimedia Design program, allowing students to develop skills in group communication and teamwork as they plan, design, develop, produce, present, and defend a culminating research project. Through regular research, critiques, and planning sessions with GMMD faculty, the senior student capstone projects are developed and realized. This course builds on the skills, projects and working methodology developed in the GMMD401; culminating in a public presentation of student works and an exit portfolio for graduation. Three lecture hours per week. Prerequisites: GMMD401 Multimedia Product Design, or permission of instructor.

GMMD 291-295; 391-395; 491-495 **SPECIAL TOPICS IN GMMD**

Fall/Spring, 1-4 credits

An introductory or more advanced exploration of subjects not covered or only partially covered by other courses in Graphic and Multimedia Design.

GRST 201 **INTRODUCTION TO GENDER STUDIES**

Fall, 3 credit hours

This course provides a broad introduction to the field of Gender Studies. From an interdisciplinary approach, this course explores past and present theories and issues about gender including, but not exclusive to, class, race, social justice, emancipation, economics, and education. Students are introduced to feminist ideology and methodology, as well as the causes and effects of gender inequality. Three lecture hours per week. Prerequisites: Composition & the Spoken Word (ENGL 101); 30 credits earned; or permission of the instructor.

HEFI 201 **HEALTH & WELLNESS PROMOTION**

Fall, 3 credit hours

This introductory course in Health and Wellness promotion introduces students to concepts required for development of successful Health/Wellness promotion programs for a variety of patient/client populations. Concepts such as the impact of socioeconomic status on health/wellness, cultural diversity as related to health/wellness, methods of creating change, and teaching strategies and theory, including teaching the adult learner, will be covered. Students will discuss current literature related to these topics and develop a promotion/wellness intervention project based on an area of their choice. Three hours lecture per week. Prerequisite: sophomore level status or permission of instructor.

HEFI 202 **HEALTH AND WELLNESS ACROSS THE** **LIFESPAN**

Spring, 3 credit hours

Students will explore the application of health promotion principles for individuals at different stages of life, from birth to old age. Disease and health promotion issues common to each population will be identified and discussed. Students will formulate strategies to promote healthy lifestyles and advocate for positive changes in health policy for individuals and communities. Three hours lecture per week. Prerequisite: Sophomore level status or permission of instructor.

HEFI 203 **MOTOR DEVELOPMENT**

Spring, 3 credit hours

This course covers the concepts of motor learning and motor development, how they affect motor learning, and what normal motor skills are for the various age groups. Students explore how our motor responses progress and develop from the very young, to the very old, and how differing motor, cognitive, and social abilities will affect our motor skills. Students learn how an individual learns motor skills, what things affect their ability to learn, and how to structure a motor learning environment to positively influence the physical, instructional, and affective factors in motor learning. Students practice designing and structuring effective practice sessions, and how to demonstrate, verbalize, and provide feedback. Prerequisite: Sophomore level status or permission of instructor.

HEFI 303 **EXERCISE PHYSIOLOGY**

Fall, 3 credit hours

Students will study immediate and long term physiological responses and adaptations to exercise. Specifically, the role of the musculoskeletal, neuromuscular, cardiovascular, and respiratory systems in regulating exercise will be covered in detail and adaptations of these systems to exercise will be discussed. Environmental and hormonal influences will also be included. Students will explore specific aspects of training for sports performance. Three hours lecture per week. Prerequisite: Human Anatomy & Physiology II (BIOL 218) or permission of instructor.

HEFI 310 **ADVANCED CARE AND PREVENTION OF** **ATHLETIC INJURIES**

Fall, 3 credit hours

This course is designed to further reinforce the knowledge and skills necessary for recognition and assessment, of sport related injuries. The management and prevention of sport related injuries is discussed, as well as specific taping techniques. Three hours lecture per week. Prerequisite: Human Anatomy & Physiology I (BIOL 217) and Junior level status, or permission of instructor.

HEFI 320 **PSYCHOLOGY OF HEALTH AND FITNESS**

Spring, 3 credit hours

This course examines human behavior and how it relates to healthy behavior and fitness. The effects of psychological factors on health, fitness and wellness, and the effects of physical activity and sports on psychological well-being is discussed. The concept of Positive Psychology, a strength-based, preventive approach to personal and community research and interventions is an integral part of the course. Three hours lecture per week. Prerequisite: Human Development (PSYC 225), junior level status, or permission of instructor.

HEFI/SSCI 370 **RESEARCH METHODS IN SOCIAL AND** **HEALTH SCIENCES**

Fall/Spring, 3 credit hours

This course provides an intense comprehensive study of the scientific research process utilized in the social and health sciences. Students will be trained to be critical consumers of published research and will be expected to complete a research project. Topics that will be covered include the underlying theory of research; and data management and presentation. Three hours lecture per week. Prerequisite: Introduction to Psychology (PSYC 101), or Introduction to Sociology (SOC 101), or Introduction to Science and Technology of Behavior (SSCI 245), or Principles of Macroeconomics (ECON 101), or Principles of Microeconomics (ECON 103); Statistics (MATH 141) or equivalent course work, and Composition & the Spoken Word (ENGL 101), or permission of the instructor. Additionally, students must have at least junior level status or permission of the instructor.

Course Descriptions: Health and Fitness Promotion, History

HEFI 375 FITNESS AND SPORTS NUTRITION *Spring, 3 credit hours*

This course will provide students with an understanding of the link between nutrition and exercise. Specifically, students will examine the unique demands of exercise training for athletes at all levels and the impact of nutrition on performance. Students will integrate their knowledge of exercise physiology and sports nutrition to create a dietary plan that enhances athletic performance. Three hours lecture per week. Prerequisite: Exercise Physiology (HEFI 303) or permission of instructor.

HEFI 401 FITNESS ASSESSMENT AND EXERCISE PRESCRIPTION *Spring, 4 credit hours*

Students will acquire the knowledge and skills to assess the physical fitness of apparently healthy individuals. The focus will be on the four components of physical fitness: cardiorespiratory fitness, muscular fitness, body composition, and flexibility. Hands-on training in assessment and exercise prescription for these four components will be included during laboratory sessions. Three hours lecture, two hours laboratory per week. Prerequisite: Exercise Physiology (HEFI 303), or permission of instructor.

HEFI 402 STRENGTH AND CONDITIONING *Fall, 3 credit hours*

This course serves to provide students with advanced knowledge and skills to design and implement safe and effective strength and conditioning programs specifically for an athletic population. An in-depth study of resistance training is included, along with specialized topics such as bioenergetics, endocrine response to resistance exercise, and use of performance-enhancing substances. Both aerobic and anaerobic exercise prescription for the athlete is discussed in detail. This course provides specific preparation for the student who wants to pursue certification as a Strength and Conditioning specialist (CSCS) through the NSCA. Three hours lecture per week. Prerequisite: Exercise Physiology (HEFI 303), or permission of instructor.

HEFI 403 COMMUNITY WELLNESS *Fall/Spring, 3 credit hours*

This course introduces students to the benefits of establishing health promotion programs in community settings. Students are provided with the knowledge and tools required to assess community needs, plan and implement wellness and fitness programs, and assess program outcomes. Theories of behavioral change guide the assessment and planning process. Three hours lecture per week. Prerequisite: Health & Wellness Promotion (HEFI 201) and Health and Wellness Across the Lifespan (HEFI 202), or permission of instructor.

HEFI 404 LEGAL ASPECTS AND DOCUMENTATION IN HEALTH AND FITNESS PROFESSIONS *Fall, 3 credit hour*

Students learn and discuss the current standards and guidelines that help health and fitness establishments provide high-quality service and program offerings in a safe environment. Students learn the high standards of care to satisfy fitness facility certification. They also learn standards and guidelines for pre-activity screening, orientation, education, and supervision; risk management and emergency procedures; facility design and construction; facility equipment; operating practices; signage; other client contact fundamental skills; as well as history taking and effective documentation of client information. Prerequisite: Junior level status or permission of instructor.

HEFI 405 CURRENT ISSUES IN HEALTH AND FITNESS *Spring, 3 credit hours*

This writing intensive course focuses on current issues related to health promotion and prevention of disease, with an emphasis on the role of physical activity. Healthy People 2020 provides a framework from which to generate topics and discussion. Students are required to research current events and issues that present themselves on a local, national, and international level and formulate their own thoughts and conclusions regarding these topics. Three hours lecture per week. Prerequisite: Senior level status in HEFI program or permission of instructor.

HEFI 406 ORIENTATION TO INTERNSHIP *Fall, 1 credit hour*

This course is a prerequisite course that prepares students for HEFI 407. Best practices in searching for internship opportunities as well as the fundamentals for developing an internship contract that meets SUNY Canton guidelines are discussed. Students are expected to submit an internship proposal which will include anticipated goals and objectives for the internship, as well as a timeline for completion. Students are provided guidance in documenting daily reflections and activities in a journal and for building a professional portfolio. One hour lecture per week. Prerequisite: Senior level status in HEFI program or permission of instructor.

HEFI 407 HEALTH AND FITNESS PROMOTION INTERNSHIP *Spring, 3-15 credit hours*

This internship course provides the student with practical experience in a health/fitness setting. This experience enables students to integrate concepts and skills gained in the classroom/lab setting. The internship is individualized based on the career interests of the student and the specific needs of the organization. Internship proposals must be presented and approved prior to registration for the course. Prerequisite: HEFI 406 and senior level status in HEFI program or permission of instructor.

HEFI 408 EXERCISE PRESCRIPTION FOR SPECIAL POPULATIONS *Spring, 4 credit hours*

Students acquire the knowledge and skills to assess the physical fitness of individuals with special needs. The focus of the course is on how to assess the four components of physical fitness: cardiorespiratory fitness, muscular fitness, body composition, and flexibility in patients/clients who have special needs. Hands-on training in assessment and exercise prescription for these four components is included during laboratory sessions. Special needs populations include: pregnancy, heart disease, cancer, diabetes, obesity, poor psychological health, osteoporosis, arthritis, the older adult, children and adolescents, neurological conditions, metabolic disorders, etc. Three hours lecture, 2 hours laboratory per week. Prerequisite: Fitness Assessment and Exercise Prescription (HEFI 401), and Strength and Conditioning (HEFI 402).

HEFI 409 APPLIED EXERCISE PRESCRIPTION *Spring, 3 credit hours*

Students directly apply the knowledge and skills learned in HEFI 401: Fitness Assessment and Exercise Prescription to assess the physical fitness of apparently healthy individuals. The focus of the course is on improving the four components of physical fitness (cardiorespiratory fitness, muscular fitness, body composition, and flexibility) of assigned clients, and/or helping clients achieve their objective health and fitness goals. Students are assigned 1-2 apparently healthy clients to prescribe exercise for over the course of the semester. Prerequisite: HEFI 401; must be of senior status in HEFI program

HEFI 410 APPLIED STRENGTH AND CONDITIONING *Spring, 4 credit hours*

Students directly apply the knowledge and skills learned in HEFI 402: Strength and Conditioning to design and implement safe and effective strength and conditioning programs specifically for an athletic team. The focus of the course is on designing an off-season foundational program for fall and winter teams, and/or an in-season maintenance program for spring teams. Programs are geared towards sport specificity in regards to bioenergetics, aerobic needs, and muscular strength/power requirements of the sport. Students are assigned 1-2 athletic teams to design a program for, and will directly work with the athletes and coaching staff of those teams.

Prerequisite: HEFI 402; must be of senior status in HEFI program.

HIST 101 HISTORY OF EUROPE TO 1815 *Fall or Spring, 3 credit hours*

GER 5

This is a basic survey course in European history from the Late Middle Ages to 1815. The course focuses on the political institutions, social structures, economic systems and cultural developments that shaped European civilization. Among

Course Descriptions: History

the topics to be studied are: the Late Middle Ages, the Renaissance, the Reformation, contact between Europe and the Americas, absolutism, the Scientific Revolution, the Enlightenment, and the French Revolution. Three hours lecture per week.

HIST 102 HISTORY OF EUROPE SINCE 1815

Fall or Spring, 3 credit hours GER 5

A study of European history from 1815 to the present. The focus is on social, cultural, economic, and political changes which transformed Europe in the Modern period. Among the topics to be studied are: Napoleon, industrialization, urbanization, liberalism, nationalism, mass culture, imperialism, socialism, fascism, World War I, World War II, the Cold War, fall of the Soviet Union, and European integration. Three hours lecture per week.

HIST 103 US HISTORY TO 1865

Fall and/or Spring, 3 credits GER 4

This course deals with the leading aspects of American history from discovery through the end of the Civil War. Attention is given to political issues, institutions, political parties, leadership, and diplomatic and constitutional questions, as well as economic, social, cultural, and intellectual trends. This course also focuses on what is unique in the American historical experience, and relates American history to the broader global setting. Three hours lecture per week.

HIST 105 U.S. HISTORY SINCE 1865

Fall and/or Spring, 3 credit hours GER 4

This course deals with the leading aspects of American history from the Civil War to the present. Attention is given to political issues, institutions, political parties, leadership, and diplomatic and constitutional questions; as well as economic, social, and intellectual trends. This course also focuses on what is unique in the American historical experience and relates American history to the broader global context. Three hours lecture per week.

HIST 106 WORLD HISTORY TO 1500

Fall and/or Spring, 3 credit hours GER 6

This course offers a general survey of world history to 1500. Using a global perspective, this course examines the emergence and development of world civilizations and their cross-cultural interactions. Some of the themes examined include: ancient civilizations and empires of the Near East, ancient China, India, Classical Greece and Rome, the development of world religions, the Arab world, Medieval Europe, Africa, and the Americas prior to European contact. Three hours lecture per week.

HIST 107 WORLD HISTORY SINCE 1500

Fall and/or Spring, 3 credit hours GER 6

This course offers a general survey of modern world history since 1500. Using a global perspective, this course examines the intellectual, economic,

political, social, and cultural forces that have linked and shaped the major world societies since 1500. Topics to be covered include: the development of global trade and new economic models; European expansionism; social and political revolutions in Europe, the Americas, and Asia; the development of modern political institutions; global conflict; decolonization; and the social and cultural interactions of people across national boundaries. Three hours lecture per week.

HIST 303 COLONIAL AMERICAN HISTORY

Fall or Spring, 3 credit hours

This course explores the important themes in the history of the British American colonies in the seventeenth and eighteenth centuries. Particular attention is devoted to social and cultural developments and to the bringing together of peoples from three different continents in the colonies. Other avenues of inquiry relating to such matters as imperial politics and economic growth will also be pursued. Three hours lecture per week. Prerequisites: Early American History (HIST 103) and Composition & the Spoken Word (ENGL 101) or permission of instructor.

HIST 304 UNITED STATES WOMEN'S HISTORY

Fall and Spring, 3 credit hours GER 4

This course explores the social, economic, and political themes in United States Women's History from pre-European contact through the twenty-first century. The diversity of women is emphasized and issues of class, race, national origin, activism, work, and the role of motherhood will be explored. Citizenship and the status of women in relationship to government will be discussed and analyzed. Three hours lecture per week. Prerequisites: 30 credit hours, Composition & the Spoken Word (ENGL 101), and a 2.50 cumulative GPA, or permission of instructor.

HIST 305 HISTORY OF THE VIETNAM WAR

Fall and Spring, 3 credit hours GER 4

This course provides an in-depth examination of the 20th century conflict in Vietnam through the lens of American involvement and interaction. Political, social, and economic and cultural contexts will be explored from both American and Vietnamese perspectives. The impact of the Vietnam War on American society, politics, and its Cold War foreign policy and conduct will be examined as will the impact of the war on Vietnamese society and its subsequent development. Three hours lecture per week. Prerequisite: Composition & the Spoken Word (ENGL 101); and Modern United States History (HIST 105) or World History (HIST 107); or permission of the instructor.

HIST 306 U.S. IMMIGRATION HISTORY

Fall and Spring, 3 credit hours GER 4

This course examines the history of immigration to the United States through the current time

period. The main themes of the course will include issues of race, class, ethnicity and gender and how they factor into the immigration process and subsequent settlement period. A plethora of immigrant groups will be studied not exclusive to the following: Eastern and Southern Europeans, Asian and Pacific Islanders, Latin Americans, and Africans. Three hours lecture per week. Pre-Requisite(s): Composition & the Spoken Word (ENGL 101) and Early American History (HIST 103), or Modern United States History (HIST 105), or Introduction to Gender Studies (GRST 201) or permission of the instructor.

HIST 307 AMERICAN THOUGHT SINCE 1865

Fall or Spring, 3 credit hours GER 4

This course is a survey of American ideas from the end of the Civil War to the present. The topics covered in this course include: debates over Darwinism, religious belief, scientific truth and aesthetic judgment, as well as the intellectual underpinnings for the major movements and institutions of the post-Civil War era including democracy, feminism, civil rights, anticommunism and capitalism. Three lecture hours per week. Prerequisite: Modern U.S. History (HIST 105) or permission of instructor.

HIST 309 AFRICAN AMERICAN HISTORY

Fall or Spring, 3 credit hours GER 4

This course focuses on the unique experience of African Americans and how this experience relates and interacts with American society as a whole. The course also deals with the major events throughout the history of African Americans in the United States. Attention is given to political, economic, social, cultural and intellectual aspects, as well as constitutional questions and the meaning of citizenship. Three lecture hours per week. Prerequisite: U.S. History to 1865 (HIST 103) or U.S. History Since 1865 (HIST 105), or permission of instructor.

HIST 310 THE EUROPEAN CITY IN THE INDUSTRIAL AGE

Fall or Spring, 3 credit hours GER 5

This course examines the relationship between industrialization, technology, and the development of the modern city in nineteenth and twentieth-century Europe and the ways in which societies addressed modern urban problems, such as crime and public health, and how cities became centers of mass popular culture and national pride. Three lecture hours per week. Prerequisite: Composition & the Spoken Word (ENGL 101) or permission of instructor.

HIST 315 CHILDREN, YOUTH, AND THE REVOLUTION IN TWENTIETH-CENTURY EUROPE

Fall and/or Spring, 3 credit hours GER 5

This course examines the ways in which children and youth experienced the major conflicts, and the political, cultural, and social revolutions of twentieth-century Europe.

Course Descriptions: History, Health-Related, Health Care Mgmt.

eth-century Europe: the place of children and youth within the political ideologies of the century; the development of generational conflict and youth culture; and shifting definitions of children and childhood in the face of conflict and revolutionary change. Prerequisite: 30 credit hours, Composition & the Spoken Word (ENGL 101) or permission of instructor.

HIST 320 TWENTIETH-CENTURY EUROPE

Fall and/or Spring, 3 credit hours **GER 5**

This course provides a close examination of the major social, economic, cultural, and political developments in European history from the eve of the First World War through the end of the twentieth century. Emphasis is placed on conflicts such as World War I, the Spanish Civil War, World War II, the Holocaust, the Cold War, and decolonization and the ways in which conflict shaped Europe and the experiences of individuals throughout the twentieth century. While the primary focus is on Western Europe, developments in the Eastern Bloc will also be discussed. Three lecture hours per week. Prerequisite: Composition & the Spoken Word (ENGL 101) or permission of instructor.

HIST 375 HISTORY OF CHILDHOOD AND YOUTH IN THE UNITED STATES

Spring, 3 credit hours

This course explores the social, economic, and political themes in the history of American childhood and youth from colonialism through the twentieth century. The diversity of children is emphasized and issues of social and economic class, race/ethnicity, national origin, gender and sexuality, activism, and work are explored. Citizenship and the status of children in relationship to government are discussed and analyzed. Prerequisites: 30 credit hours, Composition & the Spoken Word (ENGL 101), Early American History (HIST 103) or Modern American History (HIST 105), or permission of the instructor.

HIST 291-295, 391-395, OR 491-495

SPECIAL TOPICS IN HISTORY

Fall/Spring, 1-4 credit hours

An introductory or more advanced exploration of subjects not covered or only partially covered by other courses in history.

HLTH 103 HEALTH: CURRENT PERSPECTIVES AND PRACTICAL APPLICATIONS

Fall, 3 credit hours

This general elective course is designed as an introductory health education course. The course provides opportunity for students to explore healthy life styles as well as learn about major health problems in the United States. The students become more informed about their rights and responsibilities related to remaining healthy or for accessing health services. Three hours lecture per week.

HLTH 104 INTRODUCTION TO GERONTOLOGY

Fall, 3 credit hours **GER 3**

This interdisciplinary course is designed to introduce the student to the field of gerontology (the study of aging). The aging person is viewed in a holistic manner. Topics to be included are demography of aging, social and economic characteristics of aging, biological, psychological and social theories of aging, biomedical aspects of aging and selected issues in health and aging. Three hours lecture per week.

HLTH 105 PATHOLOGY

Fall, 3 credit hours

This course considers the natural response of the human body to disease, the process and progress of disease, and the implications for community health. Particular emphasis is placed on causes of deaths of interest to the embalmer. Three hours lecture per week. Open to all students.

HLTH 110 SURVEY OF COMPLEMENTARY MEDICINE

Fall, 3 credit hours

This is an introductory course that surveys the eight major areas of complementary medicine. The eight major areas include Chinese medicine, Ayurveda, Naturopathic medicine, Homeopathy, Mind/Body medicine, Osteopathic medicine, Chiropractic medicine, and Massage Therapy/Body works. Three hours lecture per week.

HLTH 115 COMMUNICABLE DISEASES

Fall/Spring, 3 credit hours

This course is designed for students interested in health. The major emphasis is reportable communicable diseases. Students learn how to identify the disease agent, the reservoir, the mode of transmission, and the control of the spread. Diseases will be grouped as gastrointestinal, respiratory, blood-borne, and sexually transmitted. Three hours lecture per week.

HLTH 175 BASIC NUTRITION

Spring, 3 credit hours

This basic nutrition course is designed to create an awareness of everyday healthy eating and physical activity necessary for a healthy lifestyle. This course discusses personal profiles, Body Mass Index, calorie needs, dietary guidelines, and chronic disease risk factors. Three hours of lecture per week.

HLTH 200 MEDICAL TERMINOLOGY OF DISEASE

Fall/Spring, 3 credit hours

Medical terminology will be presented from a disease viewpoint. Diseases will include a cross-section of several different areas such as skin, respiratory, blood, and neonatal. Three hours lecture per week.

HLTH 212 HAPPINESS, HEALTH AND WELLBEING

Fall/Spring, 3 credit hours

Our world has become increasingly technological, complex and fast paced. As we work to achieve a life of happiness and contentment, many ignore the quality of our lives and the health of our body and mind. This course is a contemporary exploration of happiness in everyday life and its relationship to the well-being and the health of our body and mind. Three hours lecture per week.

HLTH 303 OCCUPATIONAL HEALTH AND SAFETY

Spring, 3 credit hours

This course explores health and safety issues related to the workplace. Environmental controls that reduce transmission of communicable diseases, exposure to toxic substances, hazardous working conditions and accidents are included. Public policy decisions and health control program compliance issues are addressed. The effects of human-environmental interactions on physical, mental, and social well-being are explored. Three hours lecture per week. Prerequisites: Public Health Issues (HSMB 301) or junior level status or permission of instructor.

HLTH 330 GRANT WRITING STRATEGIES

Fall 2 credit hours

This course provides a general overview of the grant seeking process. The facilitator will discuss the types of projects that generally get funded, sources that can be used to identify prospective funders, as well as the essential components of a well written grant. Participants will create a needs statement, develop a project that will address that need, write clear goals and objectives for that project, develop a budget and identify an evaluation tool that could be used to measure outcomes for the project. Two hours lecture per week. Prerequisite: junior level status or permission of instructor.

HLTH 291-295, 391-395, OR 491-495 SPECIAL TOPICS IN HEALTH

Fall/Spring, 1-4 credit hours

Special Topics in Health will include topics of current interest or topics not covered in courses currently offered by the department or in combinations not currently available. Prerequisite: permission of the instructor.

HSMB 101 INTRODUCTION TO HEALTH SERVICES MANAGEMENT

Fall, 3 credit hours

This course introduces the student to the health care system in the United States and to the role of the health services manager. The course offers an overview of health care system components, management concepts, goal setting, budgeting, organizing, team building and leadership concepts. The importance of communication in healthcare management area will be stressed. Incorporated into the weekly class sessions, the instructor will have

Course Descriptions: Health Care Management

the opportunity to discuss observational experiences to acquaint the student with the management and physical makeup of health care organizations, health care administrative functions, and health care management principles. Throughout the course, the instructor will work with students to develop their research, analytical, and communication skills in the health services management field. Three hours lecture per week.

HSMB 200 **MEDICAL TERMINOLOGY & CODING CLASSIFICATION SYSTEMS**

Fall, 3 credit hours

This course provides the student with an opportunity to learn the language of medical terminology and how it correlates with United States coding classification systems. Medical terminology will be presented by body system, integrating diseases affecting each body system type. The Students learn the basics of the ICD-9 and ICD-10 medical coding classification systems to better understand the impact on the financial status of the department and/or healthcare organization. Three hours lecture per week. Prerequisite: Introduction to Health Care Management (HSMB 101) or permission of instructor.

HSMB 301 **PUBLIC HEALTH ISSUES**

Fall, 3 credit hours

The course presents with an overview of the history and development of public health. The student then provided with the opportunity to examine the current public health care system and its relevance to their practice. The fundamentals of epidemiology are covered. Applications to the students' practice settings are explored. Health planning, health promotion, and global health issues are included. Three hours lecture per week. Prerequisites: Introduction to Health Services Management (HSMB 101), or Microbiology (BIOL 209) or permission of instructor.

HSMB 302 **LEGAL AND ETHICAL ISSUES IN HEALTH CARE**

Fall, 3 credit hours

This writing intensive course prepares the students to examine legal and ethical issues in health care as they impact the health services manager and others involved in health care decision making. A variety of commonly experienced legal situations and ethical dilemmas will be discussed, including the basics of civil and criminal health care law, professional liability, antitrust, managed care, organizational restructuring, patient rights, scientific research, rationing, health care practices, and other issues. The course also will educate students in legal research methods applied to the health services management field. A writing intensive course. Three hours lecture per week. Prerequisites: Public Health Issues (HSMB 301) or junior level status or permission of instructor. Writing intensive course.

HSMB 304 **U.S. HEALTH CARE SYSTEM**

Fall, 3 credit hours

The United States health care system is a large and vital segment of the United States economy. This course identifies and examines the various components of the U.S. health care system and the interrelationship of those components. Topics covered include health care in a free enterprise system, government regulations, health services access and utilization, health delivery settings, health care personnel, the pharmaceutical industry, public health, health insurance, managed care, quality of care, health policy, and other topics. Three hours lecture per week. Prerequisites: Introduction to Health Services Management (HSMB 101), or junior status or permission of instructor.

HSMB 305 **MANAGED CARE**

Spring, 3 credit hours

This course provides the student with the basic information needed to learn critical concepts of managed care. The course will include types of managed care organizations, elements of management control and governance structure, and quality management in managed care. Regulating, legal and ethical issues related to managed care will be discussed. Three hours lecture per week. Prerequisite: U.S. Health Care System (HSMB 304), or junior level status, or permission of instructor.

HSMB 306 **HEALTH CARE FINANCING**

Fall, 3 credit hours

This course provides the student with an opportunity to understand the fundamentals of the financial management of health care organizations. The course includes such topics as accounting, financial statement analysis, time value money, cost analysis and budgeting, and agency costs and their effects on financial decision making. Three hours lecture per week. Prerequisites: U.S. Health Care System (HSMB 304) and Introduction to Finance (FSMA 210), or junior level status, or permission of instructor.

HSMB 307 **HEALTH CARE FACILITY ADMINISTRATION**

Fall, 3 credit hours

The course explores the overall responsibilities of an administrator in contemporary health care facilities. These responsibilities involve planning, implementation, and other management skills. To contribute to the achievement of these skills, along with a greater knowledge of health operations, the course examines health care organizational structures, operational aspects of clinical and non-clinical departments, delivery and finance system issues, quality improvement, strategic planning, decision-making, evaluation, and other administrative related topics. Three hours lecture per week. Prerequisite: U.S. Health Care System (HSMB 304) or permission of instructor.

HSMB 308 **ORIENTATION TO INTERNSHIP**

Fall, 1 credit hour

An internship is required to complete the degree in Health Care Management. The course prepares students for the internship by: securing an appropriate site and establishing learning objectives, describing journal contents and a portfolio, establishing contracts for SUNY approval and appropriate liability insurance documentation. Prerequisite: Senior level status or permission of instructor.

HSMB 309 **NURSING HOME ADMINISTRATION**

Fall, 3 credit hours

This course is designed to help students apply the knowledge and skills acquired in earlier courses to the specific field of nursing home administration. It covers such topics as operational management, finance, human resources, residential care, and environmental management, dealing with those subjects in the context of nursing home administration. Three hours lecture per week. Prerequisite: Introduction to Health Care Management (HSMB 101) or permission of instructor.

HSMB 310 **HEALTHCARE QUALITY & PATIENT SAFETY**

Fall, 3 credit hours

This course discusses the state of current healthcare and the role of patient safety as a professional responsibility. Students will achieve a familiarity with the definition and measurement of quality of healthcare in a variety of healthcare setting along with the drivers of quality improvement, the history of healthcare quality, the principles of quality improvement, and the integrated patient safety risk management programs that promote the national patient safety goals. Three hours lecture per week. Prerequisite: Introduction to Health Care Management (HSMB 101) or permission of instructor.

HSMB 311 **HEALTH CARE INFORMATION TECHNOLOGY**

Spring, 3 credit hours

This course provides a comprehensive overview of uses and impact of health information systems and technology in healthcare delivery and public health. It explores the ways in which health information technology can assist healthcare managers in setting strategic goals, budgeting, personnel management, and data collection. The course also provides students with the strategic tools for planning, selecting, building, and implementing the health information systems' platforms necessary for the direct patient care and the management of hospital a public health sectors. Prerequisite(s): Completion of the HSMB 304 - U.S. Health Care System and HSMB 200 Medical Terminology course or permission of instructor.

Course Descriptions: Hospitality and Tourism Mgmt., Humanities

HSMB 312 MEDICAL PRACTICE MANAGEMENT *Spring, 3 credit hours*

This course identifies and examines the various components of the medical practice management and the interrelationship of those components. It prepares students to examine principles and applications of medical practice management. The course covers the history of medical practice and the regulatory issues related to each model. It educates students on medical practice's financial, human resource, emergency, and quality management. Prerequisite(s): Introduction to Health Services Management (HSMB 101), Intro to Finance (FSMA 210), or permission of instructor.

HSMB 314 HEALTH POLICY ANALYSIS *Spring, 3 credit hours*

This course explores the processes of policy making and law that address many of the key health concerns that face the U.S. Students will learn to think critically about potential causative factors associated with these health issues and the policy alternatives that are needed to address them effectively. The impacts of individual rights, federal and state regulations as well as health economics are considered. Students apply their course learning in the development of a final policy analysis brief that addresses a health policy issue of their choice. Resulting policy analysis competence skills can be applied in any health practice setting. Three lecture hours per week. Prerequisite(s): Introduction to Health Services Management (HSMB 101) or permission of the instructor.

HSMB 408 INTERNSHIP FOR HEALTH SERVICES MANAGEMENT *Spring, 3–12 credit hours*

Working in conjunction with a field supervisor, the student performs delegated work within an administrative setting. This is a culminating experience in which the student is expected to integrate concepts gained in previous program course work. The internship will be individualized according to the career interests of the student and the needs of the supervising organization. Internship assignments may include information gathering, analysis, planning, implementation, evaluation, budget and other responsibilities. Prerequisite: Senior level status. Completion of all required Health Care Management courses before participation in internship or permission of curriculum coordinator or Dean required.

HSMB 410 SENIOR SEMINAR *Spring, 3 credit hours*

This multidisciplinary capstone course integrates materials from Business and Healthcare Management courses to allow students to gain practical skills and knowledge of the health care system and the role healthcare managers have within the healthcare system. Students analyze and evaluate advanced

health care issues, i.e. impact of Affordable Care Act on health care facilities, providers, and consumers. Students also study contemporary challenges by incorporating knowledge gained through health care courses and required readings. Three hours lecture per week. Prerequisite: Completion of a minimum of 90 credits in the Bachelor of Healthcare Management degree or permission of the instructor.

HTMT/BSAD 302 CUSTOMER SERVICE AND THE GUEST EXPERIENCE IN HOSPITALITY *Fall, 3 credit hours*

Today's customers have access to more information about products and services than ever before. Customer satisfaction is therefore critical for hospitality organizations to establish, maintain, and enhance market share. This course focuses on the provision of excellent customer service in hospitality and its impact on the guest experience and hospitality organizations. Coursework will include the analysis of case studies involving top hospitality organizations, enabling students to develop strategic plans to provide the "wow" in customer service and the guest experience. Three hours lecture per week. Prerequisite: Introduction to Business (BSAD 100) or permission of instructor.

HTMT/BSAD 303 GLOBAL TOURISM: PERSPECTIVES AND PRACTICES *Spring, 3 credit hours*

This course offers an overview of the global tourism industry as it relates to hospitality services. Traveler behavior, tourism planning, and the economic and social impacts of tourism are studied. Three hours lecture per week. Prerequisite: Introduction to Business (BSAD 100) or permission of instructor.

HUMA 189 INTRODUCTION TO ACTING *Fall or Spring, 3 credit hours* *GER 8*

This course will examine various strategies for creating and performing characters from written and unwritten texts. Students will practice improvisation and perform various roles for both self and peer evaluation. Various acting techniques and methods for creating characters will be utilized. Three lecture hours per week.

HUMA 291-295, 391-395, OR 491-495 SPECIAL TOPICS IN HUMANITIES *Fall/Spring, 1–4 credit hours*

Special Topics in Humanities will fulfill the general humanities component of the distribution requirement of the College. It may be repeated for credit depending on the content of the course. It is not a course offered on a regular basis within the department. The intent of a special topics course is to offer an educational experience which is topical, not available within the regular curricular offerings, and may even be offered interdepartmentally depending on the nature of the course.

HUSV 100 HUMAN SERVICES FORUM *Fall and Spring, 1 credit hour*

In this course students will be introduced to the Applied Psychology curriculum as well as aspects of the SUNY Canton First Year Educational Program. The course emphasizes features of Applied Psychology values, philosophy, ethics, and potential careers in the Human Services profession in addition to self-awareness, critical thinking, problem solving, and related skills needed to be successful in academic pursuits. Students may not receive credit for both HUSV 100 and FYEP 101. One lecture hour per week for 15 weeks. Prerequisite(s): None.

HUSV 101 INTRODUCTION TO CAREER DEVELOPMENT IN HUMAN SERVICES PROFESSIONS *Spring, 3 credit hours*

In this course students will focus on aspects of professional and career development for individuals currently employed in non-degree entry positions seeking higher level positions and individuals interested in gaining knowledge regarding entry-level career development in human services settings. Topics include an introduction to personal and professional development, community networking, crisis intervention, documentation skills, and participant supports. This course will not confer credit towards the Applied Psychology degree. Three lecture hours per week for fifteen weeks. Prerequisite(s): None.

