

Effective dates: February 1, 2018 through January 31, 2021

	Hudson Valley Community College A.A.S. – Civil Engineering Technology			SUNY Canton B. Tech- Civil & Environmental Engineering Technology (2488)		
Semester	Course #	Course Name	Cr	Course #	Course Name	Cr
	CIVL 101	Elementary Surveying	4	CONS 101	Elementary Surveying	4
	CIVL 111	Civil Engineering Applications	2	ENGS 101	Introduction to Engineering	2
	MATH 150	College Algebra with Trigonometry	4	MATH 123	Pre-Calculus ¹	4
1	PHYS 135	Technical Physics I	4	PHYS 121/131 & College/Univ. Physics I & Lab 125/135		4
	CIVL 110	Engineering Graphics (course substitution)	3	SOET 116	Intro to Computer Aided Drafting & Design	2
Semester	Course #	Course Name	Cr	Course #	Course Name	Cr
	CIVL 112	Statics and Strength of Materials	4	CONS 172	Technical Statics ²	3
	ENGL 101	English Composition I (GER 10)	3	ENGL 101	Composition and the Spoken Word	3
	MATH 165	Basic Calculus with Analytic Geometry	4	MATH 161	Calculus ¹	4
2				PHYS 122/132 & PHYS 126/136	College/Univ. Physics II & Lab	4
	SOCL 120	Cultural Diversity in American Society (GER 3)	3		GER Course (3, 4, 5, 6, 7, 8, 9) ³	3
Semester	Course #	Course Name	Cr	Course #	Course Name	Cr
				CHEM 150	College Chemistry I (GER 2)	4
	CIVL 202	Survey II	3	CONS 203	Advanced Surveying	3
2	CIVL 210	Structures I (course substitution)	3	CONS 272	Strength of Materials for Tech ²	3
3	CIVL 114	Construction Materials	2	CONS 280	Civil Engineering Materials	3
				MATH 162	Calculus II ¹	4
				MECH 221	Engineering Materials Lab	1
Semester	Course #	Course Name	Cr	Course #	Course Name	Cr
0011105101	CIVL 213	Soils and Foundations	3	CONS 216	Soils in Construction ⁴	4
	GIVELIS	sons and roundations		ENGS 102	Programming for Engineers	2
4				MATH 364	Differential Equations ¹	4
4				MATII 304	GER Course (3, 4, 5, 6, 7, 8, 9) ³	3
		† Transfer credit option available		-	Program Elective ^{6(UD)} + ^{7(CHEM} 155)	3
Semester	Course #	Course Name	Cr	Course #	Course Name	Cr
Semester	Course #	Course Name	u	CONS 336	Structural Analysis	3
				CON3 330	GER Course (3, 4, 5, 6, 7, 8, 9) ³	3
-	CIVL 211	Structures II	4	-	Program Elective ^{6(LD/UD)+7(UD)}	3
5			3	CONCASS	CONS Course ⁵	
	CIVL 212	Hydraulics and Drainage	3	CONS 322	CONS Course ⁵	4
	C "	C	•			4
Semester	Course #	Course Name	Cr	Course #	Course Name	Cr
	CNST 202	Construction Planning and Control	3	CONS 274	Construction Management	3
				SOET 250	Intro to 3D CADD and BIM	2
6				SOET 370	Engineering Economics	3
		1 m C 111 111			CONS Course ⁵	3
		† Transfer credit option available		- "	Program Elective ^{6(UD)+7(UD)}	3
Semester	Course #	Course Name	Cr	Course #	Course Name	Cr
				SOET 377	Engineering Ethics	1
7					CONS Course ⁵	4
					GER Course (3, 4, 5, 6, 7, 8, 9) ^{3(UD for Env.Eng.Tech. path)}	3
	CIVL 236	Highway Construction Planning and Methods	3		Program Elective ^{6(UD)+7(UD)}	3
					Program Elective ^{6 only (LD)}	2
Semester	Course #	Course Name	Cr	Course #	Course Name	Cr
				CONS 477	Capstone Project	3
				SOET 348	Engineering Safety	1
8					CONS Course ⁵	4
					Program Elective ^{6(UD)+7(UD)}	3
					Program Elective ^{6(UD)+7(UD)}	3
		Accepted Transfer Credit Total	55		SUNY Program Credit Total	125

