

SUNY Canton

Fall-2016/Spring-2017

Bachelor of Electrical Engineering Technology Program (B. Tech)

Curriculum Number – 0216

Fulltime Faculty: **Stephen Frempong, Robert Jennings, Rashid Aidun, David Hartle**

| Semester 1- Fall | Course Title | Credits | Term | Grade | Comment |
|---------------------------|--|-----------|------|-------|---------|
| ENGL 101 | Composition & the Spoken Word [GER 10] | 3 | | | |
| MATH 123 | Pre-Calculus [GER 1] | 4 | | | |
| SOET 116 | Introduction to CAD and Design | 2 | | | |
| ENGS 101 | Introduction to Engineering | 2 | | | |
| ELEC 101 | Electric Circuits I | 3 | | | |
| ELEC 109 | Electric Circuits I Lab | 1 | | | |
| Semester 2-Spring | | 15 | | | |
| ENGS 102 | Programming for Engineers | 2 | | | |
| ELEC 102 | Electric Circuits II | 3 | | | |
| ELEC 129 | Electric Circuit II Lab | 1 | | | |
| MATH 161 | Calculus I | 4 | | | |
| ELEC 165 | Digital Fundamentals & Systems | 3 | | | |
| ELEC 166 | Digital Fundamentals & Systems Lab | 1 | | | |
| Semester 3- Fall | | 14 | | | |
| PHYS 121/131 | College/University Physics I [GER 2] | 3 | | | |
| PHYS 125 | College Physics I Lab | 1 | | | |
| ELEC 213 | Microprocessors | 3 | | | |
| ELEC 231 | Electronic Circuits | 4 | | | |
| ELEC 141 | Industrial Controls | 2 | | | |
| | GER course [3,4,5,6,7,8,9] | 3 | | | |
| Semester 4- Spring | | 16 | | | |
| ELEC 243 | Computer Automated Control Systems | 2 | | | |
| PHYS 122/132 | College/University Physics II | 3 | | | |
| PHYS 126 | College Physics II Lab | 1 | | | |
| ELEC 215 | Electrical Energy Conversion | 4 | | | |
| ELEC 225 | Telecommunications | 3 | | | |
| MATH 162 | Calculus II | 4 | | | |
| Semester 5- Fall | | 17 | | | |
| MATH 141 | Statistics I | 3 | | | |
| ELEC 343 | Advanced Circuit Analysis | 3 | | | |
| ELEC 332 | Industrial Power Electronics | 3 | | | |
| | GER course[3,4,5,6,7,8,9] | 3 | | | |
| SOET 377 | Engineering Ethics | 1 | | | |
| MATH 364 | Differential Equations | 4 | | | |
| Semester 6- Spring | | 17 | | | |
| ELEC 380 | LAN/WAN Technology | 3 | | | |
| ELEC 385 | Electronic Communications I | 3 | | | |
| ELEC 383 | Power Transmission and Distribution | 3 | | | |
| SOET 348 | Engineering Safety | 1 | | | |
| | Program Elective | 3 | | | |
| | GER course[3,4,5,6,7,8,9] | 3 | | | |
| Semester 7- Fall | | 16 | | | |
| SOET 361 | Project Management | 3 | | | |
| | Program Elective | 3 | | | |
| ELEC 386 | Electronic Communications II | 3 | | | |
| ELEC 416 | Microelectronics Circuit Design | 3 | | | |
| | GER course [3,4,5,6,7,8,9] | 3 | | | |
| | | 15 | | | |

| Semester 8-Spring | | | | | |
|-------------------|---|--|----------------------------|--|--|
| | Program Elective | | 3 | | |
| ELEC 477 | Capstone Project | | 3 | | |
| SOET 370 | Engineering Economics | | 3 | | |
| ELEC 488/436 | Electrical Power Systems/Biomedical Electronics | | 3 | | |
| | Program Elective | | 3 | | |
| | | | 15 | | |
| | | | Total Credits : 125 | | |

Program Electives

| | |
|--|--|
| ELEC 375 Fiber Optic Communications | MECH 342 Thermodynamics |
| PHYS 301 Introduction to Photonics | AREA 340 Geothermal Energy |
| SOET 373 Management Telecommunications | MATH Minor Courses: 341, 361, 351, 371, 391 |
| ELEC 405 Satellite Communications | |
| AREA 303 Wind Turbines | Note: MATH 263 is expected to become a required Course for B. Tech degree program |
| MECH 351 Design of Experiments | |
| <i>Or Elective course approved by the program coordinator</i> | |
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Graduation requirements: 125 semester credit hours with a G.P.A of 2.0 minimum

Name of Student Certified for Graduation (YES/No)

SN Certified by

Class of Total G.P.A Date