HUSV 201 INTRODUCTION TO HUMAN SERVICES *Fall and Spring, 3 credit hours*

In this course, students will be introduced to the field of Human Services. The course provides a sense of the scope of practice, the various fields of work, type of clients encountered and current trends. Students will receive an overview of developmental and counseling theories, in addition to an introduction to professional and ethical conduct. A writing intensive course. Three lecture hours per week for fifteen weeks.

HUSV 281 FOUNDATIONS OF CHEMICAL DEPENDENCY AND TREATMENT *Fall, 3 credit hours*

In this course students will focus on an advanced study of the nature of addiction, including an overview of the addictions field, treatment approaches, assessment and diagnostic tools, treatment settings, and health concerns with substance-use disorders. Additional topics explored include pharmacology, toxicology and screening, family issues, and support groups. Three lecture hours per week for fifteen weeks. Prerequisite(s): Introductory Psychology (PSYC 101) and Introduction to Human Services (HUSV 201) and Alcohol, Drugs, and Society (SSCI 181) or permission of instructor.

Course Descriptions: Human Services, HVAC

HUSV 305 PROFESSIONAL AND ETHICAL RESPONSIBILITIES IN HUMAN SERVICES PROFESSIONS

Fall, 3 credit hours

In this course students will examine ethical and legal issues confronting professionals in human service careers. The course focuses on processes to address dilemmas and maintaining professional boundaries and wellness. Different professional codes of ethics are compared and contrasted. Three lecture hours per week. Prerequisites: Introduction to Human Services (HUSV 201), or permission of the instructor.

HUSV 305A PROFESSIONAL AND ETHICAL RESPONSIBILITIES IN HUMAN SERVICES PROFESSIONS, PART I

Fall and Spring, 3 credit hours

In this course students examine ethical and legal issues confronting professionals in human services careers. The course focuses on comparison of professional codes of ethics, personal and professional values, multicultural and diversity perspectives, ethical decision-making, clients' rights and counselor responsibilities. Three lecture hours per week for five weeks. Prerequisites: permission of the instructor.

HUSV 305B PROFESSIONAL AND ETHICAL RESPONSIBILITIES IN HUMAN SERVICES PROFESSIONS, PART II

Fall and Spring, 3 credit hours

In this course students examine ethical and legal issues confronting professionals in human services careers. The course focuses on confidentiality in regards to ethical and legal issues, managing boundaries and multiple relationships, professional competence, and ethical issues in supervision. Three lecture hours per week for five weeks. Prerequisites: permission of the instructor.

HUSV 305C PROFESSIONAL AND ETHICAL RESPONSIBILITIES IN HUMAN SERVICE PROFESSIONS, PART III

Fall and Spring, 1 credit hours

Students examine ethical and legal issues confronting professionals in human services careers. The course focuses on ethical issues in theory and practice, couples and families, group work, community and social justice. Three lecture hours per week. Prerequisites: permission of the instructor.

HUSV 310 WORKING IN HUMAN SERVICE AGENCIES

Spring, 3 credit hours

In this course students will be introduced to the basic skills and knowledge required of entry-level personnel in human service agencies. The course examines the conditions creating human needs and how agencies respond to these needs. Emphasis will be on working with others in a human service agency, how these agencies provide services to people in

need, and how professionals help clients to function more effectively. Three lecture hours per week for fifteen weeks. Prerequisites: Introduction to Human Services (HUSV 201) or permission of instructor.

HUSV 315 MENTAL HEALTH PRACTICE

Fall or Spring, 3 credit hours

In this course, students will be introduced to mental health care, services, and practice. The course provides an overview of the historical roots of mental health care, the state of modern mental health care, and potential future trends in the field. A thorough examination of therapeutic and clinical skills will be partnered with classroom practice and presentation of these skills. Mental health over the lifecycle will be reviewed. Finally, common mental health disorders will be studied and paired with evidence-based treatment and interventions. Three lecture hours per week for fifteen weeks. Prerequisite(s): Introductory Psychology (PSYC 101) AND Abnormal Psychology (PSYC 275) or permission of instructor.

HUSV 325 GROUP LEADERSHIP SKILLS

Spring, 3 credit hours

In this course students will be introduced to the crucial skills that are necessary for competence in the area of understanding systems and conducting groups. Topics to be addressed include working with different types of groups, the counseling process, and responding to cultural differences that may affect group process. Special populations and issues such as children, adolescents, elderly, mental health and addiction, survivors of sexual abuse, and divorced couples are explored. Three lecture hours per week for fifteen weeks. Prerequisites: Counseling Theories (PSYC 310). Corequisites: Counseling Skills (PSYC 410).

HUSV 350 CARE COORDINATION, DOCUMENTATION, AND REFERRAL SKILLS

Fall, 3 credit hours

In this course students will be offered specialized, applied knowledge for the development of skills for the care coordination process, from Intake to termination. Actual field documentation forms give students the opportunity to prepare to manage client files. Three lecture hours per week for fifteen weeks. Prerequisites: Introduction to Human Services (HUSV 201) and Alcohol, Drugs & Society (SSCI 181) or permission of the instructor.

HUSV 415 ADDICTION TREATMENT COLLOQUIUM

Spring, 3 credit hours

In this course students will be introduced to additional topics in the field of addiction treatment. Students will use this information to supplement the treatment process and to broaden their scope of practice. Three lecture hours per week for fifteen weeks. Prerequisite(s): Foundations of Chemical Dependency and Treatment (HUSV 281) and Alcohol, Drugs, and Society (SSCI 181) or permission of the instructor.

HUSV 420 SEMINAR IN HUMAN SERVICES

Fall and Spring, 3 credit hours

Issues related to public policy, professional behavior, interpersonal dynamics, and work-related skills related to human service settings will be the focus. Students will also be expected to pursue placements for HUSV 421. Students must obtain program faculty approval before registering. Three lecture hours per week for fifteen weeks. Prerequisites: Intro to Human Services (HUSV 201) and Theory and Practice of Counseling (PSYC 310) or Mental Health Practice (HUSV 315), or permission of instructor.

HUSV 421 PRACTICUM IN HUMAN SERVICES I

Fall and Spring, 3 credit hours

In this course, under direct supervision of direct care staff and supervisors, students will be provided with the opportunity to put the knowledge and skills they have learned in the classroom into practice in a human services organization. Students accepted into this practicum are required to complete a minimum of 125 hours of field experience. Per the laws of the New York State Office of the Professions, students will not be directly involved in decisions regarding client evaluations, diagnosis, and treatment planning. Pre-Requisite(s): Counseling Theories and Practice (PSYC 310), Senior Status and permission of instructor.

HVAC 101 REFRIGERATION I

Fall, 2 credit hours

The fundamentals of refrigerating and air conditioning equipment are the emphasis of this course. Students study the basic refrigeration cycle and the function of each component; compressor, condenser, evaporator and metering device. Two hours lecture per week.

HVAC 102 REFRIGERATION LAB I

Fall, 3 credit hours

Students apply knowledge of the basic refrigeration cycle and the function of each component; compressor, condenser, evaporator and metering device in laboratory experiments. Use of hand and power tools is stressed in laboratory work. Students cut, bend, solder, braze, flare, and swage cooper tubing. Flowing nitrogen is stressed during brazing operations. Six hours lab per week. Pre-requisite or Co-requisites: Refrigeration I (HVAC 101).

HVAC 103 HEATING SYSTEMS I

Fall, 3 credit hours

The fundamentals of heating equipment are the emphasis of this course. Students study basic heat transfer and the application of different fuels used in the heating industry. Three hours lecture per week.

Course Descriptions: HVAC, CJ/Investigation/Law Enf.

HVAC 104 HEATING SYSTEMS LAB I *Fall, 2 credit hours*

The fundamentals of heating equipment are the emphasis of this course. Students study basic heat transfer and the application of different fuels used in the heating industry. Safe use of hand and power tools is stressed in laboratory work. 2- three hour labs per week. Pre-requisite or Co-requisite: Heating System I (HVAC 103).

HVAC 105 HEATING SYSTEMS II *Spring, 3 credit hours*

This course covers the procedures and materials required to install residential and light commercial heating and air conditioning equipment. Field piping and electrical wiring installation is studied. Material takeoffs are performed utilizing building plans, and from field measurements. Thermostats and control equipment is also covered. Three hours lecture per week. Pre-requisites Heating Systems I (HVAC 103), and Heating System Lab I (HVAC 104).

HVAC 106 RESIDENTIAL & LIGHT COMMERCIAL INSTALLATION *Spring, 2 credit hours*

This course covers the procedures and materials required to install residential and light commercial heating and air conditioning equipment. Field piping and electrical wiring installation is studied. Material takeoffs are performed utilizing building plans, and from field measurements. Thermostats and control equipment is also covered. 2 - three-hour labs per week. Pre-requisite: Building Trades – Blueprint Reading and Drafting (CONS151), pre-requisite or co-requisite Heating Systems II (HVAC105).

HVAC 110 PLUMBING *Spring, 3 credit hours*

The fundamentals of residential and commercial plumbing are explained in lecture and applied in laboratory projects. Plumbing code is reviewed to ensure compliance and explain how systems operate properly thus ensuring adequate supply of water and removal of waste from buildings. 2- one hour lecture and 1 – three hour lab per week.

HVAC 201 HVAC ELECTRICITY, MOTORS, AND CONTROLS *Fall, 2 credit hours*

This course introduces students to AC and DC circuits, interpretation of electrical schematics, troubleshooting using test equipment, motors types and uses, and installation of electrical equipment in compliance with local, state, and national codes. The sequence of controls in HVAC are explored in details allowing students to correct electrical faults or diagnose hardware problems. Two hour lecture per week.

HVAC 202 HVAC ELECTRICITY, MOTORS, AND CONTROLS LAB *Fall, 2 credit hours*

This course develops hands-on skills at troubleshooting electrical faults, motors, and control sequences. 2 - three hour labs/lecture per week. Co-Requisite: HVAC Electricity, Motors, and Controls (HVAC 201).

HVAC 203 COMMERCIAL REFRIGERATION *Spring, 2 credit hours*

The fundamentals of refrigerating and air conditioning equipment are the emphasis of this course. Students study the basic refrigeration cycle and the function of each component; compressor, condenser, evaporator and metering device. Use of hand and power tools is stressed in laboratory work. Students cut, bend, solder, braze, flare, and swage cooper tubing. Flowing nitrogen is stressed during brazing operations. Two hours lecture per week. Prerequisites: Refrigeration I (HVAC 101) Refrigeration Lab I (HVAC 102).

HVAC 204 COMMERCIAL REFRIGERATION LAB *Spring, 3 credit hours*

The repair of refrigerating and air conditioning equipment are the emphasis of this course. Students remove and replace the basic refrigeration cycle and the function of each component; compressor, condenser, evaporator and metering device. Use of hand and power tools is stressed in laboratory work. Students cut, bend, solder, braze, flare, and swage cooper tubing. Flowing nitrogen is stressed during brazing operations. Nine hours of lab per week. Co-requisite: Commercial Refrigeration (HVAC 203).

HVAC 205 HVAC SERVICE, TROUBLESHOOTING & REPAIR *Fall, 3 credit hours*

This course covers the analysis and repair of HVAC systems. Students utilize electrical meters, pressure measuring equipment, and airflow testers to determine the performance of HVAC systems. Identification and repair of defective components is the focus of this course. Analysis of misapplication is also studied. Two hours of lecture, Three hours of lab per week. Pre-requisite: Building Trades- Blueprint Reading & Drafting (CONS 151), Heating Systems II (HVAC 105), Pre-requisite or Co-requisite: HVAC Electricity, Motors, and Controls (HVAC 201)

INDEPENDENT STUDY *Fall/Spring, credits variable*

A planned learning experience accomplished independent of formal classroom and/or laboratory sessions through written contract between a student and a member of the College's faculty. Credits earned may be applied as electives or may be taken in lieu of required subjects under special circumstances. Credits: Variable, not to exceed a total of 12 hours toward the degree or certificate.

INTL 400 STUDY ABROAD *Fall/Spring, 3-15 credits*

This course is designed to offer a student an opportunity to enroll in the study abroad programs and courses through other SUNY campuses and gain cultural experience. The students take courses overseas and complete all the requirements outlined by the campus administering the study abroad experience. They also have an opportunity to interact with students from other campuses. Prerequisites/ Corequisites: Based on the specific requirements outlined by the administering campus. Most programs require at least sophomore level standing with the GPA of at least 2.5. Freshman must be in good standing and check with the International Programs Office to ensure eligibility.

JUST 101 INTRODUCTION TO CRIMINAL JUSTICE *Fall/Spring, 3 credit hours*

This course is a comprehensive study of the development of criminal justice systems and operations in the United States. This course includes detailed examination, analysis and evaluations of the major components of the criminal justice system. Three hours lecture per week. Open to any student.

JUST 105 CORRECTIONAL PHILOSOPHY *Fall/Spring, 3 credit hours*

A survey of the philosophy, theory, and practice involved in the treatment of convicted law violators of all ages within the institutional environment. This course provides an overview of the correctional field; its origins, development, current status, and future prospects. The role of corrections and its importance in the reduction and control of crime and recidivism is evaluated. Three hours lecture per week.

JUST 110 CRIMINAL LAW *Fall/Spring, 3 credit hours*

A study of the fundamentals of criminal law: i.e., actus reus, mens rea, distinctions between grades of offenses; criminal responsibility; and the substantive law. Three hours lecture per week. Prerequisite: Introduction to Criminal Justice (JUST 101) or permission of instructor.

JUST 111 CRIMINAL PROCEDURE *Fall/Spring, 3 credit hours*

A study of principles that regulate the balance between the power of our government and the rights of individual citizens. Topics include specific constitutional amendments, searches and seizures, stops and arrests, the use of force in effecting arrests, the use of search and/or arrest warrants, self-incrimination, and stages of criminal proceedings in the U.S. Three hours lecture per week. Prerequisite: Introduction to Criminal Justice (JUST 101) or permission of instructor.

Course Descriptions: Criminal Justice/Investigation/Law Enforcement

JUST 201 CRITICAL ISSUES IN CRIMINAL JUSTICE *Fall/Spring, 3 credit hours*

This course is a study of the economic, political, ethical and emotional issues relating to the justice system. Topics covered in this course include: current trends in the criminal justice system, understanding prejudices and functioning in a culturally-diverse society, plea bargaining, the death penalty, juveniles in the justice system, victimology, and current events related to the field. Three hours lecture per week. Prerequisite: Introduction to Criminal Justice (JUST 101) or permission of instructor. Writing intensive course.

JUST 202 INTRO TO FORENSIC CRIMINOLOGY *Fall, 3 credit hours*

This course introduces students to the various aspects and applications of the field of forensic criminology. Students explore types of criminological research, evidence, and forensic examination, as well as the role of forensic criminology in criminal investigations; prosecutions and the legal process; and corrections/offender supervision. Special attention is paid to evidence-based practice in the criminal justice and legal systems, with a focus on applying evidence to current and emerging justice-system problems or investigative casework. Prerequisites: none.

JUST 203 CRIMINAL INVESTIGATIONS *Fall/Spring, 3 credit hours*

This course is designed to teach those skills and knowledge necessary to conduct thorough preliminary investigations of crimes. Techniques used to investigate common categories of crimes will be discussed. A major emphasis in this course will be the preparation and execution of investigative plans as they relate to a team approach. Other skills will include interviewing, crime scene processing, and basic forensic examination of evidence. Three hours lecture per week. Prerequisite: None.

JUST 205 CRIMINAL JUSTICE SEMINAR *Fall/Spring, 3 credit hours*

This course is designed to offer the student an opportunity to have a practical field experience with a criminal justice agency of his/her choice. The student will observe and participate in the daily functioning of an agency, share information with other students, and provide the participating agency with a valuable commodity – their time as volunteers. This course may take one of two forms, either a practicum or library research, as agreed upon by both the student and the instructor. The library research option allows the student to conduct research on a criminal justice agency to gain a more in-depth understanding of the function of said agency. 30 credit hours completed in Criminal Justice, CJ: Law Enforcement Leadership Criminal Investigation, Forensic Criminology or Emergency and Disaster Management or Homeland Security; or permission of instructor.

JUST 207 POLICE SERVICES *Fall/Spring, 3 credit hours*

This course provides students with an overview of the services that police agencies provide to the community. Programs, practices and techniques are presented with an emphasis on lawful behavior, efficiency and effectiveness. The topics include, but are not limited to: the importance of effective communication, arrest procedures, patrol strategy, enforcement of vehicle and traffic laws, violent behavior, terrorism, juvenile crime, disaster preparedness, and ethical behavior. Three hours lecture per week. Prerequisite: Introduction to Criminal Justice (JUST 101) or permission of instructor.

JUST 209 LAW ENFORCEMENT COMMUNICATIONS *Fall/Spring, 3 credit hours*

This course prepares students to write clear, accurate and grammatically correct police reports, evidence and other laboratory documents, arrest and search warrants, depositions, statements, and other associated law enforcement documents. Methods of communication such as note taking and interviewing mechanics will be addressed. Court testimony is also addressed. Three hours lecture per week. Prerequisite: Introduction to Criminal Justice (JUST 101) or permission of instructor.

JUST 210 INTRODUCTION TO FORENSIC INVESTIGATION *Spring, 3 credit hours*

This course familiarizes the students with various forms of forensic techniques evidence. The laboratory component of the course provides the student an opportunity to process and analyze various forms of forensic evidence. Two hours lecture and two hours of laboratory per week.

JUST 211 INTRODUCTION TO PROBATION & PAROLE *Fall, 3 credit hours*

This course introduces students to offender supervision in the community, with specific focus on the institutions of probation and parole. Students explore the history and foundation of probation and parole in America, as well as their role and function within the larger system of corrections and punishment. The practical daily activities of probation and parole officers are examined, including surveillance, report-writing, offender evaluation, pre-sentence investigations, and court testimony.

Pre-requisite: None

JUST 230 FUNDAMENTALS OF HOMELAND SECURITY *Fall/Spring, 3 credits*

This course surveys the policies, practices, concepts and challenges confronting practitioners in Homeland Security with a focus on local entities. It provides an overview of threats to domestic

security from terrorism, weapons of mass destruction, and other related risks and vulnerabilities. It examines the strategies and systems involved in protecting against and responding to threats. Discussion includes the managerial, political, legal and organizational issues related to crisis planning and response, the National Incident Management System impact on local practices, risk assessment and mitigation, communications and technology systems, medical and public health emergencies, and infrastructure protection. Three hours lecture per week. Prerequisite: None.

JUST 232 INTELLIGENCE ANALYSIS *Spring, 3 credit hours*

This course provides an introduction and overview of the concepts and theory of Intelligence, the Intelligence process and cycle, collection disciplines, and the US Intelligence Community (USIC) at large. This course examines the role of Intelligence in the policy process, oversight and accountability, policies, strategies and public laws that govern and regulate the USIC. Students will examine aspects of counterintelligence, counterespionage, and covert actions and their place within the Intelligence Enterprise.

Prerequisites: Homeland Security major (2335), Criminal Investigation major (1359), CJ: Law Enforcement Leadership major (1911), or Criminal Justice major (640) or permission of instructor.

JUST233 CRIME ANALYSIS *Fall, 3 credit hours*

This course provides a comprehensive overview of crime analysis through both theory and practical examples. This course explores the basics of crime analysis to sophisticated analytical concepts that provides a foundation for career analysts, homeland security practitioners, and public policy makers. Prerequisites: Homeland Security major (2335), Criminal Investigation major (1359), CJ: Law Enforcement Leadership major (1911), or Criminal Justice major (640) or permission of instructor.

JUST 300 FORENSIC PHOTOGRAPHY *Fall/Spring, 3 credit hours*

This course provides an introduction to basic techniques, equipment, material and other aspects of crime scene photographs including theory and practice of photographic image formation and recordings. The course utilizes “hands-on” instruction with an emphasis on crime scene photography, evidence photography, and surveillance photography. Prerequisites: Completion of 45 credit hours in Criminal Investigation, CJ: Law Enforcement Leadership, or Homeland Security; or permission of instructor.

JUST 301 LATENT PRINTS AND IMPRESSIONS *Fall/Spring, 3 credit hours*

This course is an introduction to the biological development of fingerprints and the identification

of the various fingerprint patterns. Course activities include physical and chemical development of fingerprints, crime scene processing techniques, the Henry System of fingerprint classification, and the comparison and identification of suspect fingerprints through manual and automated means. Two hours lecture, two hours laboratory per week. Prerequisites: Completion of 45 credit hours in Criminal Investigation, CJ: Law Enforcement Leadership, or Homeland Security; or permission of instructor.

JUST 302 INFORMATION MANAGEMENT IN CRIMINAL JUSTICE

Fall/Spring, 1 credit hour

This course introduces students to the organization, use, and retrieval of information resources in the fields of criminology and criminal justice, and related disciplines. Open-web data sources are compared against peer-reviewed sources for credibility, authority, relevancy, accuracy, and purpose. Prerequisites: 45 credit hours or permissions of instructor, must be in Criminal Justice, Criminal Investigation, CJ: Law Enforcement Leadership, Forensic Criminology or Homeland Security majors only.

JUST 303 INVESTIGATIVE INTERVIEWS

Fall/Spring, 3 credits hours

This course provides students with proven techniques which apply to conducting accusatory and non-accusatory interviews. Students develop skills related to preparing for an investigative interview with an emphasis on a proactive role. These skills include developing an interview strategy, interpreting physical and verbal cues, conducting a cognitive interview, developing admissions and confessions and recognizing a false confession. Course includes the most recent court rulings related to investigative interviews and admissibility of statements into court. Two hours lecture, two hours laboratory per week. Prerequisites: Completion of 45 credit hours in Criminal Investigation, CJ: Law Enforcement Leadership, or Homeland Security; or permission of instructor.

JUST 307 PENOLOGY

Spring, 3 credit hours

This course provides an overview of the study of punishment in contemporary society. Students investigate the underlying sentiments, philosophies, theories, and practices associated with societies' attempts to repress and control criminal activities. Current controversies are addressed, including the prison environment as criminogenic, recidivism rates, comprehensive prison reform/comparative penology, harm reduction, reentry, solitary confinement, restorative justice/alternatives to incarceration, and the ethics of punishment. Prerequisites: 45 credit hours or permission of instructor.

JUST 310 THE CAUSES OF CRIME

Fall/Spring, 3 credit hours

This course introduces various criminological theories to explain the cause of criminal behavior. Specific attention is placed on the primary theorists and the evolution of their corresponding theories and how they relate to current theories associated with biological, psychological, personality, intelligence and gender, and social disorder. Students learn to identify and apply criminological theories to the commission of specific criminal acts. The history of crime and punishment is reviewed, leading to the present day criminal justice system and competing criminological theories. Three hours lecture per week. Prerequisites: Completion of 45 credit hours or permission of instructor.

JUST 311 ALTERNATIVES TO INCARCERATION

Fall/Spring, 3 credit hours

This course examines the policies, philosophies, functions, and procedures associated with a variety of community-based correctional services or alternatives to incarceration currently operating or emerging in the U.S. justice system. Students examine these correctional alternatives from the perspective of the practitioner who provides or coordinates these services, as well as from the offender and victim perspectives, who are recipients of such services. Implications for public policy, perception, funding, and safety are discussed.

Pre-Requisite: Completion of 45 semester credit hours or permission of the instructor.

JUST 313 JUVENILE JUSTICE

Fall/Spring, 3 credit hours

This course provides an overview of the creation and evolution of juvenile justice in America. It examines the theories of delinquency, juvenile and police encounters, the adjudication process, status and non-delinquent offenders, detention of juveniles, and the rights of students. The evolution of the laws governing each aspect of juvenile justice is summarized. Prerequisite: Completion of 45 credit hours or permission of instructor.

JUST 314 ETHICS IN CRIMINAL JUSTICE

Fall/Spring, 3 credit hours

This course will provide the student with theories and practices of ethics and professionalism in criminal justice. Areas of concentration will be law enforcement, courts, and corrections. This course will require the student to exercise critical thinking skills to solve issues that test the morals and ethics of criminal justice professionals on a daily basis. Students may not earn credit for both Professional Ethics (BSAD 319) and JUST 314. Three hours lecture per week. Prerequisites: Completion of 45 credit hours or permission of instructor.

JUST 315 CONSTITUTIONAL LAW FOR CRIMINAL JUSTICE PROFESSIONALS

Spring, 3 credit hours

This course is an examination of the U.S. Constitution and how it guides the procedures and practices of the American criminal justice system, with an emphasis on law enforcement issues. Topics include an historical overview of the Constitution, our country's legal system and the role of the U.S. Supreme Court. Topics also focus on maintaining the balance between individual, state and federal rights, due process, searches and seizures, gun control, obtaining information legally, and rights related to the trial process. Students may not receive credit for both JUST 315 and LEST 340 Three hours lecture per week. Prerequisites: The American Legal System (LEST 101) or Introduction to Criminal Justice (JUST 101), and 45 credit hours completed, or permission of instructor

JUST 316 SEX OFFENDERS

Fall/Spring, 3 credit hours

This course explores the implications of sexual deviance and sexual offending on the criminal justice system and its practitioners. Students consider the nature and etiology of sexually deviant behavior, as well as the societal and legal responses to such behaviors. A case-study approach is taken to examine the applied and practical aspects of sex-offender identification in the investigative process. Students assess the impact of current issues and controversies in sex offender legislation, policy and practice for criminal justice agencies and practitioners. Two lecture hours per week. Prerequisites: 45 credit hours completed or permission of instructor.

JUST 317 POLICE TACTICAL SEMINAR

Fall, 3 credit hours

This course acquaints students with the methods and techniques that are recognized by law enforcement professionals as necessary for success in a law enforcement career. Students learn mental as well as physical techniques that are needed to tactically handle situations. Issues of officer safety are identified and discussed. The focus is on analytical understanding of the tactical challenges faced by U.S. law enforcement officers. Two hours of lecture and two hours of lab per week. Prerequisite: Introduction to Criminal Justice (JUST 101) and 60 credit hours or permission of instructor.

JUST 320 MEDICOLEGAL INVESTIGATIONS OF DEATH

Fall, 3 credit hours

This course provides an in-depth look into the medicolegal aspects of death investigation, including the manners, mechanisms, and causes of death, as well as the post mortem changes. The course also instructs the student on wound interpretation and the method to apply post mortem conditions to criminal investigations to confirm or refute evidence of wrongful deaths. Three hours lecture per week. Prerequisites: Completion of 45 credit hours or permission of instructor.

JUST 321 MANAGING LAW ENFORCEMENT TRAINING

Spring, 3 credits

In this course, students examine issues relating to law enforcement training to include pre-service training, basic law enforcement training, field training, in-service training and specialized training. The role of state oversight (P.O.S.T. type) agencies is examined. The course presents a detailed template for training management concentrating on the impact training has on the agency. The course familiarizes students with adult learning concepts and Dr. Benjamin Bloom's taxonomy of cognitive Learning. Central to the course is the understanding and appreciation of the variables associated with assessing the training needs and evaluation of training. Three hours lecture per week. Prerequisites: completion of 45 credit hours in Criminal Investigation, CJ: Law Enforcement Leadership, or Homeland Security; and junior standing or permission of the instructor

JUST 322 GENDER AND THE JUSTICE SYSTEM

Spring, 3 Credits

This course examines the role of gender in a variety of criminal justice contexts, from offending, to policing, to the courts, and corrections. Specific attention is paid to connections between masculinity and violence, how gender shapes patterns of offending as well as victimization, and the extent to which gendered offending, violence and victimization are cultural products. Pre-requisites: 45 credit hours, or permission of Instructor.

JUST 323 DIVERSITY IN CRIMINAL JUSTICE

Fall/Spring, 3 credit hours

This course provides an examination of the intersections between diverse groups and the variable agencies, practices, policies, and individual actors in the criminal justice system with whom they come into contact. Students examine contacts that criminal justice practitioners have with citizens, victims, suspects, and coworkers, and conceptualize diversity through such intersections. Specific attention is paid to gender, sexuality, race, class, status, culture, age, disability, religion, and politics.

Pre-Requisite: Completion of 45 semester credit hours or permission of the instructor.

JUST 324 SERIAL MURDERERS AND THEIR VICTIMS

Spring, 3 credit hours

This course covers topics relating to serial murder and the various categories associated with the designation, including healthcare killers, sexual predators, male versus female murderers, team killers, and their respective victims. The student analyzes the issue of serial murder from a global perspective and ways law enforcement officials are attempting to profile and apprehend suspects. Three hours lecture per week. Prerequisites: Completion of 45 credit hours or permission of instructor.

JUST 326 THREATS TO HOMELAND SECURITY

Fall/Spring, 3 credit hours

In this course students study the post cold war threats to the United States of America and the corresponding security policies. This course takes an "all-hazard" approach to homeland security and the current threats facing our nation. Topics addressed include natural hazards, man-made hazards, domestic and international terrorism, weapons of mass destruction, cyber terrorism and the emergency management planning model. This course explains the roles of various first responder agencies and the responsibility of the government to coordinate their response. Three hours lecture per week. Prerequisite: Completion of 45 credit hours in Criminal Investigation, CJ: Law Enforcement Leadership, or Homeland Security; or permission of the instructor.

JUST 327 INTERNATIONAL CRIME & JUSTICE

Fall, 3 credit hours

This course is an examination of international crime, punishments and international justice perspectives. It includes an analysis of international research efforts and resources developed to address specific transnational criminal activity and crimes against humanity. The role of international courts in delivering justice is also examined.

Pre-Requisite: Completion of 45 semester credit hours or permission of the instructor.

JUST 330 QUESTIONED DOCUMENTS

Fall/Spring, 3 credit hours

This course includes an examination of techniques used to determine the authenticity of documents through the analysis of handwriting, ink and paper sources, methods of mechanical printing, and recover of erasures, obliterations and alterations. Two hours lecture, two hours lab per week. Prerequisite: completion of 45 credit hours in Criminal Investigation, CJ: Law Enforcement Leadership, or Homeland Security; or permission of instructor.

JUST 331 PROFILING AND BEHAVIORAL CRIMINOLOGY

Spring, 3 credit hours

This course provides an introduction to contemporary criminal investigative analysis with a special focus on behavioral criminology. Students explore the nature, history and methods of criminal profiling, as well as its investigative relevance to law enforcement. Case studies are analyzed to apply the principles and methods of profiling to personality and behavioral data about offenders. Prerequisites: Forty-five (45) credit hours or permission of instructor

JUST 333 MANAGING PATROL FUNCTIONS

Fall, 3 credits

This course provides a study of many aspects of police patrol, including goals and objectives of patrol, staffing and deployment, management styles

of supervisors, and supervisory functions including scheduling and budgeting. Through group discussions, role playing activities and situational scenarios, students learn styles and various elements of the patrol function. Three hours lecture per week. Prerequisites: Completion of 45 credit hours in Criminal Investigation, CJ: Law Enforcement Leadership, or Homeland Security; or permission of instructor.

JUST 334 COMMUNITY ORIENTED POLICING

Spring, 3 credits

This course provides students with insight into the meaning of community policing and presents many dimensions necessary to consider when developing and designing a community policing strategy. Students understand the practical side of community policing, recognize the community considerations that need to exist and develop methods applicable to their unique environments. Students discuss community policing as it relates to problem solving, community engagement and organizational transformation. Students also discuss strategies associated in developing positive working relationships with local community leaders and establishing meaningful communications where there is a partnership and commonality of interests. Three hours lecture per week. Prerequisite: Completion of 45 credit hours in Criminal Investigation, CJ: Law Enforcement Leadership, or Homeland Security; or instructor's approval.

JUST 335 CRIMINAL JUSTICE AGENCY MANAGEMENT

Fall/Spring, 3 credits

Description, analysis, solution, and synthesis of contemporary management problems in a criminal justice organization; presentation and exemplary implementation of management concepts significant to criminal justice organizations; review of case studies for management problem recognition; the study of operational systems; analysis of the role of supervisors and managers. Three hours lecture per week. Prerequisite: Completion of 45 credit hours in Criminal Investigation, CJ: Law Enforcement Leadership, or Homeland Security; or permission of instructor.

JUST 339 TRUE CRIME INVESTIGATION

Fall/Spring, 3 credit hours

This course provides an in-depth examination of a real-world crime and its treatment throughout the stages of the justice process. Students examine the case from a variety of perspectives, analyzing the facts and behaviors of the key actors responsible for the commission or disposition of the crime. Special attention is given to the victim and perpetrator's characteristics and behaviors, the crime scene, investigative procedures, the courtroom process and the eventual case outcome.

Pre-Requisite: Completion of 45 semester credit hours or permission of the instructor.

Course Descriptions: Criminal Justice/Investigation/Law Enforcement

JUST 340 LEGAL ISSUES OF THE PENAL SYSTEMS *Fall/Spring, 3 credit hours*

Students examine problems and issues faced by incarcerated persons within the American penal system. Course topics include: history of confinement as punishment, issues of visitation, religion, legal assistance, prison discipline, rehabilitation, and the civil and criminal liabilities of corrections officials. Three hours lecture per week. Prerequisites: Completion of 45 credit hours in Criminal Investigation, CJ: Law Enforcement Leadership, or Homeland Security; or permission of instructor.

JUST 341 CORRECTIONS MANAGEMENT AND ADMINISTRATION *Fall/Spring, 3 credit hours*

This course examines the concepts, practices and theoretical bases of the management and administration of correctional facilities. Students will examine the issues of facility management, inmate management, leadership and governance of correctional facilities, personnel management and policy formation, and the challenges facing the future of American correctional systems. Three hours lecture per week. Prerequisite: Completion of 45 credit hours in Criminal Investigation, CJ: Law Enforcement Leadership, or Homeland Security; or permission of the instructor

JUST 344 CIVIL LIABILITY FOR THE CRIMINAL JUSTICE ADMINISTRATOR *Fall/Spring, 3 credit hours*

In this course students examine civil liability issues at the local, state, and federal law levels. Students develop better awareness of the liability risks relative to criminal justice service by learning proactive protocols that may minimize personal and organizational liability risks. Three hours lecture per week. Prerequisite: Completion of 45 credit hours in Criminal Investigation, CJ: Law Enforcement Leadership, or Homeland Security; or permission of the instructor.

JUST 345 COMPARATIVE JUSTICE SYSTEMS *Spring, 3 credit hours*

This course is an examination of crime as a world problem, consideration of the different ways justice systems are organized, comparison of the rights of offenders and an analysis of substantive and procedural law in different legal traditions, and an examination of multi-national efforts to address specific trans-border criminal activity. Similarities and dissimilarities between urban and rural criminal justice are examined in the context of culture and social structure. Three hours lecture per week. Prerequisite: Completion of 45 credit hours in Criminal Investigation, CJ: Law Enforcement Leadership, or Homeland Security; or permission of instructor.

