

# ENGINEERING TECHNOLOGY - ELECTRONICS TECHNOLOGY, ASSOCIATE OF APPLIED SCIENCE

NMC Code 557

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 electronics technology specializations provides students with a customizable pathway consisting of a strong electronics, lasers, and controls foundation. Additional courses are then selected in programmable logic controllers (PLCs), advanced photonics, or other technical content. This prepares the learner for a career in electrical systems, mechatronics, photonics, and more.

Areas of Emphasis:

- Electrical Studies
- Lights and Lasers
- Industrial Controls
- Programmable Logic Controllers

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
<b>General Education Requirements</b>		
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 <sup>1</sup>		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
<b>Technical Specialty Requirements</b>		
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
<b>Electronics Technology</b>		
EET 161	Fundamentals of Light & Lasers	4
EET 204	Electrical Studies II	3
EET 221	Industrial Controls	3
EET 232	Programmable Logic Controllers	3
EET 260	System Engineering in Practice	3
Approved Elective (see advisor)		6
<b>Total Credits</b>		<b>61-62</b>

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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
<b>Year 1</b>		
<b>Fall</b>		
ENG 111	English Composition	4
GEO 115	Introduction to GIS	3
EET 102	Intro to Engineering Tech	2
EET 103	Electrical Studies I	3
RAM 155	Microcontroller Programming	3
<b>Credits</b>		<b>15</b>
<b>Spring</b>		
Select one of the following:		3-4
ENG 112	English Composition	
ENG 220	Technical Writing	
BUS 231	Professional Communications	
RAM 205	Microcontroller Systems	3
DD 170	CADD/Computer Modeling	4
EET 204	Electrical Studies II	3
<b>Credits</b>		<b>13-14</b>
<b>Year 2</b>		
<b>Fall</b>		
MTH 121	College Algebra	4
MFG 104	Fluid Power	3
EET 161	Fundamentals of Light & Lasers (Fall only)	4
EET 221	Industrial Controls (Fall only)	3
EET 232	Programmable Logic Controllers (Fall only)	3
<b>Credits</b>		<b>17</b>
<b>Spring</b>		
PHL 105	Critical Thinking	3
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	
EET 260	System Engineering in Practice (Spring only)	3
Approved Technical Elective		3
Approved Technical Elective		3
	<b>Credits</b>	<b>16</b>
	<b>Total Credits</b>	<b>61-62</b>

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