

Industrial Systems Technology - Machining Pathway (A50240A) – 72-75 Credit Hours

2018-2019

Fall – 1 st Year				
Course Number	Course Name	Lec	Lab	Credit
BPR 111	Print Reading	1	2	2
CIS 110	Introductions to Computers (S)	2	2	3
ENG 111	Writing and Inquiry	3	0	3
MAC 111	Machining Technology I ★★ (Fall Even)	2	12	6
MAC 114	Intro to Metrology (Fall Even)	2	0	2
MAC 151	Machining Calculations (Fall Even)	1	2	2
Total				18

Fall – 2 nd Year				
Course Number	Course Name	Lec	Lab	Credit
ELC 111	Intro to Electricity or			3-5
ELC 112	DC/AC Electricity			
MAC 121	Intro to CNC	2	0	2
MAC 241	Jigs & Fixtures I (Fall Odd)	2	6	4
MNT 110	Intro to Maint Procedures (Fall Even)	1	3	2
PHY 110	Conceptual Physics or			3-4
	Mathematics Elective			
	Social/Behavioral Science Elective	3	0	3
Total				17-20

Major Electives				
Course Number	Course Name	Lec	Lab	Credit
MAC 113	Machining Technology III	2	12	6
MAC 243	Die Making I	2	6	4
WBL 110	World of Work	1	0	1
WBL 111	Work-Based Learning I (and)	0	0	1
WBL 115	Work-Based Learning Seminar I	1	0	1

- ★ - Designates classes preparing students to sit for OSHA basic safety certification tests
- ★★ - Designates classes preparing students to sit for NIMS Level I credentials

Spring – 1 st Year				
Course Number	Course Name	Lec	Lab	Credit
HYD 110	Hydraulics/Pneumatics (S)	2	3	3
MAC 112	Machining Technology II ★★	2	12	6
MAC 132	Blueprint Reading/Mach II	1	2	2
MAC 152	Advanced Machining Calculations	1	2	2
MEC 142	Physical Metallurgy (S)	1	2	2
	Communications Elective (S)			3
Total				18

Spring – 2 nd Year				
Course Number	Course Name	Lec	Lab	Credit
ISC 112	Industrial Safety ★	2	0	2
MAC 122	CNC Turning	1	3	2
MAC 124	CNC Milling	1	3	2
MAC 245	Mold Construction I	2	6	4
WLD 112	Basic Welding Processes	1	3	2
	Humanities/Fine Arts Elective	3	0	3
	Major Elective			4
Total				19

(S) – Designates recommended classes for students starting in spring of the first year