JUST 347 RESEARCH METHODS IN CRIMINOLOGY AND CJ *Fall/Spring 3 credit hours*

This course introduces students to the practices of consuming and producing research of publishable quality in the disciplines of criminal justice and criminology. Students explore the elements of the research process and the scientific method, paying special attention to ethical considerations in conducting research. Analyzing the processes and principles of the quantitative, qualitative, and mixed-methods approaches to research, students critically evaluate published literature in the field, analyze and interpret data and findings, and consider the usefulness of criminal justice/criminological research to the conceptual understanding of, and field-based practice within, the disciplines. Prerequisites: 45 credit hours or permission of instructor; must be In Criminal Investigation, CJ: Law Enforcement Leadership, Forensic Criminology or Homeland Security Major.

JUST 349 VULNERABLE POPULATIONS IN CJ *Spring, 3 credits*

This course examines a variety of vulnerable populations whose particular characteristics make them especially susceptible to justice-system involvement, and the substantial and enduring harms resulting therefrom. Special attention is paid to the mentally ill, substance-use disordered, and veterans, as well as those whose age, race, gender, ethnicity, or socioeconomic status increase their vulnerability. Current and emerging justice-system policies and practices are evaluated. Prerequisites: none.

JUST 350 VICTIMIZATION *Fall/Spring, 3 credit hours*

This course includes a study of the various issues involved in victimization, including theories, intimate versus stranger violence, family victimization, child abuse and neglect, workplace violence, school violence, elder abuse, and the criminal justice response to victimization. Three hours lecture per week. Prerequisites: Completion of 45 credit hours or permission of instructor.

JUST 351 ORGANIZED CRIME *Spring, 3 credit hours*

This course provides students with a viable definition of organized crime, its historical overview from the 18th century to present, and the theories behind why people become involved in crime. Topics include the development of organized crime in the northeast and its westward migration; nontraditional organized crime, the business enterprises of organized crime; the effect of organized crime in labor and business, the effects of the media and international organized crime. Prerequisites – 45 Credit Hours.

JUST 353 CRIMINAL JUSTICE TECHNOLOGY *Spring, 3 credit hours*

This course provides students with a survey of criminal justice technologies and their uses within the criminal justice system. In addition to providing significant technical information about technology (such as computer operations, wireless communications and geographic information systems), this course emphasizes the challenges involved in the use of technology such as implementation and interoperability. Moreover, through this course, the study of technology is integrated into wider criminal justice themes including: ethical and legal implications of technology; technology's place in the community based policing model; and, how technology impacts traditional criminal justice policy-making. Three hours lecture per week. Prerequisite: Completion of 45 credit hours in Criminal Investigation, CJ: Law Enforcement Leadership, or Homeland Security a CJ major or permission of instructor.

JUST 355 PUBLIC SAFETY CRITICAL INCIDENT RESPONSE *Fall/Spring, 3 credit hours*

In this course students study the many facets of critical incident response. The course addresses specific obstacles public safety professionals face while responding to a critical incident or a disaster. The material contrasts the characteristics of a routine response to that of a large scale critical incident and requires the students to consider challenges that may not be common to a typical response situation. From the initial response to recovery, students examine the actions a responder may take and the likely consequences of those actions. Students in this class also study the National Interagency Incident Management System and how it is applied in a critical incident. Three hours lecture per week. Prerequisite: Completion of 45 credit hours in Criminal Investigation, CJ: Law Enforcement Leadership, or Homeland Security; or permission of the instructor.

CYBR/ JUST 365 DIGITAL FORENSIC ANALYSIS *Fall/Spring, 3 credit hours*

This course is designed to prepare the student to complete forensic analysis of digital media and to understand the process and technical challenges of internet investigations. The course looks specifically at how to obtain evidence from digital media, how to process network messages and logs while preserving the evidentiary chain, and the legal aspects of the search and seizure of digital media and related equipment and information. Two hours lecture and two hours laboratory per week. Prerequisites: 45 credit hours completed or permission of instructor

JUST 370 FORENSIC TAPHONOMY *Fall/Spring, 3 credit hours*

This course is an introduction to forensic taphonomy, including an overview of forensic anthropology and archaeology. The course provides a history of forensic anthropology, archaeology, and taphonomy,

Course Descriptions: Criminal Justice/Investigation/Law Enforcement

as well as current challenges and future directions. Specific topics to be covered include human osteology and the biological profile, taphonomic processes, and the postmortem interval. Three lecture hours per week. Prerequisites: 45 credit hours completed or permission of instructor.

JUST 375 GLOBAL TERRORISM: 20TH CENTURY TO PRESENT

Fall/Spring, 3 credit hours

This course examines the historical roots of modern terrorism, how the goals, justifications, and methods of terrorist acts in the successive eras are similar, and the strategies to bring terrorist and their organizations into the political process. Three hours lecture per week. Prerequisite: Completion of 45 credit hours in Criminal Investigation, CJ: Law Enforcement Leadership, or Homeland Security; or permission of the instructor.

JUST 380 CIVIL LIBERTIES AND HOMELAND SECURITY

Fall 3 credit hours

This course examines the Constitutional and legal framework of the Homeland Security enterprise, discusses specific Constitutional issues and court opinions as they apply to Homeland Security, and considers the relationship between Homeland Security policies and the preservation of civil liberties. The course looks at the balance of the goals, objectives and activities of effective Homeland Security against the compelling need to preserve and extend fundamental American civil liberties. It examines the USA PATRIOT Act and its effectiveness in preventing and responding to the threat of terrorism as well as their role in shaping the development of Homeland Security agencies, policies, strategies, and infrastructure. Three hours lecture per week. Prerequisite: Fundamentals of Homeland Security (JUST 230), and completion of 45 credit hours.

JUST402 GIS: CRIME MAPPING

Spring, 3 credit hours

This course provides an introduction to geographic information systems and their use in public safety and crime mapping. This course introduces students in how to use maps to analyze crime, how to analyze spatial data, and how maps can help researchers evaluate programs and policies. Additionally, students are introduced to various software applications that are standard in the industry. Prerequisite: Completion of 45 credit hours or permission of instructor.

JUST 406 CRIME SCENE INVESTIGATION

Fall, 3 credit hours

This course emphasizes crime scene processing and investigation including crime scene search principles, photography, descriptive writing, recognition of physical evidence, methods for collection and preservation of evidence, sketching techniques and methods of transportation or submission of evidence

for laboratory analysis. Two hours lecture and two hours laboratory per week. Prerequisites: Forensic Photography (JUST 300), Latent Print and Impressions (JUST 301), and Investigative Interviews (JUST 303), and Senior status in the Criminal Investigations major or permission of instructor.

JUST 408 THE INVESTIGATION OF DEATH

Fall, 4 credit hours

This course is a comprehensive study of death investigations including the first responding officer's duties, the investigation at the scene, detectives' duties, case management, manners and modes of death, and identifying suspects. The course also presents recent statistics and trends related to murder. Two hours lecture and three hours laboratory per week. Prerequisites: Forensic Photography (JUST 300), Latent Print and Impressions (JUST 301), and Investigative Interviews (JUST 303), and Senior status in the Criminal Investigations major or permission of instructor.

JUST 410 CLANDESTINE GRAVES

Fall, 3 credit hours

This course presents students with the theories and practices of locating clandestine graves. Lectures address grave assessments, the use of experts, evidence recognition and preservation, and case studies. Labs will include grave location, excavation, and recovery techniques. Two hours lecture and two hours laboratory per week. Prerequisite: Completion of 45 credit hours or permission of instructor.

JUST 411 FORENSIC DRUG ANALYSIS & INVESTIGATION

Fall, 3 credit hours

This course explores the tools and methods used in, and the issues involved with, drug investigations and forensic analyses. Topics will include physiological impacts of various illicit drugs, legal categories of various substances, legal issues relating to drug crimes, methods of investigation, field examination, and lab analyses.

Pre-Requisite: Completion of 45 semester credit hours or permission of the instructor.

JUST 412 FIREARM AND TOOLMARK

Fall, 3 credit hours

This course is an in-depth look at the forensic analysis of Firearms Identification. Areas of concentration include the history and development of firearms and ammunition components, serial number restorations, toolmark examinations and distance determinations. Other areas discussed include evidence packaging, reporting results and utilizing the national ballistic database (NIBIN). Prerequisite: Completion of 45 credit hours or permission of Instructor.

JUST 413, METHODS OF HUMAN SKELETAL IDENTIFICATION

Spring, 3 credit hours

This course provides an overview of human skeletal identification methods, such as biological profile, radiographic comparison, craniofacial superimposition, stable isotopes, and DNA. The applicability of these methods in forensic, human rights, and mass disaster contexts is explored.

Pre-Requisite: Completion of 45 semester credit hours or permission of the instructor.

JUST 415 EMERGING ISSUES IN HOMELAND SECURITY

Fall, 3 credit hours

This course explores the evolving nature of the Homeland Security industry. It examines a number of contemporary issues and their immediate and long-term impact on Homeland Security policies and practices. The roles of the media, law, the Constitution, governmental and corporate entities, and politics at the federal, state and local levels in determining and shaping Homeland Security policy and practice are considered. Three hours lecture per week. Prerequisite: Fundamentals of Homeland Security (JUST 230) and completion of 45 credit hours in Criminal Investigation, CJ: Law Enforcement Leadership, or Homeland Security or permission of instructor.

JUST 420 THE CORPORATE ROLE IN HOMELAND SECURITY

Spring, 3 credit hours

This course explores the role of private sector entities in Homeland Security and relationships with governmental Homeland Security agencies. It examines the specific roles, responsibilities, and vulnerabilities of corporate entities in protecting the infrastructure as well as in preventing, deterring, and responding to events. Institutions such as utility providers, the private security industry, mental health systems, hospitals and biomedical facilities, companies with chemical and hazardous materials inventories, shipping and transportation companies, airlines and airports, the financial services industry, and information technology and telecommunications companies are considered. Three hours lecture per week. Prerequisite: Fundamentals of Homeland Security (JUST 230) and completion of 45 credit hours or permission of instructor.

JUST 421, CYBER CRIMINOLOGY

Spring, 3 credit hours

This course examines cybercrimes using theories of criminology and assesses from the perspective of the perpetrator and victim. The issue of jurisdiction, policy and legal aspects of the crime are examined since cybercrimes can be committed anywhere on the globe.

Pre-Requisite: Completion of 45 semester credit hours or permission of the instructor.

Course Descriptions: Criminal Justice, Legal Studies

JUST 422 VIOLENT CRIME ANALYSIS *Fall/Spring, 3 credits*

This course discusses the features and characteristics of criminal classification definitions, including homicide, arson, sexual assault, and computer crimes. The students will analyze data used within the criminal justice field to understand the types of crimes and the practical application of the research to assist in an investigation. Prerequisites: none.

JUST 423, INTELLIGENCE LED POLICING *Spring, 3 credit hours*

This course introduces students to the concepts of intelligence-led policing, and what distinguishes it from other policing models. This course provides a focus for increased emphasis on analysis and intelligence as a driver for objective decision making, prioritizing crime hot spots, repeat victims, recidivists, and criminal groups. Key aspects of instruction include crime and harm reduction, disruption and prevention through management, deployment, and enforcement.

Pre-Requisite: Completion of 45 semester credit hours or permission of the instructor.

JUST 424 COLD CASE INVESTIGATION *Fall/Spring, 3 credit hours*

This course discusses the techniques used to analyze and investigate a cold case. This course highlights the evaluation of the cold case file through the use of available resources, including electronic databases, interview techniques, autopsy findings, media inquiries, and forensic science disciplines. Prerequisites, 45 completed hours or permission of instructor.

JUST 425 INTELLIGENCE RESEARCH & ANALYSIS *Fall, 3 credit hours*

This course examines the concepts and practices involved in the process of collecting and analyzing intelligence as well as the influence of intelligence in shaping homeland security decision-making at the state and local levels. It examines the intelligence gathering and analysis capabilities of state and local criminal justice agencies and the use of intelligence processes to support homeland security policy formulation. Students in this course will develop an understanding of intelligence tradecraft and the analytic and research skills used in intelligence work, as well as an appreciation for the ethical, Constitutional, and civil liberties issues involved. Specific topics considered include open source intelligence, assessing the reliability and validity of information, intelligence sharing, covert and counterintelligence operations. Three hours lecture per week. Prerequisite: Completion of 45 credit hours or permission of instructor.

JUST 426 ETHICS IN FORENSIC SCIENCE *Spring, 3 credits*

This course discusses ethics within the context of forensic science from the standpoint of the forensic scientist, attorney, Sexual Assault Nurse Examiner, child abuse investigator, judge and media. The students will examine case studies in order to understand ethical dilemmas from several different perspectives within the forensic science field. Prerequisites: 45 completed hours or permission of instructor.

JUST 429 INTRODUCTION TO CULMINATING EXPERIENCE SEMINAR *Fall/Spring, 1 credit hour*

This course is the precursor to the senior culminating experience in the Criminal Investigations, Homeland Security, or Criminal Justice: Law Enforcement Leadership Bachelor's programs. Students meet on a weekly basis with faculty to discuss resume preparation, job interviewing, locating and establishing internships, and internship requirements. This course is a prerequisite to JUST430, Culminating Experience in Criminal Justice. One hour lecture per week. Prerequisites: senior level status in Criminal Investigation, CJ: Law Enforcement Leadership, or Homeland Security; or permission of instructor.

JUST 430 CULMINATING EXPERIENCE IN CRIMINAL JUSTICE *Fall/Spring, 3-15 credit hours*

This internship is an academic program which integrates classroom work and practical experience with discipline-related agencies. is a structured field experience in which an intern acquires and applies knowledge and skills, while working in a responsible role. Working with a supervisor, the student will perform prescribed work within an administrative or operational setting. The internship will be tailored to the individual student's career interests and the needs of the supervising organization. 40 hours per week per credit hour. Prerequisite: Completion of 90 credit hours in Forensic Criminology, Criminal Investigation, Criminal Justice: Law Enforcement Leadership, or Homeland Security curriculum courses or the permission of the department chair.

JUST 431 CULMINATING EXPERIENCE IN CORRECTIONS *Summer, 4 credit hours*

This internship is an academic program which integrates classroom work and practical experience during a correctional academy. It is a structured field experience in which an intern acquires and applies knowledge and skills while working in a responsible role during a corrections academy. Working with a supervisor, the student will adhere to the guidelines of the pre-certification training within the academy and perform the necessary tasks for graduation. This course designed for the NYS DCJS approved county corrections academy and can only be used for the SUNY Canton Corrections Academy pre-

certification. Prerequisites: Eligible to be accepted for the SUNY Canton Corrections Academy.

JUST 432 SENIOR SEMINAR *Spring, 3 credit hours*

This capstone course integrates students' foundational coursework in criminology with an applied focus toward meaningful, evidence-based practice or system change. Students select an area of the justice system in need of a new policy, model of practice, or significant reform, and develop a comprehensive change-management plan for this real-world problem. Prerequisites: 90 credit hours, JUST 302 and JUST 347.

JUST 441 DOMESTIC EXTREMISM AND HATE CRIMES *Spring, 3 credit hours*

This course examines the foundations of domestic extremism and hate crimes and how they are manifested in criminal behavior. Various groups who have been labeled as supporting or engaging in domestic terrorism and hate crimes are examined. Focus is placed on the organizational structure, philosophies, and networks of domestic extremists and hate crime groups; federal and state statutory laws impacting domestic extremism and hate crimes; and the interrelationships and interactions of domestic extremist organizations and hate crime groups. Three hours lecture per week. Prerequisites: completion of 45 credit hours or permission of instructor.

JUST 449 CURRENT ISSUES IN LAW ENFORCEMENT *Fall, 3 credit hours*

This course identifies current and emerging issues that may have an impact on a police manager. Students will integrate concepts such as, ethical, morality, violations of civil liberties, political correctness and corruption in law enforcement. Current U.S. Supreme Court decision and opinions, federal and state mandates affecting agency policies and procedures, and community activism and involvement will be used to help students evaluate their decisions. Prerequisites/Corequisites: Introduction to Criminal Justice (JUST 101) and completion of 45 credit hours in Criminal Investigation, CJ: Law Enforcement Leadership, or Homeland Security; or permission of instructor.

JUST 485 FRAUD EXAMINATION AND INVESTIGATIONS *Fall/Spring, 3 credit hours*

This course covers the theories, principles and methodology of fraud examination and investigation. Students learn how and why fraud is committed, how fraudulent conduct is committed, how fraudulent conduct can be deterred, and how allegations of fraud are investigated and resolved. Three hours lecture per week. Prerequisites: JUST 101, ACCT 101, and completion of 45 credit hours or permission of Instructor.

Course Descriptions: Criminal Justice, Legal Studies

JUST 291-295, 391-395, OR 491-495 SPECIAL TOPICS IN CRIMINAL JUSTICE *Fall/Spring, 1-4 credit hours*

Special Topics in Criminal Justice will generally include topics of current interest or topics not covered in courses currently offered by the department or in combinations not currently available.

JUST496/411 FORENSIC DRUG ANALYSIS AND INVESTIGATION *Fall, 3 credits*

This course explores the tools and methods used in, and the issues involved with, drug investigations and forensic analyses. Topics will include physiological impacts of various illicit drugs, legal categories of various substances, legal issues relating to drug crimes, methods of investigation, field examination, and lab analyses. Prerequisites: 45 credit hours in Criminal Investigation, Criminal Justice: Law Enforcement Leadership or Homeland Security or instructor's approval.

LEST 101 THE AMERICAN LEGAL SYSTEM *Fall and Spring, 3 credit hours*

A general overview of the American legal system, including federal and state court structures, the roles and responsibilities of various participants in the legal process, and the progress of civil and criminal cases through the courts. Three hours lecture per week.

LEST 221 CRIMINAL PRACTICE *Spring, 3 credit hours*

This course introduces students to the many aspects of Criminal Law and Criminal Procedure. Students learn the main structure of the criminal justice system, penal statutes, case law, and criminal procedure with a focus on the 4th, 5th, and 6th Amendments to the United States Constitution. There will be a particular focus on Criminal Practice in the State of New York. Prerequisites: The American Legal System (LEST 101) and Business Law I (BSAD 201) or permissions of instructor.

LEST 310 LEGAL RESEARCH *Spring, 3 credit hours*

An overview of the sources of law in the American system and specific instruction in finding and analyzing the sources needed to answer legal questions, including case law, statutes, administrative law, and secondary sources. Three hours lecture per week. Prerequisites: Successful completion of Composition & the Spoken Word (ENGL 101), and Introduction to Information Technology (CITA 110) or its equivalent, or permission of instructor.

LEST 320 NEGLIGENCE AND INTENTIONAL TORTS *Spring, 3 CREDIT HOURS*

Students explore the Law of Negligence and Intentional Torts and how these areas of law affect

the business community. Intentional torts include Business Torts, Defamation, Nuisance, Warranty, Strict Liability, Products Liability and an employer's liability for the negligence and torts of agents and employees. Prerequisite/corequisite: Business Law I (BSAD 201), or professor's prior approval.

LEST 330 LEGAL WRITING *Fall, 3 credit hours*

Instruction in writing documents commonly used in a legal setting, and in analyzing and citing the sources needed to answer legal questions, including case law, statutes, administrative law, and secondary sources. Three hours lecture per week. Prerequisites: Legal Research (LEST 310) and either Business Communications (BSAD 200) or Professional Writing and Communication (ENGL 301), or permission of instructor. This is a writing intensive course.

LEST 340 CONSTITUTIONAL LAW *Fall, 3 credit hours*

This course focuses on the issues raised by the structural parts of the United States Constitution. Consideration will be given to judicial processes in constitutional cases; judicial review; and the federal courts functioning in the constitutional system. Attention will be given to the relationships of the three federal branches of government, with emphasis on some of the powers and limitations of the executive, legislative and judicial bodies that arise from principles of separation of powers and national checks and balances. Three lecture hours per week. Prerequisite: The American Legal System (LEST 101) or Introduction to Criminal Justice (JUST 101) or Business Law I (BSAD 201) and junior status, or permission of the instructor.

LEST 350 CIVIL LITIGATION *Fall, 3 credit hours*

Introduces students to substantive and procedural requirements for, and philosophical underpinnings of civil litigation in state and federal courts, at both the trial and appellate levels. Three hours lecture per week. Prerequisites: The American Legal System (LEST 101) and Business Law II (BSAD 202), or permission of instructor.

LEST 360 FAMILY LAW *Fall, 3 credit hours*

Students will explore the core procedural and substantive concepts of family law, including legal aspects of adult family relationships and the law relating to the lives of children. Students will learn how family law principles are applied in a legal practice setting. Three lecture hours per week. Prerequisites: The American Legal System (LEST 101), Business Law I (BSAD 201), or permission of instructor.

LEST 370 REAL PROPERTY *Spring, 3 credit hours*

Students will examine the law of real property as it relates to real estate transactions, landlord tenant relationships, and real property disputes. Students will learn how real estate transactions are completed in a legal practice setting. Three hours of lecture per week. Prerequisites: The American Legal System (LEST 101), Business Law II (BSAD 202), or permission of instructor.

LEST 375 IMMIGRATION LAW AND BORDER CONTROL *Fall, 3 credit hours*

Students will understand the historical immigration policies and controls as they evolved in the 19th and 20th centuries and then changed after the World Trade Center bombings. The policy changes and their effects will be analyzed to allow students to project the effects of future world events and policy changes. The enforcement methods and means will be studied as will the regulatory and statutory requirements for temporary visits and immigration with an emphasis on practical application of common processes. Three hours lecture per week. Prerequisite: junior level status or permission of the instructor.

LEST 380 WILLS, TRUSTS, AND ESTATES *Spring, 3 credit hours*

Students explore the planning and preparation of asset transfers pre-mortem and post-mortem as well as lifetime planning tools commonly associated with trusts and estates. Students learn how attorneys assist their clients to achieve their property transfer and lifetime personal planning goals through preparing wills, trusts and related documents and examine the tax considerations involved in the planning process. Students study the probate process in depth with an emphasis on the client interview process and preparation of legal documents. Three hours of lecture per week. Prerequisites: Legal Research (LEST 310) or junior status and approval of the instructor.

LEST 388 ENVIRONMENTAL LAW *Spring, 3 credit hours*

This course introduces students to the many aspects of Environmental Law. Students learn the main structure of the American Legal System: sources of law, classification of law, constitutional principles, and administrative agencies that are involved in environmental issues and concerns. The litigation process for environmental disputes is examined. The evolution of environmental policy is examined and primary national policies are introduced. Environmental laws that relate to air-quality control, water quality control, toxic substance control, waste management and hazardous releases, energy, and natural resources are examined. International environmental laws, particularly those of Canada, are discussed. Prerequisites: Junior level status.

Course Descriptions: Legal Studies, Licensed Practical Nursing

LEST 410 AMERICAN INDIAN LAW AND FEDERAL INDIAN POLICY

Fall, 3 credit hours

This course provides an introduction to American Indian Law & Federal Indian Policies. Students examine Indian sovereignty, jurisdiction, and federal/state government to Indian relations. Students analyze events that have shaped American Indian rights under the United States Constitution and the history of those legal developments. The course covers a detailed assessment of the 1924 Citizenship Act as well as the 1968 Indian Bill of Rights Act and impact that each has had on Indian peoples in the United States. Prerequisites: Business Law II (BSAD 202) or Introduction to Criminal Justice (JUST 101) and junior level status or permission of instructor.

LEST 429 ORIENTATION TO CULMINATING EXPERIENCE IN LEGAL STUDIES

Fall and Spring, 1 credit hour

This course is intended as the precursor to the Senior Culminating Experience or the Senior Project in the Legal Studies (LEST) program. Seniors will meet with faculty on a weekly basis to discuss resume preparation, job interviewing techniques, on-the-job training, identifying and securing internships, internship requirements, and performance assessment/evaluation as well as the expectations and requirements for the Senior Project. This course is a prerequisite to Legal Studies Internship (LEST 480) and Senior Project (LEST 485). Prerequisite: Senior level status in the Legal Studies program or permission of instructor.

LEST 449 ADVANCED LEGAL WRITING

Spring, 3 credit hours

Builds on skills acquired in Legal Writing to prepare students for writing more complex types of legal documents. Students will analyze, cite, and find the sources needed to answer legal questions, including case law, statutes, administrative law, and secondary sources. A writing intensive course. Three hours lecture per week. Prerequisite: Legal Writing (LEST 330) or permission of instructor.

LEST 450 TRIAL COURT AND RULES OF EVIDENCE

Spring, 3 credit hours

This course provides students with a basic understanding of the legal mechanisms through which society resolves its disputes. Students will learn the details of trial and appellate process and procedures. Students will be provided the necessary tools to develop the confidence, ability, and control when presenting courtroom testimony. Three hours lecture per week. Prerequisite: The American Legal System (LEST 101) or Introduction to Criminal Justice (JUST 101) and at least Junior level status or permission of instructor.

LEST 480 LEGAL STUDIES INTERNSHIP

Fall/Spring, 15 credit hours

The Legal Studies Internship integrates classroom work and practical experience with cooperating businesses or agencies. The Internship allows seniors the opportunity to apply classroom learning in a legal or law enforcement setting. It is a structured field experience in which an intern, under the guidance of a supervisor, acquires and applies knowledge and skills while working in a responsible role. The internship will be tailored to the individual student's career interests and the needs of the supervising organization. Internship assignments and activities may include, but not be limited to, information gathering, research, drafting of documents, office management, and other tasks and responsibilities deemed necessary. This course can be taken multiple times up to a maximum of 15 credit hours. Prerequisites: Senior level status in the Legal Studies Program. All required courses must be completed before participating in the Internship. Students need permission of the program director or dean.

LEST 485 LEGAL STUDIES SENIOR PROJECT

Fall or Spring, 3-15 credit hours

This course is an alternative to the Legal Studies Internship. It is designed for students who are unable to complete a 15-credit Internship. Students will complete a senior research project specifically addressing issues under the umbrella of legal studies. Under the guidance of a faculty mentor, the student will submit a research proposal, conduct research, prepare a thesis style report, and present a defense to a thesis committee. A writing intensive course. 37.5 project hours per credit hour. Prerequisites: Internship Orientation (LEST 429) and senior status in the Legal Studies program, or permission of the program director.

LPNC 100 DRUG DOSAGE CALCULATIONS AND PHARMACOLOGY

Fall, 3 credit hours

This course introduces the principles related to pharmacology. It examines a variety of drug classifications and their effects on the body. This course places emphasis on use of the nursing process in drug administration and includes drug calculations. Three hours lecture per week. Pre- and Corequisite: Human Anatomy and Physiology I (BIOL 217), Composition & the Spoken Word (ENGL 101), Introduction to Psychology (PSYC 101), and PN Fundamentals (LPNC 101). Practical Nursing Certificate Majors only.

LPNC 101 PRACTICAL NURSING FUNDAMENTALS

Fall, 8 credit hours

This course examines the evolution of nursing including current trends, and introduces the health care delivery system to the student. Communication techniques, including documentation, are explored. Legal and ethical considerations and the role of

the LPN within healthcare are examined. Students will be encouraged to utilize the nursing process and critical thinking in providing nursing care to clients who are at various points on the health illness continuum. In lab, students will develop skills fundamental to the practice of nursing. Lab and theoretical content will be applied in the long-term care and clinic settings. Three hours lecture, three hours laboratory, twelve hours clinical per week. Pre- and Corequisite: Human Anatomy and Physiology I (BIOL 217), Composition & the Spoken Word (ENGL 101), Introduction to Psychology (PSYC 101), Drug Dosage Calculations and Pharmacology (LPNC 100), or permission of instructor. Practical Nursing Certificate Majors only.

LPNC 102 PRACTICAL NURSING: SPECIALTY POPULATIONS

Spring, 3 credit hours

This course introduces students to data gathering and nursing care concepts focusing on maternity, newborn, pediatric, and mentally ill clients. The nursing process and critical reasoning skills are utilized to adapt nursing concepts and procedures to these special populations. Three hours lecture per week. Pre-requisites: Drug Dosage Calculations and Pharmacology (LPNC 100), Practical Nursing Fundamentals (LPNC 101), Anatomy and Physiology I (BIOL 217), Pre- and corequisite: Practical Nursing: Medical-Surgical Nursing (LPNC 103), Composition & the Spoken Word (ENGL 101); Anatomy and Physiology II (BIOL 218), Introduction to Psychology (PSYC 101). Practical Nursing Certificate Majors only.

LPNC 103 PRACTICAL NURSING: MEDICAL- SURGICAL NURSING

Spring, 8 credit hours

Students will utilize critical reasoning and the nursing process in learning about fundamental disease processes and the LPN's role in prevention of illness, treatment of disease, and the restoration of health in the adult client. Concepts related to safety, emotional support, communication, client teaching, and pharmacology are integrated throughout the course. Students utilize the nursing laboratory to enhance their psychomotor and clinical reasoning skills in practicing advanced nursing skills. Clinical experiences provide opportunities for students to apply theory/lab in the medical-surgical units and specialty units of acute care hospitals and clinics. Three hours lecture, three hours laboratory, twelve hours clinical per week. Prerequisite: Drug Dosage Calculation and Pharmacology (LPNC 100), PN Fundamentals (LPNC 101), Anatomy and Physiology I (BIOL 217); Pre- or Corequisite: Practical Nursing: Specialty Populations (LPNC 102), Anatomy and Physiology II (BIOL 218), Composition & the Spoken Word (ENGL 101) and Introduction to Psychology (PSYC 101). Practical Nursing Certificate Majors only.

Course Descriptions: Mathematics

MATH 099 FUNDAMENTALS OF APPLIED MATHEMATICS

Fall, 3 credit hours

The course connects mathematical concepts and procedures to real-life applications relevant to a variety of technical trade fields. Topics include: a review of fundamental arithmetic concepts, order of operations, measurement and conversions, ratio and proportion, signed numbers, exponents and radicals, estimation, and an introduction to algebra. Three hours lecture per week. Prerequisites: For students with no algebra background or for those receiving less than 70 on the New York State Math A or Integrated Algebra Regents or equivalent examination, or permission of instructor.

MATH 100 BEGINNING ALGEBRA

Fall/Spring, 3 credits

This course is designed to prepare the student for Intermediate Algebra (MATH 106). It assumes a limited algebra background at the secondary level. Topics include: a review of arithmetic operations, signed numbers, exponents, basic geometry concepts (such as angle measure, area and volume formulas), operations with polynomials, solving linear equations, introduction to graphing, and elementary word problems. Three hours lecture per week. Prerequisites: For students with no algebraic background or for those receiving less than 75 on the New York State Math A or Integrated Algebra Regents or equivalent examination, or permission of instructor.

MATH 101 APPLIED COLLEGE MATHEMATICS

Spring, 3 credit hours

This course is designed to prepare students for success in technical and pre-engineering technology programs. It assumes an algebraic background at an introductory level. The course connects mathematical concepts and procedures to real-life applications relevant to a variety of technical trade fields. Topics include: an introduction to algebra, practical plane geometry, solid figures, angle measurement in degrees and radians, trigonometric ratios, solving systems of equations graphically and algebraically, and solving quadratic equations. Applications using algebra concepts are stressed in this course. Three hours lecture per week.

MATH 106 INTERMEDIATE ALGEBRA

Fall/Spring, 3 credit hours

GER 1

This course reviews and builds on the basic, fundamental concepts of algebra, which are required in many other courses and areas of study. Topics include: a review of fundamental concepts, first degree equations and inequalities, graphing and systems of equations, rational expressions, products and factoring, exponents and radicals, quadratic equations. Three hours lecture plus one hour of recitation per week. Prerequisite: Beginning Algebra (MATH 100) with a grade of C or better, or New York State Math A or Integrated Math Regents or

equivalent examination with a grade of 70 or above, or permission of instructor.

MATH 111 SURVEY OF MATHEMATICS

Fall/Spring, 3 credit hours

GER 1

A study of various mathematical topics including an introduction to quantitative reasoning skills, truth table logic, sets, probability, geometry. This course is designed for non-technical oriented students. It is appropriate for students in liberal arts. Three hour lecture per week. Prerequisite: Intermediate Algebra (MATH 106) with a grade of C or better, or 2 NYS high school regents math courses with a grade of 75 or above on the second New York State Regents mathematics examination, or permission of instructor.

MATH 115 MATHEMATICS FOR ELEMENTARY TEACHERS I

Fall/Spring, 3 credit hours

GER 1

A study of the development, meaning, and representations of numeration systems, operations on whole numbers, number theory and the real number system. The focus of the course will be on mathematical representations for K-8 topics via problem solving. This course is open to all students but will be of primary interest to those enrolled in the elementary education transfer program. The majority of the course will be activity-based (exploration of topics through problem solving activities). Three hours lecture per week and Early Childhood. The majority of the course will be activity-based (exploration of topics through problem solving activities). Prerequisite: Intermediate Algebra (MATH 106) with a grade of C or better, or 2 high school regents math courses with a grade of 75 or above on the second New York State Regents mathematics examination, or permission of instructor.

MATH 116 MATHEMATICS FOR ELEMENTARY TEACHERS II

Fall/Spring, 3 credit hours

A study of the development, meaning, and representations of statistics, patterns and functions, concepts of geometry, and measurement of two- and three-dimensional figures. The focus of the course will be on the construction of mathematical representations for K-8 topics via problem solving. The majority of the course will be activity-based (exploration of topics through problem solving activities). Three hours per week. Prerequisite: Mathematics for Elementary Teachers I (MATH 115) with a grade of C or better, or permission of instructor.

MATH 121 COLLEGE ALGEBRA

Fall/Spring, 4 credit hours

GER 1

This course provides basic algebraic concepts and an introduction to trigonometric and logarithmic functions. Emphasis is placed on equations and inequalities; polynomials, rational, exponential and logarithmic functions; and graphing and data analysis including modeling and linear regression.

Additional topics include complex numbers; radical functions; right triangle trigonometry; systems of equations; and elementary transcendental functions. Four hours lecture per week. Prerequisite: Intermediate Algebra (MATH 106) with a grade of C or better, or 2 NYS high school regents math courses with a grade of 75 or above on the second New York State Regents mathematics examination, or permission of instructor. Cannot be taken for credit by students with credit in Pre-Calculus Algebra (MATH 123).

MATH 123 PRE-CALCULUS

Spring/Fall, 4 credit hours

GER 1

This course provides an intense study of topics which are fundamental to the study of Calculus. Emphasis is placed on functions and their graphs with special attention to polynomial, rational, exponential, logarithmic and trigonometric functions, and analytic trigonometry. Additional topics include complex numbers; systems of equations and inequalities; trigonometric identities; and trigonometric applications. Four hours lecture per week. Prerequisite: Intermediate Algebra (MATH 106) with a grade of C or better, or 2 high school regents math courses with a grade of 75 or above on the second New York State Regents mathematics examinations, or permission of instructor. Cannot be taken for credit by students with credit in College Algebra (MATH 121).

