| NASSAU COMMUNITY COLLEGE | | NEW YORK INSTITUTE OF TECHNOLOGY | |
|---|---|---|---|
| **Associate in Science** <br> **Engineering Science** | | **Bachelor of Science** <br> **Electrical and Computer Engineering** <br> **2017** | |
| **Course** | **Credit** | **Course** | **Credit** |
| **First Semester:** | | | |
| CHE 151 Inorganic Chemistry I | 4 | CHEM 107 Engineering Chemistry | 4 |
| ENG 100 Enhanced Composition I *or* <br> ENG 101 Composition I *or* <br> ENG 108 The Craft of Composition | 3 | FCWR 101 Writing I | 3 |
| ENS 101 Graphics | 1 | - | - |
| ENS 103 Elementary Engineering I | 1 | * | - |
| MAT 122 Calculus I | 4 | MATH 170 Calculus I | 4 |
| NCC The College Experience | 1 | - | |
| PED Activity Course(s) | 1 | | |
| | | | |
| **Second Semester:** | | | |
| ECO 208 Principles of Microeconomics | 3 | Liberal Arts Elective | 3 |
| ENS 104 Computational Methods Engineering | 2 | CSCI 125 Computer Programming I* | 3 |
| ENG 102 Composition II *or* <br> ENG 109 The Art of Analysis | 3 | FCWR 151 Writing II | 3 |
| MAT 123 Calculus II | 4 | MATH 180 Calculus II | 4 |
| PHY 122 Engineering Physics I | 4 | PHYS 170 General Physics I | 4 |
| PED Activity Course | 1 | - | - |
| | | | |
| **Third Semester:** | | | |
| ENS 205 Statics | 3 | MENG 211 Engineering Mechanics I (Statics) | 3 |
| ENS 225 Circuit Analysis I | 4 | EENG 211 Electrical Circuits I <br> EENG 275 Electronics Laboratory | 3 <br> 1 |
| MAT 225 Multivariable Calculus | 4 | MATH 260 Calculus III | 4 |
| PHY 123 Engineering Physics II | 4 | FCSC 101 Foundations of Scientific Process | 3 |
| General Elective <br> *Recommended:* Psychology or Sociology | 3 | ICBS Behavioral Science Elective | 3 |
| | | | |
| **Fourth Semester:** | | | |
| ENS 206 Dynamics | 3 | - | - |
| ENS 226 Engineering Circuit Analysis II | 4 | EENG 281 Electrical Circuits II | 3 |
| ENS 230 Engineering Thermodynamics | 3 | - | - |
| MAT 234 Elementary Differential Equations | 3 | MATH 320 Differential Equations | 3 |
| Technical Elective <br> *Recommended:* PHY 222 Electricity and Magnetism | 3-4 | PHYS 180 General Physics II | 4 |
| | | | |
| **TOTAL** | **66-67** | **TOTAL** | **55** |

*Both ENS 103 and ENS 104 must be satisfactorily completed in order to grant credit for CSCI 125

**PLAN OF STUDY**
Approved by Dr. Nada Anid, Dean
School of Engineering and Computing Sciences, NYIT
- *Effective as of 2017*

# NEW YORK INSTITUTE OF TECHNOLOGY

*The following are courses necessary to complete the NYIT BS in Electrical and Computer Engineering after transferring from Nassau CC with a completed AS in Engineering Science. Please see preceding page for course-by-course transfer information.*

| NYIT Course | Credit |
|---|---|
| **Electrical Engineering** | |
| EENG 125 Fundamentals of Digital Logic | 3 |
| EENG 221 Computational & Engineering Tools | 1 |
| EENG 270 Introduction to Electronic Circuits | 3 |
| EENG 310 Electronic Circuit Applications | 3 |
| EENG 315 Electronics Laboratory II | 1 |
| EENG 320 Control Systems | 3 |
| EENG 330 Electromagnetic Theory I | 3 |
| EENG 341 Signals and Systems | 3 |
| EENG 360 Electronics Laboratory III | 1 |
| EENG 371 Microprocess & Embedded Systems | 3 |
| EENG 382 Random Signals and Statistics | 3 |
| EENG 401 Communication Theory | 3 |
| EENG 403 Electronics Laboratory IV | 1 |
| EENG 489 Design Project | 2 |
| EENG 491 Senior Design Project | 2 |
| EENG/CSCI Electives | 3 |
| | |
| **Computer Science** | |
| CSCI 155 Computer Organization and Architecture | 3 |
| CSCI 185 Computer Programming II | 3 |
| CSCI 235 Elements of Discrete Structures | 3 |
| CSCI 260 Data Structures | 3 |
| CSCI 330 Operating Systems | 3 |
| | |
| **Foundation Courses** | |
| FCIQ 101 Foundations of Inquiry | 3 |
| FCSP 105 Foundations of Speech Communication | 3 |
| FCWR 304 Communication for Technical Professions | 3 |
| | |
| **Mathematics and Physics** | |
| MATH 310 Linear Algebra | 3 |
| PHYS 225 Intro to Modern Physics | 3 |
| | |
| **Seminars** | |
| ICLT Literature Seminar | 3 |
| ICPH Philosophy Seminar | 3 |
| ICSS 309 Technology and Global Issues | 3 |
| | |
| **TOTAL** | **77** |