 $\underline{Course\ Descriptions: http://www.hvcc.edu/catalog/courses/courses.html?term=201710}$



† Multiple transfer credit options available depending on elective courses selected. Credits for these requirements will be accepted as follows:

Hudson Valley Community College A.A.S Civil Engineering Technology			SUNY Canton B. Tech- Civil & Environmental Engineering Technology (2488)		
Course # Course Name		Cr	Course #	Course # Course Name	
	Electives: Choose Two				
CIVL 222	Building Construction I	3	CONS 111	Program Elective (Commercial Structures)	3
CIVL 224	Estimating	3	CONS 222	Program Elective (Construction Estimating)	2
CIVL 223	Intro To Building Technology	3	ENGS 299	Program Elective	3
CIVL 234	Transportation & Hwy Sys Anal	3	ENGS 299	Program Elective	3
CIVL 205	Fundamentals of GPS	3	ENGS 299	Program Elective	3
CIVL 215	Building Systems Overview and CAD Integrated Design	3	ENGS 299	Program Elective	3
CIVL 234	Transportation & Hwy Sys Anal (L/L course credit only)	3	CONS 372	Highways and Transportation	3
CIVL 236	Hwy Const Planning & Methods	3	ENGS 299	Program Elective	3
	Additional Accepted Elective Transfer Credits	6		Total Credits	5-6

TOTAL Credits Accepted for Transfer (from both tables above): 61

Transfer credits for <u>Hudson Valley</u> Community College program requirements will be accepted as follows, however do not serve to fulfill requirements of SUNY Canton's <u>Civil and Environmental Engineering Technology</u>, <u>B.Tech</u> program:

Hudson Valley Community College				SUNY Canton		
Course # Course Name		Cr	Course #	Course Name		
FORM 101	College Forum	1	FYEP 101	First Year Experience	1	
CNST 103	Blueprint Reading for Technologies	3	CONS 151	Building Trades - Blueprint Reading and Drafting	2	
ENGL 102	English Composition II (GER 10)	3		SUNY Gen. Ed. Elective (GER 10)	3	

Additional Notes

- 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 seven (7) separate GER categories: GER 3, 4, 5, 6, 7, 8, or 9. Depending on Program Elective selection, students may need to take one or more 300/400 level GER courses in order to reach 45 upper division credits.
- 4. Writing Intensive Course
- 5. <u>CONS Courses</u>: Five (5) courses are required (CONS 285 Engineering Geology, CONS 322 Hydraulics, CONS 385 Hydrology and Hydrogeology, CONS 386 Water Quality, and CONS 387 Water and Wastewater Treatment). They are being referred to as CONS courses because they will be offered every two, three, or four semesters depending on enrollment.
- 6. Program Elective Focus on Structural Civil Engineering Tech: A list of approved Program Electives is provided below. Students wanting to focus more on structural civil engineering technology must 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. <u>Program Elective Focus on Environmental Engineering Tech:</u> A list of approved Program Electives is provided below. Students wanting to focus on environmental engineering technology must take a total of 6 Program Electives. They must take the 2 courses marked with *E (CHEM 155 and BIOL 150) 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 elective courses 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.

8. Baccalaureate degrees require successful completion of the prescribed curriculum, composed of 45 upper division credit hours, 24 of which must be taken within the major. Students may need to complete additional upper division credit hours of general electives to meet this requirement.

STUDENT ELIGIBILITY: Graduates of Associate of Applied Science—Civil Engineering Technology program at Hudson Valley Community College must possess a minimum cumulative grade point average of 2.0 on a 4.0 scale. SUNY Canton assures acceptance for Hudson Valley Community College students who have a cumulative GPA of 3.0 or better. Students are encouraged to apply during their last semester at Hudson Valley Community College.