MATH 131 COLLEGE TRIGONOMETRY

Fall/Spring, 3 credit hours

GER 1

This course is designed for those students who lack the trigonometry skills needed to perform successfully in Calculus I. Topics include: angle measurement; right triangle trigonometry; trigonometric identities; trigonometric equations; graphs of trigonometric functions; inverse trigonometric functions; oblique triangles; and exponential and logarithmic functions. Three hours lecture per week. Prerequisite: College Algebra (MATH 121) with a grade of C or better, or for students who have taken 3 years of high school mathematics with a grade of 75 or above on the third New York State Regents mathematics examination, or permission of instructor.

MATH 141 STATISTICS

Fall/Spring, 3 credit hours

GER 1

This course is an introduction to the standard methods of descriptive statistics, probability, and inferential statistics. Topics include: organization and presentation of data, descriptive measures of data, linear correlation and regression analysis, probability, binomial and normal probability distributions, t-distributions, and estimation of parameters and hypothesis testing. The Chi-square distribution and Chi-square applications are covered if time permits. Three hours lecture per week. Prerequisite: College Algebra (MATH 121), Pre-Calculus Algebra (MATH 123), Survey of Mathematics (MATH 111), or Mathematics for Elementary Teachers II

Course Descriptions: Mathematics

(MATH 116) with a grade of C or better, or 3 years of high school mathematics with a grade of 75 or above on the third New York State Regents mathematics examination, or permission of instructor.

MATH 151 BUSINESS CALCULUS

Fall/Spring, 4 credit hours **GER 1**

This course is an intuitive introduction to the Calculus. Topics include: Review of functions; analytical geometry of the line, properties of limits; the derivative with applications; transcendental functions; and integrals with applications. Selected additional topics will be offered, as time permits, at the discretion of instructor. Four hours lecture per week. Prerequisite: College Algebra (MATH 121) or Pre-Calculus Algebra (MATH 123) with a grade of C or better, or for students who have taken 3 NYS high school regents math courses with a grade of 75 or above on the third New York State Regents mathematics examination, or permission of instructor.

MATH 161 CALCULUS I

Fall/Spring, 4 credit hours **GER 1**

This course is the first of a three-semester sequence of Calculus courses. Topics include: quick review of functions and graphs, limit and continuity; the derivative and its properties, differentiation of algebraic and transcendental functions, curve sketching; related rates, applied extrema problems; other applications of differentiation, numerical methods, and antidifferentiation. Four hours lecture per week. Prerequisite: College Algebra (MATH 121), Pre-Calculus Algebra (MATH 123) or College Trigonometry (MATH 131) with a grade of C or better, or 3 years of high school mathematics with a grade of 75 or above on the third New York State Regents mathematics examination, or permission of instructor.

MATH 162 CALCULUS II

Spring, 4 credit hours **GER 1**

This course is the second of a three-semester sequence in Calculus. Topics include: differentials; definite integrals and their applications; integration of exponential, logarithmic, trigonometric, and inverse trigonometric functions; techniques of integration; series; parametric equations and polar coordinates. Four hours lecture/recitation/computer lab per week. Prerequisite: Calculus I (MATH 161) with a grade of C or better recommended or permission of instructor.

MATH 263 CALCULUS III

Spring, 4 credits **GER 1**

This course is the third of a three-semester sequence of Calculus courses included are topics from analytic geometry, plane curves and polar coordinates, vectors, vector valued functions, and topics from differential geometry, partial differentiation, multiple integrals, along with selected topics from vector calculus. Four hours lecture per week. Prerequisite: Calculus II (MATH 162) with a grade of C or better or permission of instructor.

MATH 341 STATISTICS II

TBD, 3 credit hours

Includes confidence intervals and hypothesis testing for population proportions, variance and standard deviation; hypothesis testing two samples for differences between means; correlation and regression, including multiple regression; finding prediction intervals and hypothesis tests for the linear correlation coefficient; Chi-square tests and the F-distribution; non-parametric tests. Three hours lecture per week. Prerequisites: Statistics (MATH 141) with a grade of C or better, or permission of instructor.

MATH 351 DISCRETE MATHEMATICS

Fall/Spring, 3 credit hours

This course studies the basic tools and techniques of discrete mathematics and their applications. The topics include sets, logic, proofs, functions and relations, algorithms, elementary number theory, counting methods, discrete probability, pigeonhole principle, recurrence relations, introduction to graph theory and Boolean algebras. Three hours of lecture per week. Prerequisites: College Algebra (MATH 121) or Pre-Calculus Algebra (MATH 123) with a grade of C or better, or permission of instructor.

MATH 361 LINEAR ALGEBRA

Spring/Fall, 3 credit hours

This course is an introduction to the theory of finite dimensional abstract vector spaces and linear transformations. Topics include: systems of linear equations, matrices, matrix algebra, determinants and inverses, linear combinations and linear independence, abstract vector spaces, change of basis and coordinates, inner product spaces, orthonormal bases. We also consider linear transformations, isomorphisms, matrix representation of linear maps, eigenvalues and eigenvectors, diagonalization and similarity. The applications include computer graphics, Markov chains, chemistry, linear regression, network flow, electrical circuits, and differential equations. Three hours of lecture per week. Prerequisites: Calculus II (MATH 162) with a grade of C or better or permission of the instructor.

MATH 362 DATA ANALYSIS

Spring, 4 credit hours

This course is an introduction to data analysis. Software will be used to analyze and interpret data throughout the course. Included topics are multiple regression, data modeling, along with an introduction to different distributions such as Gamma and Beta distributions. Prerequisite: Math 141 Statistics, Math 361 Linear Algebra.

MATH 364 DIFFERENTIAL EQUATIONS

Spring/Fall, 4 credit hours **GER 1**

A course in Ordinary Differential Equations, which is required of the students in the Engineering

Science curriculum. It may be taken by qualified students in other curriculums who plan to transfer mathematics credits to four-year institutions. Topics include: First-order differential equations, higher-order differential equations with constant and variable coefficients, applications of first and second-order linear equations, Laplace transforms, systems of linear differential equations and numerical methods for ordinary differential equations (optional). Four hours lecture/recitation/computer lab per week. Prerequisite: Calculus II (MATH 162) with a grade of C or better or permission of instructor.

MATH 371 GRAPH THEORY

Spring/Fall, 3 credit hours

This course is an introduction to the basic concepts of graph theory. Common classes of graphs such as paths, trees and cycles are analyzed. We will consider isomorphism, connectivity, and traversability. If time permits, planarity and graph colorings may be considered. Applications are given to chemistry, engineering and computer science. Three hours of lecture per week. Prerequisites: Calculus II (MATH 162) or permission of the instructor.

MATH 401 REAL ANALYSIS

Spring, 4 credit hours

This course is a proof-based course that covers the fundamentals of mathematical analysis: definitions and theorems regarding point set topology (applied to the real numbers), convergence of sequences, subsequences and series of numbers, continuity and differentiability of functions, the theory and practice of the Riemann integral, the theoretical rationale regarding convergence or divergence of sequences and series, and Fourier series. Also covered are uniform continuity and uniform convergence, specifically when it relates to the change in the order of limit operations. Prerequisites: Calculus III (MATH 263) and Linear Algebra (Math 361) with a grade of C or better or permission of the instructor.

MATH 461 ADVANCED CALCULUS I

Spring, 3 credit hours 4 credit hours

This course is sequel to Calculus III and serves as an introduction to topics in Advanced Calculus. Specifically, we consider line, surface and volume integrals in two and three dimensional space. We also investigate the gradient of a scalar field and discuss conservative fields and potential functions. The divergence and curl of a vector field is defined. Generalizations of the fundamental theorem of calculus are presented and used to evaluate integrals. Other topics include curvilinear coordinates, multiple integrals and transformation of multiple integrals, implicit functions, Jacobians, partial derivatives, higher order partial derivatives, mean value theorems, the theory of infinite series, Taylor series along with an introduction to Fourier series. To motivate the subject, applications will be given to fluid and solid mechanics, Electrostatics and Electromagnetism. Pre-requisites: Calculus III (MATH 263) and Linear Algebra (Math 361) with a grade of C or better or permission of the instructor.

Course Descriptions: Math, Mechanical

MATH 461 **ADVANCED CALCULUS I** *Spring/Fall, 3 credit hours*

This course is sequel to Calculus III and serves as an introduction to topics in Advanced Calculus. Topics will include line, surface and volume integrals in two and three dimensional space; investigations of the gradient of a scalar field, discussion of conservative fields and potential functions; the divergence and curl of vector fields; generalizations of the fundamental theorem of calculus to evaluate integrals; curvilinear coordinates, multiple integrals and transformation of multiple integrals; implicit functions; Jacobians; partial derivatives; higher order partial derivatives; mean value theorems; infinite series; Taylor series and an introduction to Fourier series. Subject applications will be given to fluid and solid mechanics, Electrostatics, and Electromagnetism. Three hours of lecture per week. Prerequisites: Calculus III (MATH 263) and Linear Algebra (Math 361) with a grade of C or better or permission of the instructor.

MATH 291-295, 391-395, OR 491-495 **SPECIAL TOPICS IN MATHEMATICS** *Fall/Spring, 1-4 credit hours*

Individual courses of instruction of variable credit (1-4 credits) may be offered each semester. These courses are designed to expand on topics in specific areas of mathematics.

MECH 103 **INTRO TO HVAC-R** *Fall, 3 credit hours*

This course is an introduction to heating and air conditioning systems used to achieve a comfortable indoor environment. It includes a straightforward study of heating and cooling loads and the combustion process of various fuels. Warm air, hydronic, and radiant heating systems and related controls are studied to provide technicians the knowledge to install and repair furnaces and ancillary systems. The topics of proper ventilation and refrigeration requirement of a building is developed through ASHRAE standards. Two hours lecture, three hours laboratory per week.

MECH 112 **3D MODELING** *Fall/Spring, 3 credit hours*

A 3D CAD Modeling course that introduces the student to topics of dimensioning, tolerances, assembly and detail drawings, keys, key seats, gears, and cams. 3D Rapid prototyping systems, 3D Modeling concepts and ASME standards, will be emphasized. All CAD drawings will be created using solid modeling software. One hour lecture, four hours laboratory per week.

MECH 121 **MANUFACTURING PROCESSES I** *Fall/Spring, 3 credit hours*

This course provides an overview of material removal, change in form, change in condition, and heat treatment processes. The student begins with a fundamental understanding of machine tools theory

and practice. Instruction includes precision layout and measurement, lathe operations and tooling, milling operations and tooling, drills, reamers, and drilling machines. Instruction involves the selection and calculation of proper cutting speeds and feeds for processes involving different materials. Instruction also includes an investigation to the variety of casting processes, products produced through each process and common defects found. Students further investigate material properties and how change can occur through processing and heat treatments. The laboratory provides the opportunity to apply the material from lecture through the hands on operation of the tooling and equipment. Two hours lecture, three hours laboratory per week.

MECH 128 **ELECTROMECHANICAL TECHNOLOGY** *Spring, 3 credit hours*

This course provides the knowledge base needed to understand the principles, concepts, and applications of electromechanics. It presents problem-solving techniques that are critical for troubleshooting situations. Topics covered include: Nature of motion, simple and compound machines, torque, power transmission, motion devices, electric circuits, electromagnetic circuits and devices, and maintenance procedure for electrical and mechanical machines. Two hours lecture and two hours laboratory per week. Prerequisites: Pre-Calculus Algebra (MATH 123) or College Algebra (MATH 121), and College Physics I and Lab (PHYS 121/125).

MECH 220 **ENGINEERING MATERIALS** *Spring, 3 credit hours*

A study of the wide spectrum of materials used in manufacturing of discrete parts and machines. Materials structure, characteristics, mechanical proper-ties and applications will be stressed for ferrous and non-ferrous metals, plastics, and composites. This is a designated writing intensive course for the two year and four year Mechanical Engineering Technology and the four year Civil Engineering Technology programs. Two hours lecture, three hours laboratory per week. Prerequisites: Pre-Calculus Algebra (MATH 123) or College Algebra (MATH 121) and College Physics I (PHYS 121) or permission of instructor.

MECH 221 **MATERIALS TESTING LABORATORY** *Fall, 1 credit hour*

The course provides hands on experimentation in material testing as it relates to material properties for ferrous and nonferrous metals, concrete, plastics and wood. Technical report writing that meets industrial accepted standards is required. Prerequisite: Introduction to Engineering (ENGS 101)

MECH 223 **INTRODUCTION TO CNC** *Fall/Spring, 3 credit hours*

A course designed to introduce students to the capabilities of CNC machine tools used in industry, to teach students the fundamentals in programming

CNC lathes and milling machines, to provide students the opportunity to setup and operate CNC equipment and to experience the use of CAD/CAM technology. Two hours lecture, three hours laboratory per week. Prerequisite: Manufacturing Processes I (MECH 121) or permission of instructor.

MECH 232 **MACHINE DESIGN** *Spring, 3 credit hours*

Design of machine elements subjected to static, dynamic and fluctuating loads. Theory includes design of beams, shafts, mechanical power transmission devices. A design project is required for the course. The recitation session will be used for solving numerical problems and for consultation on the semester design project. 2 hours lectures, 2 hours recitation per week. Prerequisites/Corequisites: Strength of Materials (CONS 272), or permission of instructor.

MECH 241 **FLUID MECHANICS** *Fall, 3 credit hours*

This course develops a basic knowledge of fluids under static and dynamic applications. Properties of fluids, pressure, fluid statics, Bernoulli's and the energy equation are explored in respect to applications in the mechanical industry. Flow rate, pipe sizing and minor losses in piping systems are addressed. Three hours lecture per week. Prerequisites: Pre-Calculus Algebra (MATH 123) or College Algebra (MATH 121) and Physics I and Lab (PHYS 121/125).

MECH 242 **FLUID POWER LAB** *Fall, 1 credit hour*

A study of force and motion in hydraulic and pneumatic cylinders, involving cylinders, pumps, valves, and accumulators. Electrical, hydraulic, and pneumatic controls will be studied, with an emphasis on sequential operation of fluid devices. Both electrical and fluid schematic diagrams will be examined. Two hours laboratory per week. Corequisites: Fluid Mechanics (MECH 241) or permission of instructor.

MECH 301 **TECHNICAL DYNAMICS** *Spring, 3 credit hours*

Students study the principles of dynamics and the solution of applied engineering problems. Two-dimensional dynamic analysis of particles and rigid bodies are resolved using fundamental analytical methods and computer simulation. Rectilinear, curvilinear, and rotary motion, D'Alembert's principles of work and energy, impulse and momentum, and three-dimensional kinematics and dynamics are covered. Three hours lecture per week. Prerequisite: Strengths of Materials (CONS 272) or junior level status or permission of instructor.

Course Descriptions: Mechanical Engineering

MECH 332 INTERMEDIATE MACHINE DESIGN *Fall, 3 credit hours*

This course is a continuation of Machine Design (MECH 232). Design of shafts, keys, couplings and seals provide application to tolerances and fits. The study of bearing types, loads, design life and selection along with fastener selection, machine frames, connection and joints; linear motion, motion control and electric motors and controls used in automated machinery. Three hours lecture per week. Prerequisite: Machine Design (MECH 232) or permission of instructor.

MECH 341 INTERMEDIATE FLUID MECHANICS *Fall, 3 credit hours*

This course is an intermediate step in students' understanding of fluid mechanics. Topics include fluid kinematics, Bernoulli's equation, mass, energy, and momentum analysis of flow systems, internal flow, external flow, compressible flow, and differential analysis of fluid flows. The continuity, stream function, and Navier-Stokes equations are development for 2-D and 3-D flows. The introduction of similitude and dimensional analysis is also included. Hours of lecture per week. Prerequisites: Fluid Mechanics (MECH 241) or permission of instructor.

MECH 342 THERMODYNAMICS *Fall, 3 credit hours*

This course will investigate thermal power and its applications using the first and second laws of thermodynamics. The properties of liquids and gases will be considered in their current and emerging applications to energy production. The fuel sources will be discussed for their energy input and output heat values. The efficiency of all energy applications will be explored while evaluating the theory of heat transfer. Applications of the Rankin, Otto, Brayton, and refrigeration cycles will be used in evaluating the energy production of thermal systems. Three hours of lecture per week. Prerequisites: College Physics II (PHYS 122) and Calculus I (MATH 161), or permission of instructor.

MECH 343 HEAT TRANSFER *Fall/Spring, 3 credit hours*

This course explores the various methods of transferring heat from a source to a sink in engineering systems. Topics will focus on the energy balance of a system. The transport phenomena of heat transfer will be studied in detail, allowing students to internalize these physical principles of conduction, convection, and radiation. Three hours of lecture per week. Prerequisites: College Physics II (PHYS 122) and Calculus I (MATH 161), or permission of instructor.

MECH 350 QUALITY IMPROVEMENT *Fall, 3 credit hours*

This course examines statistical concepts related to quality control and improvement. Additional top-

ics include theory, construction, and interpretation of control charts in an industrial manufacturing environment. Probability as it relates to acceptance sampling and ISO 9000 quality standards will be re-viewed. Two hours lecture, Two hours laboratory per week. Junior or Senior level status

MECH 351 DESIGN OF EXPERIMENTS *Fall/Spring, 3 credit hours*

This course provides methodologies that engineers, technologists, and management personnel need to plan and conduct experiments to quantify cause and effects relationships in complex systems. Designs of experiments test multiple factors at one time determining whether changes to products, processes, and systems are improvements. Students will perform simple comparative experiments isolating known sources of variation; while multiple level fractional designs will allow analysis for variance (ANOVA) to predict models of interactions that optimize a process. Three hours of lecture per week. Prerequisites: Junior level status or permission of instructor.

MECH 377 CAPSTONE RESEARCH & PROPOSAL *Fall, 1 credit hour*

This course is part I of a senior design course. Its purpose is to allow the student to research and propose a project. The project will be constructed and tested in MECH477. Examples include, but are not limited to, new product development or improvements to an existing product. Course faculty must approve all projects. One hour lecture per week. Pre-requisite(s): Completion of 90 credit hours or permission of instructor.

MECH 412 VIBRATION AND NOISE CONTROL *Fall/Spring, 3 credit hours*

The objective of this course is to provide students with relevant skills to model and analyze vibrating mechanical systems and equipment. Instruction includes methods for solving free, harmonic, and general forced responses and the design of suppression systems. Students gain experience with accelerometers and varies other tools needed to measure vibration and how to mitigate noise due to vibration. Prerequisites: MATH 364 and MECH 301, or permission of instructor

MECH 416 APPLIED COMPUTATIONAL FLUID DYNAMICS *Fall/Spring, 3 credit hours*

This course introduces the student to modeling and analyzing fluid mechanics problems via the finite difference and finite volume method. Fundamentals of CFD theory, solution, procedures, techniques, and analysis are discussed. Topics include computational grid generation, fluid model setup, convergence and accuracy analysis, data interpretation, model validation and discussion of conclusions. Students will use CFD software to solve various fluid problems. Two hours lectures,

two hours laboratory per week. Prerequisites: Intermediate Fluid Mechanics (MECH 341), Differential Equations (MATH 262), or permission of instructor.

MECH 417 APPLIED FINITE ELEMENT METHOD *Fall/Spring, 3 credit hours*

This course introduces the student to modeling and analysis of mechanical systems via the finite element method. Topics include the theory and procedures to design computer models to simulate various applied mechanical problems, validation of computer models, and interpretation of numerical results, mesh and accuracy analysis, and discussion of conclusions. Students will use FEM software to solve various mechanical and heat transfer problems. Two hours lecture, two hours laboratory per week. Prerequisites: Machine Design (MECH 232), Differential Equations (MATH 262), or permission of instructor.

MECH 477 CAPSTONE PROJECT *Spring, 3 credit hours*

This course provides a learning experience that allows a student to propose, design and implement a project. Examples include, but are not limited to, new product development or improvements to an existing product. Course faculty must approve all projects. Three hours lecture per week. Prerequisites: Completion of 90 credit hours or permission of instructor.

MECH 480 CO-OP EXPERIENCE IN MECHANICAL TECHNOLOGY *Spring, 1-6 credit hours*

The course provides real world learning experience. Students are expected to be involved in the design, fabrication, and testing of a system, a component, a software, or a machine where real world constraints such as manufacturability, reliability, safety, environment, aesthetics, and costs are important. Professional cooperative education placement in a private/public organization related to the student's academic objectives and career goals. In addition to their work experience, students are required to submit bi-weekly reaction papers and an academic portfolio and presentation to a Faculty Coordinator. Forty hours per week per credit hour request. Prerequisites: Junior standing, consent of academic advisor, approval by Dean of CSOET.

MECH 291-295, 391-395, OR 491-495 SPECIAL TOPICS IN MECHANICAL ENGINEERING TECHNOLOGY *Fall/Spring, 1-4 credit hours*

Special topics in Mechanical Engineering Technology will generally include topics of current interest or topics not covered in courses currently offered by the department or in combinations not currently available. Prerequisite: permission of the instructor.

Course Descriptions: Management, Mechatronics

MFGT 291-295, 391-395, OR 491-495 SPECIAL TOPICS IN MANUFACTURING TECHNOLOGY

Fall/Spring, 1-4 credit hours

Special Topics in Manufacturing Technology will generally include topics of current interest or topics not covered in courses currently offered by the department or in combinations not currently available. Prerequisite: permission of the instructor.

MINS/CITA 300 MANAGEMENT INFORMATION SYSTEMS

Fall/Spring, 3 credit hours

Students learn the concepts underlying the design, implementation, control, evaluation, and strategic use of modern, computer-based information systems for business data processing, office automation, information reporting, decision-making, and electronic commerce. The major emphasis of the course will be on the managerial and strategic aspects of information technology. Three hours lecture per week. Prerequisites: Junior standing or the sum of credits earned and credits currently enrolled in is at least 60 or permission of instructor.

MINS/CITA 307 CUSTOMER RELATIONSHIP MANAGEMENT

Fall/Spring, 3 credit hours

This course provides information systems tools for building a customer-focused organization based on customer data and information. The course focuses on using current data to enhance relationships with customers, gathering data for future marketing endeavors and providing strategic guidance to the organization. The course provides insights into customer life-cycle management, customer lifetime value and measuring customer profitability. Three hours lecture per week. Prerequisites/Corequisites: Management Information Systems (MINS/CITA 300) or permission of instructor.

MINS/CITA 315 DECISION SUPPORT SYSTEMS

Fall/Spring, 3 credit hours

This course enables the student to turn raw data into information to help an organization's managers make decisions. Students will develop decision making analytical models to provide organizational leaders with potential outcomes and their effects. Students will study the network's role in distributed systems, distributed systems development tools, and distributed systems issues. Students will apply data-mining techniques supporting knowledge-management decisions. Three hours lecture per week. Prerequisites/Corequisites: Management Information Systems (MINS/CITA 300) or permission of instructor.

MINS/CITA 320 INTRODUCTION TO DATA MINING

Spring, 3 credit hours

A systematic introduction to the basic principles, applications, techniques and models of data mining including classification, estimation, prediction, affinity grouping, clustering, description and

profiling. The emphasis is on various data mining problems and their solutions. Students will also be exposed to a sample of data mining applications. Topics include decision trees, artificial neural networks, nearest neighbor approaches, market basket analysis, and association rules. Three hours lecture per week. Prerequisites/Corequisites: Introduction to Database (CITA 104) or Database Systems (CITA 215) and Statistics (MATH 141) or permission of instructor.

MINS/CITA 425 ENTERPRISE RESOURCE PLANNING

Fall/Spring, 3 credit hours

This course provides information systems tools to ensure a comprehensive resource planning system for all functions of businesses. The course will discuss the development and employment of enterprise resource planning for marketing, accounting, supply chain management, and human resources. Content will focus on practical applications of enterprise resource planning to ensure businesses get the greatest returns on information systems investment. Three hours lecture per week. Prerequisites/Corequisites: Management Information Systems (MINS/CITA 300) and Junior standing or permission of instructor.

MINS/CITA 430 DATA AND KNOWLEDGE MANAGEMENT

Fall/Spring, 3 credit hours

This course focuses on the development of a knowledge-management system using an organization's tacit and explicit knowledge to execute its strategy. The course explores practices entailed in developing a knowledge infrastructure, managing the interaction of people and technology, valuing knowledge assets, leveraging teams, and transferring knowledge across organizations. Three lecture hours per week. Prerequisites/Corequisites: Management Information Systems (MINS/CITA 300) and Junior standing or permission of instructor.

MINS 291-295, 391-395, OR 491-495 SPECIAL TOPICS IN MANAGEMENT INFORMATION SYSTEMS

Fall/Spring, 1-4 credit hours

An introductory or more advanced exploration of subjects not covered or only partially covered by other courses in Management Information Systems.

MKTX 215 DIGITAL FUNDAMENTALS AND LOGIC DESIGN

Fall, 3 credit hours

The topics covered in this course: number systems, logic operations and codes, logic gates, Boolean algebra and logic simplification, combinational logic analysis, functions of combinational logic, latches, flip-flops, counters and shift registers. Digital to Analog and Analog to Digital converters and Semiconductor memories are also covered. Three hours lecture per week. Prerequisites: Computer Logic (CITA 152) and Programming for Engineers (ENGS 102), and University Physics II/Lab (PHYS 132/136).

MKTX 216 DIGITAL FUNDAMENTALS AND LOGIC DESIGN LABORATORY

Fall, 1 credit hour

This laboratory course emphasizes on topics such as: Adder/Subtraction Circuits, Code Converters, Multiplexers and De-Multiplexers, JK Flip-Flop Circuits, Counters, Timers, Memory devices, Analog to Digital and Digital to Analog Converters, and Digital Circuit Troubleshooting. Two hours laboratory per week. Prerequisites: Computer Logic (CITA 152) and Programming for Engineers (ENGS 102), and University Physics II/Lab (PHYS 132/136) Prerequisite or Corequisite: Digital Fundamentals and Logic Design (MKTX 215).

MKTX 310 INSTRUMENTATION AND CONTROLS

Spring, 3 credit hours

This course will introduce instrumentation systems, process measurements, and process control. Specifically, the course will discuss measurement terminology, differentiating between analog and digital, describe the instrumentation used for electronic testing and develop the principles of operation of transducers used for process measurement and control. Three hours lecture per week. Prerequisites: Electric Circuit/Laboratory (ENGS 263/264).

MKTX 320 MECHATRONICS LABORATORY I

Fall, 1 credit hour

In this laboratory, the experiments are designed to give students hands on experience with components and measurement equipment used in the design of mechatronic products. Students learn the functions of operational amplifier, diodes/LEDs, Transistors, relays, sensor, and digital components. Three hours laboratory per week. Prerequisites: Electrical Circuit Laboratory (ENGS 264), Digital Fundamentals and Logic Design Laboratory (MKTX 216).

MKTX 325 MICROCONTROLLER

Spring, 3 credit hours

This course introduces microcontrollers. The fundamental skills needed to understand, use, and design microcontroller-based systems are explored. The course focuses on 8-bit microcontroller architecture. Two hours lecture and two hours recitation per week. Prerequisites: Digital Fundamentals and Logic Design/Laboratory (MKTX 215/216).

MKTX 370 MECHATRONICS LABORATORY II

Spring, 1 credit hour

This mechatronics laboratory emphasizes the applications of analog electronics, digital electronics, sensors and transducers, actuators, and microcontrollers. Laboratory experiments are designed to give the student hands-on experience with components and measurement equipment used in the design of mechatronic products. Design and construction of mechatronics systems are emphasized. Three hours

Course Descriptions: Mechatronics, Powersports

laboratory per week. Prerequisites: MECHATRONICS LABORATORY I (MKTX 320). Corequisite: Microcontroller (MKTX 325).

MKTX 410 **ROBOTICS ANALYSIS AND SYNTHESIS** *Fall, 3 credit hours*

This course teaches the fundamentals of robotics through implementation of control theory and system dynamics and modeling. Students write computer code, implement system controllers, use sensory equipment, collect and analyze data, and design and develop robotic systems. Two hours lecture and two hours recitation per week. Prerequisite: Instrumentation and Controls (MKTX 310).

MKTX 477 **MECHATRONICS CAPSTONE I** *Fall, 2 credit hours*

This is the sequence for Mechatronics Capstone Project where students address open-ended problems. Lecture and two hours of recitation per week. Prerequisite: Senior standing in Mechatronics or permission of instructor.

MKTX 478 **MECHATRONICS CAPSTONE II** *Spring, 2 credit hours*

This is the second of a two-course sequence for Mechatronics Capstone project where students demonstrate the proposed problem resolution. One hour of lecture and two hours of recitation per week. Prerequisite: Mechatronics Capstone I (MKTX 477).

MSPT 101 **POWERSPORTS SERVICE** *Fall, 3 credit hours*

This course is an introduction to the general theories of system and maintenance of powersports vehicles, including motorcycles, snowmobiles and all-terrain vehicles. Two hours lecture, three hours laboratory per week.

MSPT 110 **ENGINE AND POWER TRANSMISSION SERVICE** *Spring, 4 credit hours*

This course involves the complete disassembly, inspection, repair and reassembly of modern modular constructed powertrain assemblies. The principles of operations key to high performance, compact engines/transmission assemblies are thoroughly covered. Prerequisite: Powersports Service (MSPT 101) or permission of instructor. Two hours lectures, four hours laboratory per week.

MSPT 112 **POWERSPORTS ELECTRICAL SYSTEMS** *Fall, 3 credit hours*

This course is a study of fundamental electrical circuits and relative theory as applied to powersports machines. Series, parallel, series-parallel circuits, magnetism, direct and alternating current fundamentals; batteries, charging systems, starters, lighting systems, and basic electronics are studied.

Three hours lecture per week. Pre- or Co-requisite: Powersports Electrical Lab (MSPT 122) –or permission of instructor.

MSPT 113 **POWERSPORTS ENGINE DIAGNOSTICS** *Spring, 3 credit hours*

With the completion of this course of study, the student will be able to diagnose and repair a machine with a no-start condition resulting from a fuel or ignition problem. Knowledge and understanding of sophisticated engine fuel and ignition systems is the focus of this course. Students study primary ignition circuits, secondary firing, points and condenser, magneto, capacitor discharge, hall-effect and transistor theory. Electronic computer scanners, gages and other diagnostic devices are used throughout the course. Study of fuel systems begins with fuel delivery and includes electronic fuel injection. Three hours lecture per week. Pre-requisite(s): Powersports Service (MSPT 101), Powersports Electrical Systems (MSPT 112), Powersports Electrical Systems Lab (MSPT 122), Pre- or Co-requisite: Powersports Engine Diagnostic Laboratory (MSPT 114) or permission of instructor.

MSPT 114 **POWERSPORTS ENGINE DIAGNOSTICS LABORATORY** *Spring, 1 credit hour*

The laboratory component of this course consists of hands-on activities involving theories learned in the classroom. Students use service information, both hard-copy and electronic, while testing systems with digital volt/ohm meters and computer scanners. Fuel and powertrain control systems are diagnosed with the latest tools available. Three hours laboratory per week. With the completion of both lecture and lab, (MSPT 113 and MSPT 114) students will be able to diagnose and repair a machine with a no-start condition resulting from a fuel or ignition problem. The student will be able to access computer information, including inputs, outputs, and miscellaneous tests. Three hours lab per week. Pre- or Co-requisite: Powersports Engine Diagnostics (MSPT 113) or permission of instructor.

MSPT 120 **FRAME AND SUSPENSION SYSTEMS** *Spring, 3 credit hours*

This course covers the theory, diagnostic and service procedures used in suspension and frame systems unique to the powersports industry. Braking and suspension concerns are integrated into frame design theory. Two hours lecture, three hours laboratory per week. Prerequisite: Powersports Service (MSPT 101) or permission of instructor.

MSPT 122 **POWERSPORTS ELECTRICAL SYSTEMS LAB** *Fall, 1 credit hour*

The laboratory component of this course consists of hands-on activities involving theories learned in the classroom. Students use service information,

both hard-copy and electronic. Testing involves batteries; series, parallel, and series-parallel circuits, as well as charging and starting systems component identification and service. Three hours laboratory per week. Pre- or Co-requisite(s): Powersports Electrical Systems (MSPT 112) or permission of instructor

MSPT 130 **MARINE PROPULSION SYSTEMS** *Spring, 2 credit hours*

A study of the different types of propulsion systems relative to various types of aquatic craft, including jet and propeller. Theory and construction will be discussed. One hour lecture, two hours laboratory per week.

MUSC 101 **INTRODUCTION TO MUSIC** *Spring, 3 credit hours* **GER 7 & GER 8**

Introduction to Music samples 500 years of music history and includes units on classical, blues, jazz, popular, Broadway, film, and world music. In the process, it gives the student the tools needed to analyze and evaluate music in a variety of styles for lifelong growth. Three lecture hours per week.

NCR N02 **SOLAR READY VETS** *Fall/Spring /Winter/Summer*

The Solar Ready Vets Program is a national training program created by the United States Department of Energy, which is designed to get transitioning soldiers and jobs in the solar industry. The program is a five week 200 hour training program that covers the material needed to pass the North American Board of Certified Energy Practitioners (NABCEP) PV associate exam, basic electricity, system design basics, cost justification, safety training, hands on training with solar equipment, completing a solar PV installation, resume writing, interview techniques, and opportunities to interview with solar companies. The course is delivered over five weeks with classes running daily for eight hours per day.

NCR N03 **CDL – COMMERCIAL DRIVER LICENSE TRAINING** *Fall/Spring/Summer*

CDL – Commercial Driver License Training will provide the student with the required knowledge and skills to pass the New York State Department of Motor Vehicles, Road Test, for the class of license they wish to receive, Class A or B. The program is 50 hours consisting of 20 hours classroom training and 30 hours if individual behind the wheel training with an instructor. Major topics covered are; Driving Skills, Safety, Vehicle Controls, Mechanical Systems and Documentation requirements. The course is delivered over a time period, with evening classes and individual behind the wheel hours scheduled between the student and instructor.

Course Descriptions: Nursing

NCR N04 CERTIFIED CLINICAL MEDICAL ASSISTANT

Fall/Winter/Spring/Summer

The Clinical Medical Assistant course is designed to prepare students to function as professionals in multiple healthcare settings. Medical assistants with a clinical background perform various clinical tasks including assisting with the administration of medications and with minor procedures, performing an EKG electrocardiogram, obtaining laboratory specimens for testing, educating patients, and other related tasks. Job opportunities are prevalent with physician's offices, clinics, chiropractor's offices, hospitals and outpatient facilities. The course is delivered over 14 weeks containing 140 classroom hours. After classroom training is complete there will be a clinical experience of 160 clinical hours at a local health organization.

