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
CIT 110	Programming Logic and Design	3
CIT 178	Relational Databases	3
CIT 213	Networking Technologies	4
CIT 240	Network Security Management	3
Approved Technical Elective		6
Total Credits		**61-62**

[1] Placement into MTH 121 College Algebra ***or*** higher, ***or*** completion of MTH 111 Intermediate Algebra or MTH 120 Mathematical Explorations with a 2.0 or higher

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
ENG 112	English Composition	
ENG 220	Technical Writing	
BUS 231	Professional Communications	
EET 204	Electrical Studies II	3
RAM 205	Microcontroller Systems	3
GEO 115	Introduction to GIS	3
CIT 178	Relational Databases	3
	Credits	**15-16**
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	4
CIT 240	Network Security Management	3
Approved Technical elective (see advisor)		6
	Credits	**16**
	Total Credits	**61-62**

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