

Industrial Engineering Technology

Guided Pathway to Success - Year 1 (AAS)

The Associate of Applied Science degree in Industrial Engineering Technology program prepares students to function as maintenance technicians and engineering assistants; installing, maintaining and programming advanced manufacturing equipment. Students receive training in machinery, maintenance and repair, basic electrical principles, motor controls, process controls, hydraulics, pneumatics, PLCs, robotics, computers, basic machinist skills and metallurgy. Students will also learn the problem solving, troubleshooting, teamwork, and self-management skills sought by business and industry.

Extra-Curricular/Co-curricular Opportunities at ECC: All Industrial Engineering students have an opportunity to participate in DECA and SkillsUSA. ECC-DECA has competed regionally and nationally enjoying trips to Washington D. C., Orlando and New York. The SkillsUSA allows students to fulfill the mission of the organization “to empower members to become world-class workers, leaders and responsible American citizens.”

COURSE #	COURSE TITLE	CREDIT HOUR	TERM OFFERED
COL 100	Campus Orientation	0	
COL 101	Foundation of Student Success	1	
PSC CIVICS	Civics Achievement Exam (recommended)*	0	
IND 103	Introduction to Manufacturing Process	3	Fall
IND 151	Industrial Electricity Lecture	2	Fall
IND 152	Industrial Electricity Lab	1	Fall
IND 172	Process & Control Systems Lecture	2	Spring
IND 173	Process & Control Systems Lab	1	Spring
IND 213	Maintenance Practices	3	
MTH 108 or MTH 110	Applied Algebra & Trigonometry Intermediate Algebra	3	
Total Credit Hours: 16			

MILESTONE NOTES
Complete IND 151
Complete IND 152
Complete Mathematics Requirement

COURSE #	COURSE TITLE	CREDIT HOUR	TERM OFFERED
IND 111	Industrial Power Systems Lecture	2	Spring
IND 112	Industrial Power Systems Lab	1	Spring
IND 215	Motor Controls	3	Spring
PHY 104	Introduction to Physics Lecture & Lab	4	
COM 101 COM 110	CORE 42 Oral Comm. Req. Oral Comm. Or Public Speaking	3	
ENG 101 ENG 114	English Comp I Honors English Comp I	3	
Total Credit Hours: 16			

MILESTONE NOTES
Complete IND 111
Complete IND 112
Complete Core 42 Written Requirement

COURSE #	COURSE TITLE	CREDIT HOUR	TERM OFFERED
PRS 121	Machine Tool 1 Lecture	2	Fall/Summer
PRS 122	Machine Tool I Lab	2	Fall/Summer
Total Credit Hours: 4			

Updated 7/2020

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Guided Pathway to Success - Year 2 (AAS)

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COURSE #	COURSE TITLE	CREDIT HOUR	TERM OFFERED
IND 212	Materials and Metallurgy	3	Fall
IND 221	PLC- Programmable Logic Controllers	3	Fall
IND 231	Advanced PLC or IET Pathway Elective (see below)	3	Fall
ENG 102 ENG 104	English Comp II or Technical Writing	3	
HST 101, HST 102, PSC 102	US Hist. to 1877, US Hist. Since 1877, US Government	3	
Total Credit Hours: 15			

COURSE #	COURSE TITLE	CREDIT HOUR	TERM OFFERED
IND 163	Industrial & Control System Wiring	3	Spring
IND 217	Industrial Systems Troubleshooting	3	Spring
PHL 203 or PSY 101 or SOC 101	Ethics General Psychology General Sociology	3	
varies	IET Pathway Electives (see below)	6	
Total Credit Hours: 15			

IET Pathway Electives:

BUS 110 - Introduction to Business Hours: 3, PRS 123 - Machine Tool 2 Lecture Hours: 1 (Spring), PRS 124 - Machine, Tool 2 Lab Hours: 3 (Spring), IND 133 - Industrial Robotics Hours: 3 (Spring), IND 174 - Maintenance Welding Hours: 3 (Fall), IND 231 - Advanced PLC Hours: 3 (Fall), IND 265 - IE Technology Internship Hours: 3, CIS 110 - Technical and Digital Literacy Hours: 3, HVC 107- Intro to Heating & Cooling Hours: 2 (Fall), HVC 108- Intro to Heating & Cooling Hours 2 (Fall)

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