NURS 101 FUNDAMENTALS OF NURSING

Fall, 6 credit hours

This course provides the student with knowledge and skills basic to nursing. Clinical experiences assist students in applying NURS 101 theory to client care. Skills performed in the nursing laboratory on campus facilitate the transfer of knowledge from the classroom to the clinical setting. Three hours lecture, three hours laboratory, and six hours clinical per week. Pre- or Corequisites: Pharmacology I (NURS 103), Nursing Seminar (NURS 105), Anatomy and Physiology I (BIOL 217), Composition and the Spoken Word (ENGL 101). NURSING MAJORS ONLY.

NURS 103 PHARMACOLOGY I

Fall, 1 credit hour

This introductory pharmacology course will explore the basic principles surrounding pharmacology. Topics include basic pharmacological principles, dosage calculations, regulatory compliance, patient education, and reduction of medication errors. One hour lecture per week. Successful completion of the drug Calculation exam with 100% is a requirement to successfully pass NURS 103. 3 attempts to pass are given. The inability to achieve a 100% by test 3 will result in failure regardless of course standing. Pre- or Corequisites: Fundamentals of Nursing (NURS 101), Nursing Seminar (NURS 105), and Composition & the Spoken Word (ENGL 101). NURSING MAJORS ONLY or permission of instructor.

NURS 104 PHARMACOLOGY II

Spring, 1 credit hour

This pharmacology course explores the various classifications of drugs, and their associated nursing care. Drugs used to treat psychiatric, reproductive, bone/joint disorders, analgesics, and those commonly used during pregnancy will specifically be discussed. One hour lecture per week. Pre- or Corequisites: Pharmacology I (NURS 103), Fundamentals of Nursing (NURS 101), Mental Health

Nursing (NURS 106), Maternal/Child Nursing (NURS 107), or permission of instructor. NURSING MAJORS ONLY.

NURS 105 NURSING SEMINAR

Fall, 1 credit hour

This course serves as an introduction to the nursing program. It includes differentiating a program of study from individual courses; clarifying experiences; learning study skills and test taking strategies; practicing stress and coping techniques; and enhancing organizational and time management skills. Students explore critical thinking within the context of nursing. The seminar format provides an opportunity to apply critical thinking to current course-work. Attendance with active participation in discussions is expected. Attendance is required in this course because of the importance of dialogue in thinking and learning. The different viewpoints shared during the seminar will help expand the thinking of all participants. One hour lecture per week. NURSING MAJORS ONLY.

NURS 106 MATERNAL/NEWBORN NURSING

Spring, 4.5 credit hours

Concepts from nursing fundamentals are adapted to the nursing care of the family. The course emphasizes utilization of all components of the nursing process in caring for individuals, within the context of family and community, during the childbearing period and in providing preventative and restorative care. Beginning with the childbearing individual from conception to birth, the concepts of pregnancy, labor and delivery, postpartum, newborn from infancy, will be presented. The student will build on skills using the nursing process and critical thinking to meet maternal/child health care needs within the family system, well child and acute care settings. Clinical experiences are provided in area hospitals. Six hours lecture, two hours laboratory, seven hours clinical per week. Prerequisites: Human Anatomy and Physiology I (BIOL 217), Fundamentals of Nursing (NURS 101), Pharmacology I (NURS 103) and Nursing Seminar (NURS 105); and Composition & the Spoken Word (ENGL 101). Pre- or Corequisites: Human Anatomy and Physiology II (BIOL 218), Pharmacology II (NURS 104), Mental Health Nursing (NURS 107), and Introduction to Psychology (PSYC 101) or permission of instructor. NURSING MAJORS ONLY.

NURS 107 MENTAL HEALTH NURSING

Spring, 4.5 credit hours

This course offers an examination of concepts and theories related to psychiatric and mental health nursing within the context of the therapeutic relationship. Exploration of methods for promoting and maintaining optimal mental health function. Emphasis is placed on relationship-centered care, teamwork, quality and safety for diverse patient populations with psychiatric disorders. Six hours lecture, two hours laboratory, seven hours clinical per week. Prerequisites: Human Anatomy and

Physiology I (BIOL 217), Fundamentals of Nursing (NURS 101), Pharmacology I (NURS 103) and Nursing Seminar (NURS 105); and Composition & the Spoken Word (ENGL 101). Pre- or Corequisites: Human Anatomy and Physiology II (BIOL 218), Pharmacology II (NURS 104), Maternal/Child Nursing (NURS 106), and Introduction to Psychology (PSYC 101). NURSING MAJORS ONLY.

NURS 200 PHARMACOLOGY III

Fall, 1 credit hours

This course explores classifications of drugs used to treat, fluid and electrolyte imbalances, infection, and cancer. Additionally, drugs used in the treatment of respiratory, gastrointestinal, and endocrine disorders will be discussed. One hour lecture per week. Prerequisites: Pharmacology II (NURS 104), Mental Health Nursing (NURS 107), and Maternal/Child Nursing (NURS 106). NURSING MAJORS ONLY.

NURS 201 MEDICAL-SURGICAL NURSING I

Fall, 10 credit hours

Course content focuses on application of nursing process to care of pediatric and adult patients experiencing medical-surgical conditions along the health-illness continuum. Topics covered include those related to acute/complex respiratory, endocrinology, gastrointestinal, oncologic, musculoskeletal and fluid, electrolyte and acid-base disorders. Students apply their learning to clients in medical-surgical clinical settings. Skills performed in the nursing laboratory on campus facilitate the transfer of knowledge from the classroom to the clinical setting. Seven hours lecture, two hours laboratory, and nine hours clinical per week. Prerequisites: Maternal/Child Nursing (NURS 106), Mental Health Nursing (NURS 107), and Anatomy & Physiology I (BIOL 217). Pre- or Corequisites: Microbiology (BIOL 209), Pharmacology III (NURS 200), Human Development (PSYC 225) or Child Development (PSYC 220). NURSING MAJORS ONLY.

NURS 202 MEDICAL-SURGICAL NURSING II

Spring, 10 credit hours

This course focuses on application of nursing process to adult patients experiencing medical-surgical conditions along the health-illness continuum. Topics covered include those related to acute/complex cardiovascular, neurologic, hematologic, integumentary, immunologic, sensory, reproductive, emergency, and disaster events or disorders. Students will apply their learning to clients in medical-surgical clinical settings. Skills performed in the nursing laboratory on campus facilitate the transfer of knowledge from the classroom to the clinical setting. Six hours lecture, ten hours clinical, and two hours lab per week. Prerequisites: Maternal/Child Nursing (NURS 106), Mental Health Nursing (NURS 107), Medical-Surgical Nursing I (NURS 201), Microbiology (BIOL 209),

Course Descriptions: Nursing, Physical Therapist Assistant

and Human Development (PSYC 225) or Child Development (PSYC 220). Pre- or Corequisites: Professional Issues and Trends in Nursing (NURS 203), Pharmacology IV (NURS 204). **NURSING MAJORS ONLY**

NURS 203 PROFESSIONAL ISSUES AND TRENDS IN NURSING

Spring, 1 credit hour

Students explore and analyze socio-economic and political variables that affect professional nursing and healthcare. Students examine the professional growth and transition of the student nurse, current issues in healthcare, nursing management, and career development. One hour lecture per week. Prerequisites: Medical-Surgical Nursing I (NURS 201). Writing intensive course. **NURSING MAJORS ONLY.**

NURS 204 PHARMACOLOGY IV

Spring, 1 credit hour

This course explores nursing care associated with the classifications of drugs used to treat cardiovascular, blood, sensory, neurological, immune, and skin disorders. In addition, drugs used in the emergency setting will be examined. One hour lecture per week. Pre- or Corequisites: Pharmacology III (NURS 200), Medical-Surgical Nursing I (NURS 201), and Medical-Surgical Nursing (NURS 202). **NURSING MAJORS ONLY.**

NURS 300 CONCEPTUAL FRAMEWORKS IN NURSING

Fall/Spring, 3 credit hours

This course examines the historical development and evolution of nursing theory and its interrelationship to research and professional nursing practice. The course includes critical thinking activities used to conceptualize, apply, analyze, and synthesize knowledge related to specific nursing theories and their importance in nursing education, practice, and research. A group project that incorporates the students' knowledge of nursing theory and nursing theorists will be used to demonstrate an understanding of the relevance of theory to practice. Three hours lecture per week. Prerequisites: Students must be enrolled in the RN-BS program or permission of instructor.

NURS 302 LEGAL AND ETHICAL ISSUES IN HEALTH CARE

Spring, 3 credit hours

The student will examine the legal and ethical issues related to health care as they impact the health services and health care decision making. A variety of commonly experienced legal situations and ethical dilemmas will be discussed, including professional liability, patients' rights, abortion, AIDS care, informed consent, organ transplantation, health care delivery and resource allocation and issues related to death and dying. Three hours lecture per week. Prerequisites: Student must be enrolled in the RS-BN Program or permission of instructor.

NURS 303 HEALTH ASSESSMENT IN NURSING

Fall, 4 credit hours

This course will provide the student with knowledge and skills basic to health assessment in nursing. The course emphasizes critical thinking skills required for accurate collection and analysis of client health information and provides opportunities for enhancement of physical assessment skills. Students will be responsible for finding a qualified preceptor (with the approval of the course instructor) in order to successfully complete the clinical portion of this course. Three hours lecture and three hours clinical per week. Prerequisite: Students must be enrolled in the RN-BS program or permission of instructor.

NURS 304 HEALTH PROMOTION AND RESTORATION

Spring, 3 credit hours

This course provides the student with knowledge of the major individual and community models and theories that guide health-promotion interventions across the life span. This course presents information that enhances the students' ability to provide holistic health promotion and preventive care. The planning, implementing and evaluating of health promotion, prevention, and restoration activities for individuals, families, and communities is stressed. Three hours lecture per week. Pre- or Corequisites: Conceptual Frameworks in Nursing (NURS 300), Health Assessment in Nursing (NURS 303), or permission of instructor. Enrolled in RN-BS.

NURS 370 RESEARCH METHODS IN THE HEALTH SCIENCES

Fall/Spring, 3 credit hours

The purpose of this course is to understand and apply research findings to practice. Three hours lecture per week. Prerequisite: Enrolled in RN-BS. Pre- or Corequisite: Statistics (MATH 141) or equivalent coursework or permission of instructor.

NURS 400 NURSING MANAGEMENT AND LEADERSHIP

Spring, 3 credit hours

This course introduces the student to the conceptual basis for the application of leadership and management principles. The student gains a better understanding of the application of these principles in the management and coordination of health care delivery systems. Exploration of the critical components of leadership and management in diverse health care settings and application of course content enhances the coordination of quality client care and the role of the nurse as a leader and manager. Two hours lecture per week and 45 hour preceptorship. Prerequisites: Conceptual Frameworks in Nursing (NURS 300), Legal and Ethical Issues in Health Care (NURS 302), Health Assessment in Nursing (NURS 303), Health Promotion and Restoration in Nursing (NURS 304) or permission of instructor. Writing Intensive Course.

NURS 402 COMMUNITY HEALTH NURSING

Fall, 4 credit hours

This course will examine public and community health theory and practice as they relate to the Registered Professional Nurse. Public health principles, epidemiology, and community health nursing theory will be utilized by the student in conducting a community health assessment and implementation of a service-learning project within the community. Four hours lecture per week, Service Learning Project. Prerequisites: Conceptual Frameworks in Nursing, (NURS 300), Health Assessment in Nursing (NURS 303), Health Promotion and Restoration (NURS 304), Research Methods in the Health Sciences (NURS 370), or permission of instructor.

NURS 403 TRANSCULTURAL NURSING

Spring, 2 credit hours

This course provides the student with an overview of the influence of culture on health care practices and in the delivery of nursing care for individuals, groups, and communities. Increased awareness of culturally diverse nursing care and a sound understanding of the impact of cultural beliefs, values, and practices upon health and health care delivery is a direct outcome of this course. The student explores and reflects upon their own cultural beliefs related to health and health care delivery and examines client behaviors, cultural perspectives, and barriers to transcultural communication. Two hours lecture per week. Prerequisites: Research Methods in Health Sciences (Nursing 370), senior level status or permission of instructor.

PHSC 101-LECTURE

PHSC 102-LAB

PHYSICAL SCIENCE

Fall/Spring, 3-4 credit hours

GER 2

The major concepts of many of the physical sciences are presented, with physics and chemistry being covered extensively. Special emphasis is placed on how these concepts are related to the society and environment in which the students operate. No science background is assumed. Basic math skills are desirable but not essential. Three hours lecture per week. If lab is elected, an additional two hours laboratory per week is required.

PHTA 100 INTRODUCTION TO PHYSICAL THERAPY

Fall, 2 credit hours

This course is designed to introduce and acclimate students to the Physical Therapist Assistant program, and the physical therapy profession. Students are introduced to the discipline of physical therapy including history and philosophies. They receive introduction to a variety of practice settings and the team approach to rehabilitation. Students are familiarized with the Guide to Physical Therapist Practice and uniform terminology. Students receive an introduction to the basic principles of medical terminology, physical therapy documentation, and

Course Descriptions: Physical Therapist Assistant

reimbursement. Scope of practice, the New York State Practice Act, ethical standards of conduct of the physical therapist assistant and the core values of physical therapy are identified and discussed. Cultural awareness is discussed and students begin to learn about interaction with individuals from cultures different than their own. Two hours lecture per week. Prerequisite: acceptance into PTA program or permission of instructor.

PHTA 101 **FUNDAMENTAL PHYSICAL THERAPY** **SKILLS AND MODALITIES** *Fall, 3 credit hours*

In this course, students are introduced to the continuum of physical therapy patient care and physical therapy settings. Students develop skills in professional communication, documentation, and data collection, including pain, vital signs, and level of patient arousal. Students will develop competency in bed mobility, transfer, gait, locomotion, and wheelchair management. Students are introduced to concepts of tissue healing in preparation for implementation of basic therapeutic exercises, thermal modalities and soft tissue mobilization. Two hours lecture, three hours laboratory per week. Prerequisite: PTA students only or permission of instructor.

PHTA 102 **CLINICAL KINESIOLOGY** *Spring, 3 credit hours*

Study and application of human motion is covered beginning with general anatomic terminology and concepts, types and laws of motion, bone, joint and muscle structure and function. Origins, insertions, actions and innervations of extremity and trunk musculature and palpable surfaces of same are discussed. Kinesiological concepts related to the gait cycle, posture, and functional movement are addressed. Two hours lecture, two hours laboratory per week. Prerequisite: Human Anatomy and Physiology I (BIOL 217) or permission of instructor.

PHTA 103 **MUSCULOSKELETAL PATHOLOGIES** *Spring, 4 credit hours*

Principles and techniques of therapeutic exercise and soft tissue mobilization are presented and related to specific musculoskeletal pathologies across the life span. Students will learn their role in assisting the physical therapist with management of an orthopedic based patient population in relation to the stages of tissue healing. The student will learn to apply a variety of exercise techniques when given the physical therapy plan of care and goals/expected outcomes. There will be a focus on educating the patient and/or care giver throughout the course. Students will also begin to read and understand professional literature. Three hours lecture, three hours laboratory per week. Prerequisites: Introduction to Physical Therapy (PHTA 100), Fundamental Physical Therapy Skills (PHTA 101), and Human Anatomy and Physiology I (BIOL 217) or permission of instructor

PHTA 104 **CLINICAL I** *Spring (summer), 4 credit hours*

Students are assigned a physical therapy clinical sites where they will work under the direct supervision of a licensed physical therapist or physical therapist assistant. This provides the student with the opportunity to put the knowledge and skills he/she has acquired so far in the classroom and laboratory into practice in a clinical setting. A strong emphasis is placed on communication/professional behaviors. This experience takes place at the end of the second semester upon completion of all spring PHTA coursework and lasts for four full-time weeks.

PHTA 105 **MUSCULOSKELETAL ASSESSMENT** **TECHNIQUES** *Spring, 2 credit hours*

This course introduces students to data collection tools used to assist the physical therapist with assessment of the musculoskeletal system. Emphasis will be placed on developing skill competency with goniometry and manual muscle testing, and postural assessment. Students will also gain familiarity with common medical imaging tests, orthopedic special tests, and functional assessments. One hour of lecture, and two hours laboratory per week in the second semester of the Physical Therapist Assistant curriculum. Prerequisites: Introduction to Physical Therapy (PHTA 100), Fundamental Physical Therapy Skills (PHTA 101), and Human Anatomy and Physiology I (BIOL 217).

PHTA 203 **PTA SEMINAR I** *Fall, 2 credit hours*

This seminar course allows second year PTA students to engage in activities and discussions that will facilitate the development of the Values Based Behaviors of physical therapist assistant practice. In-class assignments and discussion, as well as outside activities, will foster the students' integration of the American Physical Therapy Association Values Based Behaviors for the PTA: altruism, compassion/caring, continuing competence, integrity, duty, PT/PTA collaboration, and social responsibility in preparation for culminating clinical affiliation experiences and clinical practice as a Physical Therapist Assistant. This course satisfies the writing intensive requirement for the PTA curriculum. Three hours lecture per week. Prerequisites: Successful completion of all coursework in the first two semesters of the PTA curriculum or permission of instructor. PHTA majors only.

PHTA 204 **CARDIOPULMONARY AND** **INTEGUMENTARY PATHOLOGIES** *Fall, 4 credit hours*

In the first half of the semester students will study the cardiopulmonary system and related pathologies. Cardiopulmonary rehabilitation principles and management will be discussed and applied. Students will learn about diabetes and peripheral vascular disease as a lead-in to amputee

and prosthetic rehab. Management of injuries to the integumentary system, including wounds, and burns will be studied. Three hours lecture, two hours laboratory per week. Prerequisites: Successful completion of all coursework in the first two semesters of the PTA curriculum or permission of instructor. PHTA majors only.

PHTA 205 **NEUROMUSCULAR PATHOLOGIES** *Fall, 4 credit hours*

Neuroanatomy will be presented in preparation for the study of data collection and physical therapy interventions used in treatment of persons with neuromuscular pathologies. Normal motor development and neuropathologies, both central and peripheral, throughout the life span will be discussed and treatment techniques practiced in the lab setting. Two hours lecture, four hours laboratory per week. Prerequisites: Successful completion of all coursework in the first two semesters of the PTA curriculum or permission of instructor. PHTA majors only.

PHTA 206 **ADVANCED PHYSICAL THERAPY** **MODALITIES** *Fall, 2 credit hours*

Students will learn basic principles of electricity and electrotherapy. Application of electrotherapeutic agents for pain control, neuromuscular stimulation, and tissue/wound healing will be studied and applied. Students will be introduced to spinal traction as a therapeutic modality. Students will enhance their research skills by reviewing and critiquing current professional literature related to various course topics. One hour lecture, three hours laboratory per week. Prerequisites: Successful completion of all coursework in the first two semesters of the PTA curriculum or permission of instructor. PHTA majors only.

PHTA 207 **CLINICAL II** *Spring, 6 credit hours*

This clinical practicum correlates with content taught in courses PHTA 100 through PHTA 206. The student is assigned to a physical therapy clinical site where he/she will work under the direct supervision of a licensed physical therapist or registered physical therapist assistant. This will provide the student with the opportunity to put the knowledge and skills they have learned in the classroom and laboratory into practice in a clinical setting. The PTA student will demonstrate clinical skills based on their academic knowledge and previous lab and clinical experiences. This experience will begin the fourth semester and will last six full-time weeks. Prerequisites: Successful completion of first three semesters of PTA curriculum or permission of instructor. For PHTA majors only.

Course Descriptions: PHTA, Physics, Political Scienc

PHTA 209 CLINICAL III

Spring, 6 credit hours

This clinical practicum correlates with content taught in courses PHTA 100 through PHTA 207. The student is assigned to a physical therapy clinical site where he/she will work under the direct supervision of a licensed physical therapist or registered physical therapist assistant. This will provide the student with the opportunity to put the knowledge and skills they have learned in the classroom and laboratory into practice in a clinical setting as well as expand their practical knowledge learned in prior clinical courses I, and II. This experience will begin in semester and will last six full time weeks. Prerequisites: Successful completion of first three semesters of PTA curriculum or permission of instructor. For PHTA majors only.

PHTA 210 PTA SEMINAR II

Spring, 2 credit hours

This course is designed to provide for the transition from the student role to the graduate role. Web-based review of national exam material will occur throughout the fourth semester of the PTA curriculum. Once back on campus students will participate in transitional preparation by performing licensing and interviewing procedures and sit for a mock national exam. Students will be required to submit a self-directed plan for career development and lifelong learning. A student/faculty conference is required for each student prior to graduation. Fifteen hours lecture per week for one week, and one hour online per week for 15 weeks. Prerequisites: First three semesters PTA curriculum or permission of instructor. PHTA majors only.

PHYS 115 BASIC PHYSICS

Fall/Spring, 4 credit hours

GER 2

Topical coverage includes systems of units, scientific method, scientific mathematics (including basic trigonometric functions), vectors, friction, forces and translational equilibrium, torques and rotational equilibrium, uniformly accelerated motion, Newton's Laws, work, energy, power. Emphasis is on development of laboratory and problem-solving skills including description, organization, analysis, summarization, and criticism in accordance with the scientific method. Four hours lecture per week. Prerequisites: Beginning Algebra (MATH 100) or permission of instructor.

PHYS 121 COLLEGE PHYSICS I

Fall/Spring, 3 credit hours

GER 2

This is an introductory college physics course which uses algebra and trigonometry in developing some of the fundamental concepts of classical physics. Topics covered are units of measurement, vectors, velocity, acceleration, force, Newton's Laws of Motion, gravity, momentum, work, energy, power, circular motion, rotational motion and thermodynamics. Three hours lecture per week. Corequisite: MATH 121 College Algebra or its equivalent.

PHYS 122 COLLEGE PHYSICS II

Spring, 3 credit hours

GER 2

This is the second semester of an introductory college physics course which uses algebra and trigonometry in developing some of the fundamental concepts of classical physics. Topics covered are, electric forces and fields, electrical energy, capacitance and resistance, direct current circuits, reflection and refraction of light, wave optics. Three hours lecture per week. Prerequisite: College Physics I (PHYS 121) or permission of instructor.

PHYS 125 PHYSICS LAB I

Fall/Spring, 1 credit hour

GER 2

Physics Laboratory I is a laboratory course to accompany College Physics I (PHYS 121). Students will have laboratory experiments concerning translational mechanics and graphical analysis. This course is designated as writing intensive. Two hours laboratory per week. Prerequisite/Corequisite: College Physics I (PHYS 121) or permission of instructor.

PHYS 126 PHYSICS LAB II

Spring, 1 credit hour

GER 2

This is a laboratory course to accompany College Physics II (PHYS 122) Experiments examine electricity, DC circuits, and optics. This course is designated as writing intensive. Two hours laboratory per week. Corequisite: College Physics II (PHYS 122) or permission of instructor.

PHYS 131 UNIVERSITY PHYSICS I

Fall/Spring, 3 credit hours

GER 2

This is an introductory college physics course which uses basic calculus in developing some of the fundamental concepts of classical physics. Topics covered are measurement, vector manipulation (including unit vector notation), linear kinematics and dynamics, motion in a plane, and conservation of energy and linear momentum. Three hours of lecture per week. Prerequisite: Pre-Calculus Algebra (MATH 123) or College Algebra (MATH 121) or three years of high school mathematics or permission of instructor. Corequisite: University Physics Lab I (PHYS 135); Calculus I (MATH 161) or permission of instructor.

PHYS 132 UNIVERSITY PHYSICS II

Spring, 3 credit hours

GER2

This course covers topics in the area of electricity, magnetism and optics. Topics include electric fields, electric potential, conductivity, capacitance, magnetic fields, inductance, and DC circuits, EM waves, geometric optics and physical optics. Three hours lecture per week. Prerequisite: University Physics I (PHYS 131); Corequisite: Calculus II (MATH 162); or permission of instructor

PHYS 133 UNIVERSITY PHYSICS III

Fall, 3 credit hours

GER 2

This is the third semester of an introductory college physics course which uses basic calculus in developing some of the fundamental concepts of classical physics. Topics covered are rotation of rigid objects, static equilibrium of extended bodies, simple harmonic motion, gravitation, fluid mechanics, the laws of thermodynamics and kinetic theory of gases. Three hours of lecture per week. Prerequisite: University Physics I (PHYS 131) and Calculus I (MATH 161) or permission of instructor; Corequisite: University Physics III Lab (PHYS 137) or permission of instructor.

PHYS 135 UNIVERSITY PHYSICS LABORATORY I

Fall, 1 credit hours

GER 2

This is a laboratory course to accompany PHYS 131, University Physics I. Experiments will include translational mechanics and graphical analysis. Two laboratory hours per week. Corequisite(s): PHYS 131, University Physics I or permission of instructor.

PHYS 136 UNIVERSITY PHYSICS LABORATORY II

Spring, 1 credit hours

GER 2

This is a laboratory course to accompany University Physics II (PHYS132). Experiments examine electricity, circuits, and optics. Two laboratory hours per week. Corequisite(s): PHYS 132, University Physics II or permission of instructor.

PHYS 137 PHYSICS LAB III

Fall, 1 credit hour

GER 2

This laboratory course is to accompany University Physics III (PHYS 133). The student will perform experiments related to rotational motion, oscillations and waves, static equilibrium, properties of material, and thermal physics. Two hours laboratory per week. Corequisite: University Physics III (PHYS 133) or permission of instructor.

PHYS 202 MODERN PHYSICS

Fall/Spring, 3 credit hours

The atomic view of matter, Bohr model, relativity, particle properties of waves, wave properties of particles, introduction to quantum mechanics, quantum theory of the hydrogen atom, the solid state, introduction to Fourier series and integrals and statistical mechanics. Three hours lecture per week. Prerequisite: University Physics III (PHYS 133) or permission of instructor.

PHYS 301 INTRODUCTION TO PHOTONICS

Fall/Spring, 3 credit hours

This course explores the production and nature of light including: the laws of reflection and refraction, theory of image formation, principles of wave optics (including interference, diffraction and polarization), fundamentals of fiber optic theory, principles of lasers and laser safety, and the basics

Course Descriptions: Physics, Political Scienc, Psychology

of holography with image processing. Throughout the course, emphasis is placed on applications of photonics in medicine, transportation, manufacturing, communications, environmental monitoring and consumer devices. Three hours lecture per week. Prerequisites: College Physics II (PHYS 122) or University Physics II (PHYS 132), or permission of instructor.

PHYS 330 INTRODUCTION TO CLASSICAL MECHANICS

Fall/Spring, 3 credit hours

This course is a presentation of Newtonian mechanics at the intermediate level. Topics include dynamics of particles and rigid bodies, rotating reference frames, conservation laws, gravitational fields and potentials, planetary motion, wave motion, oscillations, LaGrangian and Hamiltonian equations. Three hours of lecture per week. Prerequisites: University Physics II (PHYS 132) or College Physics II (PHYS 122), or permission of instructor.

PHYS 340 ELECTROMAGNETISM

Fall/Spring, 3 credit hours

This course is an intermediate level presentation of the physics of the electromagnetic field. The course will explore the applications of electromagnetism in medicine (magnetic resonance imaging), and the interdependencies between electric and magnetic fields which are the essence of the theories of circuits, lines, antennas and guided waves. Topics include Electric and magnetic fields using vector methods, Gauss's law, theory of dielectrics, Ampere's law, Faraday's law, vector potential, displacement current, Maxwell's equations, wave propagation in dielectrics and conductors, and production and propagation of radiation. Three hours of lecture per week. Prerequisites: University Physics II (PHYS 132) or College Physics II (PHYS 122), Calculus II (MATH 162), or permission of instructor.

PHYS 410 SOLID STATE SCIENCE

Fall/Spring, 3 credit hours

This course explores how the diverse properties (mechanical, electronic, optical and magnetic) of solid materials can be related to interactions at the atomistic level. Topics include crystal structures; bonding in solids; x-ray, neutron, and electron diffraction in crystals; lattice vibrations; energy bands in solids; the free-electron model; semiconductor and semiconductor devices. Three hours lecture per week. Prerequisites: Modern Physics (PHYS 202) or permission of instructor.

PHYS 420 INTRODUCTION TO QUANTUM MECHANICS

Fall, 3 credit hours

This course is a senior-level introduction to the theory and formalism of non-relativistic quantum mechanics and its applications. This course provides the background with which to understand and meet the challenge of new applications of quantum

mechanics. Principles of quantum mechanics and some mathematical techniques of solving quantum mechanical problems are examined. Three hours lecture per week. Prerequisite: University Physics II (PHYS 132) or College Physics II (PHYS 122; Calculus II (MATH 162), or permission of instructor.

PHYS 291-295, 391-395, OR 491-495 SPECIAL TOPICS IN PHYSICS

Fall/Spring, 1-4 credit hours

Special Topics in Physics will generally include topics of current interest or topics not covered in courses currently offered by the department or in combinations not currently available. Prerequisite: permission of instructor.

POLS 101 INTRODUCTION TO POLITICAL SCIENCE

Fall or Spring, 3 credit hours

GER 3

This course introduces students to the study of politics and government and examines the impact of politics in our lives. Students learn about the fundamentals of political theory and American government, examines the differences between forms of government and politics around the world, and analyze the relations between countries in the international community. Students consider contemporary issues of civil and human rights, political violence, globalization, and the workings of democracy in light of the theories and systems presented through the semester. Three hours lecture per week.

POLS 105 INTRODUCTION TO AMERICAN GOVERNMENT AND POLITICS

Fall or Spring, 3 credit hours

GER 3

This course examines the fundamental components of American government and politics including political culture, interest representation, political participation, government institutions, and government policymaking. Students develop a basic knowledge of American politics and the tools for careful and critical evaluation of current events and political phenomena. Through the framework of the Constitution, this course considers governmental and political issues from the founding until now, including federalism, civil liberties and rights, political processes such as campaigns and elections, and the checks and balances between branches of government. Three hours lecture per week.

POLS 120 INTRODUCTION TO COMPARATIVE POLITICS

Fall, 3 credit hours

This course presents a comparative analysis of key political institutions, operations, leadership, policy-making process, and change. It evaluates political systems in selected countries, including democratic, socialist, authoritarian, and totalitarian states, and compares political processes and systems in the developing and developed world. Three hours lecture per week.

POLS 201 CONSTITUTIONAL LAW AND CIVIL LIBERTIES

Fall, 3 credit hours

An examination of the principles and Processes of the American judicial system, constitutional issues defining the relationship between law enforcement and civil rights and liberties will be discussed to acquaint the student with the special problems of justice in a democratic society. Three hours lecture per week. Prerequisite: Introduction to Government and Politics (POLS 101) or permission of the instructor.

POLS 291-295, 391-395, OR 491-495 SPECIAL TOPICS IN POLITICS

Fall/Spring, 1-4 credit hours

An introductory or more advanced exploration of subjects not covered or only partially covered by other courses in politics.

PSYC 101 INTRODUCTORY PSYCHOLOGY

Fall and Spring, 3 credit hours

GER 3

In this course, students are given an introduction to the scientific analysis of behavior. Attention is given to the historical background of present-day psychology, scientific methodology, the physiological basis of behavior, perception, learning, motivation, emotion, personality and the analysis and measurement of individual difference. Three lecture hours per week for fifteen weeks.

PSYC 220 CHILD DEVELOPMENT

Fall or Spring, 3 credit hours

this course students will explore the growth and development of the child from conception to adolescence. A variety of major theories and research will be covered to give an overview of the changes that occur in areas such as cognition, personality, social relationships, family, behavior, physical development, and sociocultural factors throughout the life of a child. Applications to parenting, teaching, and current societal trends will be discussed. Students may receive credit for either PSYC 220 OR PSCY 225, but not both. Three lecture hours per week for fifteen weeks. Prerequisite: Introductory Psychology (PSYC 101).

PSYC 225 HUMAN DEVELOPMENT

Fall and Spring, 3 credit hours

In this course, students will explore lifespan developmental psychology: the quantitative and qualitative ways in which people change over time from conception through death. The course prepares students to grow in their ability to describe, explain, predict, and intervene in human behavior as demanded in the helping professions, and, in their lives as family members and citizens of the wider community. This course is an alternate to Child Development (PSYC220). Students cannot receive credit for both. Three lecture hours per week for fifteen weeks. Prerequisite: Introductory Psychology (PSYC 101), or permission of Instructor.

Course Descriptions: Psychology

PSYC 275 ABNORMAL PSYCHOLOGY *Fall and Spring, 3 credit hours*

In this course, students will learn about psychopathology: the scientific study of the inability of people to behave in ways that foster their own well-being and the well-being of the greater society. The course examines psychological disorders – their symptoms, causes, and treatments – from multiple theoretical perspectives. Strengths and weaknesses in psychological assessment, the psychiatric diagnostic system, and mental health practices are explored. Three lecture hours per week for fifteen weeks. Prerequisite: Introductory Psychology (PSYC 101) or permission of Instructor.

PSYC 300 CULTURAL PSYCHOLOGY *Fall, 3 credit hours*

In this course, students will examine psychological concepts, theory, and research on variations and commonalities in human behavior, both within and across cultures. As a means of exploring the extent to which culture influences psychological phenomena, students will examine their own and different cultural practices and behaviors from around the world, and critically evaluate psychological topics from a cross-cultural perspective. Topics may include, but are not limited to: individualism and collectivism, perspectives on the self, culture and development, acculturation, among others. Three lecture hours per week for fifteen weeks. Prerequisite: Introductory Psychology (PSYC 101) and 45 credits.

PSYC 308 PERSONALITY & INDIVIDUAL DIFFERENCES *Fall and Spring, 3 credit hours* *GER 3*

In this course, students are introduced to the diverse ways of conceptualizing, assessing, and studying personality. Personality psychology is the scientific study of individual differences in characteristic patterns of thinking, feeling, and behaving. Students will learn about different approaches to the study, assessment, and application of personality and individual differences, including: psychoanalytic, trait, humanistic, biological, cognitive, behavioral/social learning, and cultural, among others. Three lecture hours per week for fifteen weeks. Prerequisite: Introductory Psychology (PSYC 101) or permission of instructor.

PSYC 310 COUNSELING THEORIES AND PRACTICE *Fall, 3 credit hours*

In this course students will learn of the major theories of psychological counseling, common issues, and principles in the practice of the helping professions. A critical presentation of the theoretical models will focus on the concepts, principles, techniques, goals, and contributions of each approach to counseling. The uses and limitations of each theory will be discussed. Issues related to the helping professions will include standards of professionalism, ethics, and legalities. Three lecture hours per week for fifteen weeks. Prerequisite(s): Introductory Psychology (PSYC 101), and Abnormal Psychology (PSYC 275).

