

# ENGINEERING TECHNOLOGY - MARINE TECHNOLOGY, ASSOCIATE OF APPLIED SCIENCE

NMC Code 541

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.

Marine Technology provides a background in applied fundamentals including engineering technology, GIS, data processing, and underwater acoustics. Includes practical laboratory experiences in onshore, nearshore, and offshore areas of the Great Lakes.

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
or PHL 203	Environmental Ethics	
Math Competency <sup>1</sup>		4
Select one of the following:		4
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>Marine Technology</b>		
EET 204	Electrical Studies II	3
EET 260	System Engineering in Practice	3

ENV 131	Oceanography	4
WSI 200	GL Research Technologies	3
WSI 210	Underwater Acoustics and Sonar	3
WSI 215	Marine GIS & Data Processing	3
WSI 240	ROV Systems and Operations	3
<b>Total Credits</b>		<b>61-62</b>

<sup>1</sup> 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
EET 102	Intro to Engineering Tech	2
EET 103	Electrical Studies I	3
RAM 155	Microcontroller Programming	3
DD 170	CADD/Computer Modeling	4
<b>Credits</b>		<b>16</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
EET 204	Electrical Studies II	3
Select one of the following:		4
ENV 117	Meteorology & Climatology	
PHY 105	Physics of the World Around Us	
PHY 121	General Physics I	
<b>Credits</b>		<b>13-14</b>
<b>Summer</b>		
WSI 200	GL Research Technologies (Summer only)	3
<b>Credits</b>		<b>3</b>
<b>Year 2</b>		
<b>Fall</b>		
MTH 121	College Algebra	4
MFG 104	Fluid Power	3
GEO 115	Introduction to GIS	3
WSI 210	Underwater Acoustics and Sonar (Fall only)	3
WSI 240	ROV Systems and Operations (Fall only)	3
<b>Credits</b>		<b>16</b>
<b>Spring</b>		
PHL 105	Critical Thinking	3
or PHL 203	or Environmental Ethics	
EET 260	System Engineering in Practice (Spring only)	3
ENV 131	Oceanography	4

WSI 215	Marine GIS & Data Processing (Spring only)	3
<b>Credits</b>		<b>13</b>
<b>Total Credits</b>		<b>61-62</b>

<sup>1</sup> If you are considering enrolling in the Bachelor's program you should consider taking ENV 117 Meteorology & Climatology or PHY 121 General Physics I instead of PHY 105 Physics of the World Around Us

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