ENGINEERING TECHNOLOGY
- COMPUTER TECHNOLOGY,
ASSOCIATE OF APPLIED SCIENCE

NMC Code 545

Engineering technology education focuses primarily on the applied aspects of science and engineering aimed at preparing graduates for practice in that portion of the technological spectrum closest to product improvement, manufacturing, construction, and engineering operational functions.

The NMC Engineering Technology degree offers students a broad-based curriculum across all areas of technical education, preparing the graduates for emerging job markets and highly technical fields.

The computer technology specialization offers a hybrid curriculum consisting of the engineering technology core (electronics, fluid power, and CADD) and a broad computer technologies experience in programming and applications. This approach provides students with the technical core to be successful in diverse environments that require IT skills integrated around a manufacturing process or product development.

Areas of Emphasis:

• Programming Logic & Design
• Application Development
• HTML5 & CSS Programming
• Relational Databases
• JavaScript Programming
• Object-Oriented Programming

Within this degree students will have the opportunity to earn the following: CSWA Certified Solidworks Associate, ISPS Connector and Conductor, and PCEP- Certified Entry-Level Python Programmer.

Requirements

Major Requirements

Course Title Credits

General Education Requirements

ENG 111 English Composition 4
Select one of the following: 3-4
ENG 112 English Composition
ENG 220 Technical Writing
BUS 231 Professional Communications
PHL 105 Critical Thinking 3
Math Competency 1 4
Select one of the following: 4
BIO 106 Human Biology
ENV 117 Meteorology & Climatology
PHY 105 Physics of the World Around Us
PHY 121 General Physics I

GEO 115 Introduction to GIS 3

Technical Specialty Requirements

DD 170 CADD/Computer Modeling 4
EET 102 Intro to Engineering Tech 2
EET 103 Electrical Studies I 3
MFG 104 Fluid Power 3
RAM 155 Microcontroller Programming 3
RAM 205 Microcontroller Systems 3

Computer Technology

EET 204 Electrical Studies II 3
EET 260 System Engineering in Practice 3
CIT 110 Programming Logic and Design 3
CIT 178 Relational Databases
CIT 213 Networking Technologies 4
CIT 240 Network Security Management 3

Approved Technical Elective

Total Credits 58-59

1 Placement into MTH 122 Trigonometry or higher, or completion of MTH 121 College Algebra

Minimum Program Requirements 60

Note: Internship opportunities are available for additional credits.

Course Sequence Guide

Course Title Credits

Year 1

Fall
ENG 111 English Composition 4
EET 102 Intro to Engineering Tech 2
EET 103 Electrical Studies I 3
RAM 155 Microcontroller Programming 3
CIT 110 Programming Logic and Design 3

Credits 15

Spring
Select one of the following: 3-4
BIO 106 Human Biology
ENV 117 Meteorology & Climatology
PHY 105 Physics of the World Around Us
PHY 121 General Physics I

Year 2

Fall
MTH 121 College Algebra 4
Select one of the following: 4
BIO 106 Human Biology
ENV 117 Meteorology & Climatology
PHY 105 Physics of the World Around Us
PHY 121 General Physics I
MFG 104  Fluid Power  3
CIT 213  Networking Technologies  4

Credits  15

Spring
PHL 105  Critical Thinking  3
DD 170  CADD/Computer Modeling (Approved Elective (see advisor))  4
CIT 240  Network Security Management  3
Approved Technical elective (see advisor)  3

Credits  13

Total Credits  58-59

The responsibility for determining the transferability of this degree and courses to another institution is the sole responsibility of the student.