PSYC 315 CRISIS INTERVENTION *Spring, 3 credit hours*

In this course students are introduced to the most common types of crisis events arising in settings such the hospital emergency room, community mental health center, community hotline, correctional facilities, and police services. It provides knowledge of the major assessment methods and models of intervention appropriate to the setting. There is also an emphasis on special groups including the development and treatment of crises with children and adolescents, college students, Native Americans, victims of violence, victims of disaster or terrorism, and vicarious trauma experienced by care-givers. Students will learn through case studies, readings, group activities and role-play experiences. Three lecture hours per week for fifteen weeks. Prerequisite(s): Introductory Psychology (PSYC 101).

PSYC 320 HEALTH PSYCHOLOGY *Fall, 3 credit hours*

In this course, students will examine the theories, research, and practice of health psychology. Students will explore the role of social determinants of health and wellness; the application of social and psychological factors to understand health promotion and prevention; and the interaction of psychological and biological factors through various topics including stress and coping, the placebo effect, chronic illness, and pain. Students will investigate how health-related theory and research can be applied for the benefit of both personal behavior change, and the health of communities. Three lecture hours per week for fifteen weeks. Prerequisite(s): Introductory Psychology (PSYC 101) and 60 credits or permission of instructor.

PSYC 340 SOCIAL PSYCHOLOGY *Spring, 3 credit hours*

In this course, students undertake a scientific examination of how thoughts, feelings, and behaviors are influenced by the perceived or real presence of other people (i.e., individual behavior and thought in social situations). Core areas of examination include social cognition (e.g., heuristics, schemata, and affect), social perception (e.g., emotion, attribution, and impression formation), social influence (e.g., conformity, compliance, obedience, and prosocial behavior), attitudes (including prejudice, discrimination, and stereotypes), and the self (e.g., self-concept, social comparison, and stereotype threat). Three lecture hours per week for fifteen weeks. Prerequisite(s): Introductory Psychology (PSYC 101) and 45 credits.

PSYC 350 EDUCATIONAL PSYCHOLOGY *Fall and/or Spring, 3 credit hours*

A study of human behavior in educational settings: the application of child and adolescent development and learning principles; including use of tests and measurements, motivation, exceptional learners, classroom and behavior management, cog-

nitive strategies, and introduction to the concept of “Expert” teacher and student. Three hours lecture per week. Prerequisites: A grade of C or better in Child Development (PSYC 220) or Human Development (PSYC 225) and a minimum of 30 credit hours with a GPA of 2.0.

PSYC 375 ASSESSMENT, DIAGNOSING, AND TREATMENT PLANNING *Spring, 3 credit hours*

In this course students will be instructed in the process and skills needed for assessment, diagnosing, and treatment planning of substance abuse/dependence and co-occurring disorders. It explores motivational techniques and introduces students to current best practices used in the field of addiction treatment and behavioral health. Three lecture hours per week for fifteen weeks. Prerequisite(s): Alcohol, Drugs, and Society (SSCI 181), and Foundation of Chemical Dependency and Treatment (HUSV 281), and Human Development (PSYC 225), and Abnormal Psychology (PSYC 275) or permission of instructor.

PSYC 406 WORKPLACE PSYCHOLOGY *Fall, 3 credit hours*

In this course, students will explore the intersection of the workplace and psychology. Students can expect to apply theory and principles to solve real life work issues. Topics include employee selection, performance & training evaluation, group dynamics, employee motivation & commitment, employee selection, leadership, organizational culture & development, and stress management. Three lecture hours per week for fifteen weeks. Prerequisite(s): Introductory Psychology (PSYC 101) OR Introduction to Business (BSAD 100) OR Introduction to Health Services Management (HSMB 101) AND 60 credits.

PSYC 410 COUNSELING SKILLS AND PROCESS *Spring, 3 credit hours*

In this course students will examine and practice the skills, techniques, and process of counseling for students entering one of the helping professions. Specific techniques will be described, demonstrated, and practiced. The stages of the counseling process and the goals and methods of each stage will be discussed and practiced. Three lecture hours per week for fifteen weeks. Prerequisite(s): Mental Health Practice (HUSV 315) or permission of instructor.

PSYC 291-295, 391-395, OR 491-495 SPECIAL TOPICS IN PSYCHOLOGY *Fall/Spring, 1-4 credit hours*

Individual courses of instruction of variable credit (1-4 credits) may be offered each semester. These courses are designed to expand on topics in specific areas of psychology. Prerequisite: depends on the nature of each course.

Course Descriptions: Sociology, SOET

SOCI 101 INTRODUCTION TO SOCIOLOGY

Fall and Spring, 3 credit hours **GER 3**

This course is an introduction to into the sociological study of society by exploring fundamental social theories and research methods used by sociologists to examine the interactions between social structures and individuals. The goal of the course is to gain a basic knowledge of sociological concepts and techniques, with a focus on the cultivation of the sociological imagination. This course will examine concepts such as culture, social structures and institutions, social processes of socialization, stratification, and change, deviance, race, ethnicity, and gender. Three lecture hours per week for fifteen weeks. Prerequisite(s): None.

SOCI 105 AMERICAN SOCIAL PROBLEMS

Fall or Spring, 3 credit hours **GER 3**

This course provides a sociological perspective on the origin, nature, impact and policies which address contemporary American social problems. Emphasis is placed on institutional/macro sociological analysis, interrelationships, and the global context of American problems. Three hours lecture per week.

SOCI 205 SOCIAL DEVIANCE AND CONTROL

Fall or Spring, 3 credit hours

An introduction to the ideological and theoretical foundation of Social Deviance and Social Control. Attention is given to micro/macro forms of deviance including the gamut from individual forms of deviance to state organized deviance. The course will examine the complex nature and the role agents of social control play in creating and enforcing norms and deviant labels. The course will examine a range of empirical data that attempt to explain the existence and occurrence of deviance. Three hours lecture per week. Prerequisite: Introduction to Sociology (SOCI 101) or permission of instructor.

SOCI 210 SOCIOLOGY OF THE FAMILY

Fall or Spring, 3 credit hours **GER3**

The study of family as a key social unit with the emphasis on structure, functions, problems and future of the institution. Cross-cultural comparisons, the relationship between the family and other institutions, and family-related policies also will be discussed. Three hours lecture per week.

SOCI 250 SOCIOLOGY OF THE MASS MEDIA

Fall or Spring, 3 Credit hours

The course will begin by exploring the component and the basic concepts of mass media. Special emphasis is on the social construction power of the mass media. The positive role of the mass media will be explored as well as the negative impact. The social control function of the mass media will be explained. The course is aimed at providing a critical assessment of the social construction power of the mass media with an emphasis on images, content and context as presented in the mass media. The

course will explore the images of various segments of American society as presented in the mass media including racial/ethnic groups, gender and sexual orientation, age and class. Three hours lecture per week. Prerequisite: Introduction to Sociology (SOCI 101) or permission of instructor.

SOCI 300 RACE AND ETHNIC RELATIONS: AMERICAN AND GLOBAL PERSPECTIVES

Fall or Spring, 3 credit hours

This course provides an overview and critical assessment of racial and ethnic relations. The student will be exposed to theories and research that explore the nature of ethnic stratification, incorporation, exclusion, and identity. Focusing on the United States, the course will survey key institutions and identify issues that reflect on inclusion/exclusion/identity. In addition, the course will briefly overview critical issues in racial and ethnic relations from a global context. A writing intensive course. Three hours lecture per week. Prerequisite: Introduction to Sociology (SOCI 101) or permission of instructor.

SOCI 305 GENDER IN THE MEDIA

Fall or Spring, 3 credit hours.

The course will begin by reviewing the components and the basic concepts of mass media. The course will focus on the power of social construction of the mass media in creating appropriate images of masculinity and femininity including sexual orientation. The course will survey the various theoretical traditions coming from sociology, psychology and gender studies exploring gender dynamics as portrayed in the media. The course will examine research exploring the impact and the ideological consequences of the power of the mass media within the arena of gender dynamics. A writing intensive course. Three hours lecture per week. Prerequisites: Introduction to Sociology (SOCI 101) (with a grade of C or better) and junior level status with a GPA 2.00, or permission of instructor.

SOCI 313 WOMEN AND AGING

Fall or Spring, 3 credit hours

This course provides an extensive exploration of the impact of aging on women. Topics include the social construction of older women; historical and theoretical perspectives on midlife and older women; relationships with family and friends; racial, ethnic, and demographic issues; spirituality; economic issues; and living arrangements and care giving. Three hours lecture per week. Prerequisite: Introduction to Sociology (SOCI 101). Additionally, students must have at least junior level status or permission of instructor.

SOCI 320 SOCIOLOGY OF HEALTH, ILLNESS AND HEALTH CARE

Fall or Spring, 3 credit hours

Using the sociological perspective, this course explores how social factors such as age, gender, social class and race/ethnicity influence personal experi-

ences of health, illness, and health care utilization. This course will challenge assumptions about health, illness and health care. Topics include the social construction of illness and health, a critique of the 'sick role', the meaning and experience of disability, chronic pain and chronic illness, an exploration of health care systems in the developed and developing worlds, and the challenges and opportunities facing both consumers and providers of health care in the 21st century. Three hours lecture per week. Prerequisites: Junior level status; Introduction to Sociology (SOCI101) or Introduction to Gerontology (HLTH 104) or permission of instructor.

SOCI 330 SOCIOLOGY OF GENDERED LIVES

Fall or Spring, 3 credit hours

This course focuses on social changes in gender relations, gender inequalities and the social construction of gender. Using sociological theories different social institutions and spheres of society will be analyzed. Topics will include creation of gender differentiation, power, privilege, gendered performances, masculinities, femininities, sexualities, social inequalities and subordination. We will also look at social movements concern with gender. Three hours lecture per week. Prerequisites/Corequisites: Introduction to Sociology (SOCI 101) or American Social Problems (SOCI 105) or permission of instructor.

SOCI 291-295, 391-395, OR 491-495 SPECIAL TOPICS IN SOCIOLOGY

Fall/Spring, 1-4 credit hours

An introductory or more advanced exploration of subjects not covered or only partially covered by other courses in sociology.

SOET 101 INTRODUCTION TO COMPUTER USAGE FOR TECHNICIANS

Fall/Spring, 1 credit hour

This course introduces students to the Windows operating environment including creating and manipulating files and folders. Topics pertaining to word processor, spreadsheet and presentation software will be introduced with laboratory assignments and instruction Two hours per week in a computer classroom.

SOET 114 COMPUTER AIDED DRAFTING AND DESIGN I

Fall/Spring, 3 credit hours

This course introduces the student to the use of a computer to produce Mechanical engineering, Architectural, MEP and construction drawings. Students shall learn fundamentals functions of 2D AutoCAD software. Other topics covered in the course include Orthographic Projection, National Drafting Standards and Conventions, Detail Drawings, Assembly Drawings, Architectural, Constructions, Electrical, PLMG/HVAC and Civil CADD topics. 3D solid modeling and Building Information Modeling (BIM) are briefly explored at the end of this course. This course introduces 2D drawing

Course Descriptions: School of Engineering Technology

topics in lecture as well as lab, with drafting and other related topics covered in lecture. This course cannot be taken for credit by students with credit in SOET 116.

SOET 116

INTRODUCTION TO COMPUTER AIDED DRAFTING AND DESIGN

Fall, 2 credit hours

This course introduces the student to the use of a computer to produce Mechanical engineering, Architectural, MEP, and construction drawings. Students shall learn fundamentals functions of 2D AutoCAD software. Other topics covered in the course include Orthographic Projection, National Drafting Standards and Conventions, Detail Drawings, Assembly Drawings, Architectural, Constructions, Electrical, PLMG/HVAC and Civil CADD topics. 3D solid modeling and Building Information Modeling (BIM) are briefly explored at the end of the course. Four hours laboratory per week.

SOET 250

INTRODUCTION TO 3D CAD AND BIM

Fall, 2 credit hours

This course introduces students to commercial construction drawings using object based CADD/REVIT software used by engineers, architects and designers also known as Building information Modeling (BIM). Produce plans, sections elevations, 3D models, quantities, and other data which are fully coordinated and can be readily manipulated, accessed and shared. In addition BIM allows students to perform design tasks, query quantities and take-offs, and generate drawing sheets for construction documentation needs. Two, two-hour laboratories per week.

SOET 314

ADVANCED CADD

Spring, 3 credit hours

Students learn advanced methods, tools, and applications of 2D AutoCAD software. Students learn to use external references (XREFS) in CADD project files. Other topics include: learning to use attributes and dynamic blocks, scaling objects, using annotative tools and view ports, and alternate formatting. Students create civil, architectural and MEP type drawings using advanced CADD tools and industry concepts. A higher level of communication in CADD is emphasized with utilization of advanced tools to maintain control of and standardize CADD files for a commercial project. Projects mimic real world expectations of a professional CADD designer. (One hour of lecture per week and 4 hours of lab per week.) Prerequisites: (SOET 116) or (SOET 114); or permission of the instructor.

SOET 348

ENGINEERING SAFETY

Spring, 1 credit hour

This course covers topics such as: The basic hazards and preventative measures from falls, mechanical injuries, heat and temperature, pressure, electricity, fires, explosions, toxic materials, radiation, vibration, noise, and computer safety. Student

with Occupational Safety and Health Administration (OSHA) certification will receive credit for this course (SOET 348). One hour lecture per week. Prerequisites: Student should be in his/her second year, or permission of instructor.

SOET 349

INDUSTRIAL SAFETY & HEALTH

Fall, 3 credit hours

This course explores provides the student with the key issues on engineering safety and health in workplace environments. Topics covered include historical perspective, laws and regulations, the human element, hazard assessment, prevention, control, and management of safety & health. Three hours lecture per week. Prerequisites: Junior standing or permission of instructor.

SOET 352

ADVANCED REVIT AND BUILDING INFORMATION MODELING (BIM) MANAGEMENT

Fall, 3 credit hours

Building Information Modeling (BIM) generates and manages all components of a building's life cycle. BIM is a new industry standard, knowledge and efficiency which is highly sought after by employers. Students expand upon their knowledge of how the software works to learn about how it is used as a management tool. Students learn how to coordinate, update, and share design data with team members throughout the design and construction phases of a building project. Specifically, students learn how set up office standards with templates that include annotation styles, preset views, sheets, and schedules; create custom element types and families; and establish a Company/Firm BIM foundation. This course prepares students for certification exams associated with Autodesk Revit certification. One hour lecture, four hours laboratory per week. Prerequisites: Intro to 3D CADD and BIM (SOET 250).

SOET 353

ADVANCED BUILDING INFORMATION MODEL (BIM) 2

Fall, 3 credit hours

Students learn how to use BIM as a catalyst to improve collaboration, enhance shared ownership of project goals, and drive synergies between the project plan, design strategy and BIM strategy, thereby increasing the level of engagement in project teams. This course covers 3D (visualization/clash detection), 4D (Time Simulation/Virtual construction/construction sequencing), 5D Estimating/cost simulation, 6d Sustainability and Energy analysis, 7D (Life cycle/Maintenance/Facilities management) components of BIM. (One hour of lecture per week and four hours of lab per week.) Prerequisites: (SOET 352) Advanced REVIT and BIM; or permission of the instructor.

SOET 361/BSAD 361

PROJECT MANAGEMENT

Fall, 3 credit hours

This course is an introduction to projects and project management as it pertains to Industry.

Students will be introduced to principles of project selection, project planning & scheduling, duties of a project manager, project organization, implementation and termination. Three hours of lecture per week. Prerequisites: Junior standing or permission from instructor.

SOET 370/BSAD 370

ENGINEERING ECONOMICS

Fall or Spring, 3 credit hours

This course emphasizes the strong correlation between engineering design and manufacturing of products/systems and the economic issues they involve. The basic concepts of the time value of money and economic equivalence is applied throughout the course. Each engineering problem/project progressively incorporates different cash flows, the cost of funds, capital, operational and maintenance costs, salvage value, depreciation, amortization, and taxation. Students learn to apply different economic analysis methods- like present worth, annual-equivalent worth, rate-of-return, life-cycle cost, cost/benefit etc. - in evaluating the economic viability of a project, as well as the comparison of mutually exclusive alternatives. The course also introduces concepts of replacement decisions, capital-budgeting decisions, and project risk and uncertainty, and exposes students to specific issues of economic analysis of the private sector versus the public sector. Applications to a variety of engineering fields' actual cases are stressed throughout the course. Three lecture hours per week. Prerequisites: College Algebra (MATH 121), or Pre-Calculus Algebra and Trigonometry (MATH 123). Additionally, students must have at least junior status or permission of instructor.

SOET 373

MANAGEMENT TELECOMMUNICATIONS

Spring/Fall, 3 credit hours

This course provides the student with opportunity to learn both voice and data communications, why companies and corporations feel that telecommunications is vitally important as well as how the regulatory environment affects the telecommunications industry. The technology is explained in an easy to understand, yet thorough, manner. Current and emerging technologies, the International Organization for Standardization, how telecommunications works, and how it is designed and managed, are covered. The student will learn why it is necessary to manage telecommunications, the functions of the telecommunications department, issues that telecommunications managers will be dealing with, and case studies. Three hours lecture per week. Prerequisites: 30 credit hours or permission of instructor.

SOET 374

INDUSTRIAL MANAGEMENT

Spring/Fall, 3 credit hours

Industrial management is a multi-disciplinary field that focuses on managing all aspects of an organization's operations. Topics covered include operations and productivity, operations strategy in a global environment, project management, forecasting, design of goods and services, sustainability

Course Descriptions: SOET, Spanish, Speech, Sports Management

in the supply chain, managing quality, statistical process control, process strategy, capacity and constraint management, location strategies, and layout strategies. Prerequisites: College Algebra (MATH 121) or Pre-Calculus (MATH 123), and Statistics (MATH 141), or permission of instructor.

SOET 377 ENGINEERING ETHICS *Fall/Spring, 1 credit hour*

This course extends the student analytical skills to moral deliberation. Topics covered include engineering code of ethics, responsibility in engineering, the social and value dimensions of technology, trust and reliability, engineers in organizations, engineers and environment, international engineering professionalism, global issues, respect for diversity, and cases. One hour lecture per week, and considered writing intensive. Prerequisites: Composition & the Spoken Word (ENGL 101) or permission of instructor.

SOET 378 ETHICS FOR ENGINEERS *Fall/Spring, 3 credit hours*

This course extends the student analytical skills to moral deliberation. Topics covered include engineering code of ethics, responsibility in engineering, the social and value dimensions of technology, trust and reliability, engineers in organizations, engineers and environment, international engineering professionalism, global issues, respect for diversity, case studies analysis, and research term paper. Prerequisites: Junior level status or permission of instructor.

SOET 400 TECHNICAL COMMUNICATIONS *Fall, 3 credit hours*

This course reinforces and improves students technical communication skills through writing, oral, and graphical communication. Students review concepts of proper sentence and paragraph structure and organization. Technical report writing reinforces proper verb tense, word choice, and writing style for a number of technical writing systems (e.g. full technical reports, letters, memos, fact-sheets). Students review program related technical literature to learn about proper use and referencing of technical, peer-reviewed literature. Editing and review skills are developed. Students conduct technical literature reviews of program related material, learn to synthesize the content, and present it in an oral presentation. Oral presentations are made using PowerPoint and by creating technical posters. These presentations also improve the student's graphical communication skills. Prerequisites: ENGL 101 and 45 earned credits, or permission of instructor.

SOET 410 ENGINEERING TECHNOLOGY SENIOR SEMINAR *Spring, 3 credit hours*

This seminar course provides a forum in which students will present research proposals and/or results to peers and faculty. Practicing professionals may be invited to give presentations on current

engineering technology issues facing students upon graduation. This course will serve all students in the School of Engineering Technology's baccalaureate programs. Three hours lecture per week. Prerequisites: Enrolled in the culminating experience course for major program of study, or permission of instructor.

SOET 421/BSAD 421 SIX SIGMA AND LEAN MANUFACTURING *Spring, 3 credit hours*

This course discusses the origin and implementation of six sigma processes into manufacturing. The course investigates both the management and leadership of successful continuous improvement projects. The course introduces the students to the DMAIC process and applies the DMAIC process to class projects. The course aids in student preparation toward a green belt in six sigma. Three hours lecture per week. Pre-requisites: Statistics (MATH 141), Principles of Management (BSAD 301), or Quality Improvement (MECH 350).

SOET 430 SYSTEMS ANALYSIS *Fall/Spring, 3 credit hours*

This course will enable students to learn and apply the skills a systems analyst needs to improve organizational processes. It will allow them to see the viewpoints and necessary inputs of all the stakeholders of an information system. The students will focus on the assessment of the users' interaction with technology and business functions, and on the analysis of data flow and its conversion into information. A familiarity with MS Office (or similar product) is expected. Three hours lecture per week. Prerequisites: Junior/Senior level status and GER 1 (math) or permission of instructor.

SOET 477 CAPSTONE PROJECT *Fall/Spring, 3 credit hours*

This course provides a learning experience that allows students to propose, design and implement a project. This could be a study of a problem and solution of specific equipment, new product design, improvement of an existing product, and many others. All projects must be approved by course faculty. Three hours of lecture per week. Prerequisites: Senior level status or permission of program director.

SOET 480 FE EXAM REVIEW *Spring, no credits*

This course is a review the necessary knowledge to pass the Fundamentals of Engineering exam. Two hours of lecture per week.

Prerequisites: Senior status. Co-requisite: An Engineering Technology Capstone Course.

SPAN 101 CONTEMPORARY SPANISH I *Fall and Spring, 4 credit hours*

This course will introduce the student to the sound system and grammatical structure of the Spanish language. The focus will be on developing

skills in the areas of aural comprehension, speaking, reading, and writing. By the end of the semester, the student will have a basic understanding of grammar, including word formation, verb conjugations, idiomatic expressions, and cognates. Four hours lecture per week. This course is only for the true beginner or for students who have had less than three years of high school Spanish. Students who have taken more than three years of high school Spanish may enroll in this course with the permission of the instructor.

SPAN 102 CONTEMPORARY SPANISH II *Fall or Spring, 4 credit hours*

GER 9

This course will build upon the grammatical structure of the Spanish language learned in first semester Spanish. The focus will be on developing and increasing skill levels in the areas of aural comprehension, speaking, reading, and writing. The student will learn to describe situations in the present, past and future tenses. At the end of the semester, the student will have an intermediate understanding of grammar, including word formation, complex verb conjugations, and idiomatic expressions. This course will also discuss various cultural aspects of the Spanish-speaking world. Four hours lecture per week. Prerequisite: Contemporary Spanish I (SPAN 101) or have had at least three years of high school Spanish. Speakers of Spanish may enroll in this course with the permission of the instructor.

SPCH 104 INTRODUCTION TO SPEECH *Spring, 3 credit hours*

This course is an introduction to the principles of Effective Speech Communication. It includes techniques of audience analysis, establishing credibility as a speaker, planning, organizing and researching material, and delivery and use of aids. Both informative and persuasive speaking are covered. Three hours lecture per week.

SPMT 100 MAJOR PREP COURSE *Fall, 1 credit hour*

A requirement for all sports management students, this course is designed to help prepare sports management students for success in the major, as well as, college as a whole. The course will introduce students to critical reading, critical thinking and academic writing and the expectations of each throughout the program. In addition, topics such as college success strategies, learning/study techniques and available resources will be covered. One hour lecture per week.

SPMT 101 FOUNDATIONS OF SPORTS MANAGEMENT *Fall/Spring, 3 credit hours*

This course is designed to provide students with an overview of sports management issues, trends and career opportunities. The course will examine marketing, financial, ethical, and legal management principles and apply those principles to amateur, professional and lifestyle sport settings. Three hours lecture per week.

Course Descriptions: Sports Management

SPMT 202 SPORT IN SOCIETY *Fall/Spring, 3 credit hours*

This course examines sports using the sociological perspective. The course will focus on current and past issues within the sociology of the sporting landscape. Students will utilize critical thinking skills, past research and theories to examine the role of sports as a key social institution that influences and is influenced by the larger society. Three hours lecture per week.

SPMT 203 LEADERSHIP FOR SPORT PROFESSIONALS *Fall/Spring, 3 credit hours*

This course will first introduce students to theories, approaches, and styles of leadership, as well as, the role that ethics and ethical decision making play in shaping leader behavior. Students will analyze leadership practices within different sport settings. Case studies of sport leaders from multiple sport levels and structures will be used to examine best practices in sport leadership. Critical issues in sport leadership such as gender and ethnicity will be examined as well. Students will also begin to explore their own leadership thoughts and tendencies and emphasis will be placed on the promotion of personal leadership development with a focus towards successful sport leadership. Three hours lecture per week. Prerequisites: Foundations of Sport Management (SPMT 101) and sophomore level status or permission of instructor.

SPMT 240 SPORTS GOVERNANCE *Spring, 3 credit hours*

This course is an examination of governance structures within professional and amateur sport organizations. Students will explore policy elements and issues within scholastic, amateur, campus recreation, intercollegiate athletics, professional sport (North American and International), and Olympic sport. This course will examine the mission, structure and function of sport governing bodies such as the NCAA and NAIA in Intercollegiate Athletics, Players Associations in Professional Sports, and the IOC, NOC's and OGOC's in Olympic sport. Three hours lecture per week. Prerequisites: Foundations of Sports Management (SPMT 101) or permission of instructor.

SPMT 241 LEGAL ISSUES IN SPORT *Fall/Spring, 3 credit hours*

This course is designed to introduce students to legal applications within the sport industry. Through the use of case studies, an in-depth look at amateur and professional sports legal issues, such as; due process, anti-trust, free speech, duty of care, care owed to athletes and spectators, injuries, assumption of risk, contributory negligence, Title IX, contracts, tort law, and the growing instance of violent acts or as a result of sporting events. Three hours lecture per week. Prerequisites: Business Law I (BSAD 201) or permission of instructor.

SPMT 242 SPORTS FINANCE *Spring, 3 credit hours*

This course deals with the importance of finance and accounting theory within the sport industry. Students will explore elements that influence the financial world then apply such elements to the specific sport business world. From case studies, this course will examine business structure, sources of capital and financial management in the unique business environment of professional and college sports. Three hours lecture per week. Prerequisites: Introduction to Finance (FSMA 210) or permission of instructor.

SPMT 300 SPORTS MANAGEMENT PRACTICUM *Spring/fall, 1-3 credit hours*

The Sports Management Practicum course offers students curriculum opportunities to engage in practicum experiences after their sophomore year for earned credit. The practicum course provides opportunity for a student to observe a working sports management professional perform his/her duties and allow students the opportunity to participate in a limited role in performing tasks under supervision of practicum supervisor. Students may earn a maximum of three upper level credits through the practicum course. The three credits may be earned in one semester or split between semesters. One credit of practicum is equal to 40 hours of supervised work. Practicum supervisors and students may never exceed the hour requirement for a practicum course enrolled for. Students must fulfill all expectations and requirements of the practicum course to pass.

SPMT 306 SPORTS OPERATIONS AND FACILITIES MANAGEMENT *Fall/Spring, 3 credit hours*

This course is designed to introduce students to the planning, design, and development of sport and recreation facilities, and to the principles and techniques of facility operation and management. The course will cover specific topics related to sport operations and facility management such as: organization and management, federal and state laws, policy and procedure development, risk management, financial management, and human resource management. Through visits and tours of various sport and/or recreation facilities, students will be able to see practical applications of theories learned in the classroom. Three hours lecture per week. Prerequisites: Junior or senior level status in Sports Management major or Health & Fitness Promotion major or permission of instructor.

SPMT 307 SPORTS MARKETING *Fall 3 credit hours*

This course examines the various techniques and strategies used in meeting the wants and needs of consumers in the sports industry. The course also makes a comparison between sports marketing and traditional marketing. Students will learn about the importance of market research and segmentation in

identifying the right sports consumer. Students will also learn about how data-based marketing can be used to connect them with the sports consumer and the development of sponsorship and endorsement packages. Three hours lecture per week. Prerequisites: Marketing (BSAD 203) or permission of instructor.

SPMT 308 SPORT EVENT MANAGEMENT *Fall/Spring, 3 credit hours*

This course will focus on the fundamentals of sports events management at multiple levels – recreational, college, and professional. Components will include program planning, organization, budgeting, marketing, risk management, safety and security, staffing, conducting the event, promotional activities, and other factors associated with successful management of sport events. Students will be responsible for the management of at least one sport/recreation event on campus. Three hours lecture per week. Prerequisites: Junior or senior level status in Sports Management major or permission of instructor.

SPMT 311 SPORTS INFORMATION *Spring, 3 credit hours*

This course is designed to introduce students to the working elements of an effective sports information office in a college setting. Students learn the techniques and strategies used by sports information professionals for effective communication including writing, publications, web site design and management, digital sports photography, and social media. Students are also introduced to the various technologies and software widely used in sports information. Three hours lecture per week. Prerequisite: Foundations of Sports Management (SPMT 101) or permission of instructor.

SPMT 312 SPORTS ENTREPRENEURSHIP *Fall, 3 credit hours*

This course evaluates the skills, attitude, and commitment necessary to successfully operate an entrepreneurial venture. Students assess their personal strengths and entrepreneurial capabilities as well as explore and identify opportunities for small business ventures within the sport marketplace. Students assemble the key components of a business plan and will learn to evaluate idea feasibility and financial requirements. Three hours lecture per week. Prerequisites: Introduction to Business (BSAD 100), Foundations of Sports Management (SPMT 101), Sports Finance (SPMT 242), and Sports Marketing (SPMT 307) or permission of instructor.

SPMT 313 ECONOMICS OF SPORT *Fall, 3 credit hours*

This course utilizes economic theory to assess market outcomes in the professional and collegiate sport industry. Fan decisions to attend games will be evaluated according to economic principles such as scarcity and demand. Further, fan responsiveness

Course Descriptions: Sports Management

to ticket prices will include price elasticity, marginal revenue and price discrimination considerations. Students will also assess sport media markets, management decision making, and league structure in terms of market outcomes. The impact of stadium subsidies on economic impact will also be reviewed. Three hours lecture per week. Prerequisite: Sports finance (SPMT 242) or permission of instructor.

SPMT 315 SPORTS MANAGEMENT INTERNATIONAL STUDY ABROAD *Spring, 3 credit hours*

This course provides students a short-term study abroad opportunity and will provide theoretical and professional insight and a first-hand experience in international sports. The course meets during the spring semester, and shortly after graduation in May, students travel to various cities in Europe while exploring the European Model of Sport. Students will attend lectures from European sport executives, conduct workshops, and tour sports facilities and attend sporting events. Lectures will cover structure and characteristics of international sports, marketing, event and facility management, and international sports governance.

SPMT 320 GLOBAL SPORT PERSPECTIVES *Spring, 3 credit hours*

Global sport study introduces students to structure and critical issues of the sport business environment from a global perspective. International sport governance, globalization of professional sport, international sports mega-events, and global media technology will be assessed to recognize trends and create sport management strategy. The impact of social changes and global market expansion will be demonstrated in a review sport culture, and commerce. Three hours lecture per week. Prerequisites: Junior or senior standing in SPMT program or permission of instructor.

SPMT 410 ORIENTATION TO CULMINATING EXPERIENCE IN SPORTS MANAGEMENT *Fall/Spring, 1 credit hour*

This course prepares the student for their internship or senior project in sport management. Students will learn the processes involved in selecting and securing an internship site along with the necessary skills and appropriate behavior necessary for a successful internship experience. Students will also prepare a resume and cover letter to be used in the internship process, and be introduced to interviewing techniques and tips. Alternatively, if the student chooses the senior project route, the course will provide information on what is to be accomplished in satisfaction of the requirements for completion of the senior project, and students will begin the planning phase of the project. This course will be conducted as a hybrid course on Blackboard with classroom requirements and individual meeting requirements. One hour lecture per week. Prerequisites: Senior level status in SPMT and completion of required Sport Management courses through semester six, or permission of instructor.

SPMT 411 SPORTS PUBLIC RELATIONS *Fall/Spring, 3 credit hours*

This course focuses on the application of media relations, communications, sport marketing, and demographical concepts in a sport organization. Students will develop a sport public relations campaign that will utilize various broadcast, electronic, and print media. Students will learn how to generate and run focus groups, as well as generate media packets, press releases, and presentation of their public relations campaign. Three hours lecture per week. Prerequisites: Foundations of Sports Management (SPMT 101) or permission of instructor.

SPMT 412 SPORTS SALES AND SPONSORSHIPS *Spring, 3 credit hours*

In this course students will learn techniques and strategies for enhancing and expanding sport sales and sponsorships. Students will examine the sports sales process and compare the strengths and disadvantages of various selling strategies and methods. Sponsorship opportunities will be reviewed and students will learn key elements of sport sponsorship sales, implementation and evaluation. Three hours lecture per week. Prerequisites: Sports Marketing (SPMT 307) or permission of instructor.

SPMT 413 CONTEMPORARY ISSUES IN COLLEGE SPORTS ADMINISTRATION *Fall, 3 credit hours*

Using a seminar format, this course will study the enterprise of college athletics in the United States. Primary focus, discussion and research will center on current contemporary issues in college athletics including but not limited to gender equity & Title IX, graduation rates, recruitment ethics, hazing, drug testing, pay for play, diversity in coaching, financial issues, student-athlete behavior, and academic reform and how these issues impact the function, management and leadership of intercollegiate athletic programs. Three hours lecture per week. Prerequisites: Senior level status in Sports Management major or permission of instructor.

SPMT 414 LABOR RELATIONS IN SPORT *Fall, 3 credit hours*

This course examines labor markets in sport and the infrastructural interests of management (league and teams) and players (players associations, players, agents/attorneys). Students review collective bargaining agreements and evaluate the impact of salary caps, free agency and athlete compensation frameworks. This course also examines athlete salaries and agent representation and the unique labor markets of Major League Baseball and the National Football League. Three hours lecture per week. Prerequisites: Legal Issues In Sport (SPMT 241) and Human Resource Management (BSAD 310), or permission of instructor.

SPMT 415 SPORTS MEDIA AND BROADCASTING *Fall, 3 credit hours*

This course examines different forms of sports media including print, broadcast, and internet and their impact on sports. Students learn the fundamentals of various components of sports media such as writing game and feature stories, writing strategies for broadcast, active voice, internet streaming, shooting on location, anchoring and play by play, and production of the various forms of sports media. Students examine economic, ethical, gender, and race issues in sports media. This experiential course offers students an opportunity to apply knowledge and skills to sports media activities using the college's athletic programs and high school sports programs as their media focus. Three hours lecture per week. Prerequisites: Sports Public Relations (SPMT 411) or permission of instructor.

SPMT 421 SPORTS MANAGEMENT INTERNSHIP *Spring or summer, 9-15 credit hours*

The internship for sport management students provides a structured opportunity to apply theories, concepts, and skills learned in the classroom in a sport management/industry setting. The internship is individualized based on the career interests of the student and the specific needs of the organization. Combined GPA of 3.0 in all SPMT courses completed and completion and acceptance of SPMT Internship Application.

