| DUTCHESS COMMUNITY COLLEGE | | NEW YORK INSTITUTE OF TECHNOLOGY | |
|---|---|---|---|
| *Associate in Applied Science*<br>*Electrical Technology (ELT)* | | *Bachelor of Science in*<br>*Electrical and Computer Engineering Technology*<br><br>**2019** | |
| **Course** | **Credit** | **Course** | **Credit** |
| | | | |
| **First Semester (15 credits)** | | | |
| Math—*Recommended* MAT 184: Algebra/Trig for Precalc | 3 | MATH 135 Fundamentals of Precalculus I | 4 |
| ENG 101 Composition I | 3 | FCWR 101 Writing I | 3 |
| ELT 105 DC Circuits | 3 | ETEC 110 Electrical Technology I | 4 |
| ELT 107 Intro to Prog for Automation | 3 | ETEC/CTEC Elective | 3 |
| BHS 103 Social Problems in Today's World | 3 | ICBS Behavioral Science Seminar* | 3 |
| | | | |
| **Second Semester (15 credits)** | | | |
| Math Elective – *Recommended* MAT 185: Precalculus | 3 | MATH 136 Fundamentals of Precalculus II | 4 |
| ENG 102 Composition II | 3 | FCWR 151 Writing II | 3 |
| ELT 106 AC Circuits | 3 | ETEC 120 Electrical Technology II | 4 |
| ELT 108 Electronics I | 3 | ETEC 131 Electronics Technology I | 4 |
| ELT 115 Digital Fundamentals | 3 | CTEC 216 Digital Electronics | 4 |
| | | | |
| **Third Semester (16 credits)** | | | |
| ELT 122 Manufacturing Tools and Practices | 3 | Credit used to balance ETEC 110, 120, 131 | - |
| ELT 213 Electro-Mechanical Devices | 3 | ETEC 240 Energy Technology | 3 |
| ELT 218 Electronics II | 3 | ETEC 231 Electronics Technology II | 4 |
| PHY 121 General Physics I | 4 | PHYS 130 Introductory Physics + 1 credit used to balance ETEC 231 | 4 |
| American History Course | 3 | FCIQ 101 Foundations of Inquiry* | 3 |
| | | | |
| **Fourth Semester (17 credits)** | | | |
| ELT 216 Automation Systems | 3 | CTEC 235 Microcomputers I | 4 |
| ELT 250 ELT Capstone Project | 2 | Credit used to balance CTEC 216, 235 | - |
| ENT 131 Technical Drawing | 1 | Credit used to balance MATH 135 | - |
| Technical Elective | 3 | ETEC/CTEC Elective | 3 |
| CHE 111, CHE 121, *or* PHY 122 | 4 | Course Equivalent: Chemistry Elective (4), *or* PHYS 150 Intro Physics II + 1 Physics Elec credit | 4 |
| Free Elective – *Recommended* MAT 221 Calculus I (4) | 4 | MATH 161 Basic Applied Calculus + 1 credit used to balance MATH 136 | 3 |
| | | | |
| | | | |
| **TOTAL** | **63** | **TOTAL** | **63** |

*Transfer substitution awarded on the basis of this agreement.
Note – Recommended courses are identified to maximize transfer credit award to NYIT.
Fewer credits may transfer if "Recommended" courses are not completed.

Program of Study at New York Institute of Technology
Bachelor of Science in Electrical and Computer Engineering Technology

Courses to be completed at NYIT:

| Major courses: | | Credits |
|---|---|---|
| ETEC 310 | Communication Circuits | 4 |
| ETEC 325 | Applied Statistics | 3 |
| ETEC 410 | Control Systems Technology | 4 |
| ETEC 495 | Electrical Engineering Technology Senior Design *or* | - |
| CTEC 495 | Computer Technology Seminar Project | 3 |
| CTEC 204 | Programming Techniques I | 3 |
| CTEC 208 | Programming Techniques II | 3 |
| CTEC 241 | Circuit Design and Fabrication | 4 |
| CTEC 243 | Applied Computational Analysis I | 3 |
| CTEC 247 | Applied Computational Analysis II | 3 |
| CTEC 336 | Embedded Systems and IoT | 4 |
| CTEC 350 | Microcontroller Based Systems | 3 |
| IENG 240 | Engineering Economics | 3 |
| IENG 251 | Project Engineering | 3 |
| Core and additional requirements: | | |
| FCSP 105 | Foundations of Speech Communication | 3 |
| FCSC 101 | Foundations of Scientific Process | 3 |
| FCWR 304 | Communication for Technical Professions | 3 |
| ICLT 3XX | ICLT Literature Seminar | 3 |
| ICPH 3XX | ICPH Philosophy Seminar | 3 |
| ICSS 309 | Technology and Global Issues | 3 |
| PHYS 150/Elective | Intro Physics II (3) + Liberal Arts/Science Elec (2) *or* | |
| Liberal Arts/Science Electives (5)^ | | 5 |
| Total credits at New York Institute of Technology: | | 66 |

*^Requirement determined by science course completed at Dutchess CC*

Babak D. Beheshti

Dr. Babak Dastgheib-Beheshti, Dean
College of Engineering & Computing Sciences, NYIT

11/6/19
Date

- *Effective Fall 2019*