Required CONS Courses

Course #	Course # Course Name			
CONS 285	Engineering Geology	4		
CONS 322	Hydraulics	4		
CONS 385	Hydrology and Hydrogeology	4		
CONS 386	Water Quality	4		
CONS 387	Water and Wastewater Treatment	3		

Approved Program Electives

Course #	Course Name	Credit		
*S - Students on Structural Path Must Take At Least 1				
CONS 304 *S	Reinforced Concrete Design	3		
CONS 324 *S	Structural Steel Design	3		
CONS 370 *S	Timber Design	3		
*E - Students on	Environmental Path Must Take Both			
BIOL 150 *E	College Biology I	4		
CHEM 155 *E	College Chemistry II	4		
Other Program E	ectives			
CONS 222	Construction Estimating	2		
CONS 316	Foundation Design	3		
CONS 338	Advanced Mechanics of Materials	3		
CONS 350	Introduction to GIS	3		
CONS 366	Structural Steel Detailing	3		
CONS 368	Building Electrical and Mechanical Systems	3		
CONS 372	Highways and Transportation	3		
CONS 375	Structural Engineering Design	3		
CONS 472	Advanced Highway Design	3		
CONS 432	Civil Drafting and Design	3		
CONS 226	Bridge Building	1		
CONS 485	Solid Waste Management	3		
CONS 486	Soil and Groundwater Remediation	3		
CONS 487	Water Resources Management	3		

Approved Program Electives Continued

Course #	Course Name	Credit
Other Progr	am Electives Continued	
AREA 110	Intro to Alternative Energy	3
AREA 320	Exp. and Meas. I	3
AREA 322	Passive Solar Building	3
AREA 340	Geothermal Energy	3
AREA 370	Exp. and Meas. II	3
BIOL 155	College Biology II	4
BIOL 209	Microbiology	4
CHEM 301	Organic Chemistry	4
CHEM 302	Organic Chemistry II	4
EADM 201	Fund. Of Emergency Manag.	3
ESCI 320	Weather, Climate, and Climate Change	
LEST 388	「388 Environmental Law	
MATH 141	1 Statistics	
MATH 341	Statistics II	3
MECH 220	Engineering Materials lecture	3
MECH 342	Thermodynamics	3
MECH 341	CH 341 Intermediate Fluid Mechanics	
SOET 352	ET 352 Advanced REVIT and BIM Management	
SOET 430	DET 430 Systems Analysis	
MECH XXX	MECH XXX Other Mech. Tech. approved course	
AREA XXX	Other ARES approved course	3 or 4
ELEC XXX Other Elec. Tech. approved course		

Program Contact

Adrienne Rygel, Department Chair, Civil & Construction Technology SUNY Canton
34 Cornell Drive, NN 105
Canton, New York 13617
(315) 386-7163
rygela@canton.edu



APPROVALS

Hudson	Valley	Community	College:

P. Phillip White, Dean

School of Engineering and Industrial Technologies

Christine LaPlante, Ph.D., Department Chairperson

Construction, Industrial and Mechanical

Technologies Civil and Construction

Date / Dolf

02-06-2018

SUNY Canton:

Michael Newtown

Interim Dean, Canino School of Engineering

Technology

Dr. Adrienne Rygel

Curriculum Coordinator, Civil & Environmental

Technology

4/2/2010

3/3/2018



Master Articulation Agreement Between <u>State University of New York (SUNY) Canton</u> and <u>Hudson Valley Community College</u>

Effective date: November 15, 2014

This articulation agreement is intended to facilitate the transfer of graduates from <u>Hudson Valley</u> <u>Community College</u> to SUNY Canton. The objectives, terms and conditions of this agreement are set forth as follows:

OBJECTIVES

- 1. To attract qualified students to Hudson Valley Community College and SUNY Canton.
- 2. To facilitate upward educational and career mobility by increasing accessibility to baccalaureate education for qualified individuals.
- 3. To provide students with advisement in academic and career planning throughout their program of study.
- 4. To reduce unnecessary repetition of general education and curricular content by providing seamless articulation opportunities.
- 5. To facilitate communication and academic coordination between faculty, students, and administrators at each institution.

ELIGIBILITY/ADMISSION REQUIREMENTS

- 1. Students must complete the admission process at SUNY Canton.
- 2. Students must meet the academic requirements listed in the "Terms of Agreement".

TERMS OF AGREEMENT

Students who have completed an Associates program at <u>Hudson Valley Community College</u> will be accepted into a baccalaureate program at <u>SUNY Canton</u>.

