

# Industrial and Engineering Technology

## Industrial Technologies

*Offered at MCC-Business & Technology*

A.A.S. Industrial Technology		Industrial Technology Certificates	
Industrial Electrical	63-68 Credits	Industrial Technology Level I	22-24 Credits
Industrial Maintenance	64-69 Credits	Industrial Automation Mechatronics Level II	40-42 Credits
Instrumentation & Controls	70-75 Credits	Industrial Automation Mechatronics Level III	61-66 Credits
Military Technology	63-68 Credits	Industrial Mechanic Level II - Maintenance Mechanics	44-46 Credits
Millwright	64-69 Credits	Industrial Electrical Level II	43-45 Credits
Photovoltaics	62-64 Credits	Industrial Maintenance	40-44 Credits
Stationary Engineering	66-71 Credits	Industrial Millwright Level II	43-46 Credits
Stationary Engineering Critical Facilities	70-75 Credits	Instrumentation Level III	57-59 Credits
		Photovoltaic	35-37 Credits
		Stationary Engineering Critical Facilities Level II	42-45 Credits
		Stationary Engineering HVAC	18 Credits
		Stationary Engineering Level II	42-45 Credits

This program offers degree and certificate options leading to careers in Industrial Technology.

### AAS INTE – Stationary Engineering Critical Facilities Emphasis

201830 Revised 11/2016 (Fall 2017)

General Education Requirements	Credits	Semester Taken	Prerequisites
COLL 100 First Year Seminar	1		
ENGL 101 Composition and Reading I	3		ENGL 30/90 or ENGL 90 or appropriate placement test score
ENGL 215 Technical Writing <b>or</b> SPAN 100 Beginning Occupational Spanish	3		ENGL 101 (ENGL 215)
HIST 120 United States History to 1865 <b>or</b> HIST 121 United States History Since 1865 <b>or</b> POLS 135 Introduction to Political Science <b>or</b> POLS 136 Introduction to American National Politics <b>or</b> POLS 137 Introduction to State and Local Politics	3		
COMM 100 Fundamentals of Speech	3		ENGL 30/90 or appropriate placement test score
Choose one of the following Math options			
Option 1: MATH 103 Technical Mathematics I <b>or</b> MATH 103R Technical Mathematics I w/ review <b>or</b> MATH 120 College Algebra <b>or</b> MATH 120R College Algebra w/ review <b>and</b> MATH 104 Technical Mathematics II <b>or</b> MATH 130 Trigonometry	5-8		MATH 40/40L or appropriate placement test score (MATH 103), MATH 103 (MATH 104), MATH 110 or appropriate placement test score (MATH 120), MATH 120 or appropriate placement test score (MATH 130)
Option 2: MATH 150 PreCalculus or higher			
Any course numbered 100 or higher from the following disciplines: ART, ANTH, COMM, ECON, ENGL, FOREIGN LANGUAGE, GEOG (Except 104,110 or GIS Courses), HIST, HUMN, MUSI, PHIL, POLS, PSYC, SIGN, SOSC, SOCI, THEA	3-5		
<b>Minimum Total General Education Credit Hours</b>	<b>20</b>		

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# Industrial Technologies

## AAS INTE – Stationary Engineering Critical Facilities Emphasis (Continued)

<b>Core Program Requirements</b>				
EHSS 111	Introduction to Health & Safety for General Industry	1		
INTE 107	Industrial Electrical Safety	2		
INTE 112	Industrial Electrical DC Principles	2		Concurrent enrollment or completion of MATH 103R or higher
INTE 113	Industrial Electrical AC Principles	2		INTE 112 or equivalent
INTE 115	Electrical Print Reading	3		INTE 113
INTE 124	Employment Strategies for Technical Careers	2		CSIS 100 or CSIS 115 or higher
INTE 140	Fundamentals of Industrial Machine Repair	3		
INTE 175	Electric Motor Controls I	3		HVAC 109 or INTE 115
<b>Specific Program Requirements</b>				
HVAC 111	Principles of Heating, Ventilation and Air Conditioning	3		
HVAC 120	Fundamentals of Refrigeration	4		
HVAC 201	Stationary Engineering	3		HVAC 111 and 120
HVAC 221	Commercial Refrigeration	4		HVAC 109, 120, and 136
INTE 271	Programmable Logic Controllers I	4		INTE 113, 175 with a grade of C or higher
INTE 273	Variable Speed Motors and Drives	3		INTE 175 and INTE 271
INTE 275	Electric Motor Controls II	3		INTE 175
INTE 276	Electrical Troubleshooting and PLC Troubleshooting	4		INTE 275 and INTE 271, both co-requisites
INTE 279	Networking for Automated Systems	3		INTE 271
<b>Total Credit Hours Required</b>		<b>70-75</b>		