SPMT 422 SPORTS MANAGEMENT SENIOR PROJECT *Fall/Spring, 3, 6, 9, 12, or 15 credit hours*

This course is an alternative to SPMT 421 for students unable to complete a 15-credit internship. Students complete a senior research project specifically addressing a critical issue in a sport management setting or germane to a sports profession. Under the guidance of a faculty mentor, the student submits a research proposal, conducts research, prepares a thesis style report, and presents a defense to a thesis committee. Length and depth of the project dependent upon credit value. 112.5–562.5 project hours per semester. Prerequisites: Orientation to Culminating Experience in Sports Management (SPMT 410) and senior standing in the Sports Management major or permission of instructor.

SPMT 431 APPLIED SPORTS MEDIA AND BROADCASTING *Spring, 3 credit hours*

This experiential course builds on the fundamentals of sports media and broadcasting learned in SPMT 415 providing an opportunity for the application of principles, best practices, theories and techniques of different sports media components. Working collaboratively, students produce three sports shows throughout the semester based on topics assigned. Students will write and deliver copy and work the various stations in the control room. Each student is also responsible for doing one Weekly Roo

Course Descriptions: Social Science, Technological Communications

Review, which will focus on SUNY Canton athletics during a one-week period. Students will also collaboratively do at least one live broadcast of an on-campus sporting event. Three hours lecture per week. Prerequisites: Sports Media and Broadcasting (SPMT 415) or permission of instructor.

SPMT 432

APPLIED SPORTS EVENT MANAGEMENT *Spring, 3 credit hours*

This experiential course builds on the fundamentals of sports events management learned in SPMT 308 providing an opportunity for the application of principles, best practices, and theories of successful event management. As a group, students are responsible for the total management of a major sporting event available to the public at large. Students have hands-on opportunity for all components of the event including planning, organizing, budgeting, marketing, public relations, leading personnel, risk management planning, conducting the event and event assessment. Prerequisites: Sports Event Management (SPMT 308) and senior standing in the Sports Management major or permission of instructor.

SSCI 181

ALCOHOL, DRUGS, AND SOCIETY

Fall and Spring, 3 credit hours

GER 3

In this course students examine the various aspects of drug abuse and addiction including theories, models, individual drug classifications, and social consequences. Additional topics include the impact on family systems, overview of treatment approaches, and public policy in the United States. Three hours lecture per week for fifteen weeks. Prerequisite(s): None.

SSCI 221

INTRODUCTION TO CHINESE HISTORY AND CULTURE

Fall and Spring, 3 credit hours

GER 6

This course introduces students to the major aspects of Chinese history and culture. The broad outlines of the Interaction between history and culture are developed through coverage of the major Chinese dynasties together with coverage of the influence of Chinese literature, language, and art, in the context of current social life. Three hours lecture per week.

SSCI 271

CONTEMPORARY GLOBAL ISSUES

Fall or Spring, 3 credit hours

GER 6

This course introduces the students to global economic and political Issues. The primary focus is on the global interplay between the changing resource base, dynamics of needs and concerns of human beings, and the economic, social, and political systems. The intent is to examine the extent to which our economics, social and political systems are successfully adjusting to changes in the underlying natural resource base (ecology), and contributing toward global sustainability of modernization and development. Specific topics covered each semester may vary. Three hours lecture per week.

SSCI 275

INTRODUCTION TO UKRAINE

Fall and Spring, 3 credit hours

GER 5

Introduction to major aspects of Ukrainian culture and history. Cultural topics related to family, religion, population demographics, government, arts, music, literature and education will be included. Contemporary life in Ukraine and the broad sweep of historical forces contributing to today's culture will be the focus of the course. The recent events in Ukraine will be discussed, such as the election of October-December 2004 and the "Orange Revolution." Ukraine gained its independence in 1991 and is fiercely proud of this independence from the Soviet Union. Three hours lecture per week.

SSCI 310

HELPING THE GRIEVING CHILD

Spring, 3 credit hours

Children are often the forgotten mourners. How does our society support grieving children and communicate with children about the sensitive topics of dying and death? This course will examine how adults, including parents, funeral directors, teachers, and health care professionals can talk to children about death and loss in general. This study of children's grief will include an examination of the developmental stages and children's reactions to death. Specific techniques, activities, and rituals designed to facilitate a child's grief will be explored and discussed. Three lecture hours per week for fifteen weeks. Prerequisite(s): Composition and the Spoken Word (ENGL 101) and Introductory Psychology (PSYC 101).

SSCI 315

DEATH, DYING, AND BEREAVEMENT

Fall and Spring, 3 credit hours

This course is designed to present various ways in which social science views the human experience of death, dying, and bereavement. Drawing from sociology and psychology, this course will introduce macro and micro level theories and associated concepts. Micro-level concepts and theories about the interaction patterns between the dying patients and the family, medical staff and others involved will be examined. Also discussed will be: societal (or macrolevel) theories of social change, the ethical problem of euthanasia, and the needs of the dying; the biological, social, and psychological factors in the lengthening of life; and the consequences of death, dying, and bereavement. Cross-cultural experiences with these phenomena will also be examined. Three hours lecture per week. Prerequisites: Introduction to Psychology (PSYC 101) or Introduction to Sociology (SOC1 101) and 30 credit hours, or permission of instructor.

SSCI 370

RESEARCH METHODS IN THE SOCIAL SCIENCES

Fall or Spring, 3 credit hours

This course provides a comprehensive study of the scientific research process utilized in the social and health sciences. Students are trained to be critical consumers of published research. Topics

covered include the underlying theory of research; critically evaluating research; qualitative research analysis; quantitative research analysis; operationalization and measurement, sampling techniques, surveys, field research, secondary data analysis, experimental research, causation and statistically significant correlation; and data management and presentation. A writing intensive course. Three hours lecture per week. Prerequisites: Introduction to Psychology (PSYC 101), or Introduction to Sociology (SOC1 101), or Introduction to Science and Technology of Behavior (SSCI 245), or Principles of Macroeconomics (ECON 101), or Principles of Microeconomics (ECON 103) and Composition & the Spoken Word (ENGL 101) Prerequisite/Corequisite: Statistics (MATH 141). Additionally, students must have at least Junior level status, or permission of the instructor.

SSCI 291-295, 391-395, OR 491-495

SPECIAL TOPICS IN SOCIAL SCIENCE

Fall/Spring, 1-4 credit hours

An introductory or more advanced exploration of subjects not covered or only partially covered by other courses in any social science discipline. The course is specified in the semester class schedule. The course will address topics which require a broader scope or an examination in greater depth. Providing a different topic is selected, the student may take this course twice for credit.

TCOM 100

INTRODUCTION TO TECHNOLOGICAL COMMUNICATIONS

Fall, 3 credit hours

This course offers students a first step into the study and practice of Technological Communications, the craft of getting their ideas across in the Digital Era. Students construct information architecture, writing, editing, user experience design, and instructional planning while gaining a working knowledge of a range of tools available to help them create and share their work. Students also start a portfolio of projects designed to explore the boundaries of communication in the 21st century. Three hours lecture per week.

TCOM 200

NARRATIVE FORM IN VIDEO GAMES

Spring, 3 credit hours

GER 7

Students explore the evolution of narrative, from basic concepts to interactive fiction and interactive storytelling to early text-based adventures and recent open-world storytelling. Students review several philosophies on interactive narrative. Students also experience and discuss interactive fiction and storytelling through game case studies, including required playthroughs and subsequent discussion. As a course capstone, students will develop interactive fiction or storytelling through ADRIFT or other available programs. Three hours of lecture per week. Prerequisites/Corequisites: Composition and the Spoken Word (ENGL 101).

Course Descriptions: Technological Communications, Veterinary

TCOM 290 MOBILE MEDIA STORIES & GAMES

Spring, 3 credit hours

Students explore the emerging practices and transformative potential of mobile media storytelling and games. The site-specificity of mobile media through GPS capabilities allows us to connect media to location; stories become part of the spaces in which they unfold and are created. In this course students examine the ways that written and visual narratives, maps, and interactive digital experiences structure knowledge in physical and virtual space. The first half of the course is spent reading, interacting with, and assessing existing location-based texts and games such as interactive webstories, electronic performance theater, and augmented reality games. Students examine these works through a literary framework as well as through two design frameworks: CAT (conceptual, aesthetic, technical) and UX (user experience, experience design, information architecture, and information design). In the second half of the course, students apply the conceptual and aesthetic principles learned in the first half of the course in order to build experimental GPS-based locative games and stories. The course consists of weekly discussion classes, workshops, and demo studios. Students design original mobile works in various software platforms such as Google Earth, ARIS, and Siftr. Through literary and locational analysis, peer critique, and iterative thinking/practice, students learn to create original mobile stories and games. Projects may include: critical hacktivist games, graphic narrative maps in Google Earth, and mobile stories in ARIS and Siftr. Prerequisite(s): Composition and the Spoken Word (ENGL 101) and Introduction to Technical Communications (TCOM 101). Three hours lecture per week.

TCOM 310 IDENTITY IN THE DIGITAL AGE

Fall, 3 credit hours

Students explore theories of identity and their evolution in the digital era, noting how self-presentation has changed through the use of multi-media communication, and how social interaction in digital spaces has changed. In the course, students read and interpret multi-media texts, noting how image, sound, and language affect self-presentation. The course closes with an applied learning unit in which students employ ethnographic methodologies to explore identity in digital spaces. Three hours of lecture per week. Prerequisite(s): Composition and the Spoken Word (ENGL 101) and Introduction to Technical Communications (TCOM 101). Three hours lecture per week.

TCOM 330 DIGITAL NARRATIVES WORKSHOP

Spring, 3 credit hours

This course is a writing intensive digital workshop where students hone the knowledge and skills they have developed in previous Technological Communications courses. As an advanced workshop this course is intended for students already producing solid work and is meant to provide a disciplined, creative environment where students

focus on the craft of writing alongside technology. Students read and discuss notable digital writing projects while also providing constructive oral and written feedback on the projects of their peers in a workshop setting. Students produce multiple projects over the course of the semester which are revised and submitted into their professional portfolio. At the end of the course, students seek publication for their work. Pre-requisites: In Technical Communications Program; AND Creative Writing (ENGL 221), Short Fiction: Art of the Tale (ENGL 315), OR Flash Fiction (ENGL 350); OR received permission from the instructor. Three hours lecture per week.

TCOM 350 ELECTRONIC LITERATURE

Spring, 3 credit hours

Electronic literature emerged on computer screens in the 1980s as an experiment in writing. This course explores the practices and theories of screen-based literature as it traces the transformation of e-literature from hypertext fiction to augmented reality stories to massive online games (MMOGs). Students examine the ways that written narratives become multi-layered and rhizomorphic as their structures and coding capabilities change. Students explore the ways that these textual and visual narratives, and interactive digital experiences structure knowledge in physical and virtual space. The first half of the course is spent reading, interacting with, and assessing existing hypertext fiction and early indie computer games such as *Afternoon, A Story* and *Twine* games; students, then, try their hand at creating hypertext fiction ourselves. The second half of the course allows students to experience the transformational experiences and interfaces of more immersive stories such as augmented reality documentaries, interactive fiction, hacktivist narrative games, and cooperative MMOGs. Students examine these works through literary frameworks (symbols, imagery, setting, metaphor and so forth) as well as through design frameworks (user experience, experience design, information architecture, and information design). Students apply these conceptual and aesthetic principles to build experimental stories and games in various platforms including *Twine*, *ARIS*, *Unity*, and *Siftr*. The course consists of weekly discussion classes, workshops, and demo studios and utilizes peer critique and iterative thinking/practices as ways for students to learn meta-analysis skills and hands-on tools for designing effective screen narratives. Prerequisite(s): Composition and the Spoken Word (ENGL 101) and Introduction to Technical Communications (TCOM 101). Three hours lecture per week.

TCOM 360 ONLINE MEDIA & POP CULTURE

Fall, 3 credit hours

Students explore new forms of online media and their interaction with various types of popular culture, including television, news, literature, film, and politics. Platforms like Tumblr, Twitter, Facebook, and YouTube are discussed, as well as tools like podcasts, RSS feeds, and push notifica-

tions. Transformative works and implications for copyright law are also examined. Students learn online skills while analyzing the content of popular culture and its dissemination to the wider public. Prerequisite(s): Junior status in TCOM Program. Three hours lecture per week.

TCOM 400 INTERNSHIP I

Fall, 3 credit hours

Students develop technological communications skills in a professional environment. Students work closely in technological communications with an organization, building their portfolio and gaining important community experience. Students also attend a weekly seminar and provide regular updates of their progress. Pre-requisite(s): Senior status in TCOM program. Weekly Seminar (50 minutes/per week) and 120 internship hours per semester.

TCOM 410 INTERNSHIP II

Spring, 3 credit hours

This course provides students with the opportunity to build on experiences in TCOM 400 and further develop practical communications skills in a real-world setting. Students work closely with an organization to assess its needs, and build a project designed to address these needs. Students also have a weekly seminar and provide regular updates of their progress. Pre-requisite(s): Internship I (TCOM 400), Senior status in TCOM program. Weekly Seminar (50 minutes/per week) and 120 internship hours per semester.

TCOM 420 SENIOR SEMINAR

Spring, 3 credit hours

This class offers students the opportunity to look towards their professional future as they synthesize their Technological Communications coursework by completing and enhancing their professional portfolio, designing, and constructing a semester-long capstone project, and completing preparations for career opportunities. Prerequisite(s): Senior status in TCOM Program. Three hours lecture per week.

VAST 105 VETERINARY ASSISTING

Spring, 1 credit hour

This course provides students with an understanding of the roles of all members of the veterinary health care team and the knowledge and skills necessary to assist veterinarians and veterinary technicians in the practice of their professions. It instructs students in proper basic care and husbandry of animals as well as the monitoring of general animal health indicators. It emphasizes the proper handling and restraint of animals for examinations and medical procedures. Care of veterinary supplies, equipment and facilities will also be covered, with an emphasis on meticulous disinfection, sterilization and infection control measures. Three hours laboratory per week.

Course Descriptions: Veterinary

VSAD 301 **VETERINARY PRACTICE MANAGEMENT** *Spring, 3 credit hours*

The purpose of this course is to provide students with current information in veterinary practice management. Students apply concepts, principles and skills they have learned in previous coursework to situations specific to veterinary practice management. Topics include: veterinary hospital human resource management, management of reception and front desk procedures, telecommunications and information technology management in veterinary practice, veterinary hospital revenue and financial control, management of veterinary medical records, veterinary inventory control, veterinary facilities management, and marketing a veterinary practice. Three hours lecture per week. Prerequisites: Enrollment in or completion of a degree in Veterinary Technology, Veterinary Science, Business, Management, or Accounting; and at least 45 credits earned overall, or permission of instructor. It is strongly recommended that students take Human Resource Management (BSAD 310) prior to taking this course.

VSAD 302 **ANIMAL CARE INSTITUTION MANAGEMENT** *Fall, 3 credit hours*

This course instructs students in veterinary hospital design and construction; insurance programs for veterinarians and veterinary facilities; services administered by veterinary technicians for veterinary facilities. The course also addresses the management of specific types of animal care facilities and institutions and how this may differ from that of the conventional companion animal practice. Facilities and organizations such as veterinary mobile clinics, large animal practices, feline and exotic animal practices, emergency and specialty practice, laboratory animal facilities, animal shelters, zoos, wildlife management and diagnostic laboratories are considered. Three hours lecture per week. Pre-requisite: Enrollment in or completion of a degree in Veterinary Technology, Veterinary Science, Business Management, or Accounting; and at least 45 credits earned overall, or permission of instructor.

VSAD 308 **VETERINARY SERVICE ADMINISTRATION INTERNSHIP ORIENTATION** *Spring, 1 credit hour*

This course prepares students for the Internship for Veterinary Service Administration, helps each student secure an appropriate internship site, helps students plan appropriate tasks and activities to complete during their internships, and establishes a contract between SUNY Canton, the internship site, and the student. One hour lecture per week. Prerequisite: Senior status in the Veterinary Service Administration program or permission of instructor.

VSAD 402 **VETERINARY BUSINESS & FINANCIAL MANAGEMENT** *Fall, 3 credit hour*

This course introduces skills necessary to become proficient in one of the critical competencies required for Certified Veterinary Practice Manager certification: Finance. Students will utilize Quickbooks Online web-based accounting software with the American Animal Hospital Association Chart of Accounts to perform financial management tasks as they pertain to veterinary medicine and animal industries, and to generate and analyze financial reports. They will also discuss retirement plans and investment accounts, and their establishment for veterinary practice owners and employees. And they will discuss outside entities (accountants, financial advisors) with whom they will work to establish financial accounts, report financial data, and make timely and accurate payment of financial obligations. 3 hours lecture/recitation per week. Prerequisite: Enrollment in or completion of a degree in Veterinary Technology, Veterinary Science Technology, Business, Management, or Accounting; and at least 45 credits earned overall, or permission of instructor. It is strongly recommended that students complete Foundations of Financial Accounting (ACCT 101) and Human Resource Management (BSAD 310) prior to taking this course.

VSAD 408 **INTERNSHIP FOR VETERINARY SERVICE ADMINISTRATION** *Spring, 3-12 credit hours*

This course is intended to be a culminating experience for the student, building upon and reinforcing material of previous course work. Working in conjunction with a field supervisor, the student will perform delegated duties associated with those of a veterinary facility manager or administrator. The internship will be individualized according to the career interests of the student and the needs of the supervising organization. Internship assignments may include information gathering, analysis, planning, implementation, evaluation, and other responsibilities. The student must complete 40 hours of internship experience to receive one credit hour of course work (for a total of 12 credits/480 hours). Pre- or Corequisites: Senior-level status in the Veterinary Service Administration program and all required math, accounting, business, health services management, and veterinary service administration courses required for the program or permission of the Department Chair or Dean.

VSCT 101 **FUNDAMENTAL VETERINARY NURSING SKILLS I** *Fall, 2 credit hour*

This course introduces students to the Veterinary Technology profession and fundamental animal care nursing skills. Students learn how to properly restrain cats and dogs, administer parenteral injections on models, take a patient history, complete medical records, conduct a physical examination, and perform clinical procedures related to primary

patient care. Students also learn to identify cat and dog breeds and surgical instruments. Competencies related to basic nursing care are conducted at the end of the course. Enrollment limited to students in the veterinary technology programs. One hour lecture, two hours laboratory per week. This course is a prerequisite to all other required VSCT courses. Pre- or Corequisites: College Biology I (BIOL 150), College Chemistry I (CHEM 150), Introduction to Animal Agriculture (VSCT 103); or permission of instructor.

VSCT 103 **INTRODUCTION TO ANIMAL AGRICULTURE**

Fall/Spring, 2 credit hours

An introductory course designed to familiarize the student with the use of animals to produce food, fiber, or profit. Beef cattle, dairy cattle, horses, sheep, swine, goats, and other animals will be discussed. The intent of this course is to provide the student with insight as to the functions and needs of the animal owner/producer. Common production schemes, terminology, and animal breeds will be addressed. Two hours lecture per week. Enrollment is limited to students in the Veterinary Technology programs.

VSCT 104 **VETERINARY OFFICE PRACTICES** *Spring, 1 credit hour*

This course introduces basic veterinary office practices that would be expected of a graduate veterinary technician. The course covers business and professional skills such as: record keeping, scheduling appointments, professionalism and client communication. This course also provides hands-on experience with current veterinary practice software. Two hours laboratory per week. Enrollment is limited to students in the Veterinary Science Technology programs.

VSCT 112 **VETERINARY CLINICAL PATHOLOGY I** *Spring, 3 credit hours*

An introduction to Veterinary Clinical Pathology as it relates to normal and abnormal physiology of animal species. Emphasis will be placed on techniques and sample handling rather than diagnosis. This course includes instruction in general laboratory equipment and the proper preparation of biological samples. Students will learn basic diagnostic techniques that include complete blood count, urinalysis, and examination of feces for internal parasites. Enrollment limited to students in the veterinary technology programs. Two hours lecture, two hours laboratory per week. Pre- or Corequisites: Animal Anatomy & Physiology (VSCT 114) and Fundamental Veterinary Nursing Skills II (VSCT 115).

VSCT 114 **ANIMAL ANATOMY AND PHYSIOLOGY** *Spring, 3 credit hours*

An introduction to the fundamental understanding of animal structure and function. Emphasis placed on the practical aspects of anatomy and phys-

Course Descriptions: Veterinary

iology of different species. Discussion will include tissues, organs, and body systems which make up the living mammalian organism. Two hours lecture, two hours laboratory per week. Enrollment limited to students in the veterinary technology programs. Prerequisites: College Biology I (BIOL 150), Fundamental Veterinary Nursing Skills I (VSCT 101), or permission of instructor.

VSCT 115 FUNDAMENTAL VETERINARY NURSING SKILLS II

Spring, 2 credit hour

This course is a continuation of material covered in Fundamental Veterinary Nursing Skills I. Students continue with identification of dog breeds and surgical instrumentation. Students identify, handle, and discuss husbandry of birds, small mammals, and reptile species. Instrumentation and restraint techniques for horses and livestock are also covered. Students perform nursing procedures including wound care and bandaging, diagnostic procedures for the eye, and subcutaneous and Intramuscular injection techniques, among others, and discuss the examination and care of pediatric and geriatric patients. Students perform surgical preparation and assisting techniques, CPR, and endotracheal intubation on models and prepare surgical instruments and supplies for use. Animal welfare and the pet overpopulation crisis are also covered and client education is further developed. Enrollment limited to students in the veterinary technology programs. One hour lecture, two hours laboratory per week. Prerequisite: Fundamental Veterinary Nursing Skills I (VSCT 101) or permission of instructor.

VSCT 201 VETERINARY TECHNOLOGY PRECEPTORSHIP I

Spring, 1 credit hour

The preceptorship is designed to involve the students in the daily activities that are encountered in a veterinary practice, animal research facility or other allied animal health facility. The clinical site is selected by the student, however, they must be under the direct supervision of either a licensed veterinarian or a licensed veterinary technician. A minimum of 120 hours of participation is required. The preceptorship is performed during the summer. Prerequisites: Fundamental Veterinary Nursing Skills I (VSCT 101), Introduction to Animal Agriculture (VSCT 103), Veterinary Office Practices (VSCT 104), Veterinary Clinical Pathology I (VSCT 112), Animal Anatomy and Physiology (VSCT 114), and Fundamental Veterinary Nursing Skills II (VSCT 115)

VSCT 202 VETERINARY CLINICAL PATHOLOGY II

Fall, 3 credit hours

A course of continued study (Veterinary Clinical Pathology I) dealing with diagnostic laboratory procedures and their correlation with pathological conditions. This course includes discussion of normal hematology of the common domestic mammals and birds. Hematopoiesis, classification of anemias and abnormal leukograms are also covered. Students will also be instructed in the identification, life cycles

and controls of animal parasitisms as well as the method and interpretation of a complete urinalysis. Laboratory practice in hematology, chemistry, parasitology, urinalysis, etc. of all the domestic species of animals is included. Enrollment limited to students in the veterinary technology programs. Two hours lecture, two hours laboratory per week. Prerequisites: Fundamental Veterinary Nursing Skills I (VSCT 101), Veterinary Clinical Pathology I (VSCT 112), Animal Anatomy and Physiology (VSCT 114), and Fundamental Veterinary Nursing Skills II (VSCT 115).

VSCT 203 SMALL ANIMAL MEDICINE AND THERAPEUTIC TECHNIQUES

Fall, 3 credit hours

This course is designed to introduce students to many of the common procedures performed by Licensed Veterinary Technicians in a small animal clinic situation. Students will be instructed on many of the common canine and feline diseases and will become familiar with the signs, therapeutic treatments, and methods of prevention. Small animal zoonotic diseases will be discussed to familiarize students with topics that veterinary practices are frequently called upon to answer. Students will perform venipuncture and intravenous catheter placements. Other procedures such as cystocentesis, stomach tube placement, blood transfusions, EKG use and splint application will be demonstrated. Enrollment limited to students in the veterinary technology programs. Three hours lecture, two hours laboratory per week. Prerequisites: Veterinary Clinical Pathology I (VSCT 112), Animal Anatomy and Physiology (VSCT 114), and Fundamental Veterinary Nursing Skills II (VSCT 115), or permission of instructor.

VSCT 204 LARGE ANIMAL MEDICINE AND THERAPEUTIC TECHNIQUES

Fall, 2 credit hours

A course designed to prepare the Veterinary Science student for a role in a large animal veterinary practice. Emphasis will be on restraint and handling, physical exam, and therapeutic methods of the food, fiber, and equine patient. Students will also have an understanding of specialized diagnostics, anesthetic principles, and surgeries associated with these animals. This course also includes discussion on regulatory medicine and its importance to agriculture and public health. Enrollment limited to students in the veterinary technology programs. One hour lecture, two hours laboratory per week. Prerequisites: *Intro to Animal Agriculture* (VSCT 103), Veterinary Clinical Pathology I (VSCT 112), Animal Anatomy and Physiology (VSCT 114), Fundamental Veterinary Nursing Skills II (VSCT 115), or permission of instructor.

VSCT 205 RADIOGRAPHIC TECHNIQUES

Fall, 2 credit hours

This course is designed as an introduction to radiology and other types of imaging in a veterinary facility. Students will be required to position pa-

tients, calculate exposure values, expose radiographic film, and process films manually, automatically, and digitally. Students will examine radiographs taken by their lab groups and critique them for their diagnostic quality. Students will be instructed on radiation hazards and how to avoid them. The use of ultrasound will be demonstrated and alternative technologies for imaging such as fluoroscopy, CT, MRI and nuclear scintigraphy will be discussed. Enrollment limited to students in the veterinary technology programs. One hour lecture, two hours laboratory per week. Prerequisites: Veterinary Clinical Pathology I (VSCT 112), Animal Anatomy and Physiology (VSCT 114), and Fundamental Veterinary Nursing Skills II (VSCT 115), or permission of instructor.

VSCT 206 ANESTHETIC PRINCIPLES

Fall, 3 credit hours

This course is an introduction to anesthetic principles as they relate to animal medical and surgical care. The student will be presented with information on basic pre-anesthetic agents, anesthetic agents, and anesthetic monitoring devices. The students will have experience with pre-anesthetic, anesthesia, and post-anesthetic evaluation/monitoring techniques and devices. Students will be presented with the potential human and animal hazards associated with anesthetic drugs. CPR and the recognition and treatment of emergency situations will be addressed. Pain control and analgesics commonly used in multi-modal pain treatment will be covered. Enrollment limited to students in the veterinary technology programs. Three hours lecture per week. Prerequisites: Animal Anatomy & Physiology (VSCT 114) and Fundamental Veterinary Nursing Skills II (VSCT 115), or permission of instructor.

VSCT 207 HEALTH AND DISEASE OF FARM ANIMALS

Fall, 3 credit hours

This course is designed to acquaint students with the most common infectious and non-infectious diseases of cattle, horses, sheep, goats, and swine. The causative agent of these diseases will be identified and emphasis will be placed on the care of the animal and the prevention of the disease. Basic discussion of immunology and vaccination theory is also included as well as proper husbandry of these animals and how this relates to the well-being of these animals. Diseases of public health importance and zoonotic potential are also included. Three hours lecture per week. Prerequisite: College Biology I (BIOL 150) or permission of instructor.

VSCT 209 VETERINARY TECHNOLOGY PRECEPTORSHIP II

Fall, 1 credit hour

The preceptorship is designed to involve the students in the daily activities that are encountered in a veterinary practice, animal research facility or other allied animal health facility. The clinical site is selected by the student, however, they must be under

Course Descriptions: Veterinary

the direct supervision of either a licensed veterinarian or a licensed veterinary technician. A minimum of 120 hours of participation in a position relating to veterinary technology in a faculty approved facility is required. Emphasis in this course is on the integration of skills learned in the veterinary technology clinical coursework during the previous semesters. These tasks may include history taking and physical exam, surgical nursing, laboratory procedures, radiology as well as therapeutics and animal care. The preceptorship is performed during the winter term. Prerequisites: Veterinary Clinical Pathology II (VSCT 202), Small Animal Medicine and Therapeutic Techniques (VSCT 203), Large Animal Medicine and Therapeutic Techniques (VSCT 204), Radiographic Techniques (VSCT 206), and Health and Disease of Farm Animals (VSCT 207).

VSCT 210 VETERINARY MICROBIOLOGY

Spring, 3 credit hours

This course consists of the study of pathogenic organisms encountered in animals and the diseases that they cause. Basic concepts of cytology and the interpretation of cytological slides are also covered. The laboratory focuses on the management of a veterinary microbiology lab as well as the isolation and identification of veterinary pathogens. Two hours lecture, two hours laboratory per week. Enrollment limited to students in the veterinary technology programs. Prerequisites: Microbiology (BIOL 209), Veterinary Clinical Pathology I (VSCT 112), Veterinary Clinical Pathology II (VSCT 202), Small Animal Medicine and Therapeutic Techniques (VSCT 203), and Health and Disease of Farm Animals (VSCT 207) or permission of instructor.

VSCT 211 ANIMAL HOSPITAL PRACTICES AND PROCEDURES

Spring, 3 credit hours

This course is considered the capstone course for the Veterinary Science Technology curriculum. This class creates an environment similar to that of a working veterinary practice and allows students to practice and further enhance the skills necessary for a licensed veterinary technician. During each class meeting, students are required to write graded assignments. They will also complete longer reflective papers as part of the semester assignment. Students are also required to research a case study and prepare a written reference paper and deliver an oral presentation using presentation software. Students enrolling in this class are expected to perform required kennel duty. Enrollment is limited to Veterinary Technology students who have successfully completed all prior veterinary science courses that are required in the AAS program. Students must successfully complete this writing intensive class to meet graduation requirements. Two hours lecture, two hours of laboratory per week. Prerequisites: Veterinary Technology Preceptorship I (VSCT 201), Clinical Pathology II (VSCT 202), Small Animal Medicine and Therapeutic Techniques (VSCT 203), Large Animal Medicine and Therapeutic Techniques (VSCT 204), Radiographic Techniques (VSCT 205), Anesthetic

Principles (VSCT 206), and Health and Disease of Farm Animals (VSCT 207), and Veterinary Technology Preceptorship II (VSCT 209).

VSCT 212 RESEARCH ANIMAL TECHNIQUES

Spring, 1 credit hour

This course is a foundation course in developing skills necessary for employment in an animal research facility. Husbandry and clinical techniques specific to laboratory animals will be discussed. Emphasis will be on providing quality animal care, monitoring the health and well-being of laboratory animals, and understanding ethical issues surrounding animal research. Enrollment limited to students in the veterinary technology programs. Two hours laboratory per week. Prerequisite: Fundamental Veterinary Nursing Skills I (VSCT 101) or permission of instructor.

VSCT 213 PRACTICAL NUTRITION

Spring, 2 credit hours

This course will cover the feeding of small animals in health and disease during various stages of the life cycle. The major dietary nutrients will be discussed at length. Nutrient deficiencies and excesses will be discussed and human and animal case examples used. Dietary management of specific diseases that affect small animals (and to a lesser extent large animals) will be a primary focus. Homemade, raw and commercial diets will be discussed. Interpreting pet food labels and calculating the amount of food to feed an animal will be covered. Two hours lecture per week. Prerequisite: Animal Anatomy & Physiology (VSCT 114), Fundamental Veterinary Nursing Skills II (VSCT 115), or permission of instructor.

VSCT 214 VETERINARY PHARMACOLOGY

Spring, 2 credit hours

This course is designed for Veterinary Science Technology students as an introduction to Pharmacology. The various classes of drugs used in Veterinary medicine will be discussed in regard to use, side effects, contraindications, method of administration, etc. Drug math will be emphasized including CRI and other calculations related to drug use. Upon completion of this course, a student should have familiarity with many of the commonly used drugs in a veterinary hospital. One hour lecture, two hours laboratory per week. Prerequisites: Veterinary Clinical Pathology II (VSCT 202), Small Animal Medicine and Therapeutic Techniques (VSCT 203), and Anesthetic Principles (VSCT 206), or permission of instructor.

VSCT 303 ADVANCED VETERINARY NURSING

Spring, 3 credit hours

This course aids students who have already completed fundamental courses in veterinary technology in developing their knowledge and skills. Emphasis on specific concepts of patient assessment, critical care nursing, advanced fluid therapy, transfusion

medicine, respiratory therapy, rehabilitation, advanced imaging, clinical nutrition, and emergency medicine will be covered. Three hours lecture per week. Prerequisites: Veterinary Clinical Pathology II (VSCT 202), Small Animal Medicine and Therapeutic Techniques (VSCT 203), Radiographic Techniques (VSCT 205), Anesthetic Principles (VSCT 206), and at least 45 credits earned, or permission of instructor.

VSCT 305 ANIMAL BEHAVIOR IN VETERINARY PRACTICE

Fall, 3 Credit Hours

This course examines the normal and abnormal behavior of domestic animals, with emphasis on analyzing companion animal behavior disorders, taking a behavioral history, examining treatment methods and providing client education and preventative counseling. Common pharmaceutical therapies used in behavioral modification will be discussed. Domestic ruminant, bird and captive animals' behavioral issues will also be discussed. Students will be expected to analyze case studies and discuss possible modification tactics. Prerequisites VSCT 203 Small Animal Medicine and Therapeutic Techniques, VSCT 204 Large Animal Medicine and Therapeutic Techniques.

VSCT 401 ISSUES AND PERSPECTIVES IN VETERINARY MEDICINE

Spring, 3 credit hours

This course allows the student to explore legal and ethical issues as they pertain to veterinary medicine and animal industries. Students are required to thoroughly research topics and present their own thoughts and conclusions. Student research, debate, case studies, and other modalities are used. Three hours lecture/recitation per week. Prerequisite: Veterinary Clinical Pathology II (VSCT 202), Small Animal Medicine and Therapeutic Techniques (VSCT 203), Radiographic Techniques (VSCT 205), Anesthetic Principles (VSCT 206), and at least 45 credits earned, or permission of instructor.



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ABOUT SUNY

The nation's largest comprehensive public university system, The State University of New York (SUNY), was established in 1948. Since its founding, the SUNY system has evolved to meet the changing needs of New York's students, communities, and workforce. SUNY initially represented a consolidation of 29 unaffiliated institutions, including 11 teachers colleges. All of these colleges, with their unique histories and backgrounds, united for a common goal: To serve New York State.

Today, the system includes 64 schools, a mix of 29 state-operated campuses and five statutory colleges—including research universities, liberal arts colleges, specialized and technical colleges, health science centers, land-grant colleges—and 30 community colleges. These institutions offer programs as varied as ceramics engineering, philosophy, fashion design, optometry, maritime studies, law, medical education, and everything in between. The University also operates hospitals and numerous research institutes.

