

Machining & Manufacturing Technology

Certificate A

Required Courses: 22 Credit Hours			
Course ID	Course Title	Credit Hours	Notes
IND 100	Safety/OSHA	1	Fall/Spring
IND 103	Workplace Ethics	2	Fall/Spring
IND 105	Print Reading	3	Fall/Spring
MCH 100	Machining Math	3	Fall
MCH 105	Quality Control and Inspection	1	Fall/Spring
MCH 110	Bench Work	1	Fall/Spring
MCH 115	Metallurgy	1	Fall/Spring
MCH 120	Machine Tool Processes	1	Fall/Spring
MCH 140	CNC Milling I	3	Fall/Spring
MCH 145	CNC Operations	3	Fall/Spring
MCH 150	CNC Lathe	3	Fall/Spring

Certificate B

Required Courses: 33 Credit Hours			
Course ID	Course Title	Credit Hours	Notes
	**All Certificate Courses Listed Above	22	
IND 110	Intro to CAD	3	Fall/Spring
IND 120/130	Industrial Tech Field Experience I/II	1/2	Fall/Spring/Summer
IND 200	MasterCam	3	Fall/Spring
HPE 111	First Aid/CPR	1	Fall/Spring/Summer
MAT 112	Technical Mathematics	3	Spring

AAS

Required Courses: 45 Credit Hours			
Course ID	Course Title	Credit Hours	Notes
	**All Certificate Courses Listed Above	33	
MCH 200	Fundamentals of Robotics	3	Fall
MCH 205	Advanced Machining	3	Fall
MCH 210	Machining Internship	3	Spring
IND 115	Parametric Modeling	3	Fall
General Education Courses: 15 Credit Hours			
Course ID	Course Title	Credit Hours	Notes
COM 211	Interpersonal Communication	3	Fall/Spring/Summer
ENG 101	English Composition I	3	Fall/Spring/Summer

	Arts & Humanities Bucket	3	
	Social & Behavioral Bucket	3	
	Institutionally Designated Bucket	3	
	Total:	61	

Certificates/AAS in Machining & Manufacturing Technology Semester Plan

Fall		Spring	
Course	Credits	Course	Credits
IND 100: Safety/OSHA	1	MCH 140: CNC Milling I	3
MCH 105: Quality Control and Inspection	1	MCH 145: CNC Operations	3
MCH 110: Bench Work	1	MCH 150: CNC Lathe	3
MCH 115: Metallurgy	1	IND 110: Introduction to CAD	3
MCH 120: Machining Tool Processes	1	IND 103: Workplace Ethics	2
IND 105: Print Reading	3	COM 211: Interpersonal Communication	3
MCH 100: Machining Math	3		
HPE 111: First Aid/CPR	1		
COL 101: English Comp I	3		
Total	15	Total	17

Fall	
Course	Credits
MAT 112: Technical Mathematics	3
IND 120/130: Industrial Tech Field Experience I/II	1-2
IND 200: MasterCam	3
Arts & Humanities Bucket	3
Institutionally Designated Bucket	3
Total	13-14

Spring	
Course	Credits
MCH 210: Machining Internship	3
IND 115: Parametric Modeling	3
Social & Behavioral Bucket	3
MCH 205: Advanced Machining	3
MCH 200: Fundamentals of Robotics	3
Total	15