STUDENT ELIGIBILITY: Graduates of <u>Hudson Valley Community College</u> must possess a **minimum** cumulative grade point average of <u>2.0 on a 4.0 scale</u>. SUNY Canton assures acceptance for <u>Hudson Valley Community College</u> students who have <u>a cumulative GPA of 2.5 or better</u>. Students are encouraged to apply during their last semester at Hudson Valley Community College.

TRANSFER CREDIT: A grade of C or better must be earned for each transfer credit of courses applicable to the Bachelor's Degree. (See *Appendix A* for list of specific college level courses.)

DEGREE REQUIREMENTS: SUNY Canton requires that 120 or more¹ credits be completed in order to earn a Bachelor's Degree. To be eligible for graduation with a Bachelor's Degree, a minimum of 30 credits must be taken in residence at SUNY Canton. 15 credits must be taken in the major, or acceptable cognates as determined by the department at SUNY Canton. Students will be required to matriculate in accordance with the guidelines as specified in the policies of the academic catalog.

¹ Exceptions may apply. Program-specific requirements are stated on the individual program's current course equivalency chart on file.



2+2 Program Articulations: The following SUNY Canton programs accept a corresponding Associate's degree as the first two years of the baccalaureate program. Students will enter with junior status and take third and fourth year courses to complete the baccalaureate program. (See program descriptions.) Specific requirements apply. Students are encouraged to apply during their last semester at <u>Hudson Valley Community College</u>.

Dental Hygiene (Online program)

- Hudson Valley Community College students must graduate with an Associate of Applied Science in Dental Hygiene and must be a Registered Dental Hygienist.
- SUNY Canton requires <u>61 baccalaureate credits</u> be completed in order to earn the <u>Bachelors of Technology in Dental Hygiene</u>. Students will be required to matriculate in accordance with the guidelines as specified in the policies of the academic catalog.
- Hudson Valley Community College must maintain either ADA or CDA accreditation in order for this agreement to remain valid. Failure to retain either ADA or CDA accreditation will nullify this agreement.

Nursing (Online program)

- Students must be able to provide proof of US Citizenship, legal residence or valid work visa.
- Proof of licensure as a <u>Registered Nurse (RN)</u>. This must be submitted to the SUNY Canton Nursing Curriculum Coordinator by October 1 (for fall semester enrollment) or March 1 (for spring semester enrollment). Students who do not submit proof of licensure by the above listed date will be moved to non-matriculated status and withdrawn from the program at the end of the semester. (Students may reapply to the program once they supply proof of Registered Nurse License.)

IMPLEMENTATION: Students transferring under this agreement into SUNY Canton will, whenever possible, be provided with a projected outline of their individual requirements for the Bachelor's Degree.

LOCATION: SUNY Canton reserves the right to use classroom space at alternative locations and to offer all, or part, of this degree program online.

FINANCIAL AID: A student accepted into SUNY Canton under this agreement is eligible to participate in all financial aid, grants, and scholarship programs customarily open to transfer students.

PROGRAM CHANGES: If either SUNY Canton or <u>Hudson Valley Community College</u> makes changes to their respective program(s), those changes will be communicated to the other college for review of the respective course equivalency chart.

SUNY Canton Contact Information:

Office of the Provost/VP of Academic Affairs Special Projects Coordinator to the Provost Erin Voisin
34 Cornell Drive
Canton, NY 13617
p 315.386.7838
f 315.386.7945
voisine@canton.edu
www.canton.edu

<u>Hudson Valley Community College Contact</u>

Information:

Vice President for Academic Affairs Dr. Carolyn G. Curtis 80 Vandenburgh Avenue Troy, NY 12180 p 518-629-7204 c.curtis@hvcc.edu www.hvcc.edu



APPROVALS

We, the undersigned, agree to the above conditions established for the articulation agreement between *Hudson Valley Community College* and *SUNY Canton*.

Representatives of Hudson Valley Community College:

Dr. Andrew J. Matonak

President

Dr. Carolyn G. Curti

Vice President for Academic Affairs

_____ Date

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Representatives of SUNY Canton:

Dr. Zvi Szafran President

Karen Spellacy

Interim Provost/VP of Academic Affairs

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