SUNY is embedded in virtually every community in New York State: Remarkably, 93 percent of New Yorkers live within 15 miles of a SUNY campus, and nearly 100 percent live within 30 miles. In many communities, SUNY is also the region's largest employer. While SUNY students are predominantly New York State residents, hailing from every one of the state's 62 counties, the University also draws students from every other state in the United States, the District of Columbia, four U.S. territories, and 160 nations from around the world. One out of three New York State high school graduates choose SUNY, and the total enrollment of nearly 445,000 full-time and part-time students represents 37 percent of New York State's higher education student population. SUNY also employs 88,000 faculty and staff and counts more than 3 million living alumni, residing in New York State and throughout the world.

SUNY attracts the best and brightest scholars, scientists, artists, and professionals and boasts nationally and internationally recognized faculty in all major disciplines.

Faculty are regular recipients of prestigious awards and honors.

The State University of New York is committed to serving as the state's strongest economic and quality-of-life driver and providing quality education at an affordable price to New Yorkers and students from across the country and the world.

THE BOARD OF TRUSTEES

The Board of Trustees is the governing body of the State University of New York. It consists of 18 members, 15 of whom are appointed by the Governor, by and with consent of the New York State Senate. In addition, the President of the Student Assembly serves as student trustee and the Presidents of the University Faculty Senate and Faculty Council of Community Colleges serve as ex-officio trustees.

Among the authorities of the Board of Trustees is the power to:

- Appoints its own officers, the Chancellor, and System Administration senior staff.
- Appoint the President of each state-operated institution, and approve the appointment of statutory and community college presidents by their respective boards.
- Grant all degrees, diplomas, and certificates for the completion of studies at any state-operated campus, including honorary degrees.
- Regulate the admission of students, and prescribe qualifications for their continued attendance.
- Regulate tuition, fees, and charges; curricula; and all other matters pertaining to the operation and administration of each state-operated campus.
- Establish new campuses.

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PEGGY A. DECOOK (19), *Provost*; A.B., University of Michigan; M.S., University of Pittsburg; Ph.D., University of Pittsburg

RENEE L. CAMPBELL (02), *Assistant to the Provost*; A.S., Erie Community College South

SCHOOL DEANS

KENNETH M. ERICKSON (97), *Dean, School of Science, Health, and Criminal Justice, Science*; B.S., Eastern Illinois University; M.A., SUNY Geneseo; D.V.M., University of Illinois College of Veterinary Medicine; SUNY Canton Distinguished Faculty Award 2004

PHILIP T. NEISSER (18), *Dean, School of Business and Liberal Arts*; B.A., SUNY Potsdam; M.A., Georgetown University; Ph.D., University of Massachusetts-Boston

MOLLY A. MOTT (89), *Dean, Dean of Academic Support Services/IT*; A.A.S., Farmingdale College of Technology; B.A., SUNY College at Geneseo; M.Ed. SUNY Potsdam; Ph.D. Walden University; SUNY Canton's Excellence in College Service Award 2003; SUNY Canton President's Meritorious Service Award 2010

MICHAEL J. NEWTOWN (99), *Dean, Canino School of Engineering Technology*; P.E., A.A.S., SUNY Canton; B.T., Rochester Institute of Technology; MS., Clarkson University; SUNY Canton President's Meritorious Service Award 2009

ACADEMIC SUPPORT SERVICES; TRIO

BRUCE P. HANSON (14), *Academic Counselor*; A.A.S., SUNY Canton; BA, SUNY Potsdam; MS.ED., SUNY Potsdam; M.Ed., St. Lawrence University

BRENDA L. MILLER (01), *Director/Senior Academic Counselor*; A.S., SUNY Canton; B.A., M.Ed., St. Lawrence University

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ADMISSIONS

CHELSEA E. CHASE (07), *Associate Director of Admissions*; B.A., Dickinson College

BRANDON S. DAVOCK (09), *Admissions Counselor*; B.A., Becker College

CHAD M. DELOSH (11), *Assistant Director*; B.B.A., SUNY Canton

MELISSA J. EVANS (14), *Director of Admissions*; A.A.S., B.P.S., Cazenovia College; M.Ed., SUNY Potsdam

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KAYLA ROSA (19), *Admissions Counselor*;

JULIAN SHAW (18), *Admissions Counselor*; B.T., SUNY Canton

ADVISING & FIRST YEAR PROGRAMS

SHARON E. TAVERNIER (09), *Director of Advising Center and First Year Programs*; A.A.S., Paul Smith's College; B.S., M.Ed., University of Alaska Fairbanks

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CAREER SERVICES

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CSTEP

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GRANTS

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INTERNATIONAL PROGRAMS

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INSTITUTIONAL RESEARCH

JANEL L. SMITH (06), *Institutional Research Assistant*; B.S., St. Lawrence University; M.Ed., SUNY Potsdam

SARAH E. TODD (11), *Director of Institutional Research*; B.A., M.Ed., St. Lawrence University; SUNY Canton's Excellence in College Service Award 2016

LIBERTY PARTNERSHIP

AGNES GRANT

LIBRARY

GLEN R. BOGARDUS (12), *Interlibrary Loan Specialist*; B.A., St. Lawrence University

ALLAN D. COX (12), *Building Manager*; B.A., SUNY Potsdam

SARAH LANE (18), *Assistant Librarian*; M.S.I.S., University of Texas at Austin

ANDREA MORRISON (19), *Circulation Supervisor; Library*; B.A., SUNY Oswego

JESSICA M. SPOONER (05), *Senior Assistant Librarian*; B.A., M.S. Ed., SUNY Potsdam; M.L.S., SUNY Buffalo

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CORI L. WILHELM (06), *Director*; B.A., St. Lawrence University; M.S.T., SUNY Potsdam; M.L.S., SUNY Buffalo

ONLINE LEARNING

JERRY J. BARTLETT (06), *Learning System Manager*; A.S., SUNY Canton; SUNY Canton President's Meritorious Service Award 2013

ALLISON BOND (19), *Instructional Designer*; B.A., SUNY Potsdam

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BENJAMIN RAWDON (20), *Instructional Designer*

DAVID J. SCOVIL (14), *Instructional Support Associate*

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STUDENT ACCESSIBILITY SERVICES

PATRICIA ENDRES (19) *Instructional Support Assistant*; B.A., SUNY Potsdam

MEGAN R. RIEDL (16), *Director of Accommodative Disability Services*; M.S., SUNY Potsdam

TUTORING SERVICES

JOHANNA M. LEE (10), *Director of Tutoring Services*; A.S., SUNY Canton; B.A., SUNY Cortland; Northstar Award 2015

MELISSA L. MANCHESTER (08), *Lab Coordinator*; B.A., SUN19)Y Potsdam; M.A., SUNY Potsdam

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STUDENT ACCOUNTS

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FACILITIES

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INFORMATION SERVICES

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JENNIFER R. CHURCH (16), *Help Desk Technician*; A.A.S., SUNY Canton

RONDA L. CURTIS (96), *Systems Analyst Programmer*; B.A., SUNY Potsdam

KEVIN D. ELLIOTT (11), *Senior Programmer-Analyst*; B.A., SUNY Potsdam

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EDMUND M. SMITH (18), *Learning Spaces Technician*; B.A., M.S.E., SUNY Potsdam

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UNIVERSITY POLICE

JOSEPH W. BROWN (15), *Police Academy Director of Operations*; A.S., SUNY Canton; Certified Police Officer

ALAN P. MULKIN (13), *Chief of Police*; A.A.S., Corning Community College; B.A., SUNY Potsdam; FBI National Academy; M.Ed., St Law University

DIVISION OF ADVANCEMENT

TRACEYL THOMPSON (19), *Vice President for Advancement*; B.A., University of Maine; M.M., Cambridge College

ALUMNI AND DEVELOPMENT

JAMIE L. BURGESS (12), *Alumni/Development Associate*; B.A., SUNY Oswego

STEPHANIE J. FAY (17), *Sr. Foundation Accountant*

ELIZABETH F. GRAVLIN (02), *Alumni/Development Associate*; A.A.S., SUNY Canton

SARAH HARTMAN (18), *Gift Steward*

PEGGY SUE LEVATO (98), *Director of Major Gifts/Sr. Philanthropic Advisor*; SUNY Canton Excellence in College Service Award 2014

SARAH H. MANEELY (18), *Assistant Director of Planned Giving*; M.S., University of Colorado

GEOFFREY C.S. VANDERWOUDE (14), *Director of Planned Giving*; B.A., SUNY Potsdam

JORDAN WALKER (18), *Assistant Director of Individual Giving*; B.A., SUNY Potsdam

DIVISION OF STUDENT AFFAIRS

COURTNEY B. BISH (02), *Vice President for Student Affairs/Dean of Students*; A.A.S., Jefferson Community College; B.S., M.Ed., St. Lawrence University

ATHLETICS

ALEXANDER G. BOAK (15), *Men's Ice Hockey Coach*; B.S., Clarkson University

MATTHEW D. GARMAN (16), *Assistant Director of Athletic Facilities*; B.S., SUNY Canton

PATRICK M. HARRINGTON (14), *Director of CARC*; Men's Lacrosse Coach; B.S., Nazareth College

NATHANIEL C. HART (13), *Director of Athletic Communications and Marketing*; B.A., SUNY Oswego; M.S., Elmira College

DAVID D. LABAFF (13), *Women's Ice Hockey Coach and Coordinator of Intramurals*; B.S., SUNY Morrisville

ROSE LUCIDI (15), *Women's Soccer Coach*; B.A., Juniata College; M.S., SUNY Cortland

PATRICK K. MARTIN (00), *Assistant Athletic Director-NCAA Compliance*; B.S., SUNY Cortland

TERESA K. MINCKLER (05), *Associate Director of Athletics*; A.A.S., Mater Dei College; B.S., University of North Carolina at Pembroke; M.S.T., SUNY Potsdam

CHARLES MURRAY (18), *eSports Coordinator*; M.Ed., SUNY Potsdam

BRYAN M. O'CONNOR (05), *Senior Staff Assistant*; A.A.S., B.Tech, SUNY Canton

BRYAN D. PARKER (07), *Director of Fitness Center and Pool*; B.S., SUNY Potsdam

TIMOTHY M. PENROD (13), *Men's Soccer Coach*; B.S., Juniata College

CHRISTINE SCUDERI (00), *Athletic Trainer*; A.S., Nassau College; B.S., Long Island University; M.S., SUNY Potsdam

Campus Directory: Administration

SHIVA SENTHIL (19), *Men's Basketball Coach*; B.S., Hartwick College; M.B.A., Clarkson University

RANDY B. SIEMINSKI (05), *Director of Athletics*; B.S., St. Lawrence University; SUNY Canton President's Meritorious Service Award 2015

LINDSEY THAYER (20), *Women's Softball Coach*; B.S., St. John's Fisher College

ADAM TODD (14), *Women's Lacrosse Coach*; B.A., Cabrini College

VANESSA S. VIRGILIO (19), *Assistant Athletic Trainer*;

HEALTH SERVICES

JULIE A. CRUICKSHANK (06), *Associate Director of Health Services*; A.A.S., SUNY Canton; B.S.N., SUNY Plattsburgh; RN

ROSEMARIE C. HEISSE (98), *College Physician*; B.A., Boston University; Doctor of Osteopathy, Philadelphia College of Osteopathic Medicine

FARREN C. LOBDELL (07), *Health Educator/Wellness Coordinator*; B.A., SUNY Potsdam; M.S., SUNY Plattsburgh

AMANDA L. PERSONS (19), *Physician Assistant*; B.A., SUNY Oswego; B.S., SUNY Upstate; M.S., SUNY Upstate

JENNIFER L. POLNIAK (17), *Associate Counselor*; B.A., SUNY Potsdam; M.S., St. Lawrence University

KIM M. RICHARDS (18), *Psychiatric Nurse Practitioner*, M.N., Upstate Medical University

KRISTIN WESTON (18), *Nurse Practitioner*, Doc Nursing, Frontier Nursing University

SHANNA WHITE (18), *Director of Health Services*; M.S.N., St. Francis University

STUDENT LIFE

NICODEME F. AUGUSTE (16), *Residence Hall Director*, B.S., SUNY Canton

MARK R. AVERY (18), *Student Conduct Officer*; M.S., American International College

ROBERT BRUCE (13), *Assistant Director of Student Activities*, M.B., Berklee College of Music

SARAH L. CHAMBERLAIN (13), *Associate Director of Residence Life*; B.S., SUNY Cobleskill

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LORRAINE M. HONEYGHAN (18), *Residence Hall Director*; B.S., SUNY Canton

LASHAWANDA T. INGRAM (05), *Director of Diversity and Orientation/Co-Chief Diversity Officer*; B.S., M.S., SUNY Buffalo

SAMUEL J. JOHNSON (13), *Residence Hall Director*; A.S., B.B.A., SUNY Canton

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AMANI M. AWWAD (98), *Associate Professor, Sociology*; B.A., Siena Heights University; M.A., Ph.D., Western Michigan University; Research Foundation Award for Research and Scholarship 2005

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DAWNE M. BARKLEY (07), *Associate Professor, Nursing*; A.A.S., SUNY Canton; B.S.N., Florida Hospital College of Health Sciences; M.S.N., Walden University; D.N.P., Chamberlain College of Nursing; RN

WILLIAM DAVID BARNES (05), *Associate Professor, Science*; B.A., University of MT; M.S.T., SUNY Potsdam; Ed.D., Capella University

D. ANTHONY BEANE (99), *Professor, Veterinary Science Technology*; B.A., SUNY Potsdam; D.V.M. NYS College of Veterinary Medicine at Cornell University

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ELIZABETH A. BROWN (08), *Professor, Criminal Justice*; B.S., SUNY Brockport; M.F.S., George Washington University; Ph.D., Northcentral University; SUNY Canton President's Meritorious Service Award 2016

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MICHELLE L. CURRIER (09), *Assistant Professor, Criminal Justice*; B.A., SUNY Potsdam; M.L.S., Florida State University; Ph.D., Nova Southwestern University; Chancellor's Award for Excellence in Professional Service 2016

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CHARLES R. FENNER (06), *Professor, Business*; B.A., University of Maryland; M.B.A., City University; Ph.D., Touro University International

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STEPHEN E. FREMPONG (06), *Professor, Electrical Engineering Technology*; B.E.T., City College of the City University of New York; M.S., Pace University; Ph.D., California Coast University; Chancellor's Award for Excellence In Scholarship and Creative Activities 2015

DANIEL J. GAGLIARDI (06), *Professor, Mathematics*; B.A., Purchase College; M.S., New Mexico State University; Ph.D., North Carolina State University; SUNY Canton's Distinguished Faculty Award 2015

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WILLIAM T. JONES (08), *Professor, Business & Legal Studies/Co-Chief Diversity Officer*; A.S., Jefferson Community College; B.A., SUNY Oswego; M.A., Boston University; J.D., Syracuse University College of Law; Chancellor's Award for Excellence in Faculty Service 2016

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DR. JOSEPH L. KENNEDY, Daytona Beach, FL
DR. EARL W. MacARTHUR, Morristown
ROBERT A. NOBLE, JR., Tinmouth, VT
BARBARA R. WILDER '53 & '70, Canton
RONALD L. WOODCOCK '59, Baldwinsville

Consumer Complaint Procedure

LOCAL PROCEDURE

Any person who believes he/she has been aggrieved by the College may file a complaint with the Dean of Students within ninety (90) days of the alleged occurrence or event giving rise to the grievance. Complaints may be made in person, by telephone or in writing. You will be asked to discuss your problem with a responsible college representative, one who may best be able to resolve your concerns. **Students are also reminded of specific procedures for filing academic complaints or allegations of sexual harassment found in the *Student Handbook*.**

In response to a written complaint, the College shall investigate the allegations and respond to the grievant in a timely manner. The College may contact the grievant for further information or clarification of the complaint should the need arise. The complaint may be referred to a responsible campus official for resolution; any final determination of a formal complaint will be made by an individual not directly involved in the alleged problem.

No adverse action will be taken by the College against the student or other complainant.

The College will maintain a written record of the complaint and its resolution or disposition, including appropriate documentation, for a period of six years. Such file shall be retained in the Office of the Dean of Students.

If a grievant wishes, he/she may file a formal written complaint with the State Education Department in accordance with their guidelines (see below). An official complaint form and guidelines are available in the Office of the Dean of Students.

STATE EDUCATION DEPARTMENT PROCEDURES

Section 494C(j) of the Higher Education Act of 1965, as amended, provides that a

student, faculty member or any other person who believes he/she has been aggrieved by an institution of higher education has the right to file a written complaint.

In New York State, a complaint may be filed by any person with reason to believe that an institution has acted contrary to its published standards or that conditions at the institution appear to jeopardize the quality of the institution's instructional programs or the general welfare of its students. Any person who believes he/she has been aggrieved by an institution may file a written complaint with the Department within five years of the alleged incident.

HOW TO FILE A COMPLAINT

For all types of complaints concerning colleges and universities in New York State, the first course of action must be to try to resolve the complaint directly with the administration of the college or university involved. The Office of College and University Evaluation will not review a complaint until all grievance procedures at the institution have been followed and all avenues of appeal exhausted and documentation provided that such procedures have been exhausted. Please note: Every New York State college and university is required to establish, publish, and enforce explicit policies related to redress of grievances.

Please do not send a complaint to the Office of College and University Evaluation until you have read all of the information below. This will assure that you are sending your complaint to the appropriate agency/office.

The Office of College and University Evaluation handles only those complaints that concern educational programs or practices of degree-granting institutions subject to the Regulations of the Commissioner of Education, with the exceptions noted below.

- The Office does not handle anonymous complaints.
- The Office of College and University Evaluation does not intervene in mat-

ters concerning an individual's grades or examination results, as these are the prerogative of the college's faculty.

- The Office does not handle complaints concerning actions that occurred more than five years ago.
- The Office does not intervene in matters that are or have been in litigation.
- Complaints concerning programs in fields leading to professional licensure (e.g., nursing) should be directed to:

**Office of the Professions
Professional Educ. Program Review
Education Building, 2 West
Albany, NY 12234**

- A complaint against a college in the State University system should be sent to:

**State University of New York
Central Administration
State University Plaza
Albany, NY 12246**

- A complaint involving discrimination against enrolled students on the part of an institution or faculty, or involving sexual harassment, should be filed with the U.S. Office for Civil Rights:

**Office for Civil Rights - New York State
U.S. Department of Education
32 Old Slip, 26th Floor
New York, NY 10005-2500
Telephone: 646-428-3900
Fax: 646-428-3843
TDD: 877-521-2172
E-mail: OCR.NewYork@ed.gov**

- A complaint of consumer fraud on the part of the institution should be directed to the Office of the New York State Attorney General, Justice Building, Empire State Plaza, Albany, NY 12223.
- For a complaint about state student financial aid matters, contact the Higher Education Services Corporation (HESC) Customer Communications Center at 1-888-NYS-HESC.

Complainants should be aware that the Office of College and University Evaluation does not conduct a judicial investiga-

Consumer Complaint Procedure

tion and has no legal authority to require a college or university to comply with a complainant's request.

If your complaint does not fall into one of the exceptions noted above, you may obtain a complaint form at the following link (www.highered.nysed.gov/ocue/complaintform.pdf) or by contacting the Office of College and University Evaluation, New York State Education Department, Education Building, 5 North Mezzanine, 89 Washington Avenue, Albany, New York 12234. Official complaint forms and guidelines are also available in the Office of the Dean of Students.

COMPLAINT RESOLUTION

Some complaints may fall within the jurisdiction of an agency or organization other than the State Education Department. These complaints will be referred to the entity with appropriate jurisdiction. When a complaint concerns a matter that falls solely within the jurisdiction of the institution of higher education, the complainant will be notified and the Department will refer the complainant to the institution in question and request that the matter receive a review and response.

Upon conclusion of the Department's complaint review or upon a disposition of

the complaint by referral to another agency or organization, or to the institution of higher education, the Department will issue a written notice to the complainant describing the resolution of the complaint. The complainant may contact the Department evaluator directly for follow-up information or for additional assistance.

A.A. DEGREE

Associate in Arts degree. A transfer degree requiring at least 45 hours of liberal arts courses. Students in the Liberal Arts and Sciences: General Studies program have an option of enrolling in the A.A. or the A.S. degree program.

A.A.S. DEGREE

Associate in Applied Science degree. A career degree preparing students for employment upon completion of the SUNY Canton program or enrollment in an applied baccalaureate degree. Requirements include at least 20 hours of liberal arts courses while the remaining courses provide the training needed for the student's chosen career field. Many four-year colleges accept graduates with A.A.S. degrees.

ACADEMIC RECOVERY

A designation by the Dean of the appropriate School for a student with less than satisfactory academic progress. Students on academic recovery must follow a plan designed to improve their performance.

APPLIED ELECTIVE

A college course outside of the liberal arts and sciences disciplines.

ARTICULATION AGREEMENTS

Formal agreements between SUNY Canton and bachelor degree-granting colleges, community colleges, or high schools describing conditions for transfer such as GPA and program or course requirements.

A.S. DEGREE

Associate in Science degree. A transfer degree requiring at least 30 credit hours of liberal arts courses. The remainder of the courses selected are based on the student's intended transfer major.

ASSOCIATE DEGREES

Degrees which require a minimum of 60 credit hours (excluding physical education) and may be completed in two years of full-time study.

BACCALAUREATE DEGREES

Degrees which are completed in approximately four years of full-time study, generally including 120 to 128 credit hours. They

require two years of study at a transfer college after graduating from SUNY Canton or enrollment in one of SUNY Canton's baccalaureate degree programs, designed for graduates of an A.A.S. program or freshmen interested in an applied baccalaureate degree.

CERTIFICATE PROGRAMS

Students completing an organized program of courses, approved by SUNY and registered by the State Education Department, are awarded certificate diplomas. These programs develop skills in a particular discipline or occupational specialty. Certificate programs have minimum credit hour and GPA requirements specific to each program. Certificate programs may require some course work in mathematics, humanities, and science.

Local Certificates: SUNY Canton may recognize students who successfully complete a specified sequence or cluster of approved, credit courses by awarding a local certificate of completion. Such awards of themselves are not registered, aid-eligible programs and are not transcribed. Local certificates shall be subject to review and approval by the established faculty governance process for curricular matters.

COURSE OUTLINE

Detailed description and content of a course. Copies are housed in the School Deans' Offices.

CREDIT HOUR

A semester credit hour is granted for satisfactory completion of one 50-minute session of classroom instruction per week for a semester of fifteen weeks. Semester credit hours are granted for various types of instruction as follows:

1. Lecture/Recitation—A semester credit hour is an academic unit earned for fifteen 50-minute sessions of classroom Instruction.
2. Lab/Practicum - Forty-five 50-minute sessions of such activity would also normally earn one semester credit hour. Where such activity involves substantial outside preparation by the student, the equivalent of fifteen periods of 100 min-

utes duration each will earn one semester credit hour.

3. Independent Study - One credit for independent study will be awarded for the equivalent of forty-five 50-minute sessions of student academic activity.

CURRICULUM

(also Program or Major)

All courses offered. Also refers to an academic program and the full scope of courses needed to complete it.

DIRECTED STUDY

Constitutes an alternate delivery of a course to be used in the student's program of study when a particular course is not offered in the semester he/she wishes to take it. The material covered in a directed study course is essentially the same as that covered in the traditional course.

EQUIVALENT CREDIT HOURS

When the content of a course is developmental and not considered college level, equivalent credit hours are earned and are not counted toward degree requirement. They may count toward certificate requirements.

FRESHMAN

A student who has earned 0 - 29 credit hours, all of which must be a part of a degree program offered by the College.

FULL-TIME STUDENT

Anyone enrolled for twelve or more credit hours or equivalent credit in a semester. A typical course load would be 15 credit hours per semester or approximately five courses.

GENERAL EDUCATION REQUIREMENTS

The ten Knowledge and Skills Areas (GER 1-10) and the two Competencies designated by SUNY as required for graduation with a baccalaureate degree. Knowledge and Skill Areas: Mathematics; Natural Sciences; Social Sciences; American History; Western Civilization; Other World Civilizations; Humanities; The Arts; Foreign Language; Basic Communication. Competencies: Critical Thinking and Information Management.

GENERAL ELECTIVE

Any college course may serve as a general elec-

tive if it meets the minimum requirements of a curriculum. Exceptions may include physical education courses, equivalent credit courses, or courses designated for a particular program only.

GOOD STANDING

Students who meet the minimum requirements of the Student Academic Re-registration Policy are considered to be students in good standing.

GPA (Grade Point Average)

For each credit hour, points are assigned based on the grade received. This average is calculated by dividing the total grade points earned by the number of credit hours taken.

HUMANITIES

Art; music; foreign languages; philosophy; most 200-level English, media communication, speech, or theater courses; and courses with the prefix HUMA.

INDEPENDENT STUDY

A planned educational process which is available to the student who wishes to broaden his/her educational experience beyond normal course structure and classroom and/or laboratory activity. Independent Study is intended to be an offshoot of an existing course. It provides the student with an opportunity to pursue/research a subject in more depth and in a more independent manner than would be possible in a traditional course. Independent study does not apply to past life/work experiences for satisfactory completion of proficiency or challenge examinations.

JUNIOR

A student who has earned 60 - 89 credit hours, all of which must be a part of a degree program offered by the College.

LABORATORY SCIENCE

Any science course which has a laboratory experience along with lectures. Examples include biology, chemistry, environmental science, and physics.

LIBERAL ARTS ELECTIVE

Any course from the areas of humanities, sciences, mathematics, and social sciences.

LOAD

The total number of credit and equivalent credit courses for which a student has registered. Example: a registration of 9 credit hours and 4 equivalent credit hours equals a load of 13 hours.

MATRICULATION

This is a process that involves application to the College, admission to a specific academic program and enrollment in courses. An advantage of matriculation is that you officially come under the set of regulations described in the catalog in effect at the date of your matriculation. You must be matriculated to receive financial aid.

OCCUPATIONAL

A.A.S. degrees are generally considered occupational degrees. Students in these programs are preparing for a career or job upon graduation from SUNY Canton or to continue in a bachelor's degree program.

PART-TIME STUDENT

Anyone who is enrolled in fewer than twelve credit hours in a semester.

PEDAGOGY

The science or art of teaching or education.

PREREQUISITE

A requirement that must be met before a student may take a course. Each course description indicates whether there is a prerequisite.

PROGRAM ELECTIVE

A course from a program-related discipline designated by that program. Each degree program specifies the disciplines applicable to that program.

RECITATION

In addition to lectures and laboratories, some courses require a recitation, which is an individual or small group meeting with an instructor.

SENIOR

A student who has earned 90+ credit hours, all of which must be part of a degree program offered by the College.

SOPHOMORE

A student who has earned 30–59 credit hours, all of which must be a part of a degree program offered by the College.

SOCIAL SCIENCES

Anthropology, economics, geography, government, history, psychology, sociology, or political science.

SUSPENSION

Students who do not meet minimum academic requirements for returning and are dismissed from the College for at least one semester

SUNY

All of the units of the State University of New York, including Canton.

SYLLABUS

A statement of the requirements for a course and the course material to be covered. Each professor should distribute a syllabus in the first week of class.

TRANSCRIPT

An official copy of the permanent record of every course taken and the resulting grades. This permanent record is maintained in the Registrar's Office.

TRANSFER PROGRAM

Programs which are generally designed for students who want to continue their studies toward a baccalaureate degree. Programs which lead to the A.A. (Associate in Arts) and the A.S. (Associate in Science) degrees transfer easily into B.A. (Bachelor of Arts), B.S. (Bachelor of Science), or B.Tech. (Bachelor of Technology) degrees.

WITHDRAWAL FROM THE COLLEGE

Official notification to the College that a student will not complete the semester. Students submit request to officially withdraw through their UCanWeb account. Grades of "W" are recorded for all courses in progress at the time of the withdrawal.

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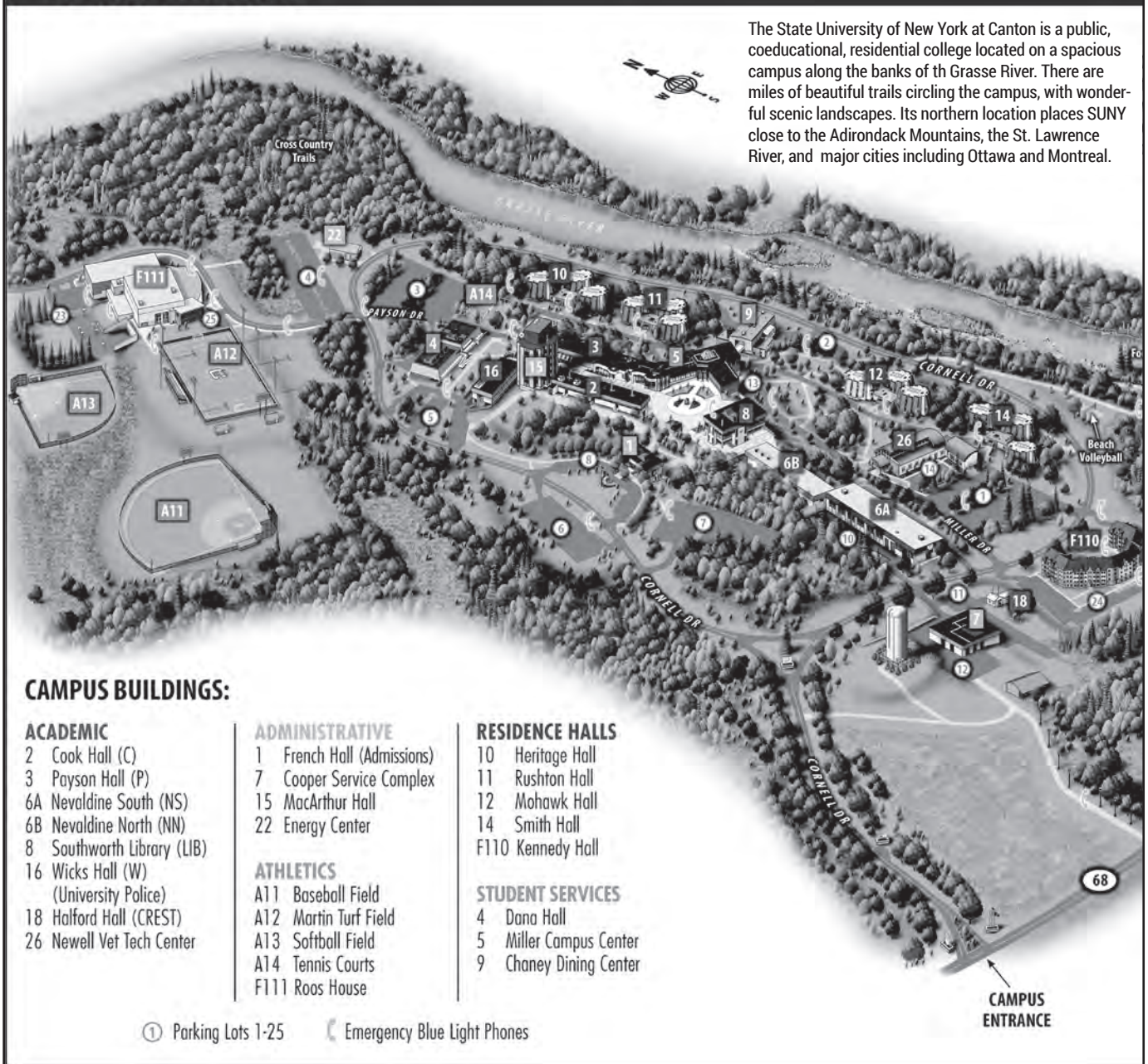
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CAMPUS MAP



The State University of New York at Canton is a public, coeducational, residential college located on a spacious campus along the banks of the Grasse River. There are miles of beautiful trails circling the campus, with wonderful scenic landscapes. Its northern location places SUNY close to the Adirondack Mountains, the St. Lawrence River, and major cities including Ottawa and Montreal.

CAMPUS BUILDINGS:

ACADEMIC

- 2 Cook Hall (C)
- 3 Payson Hall (P)
- 6A Nevaldine South (NS)
- 6B Nevaldine North (NN)
- 8 Southworth Library (LIB)
- 16 Wicks Hall (W)
(University Police)
- 18 Halford Hall (CREST)
- 26 Newell Vet Tech Center

ADMINISTRATIVE

- 1 French Hall (Admissions)
- 7 Cooper Service Complex
- 15 MacArthur Hall
- 22 Energy Center

ATHLETICS

- A11 Baseball Field
- A12 Martin Turf Field
- A13 Softball Field
- A14 Tennis Courts
- F111 Roos House

RESIDENCE HALLS

- 10 Heritage Hall
- 11 Rushton Hall
- 12 Mohawk Hall
- 14 Smith Hall
- F110 Kennedy Hall

STUDENT SERVICES

- 4 Dana Hall
- 5 Miller Campus Center
- 9 Chaney Dining Center

① Parking Lots 1-25

☎ Emergency Blue Light Phones

CAMPUS ENTRANCE

NON-DISCRIMINATION NOTICE

Pursuant to the State University of New York policy, SUNY Canton is committed to fostering a diverse community of outstanding faculty, staff, and students, as well as ensuring equal educational opportunity, employment, and access to services, programs, and activities, without regard to an individual's race, color, national origin, religion, creed, age, disability, sex, gender identity, gender expression, sexual orientation, familial status, pregnancy, predisposing genetic characteristics, military status, domestic violence victim status, or criminal conviction. Employees, students, applicants, or other members of the campus community (including, but not limited to, vendors, visitors, and guests) may not be subjected to harassment that is prohibited by law or treated adversely or retaliated against based upon a protected characteristic.

The University's policy is in accordance with federal and state laws and regulations prohibiting discrimination and harassment. These laws include the Americans with Disabilities Act (ADA), Section 504 of the Rehabilitation Act of 1973, Title IX of the Education Amendments of 1972, Title VII of the Civil Rights Act of 1964 as Amended by the Equal Employment Opportunity Act of 1972, and the New York State Human Rights Law. These laws prohibit discrimination and harassment, including sexual harassment and sexual violence.

Inquiries regarding the application of laws, regulations, and policies prohibiting discrimination may be directed to Co-Affirmative Action Officers, Emily Hamilton-Honey at (315)-386-7071 / hamiltone@canton.edu or Lashawanda Ingram at (315)386-7128 / ingraml@canton.edu. Inquiries regarding the application of Title IX may be directed to the Title IX Coordinator, Amanda Deckert, at (315) 386-7688/wood121@canton.edu. Inquiries may also be directed to the United States Department of Education's Office for Civil Rights, 32 Old Slip 26th Floor, New York, NY 10005-2500; Tel. (646) 428-3800; email OCR.NewYork@ed.gov.