

A.A.S. IN COMPUTER INTEGRATED MACHINING



2021-2022

A.A.S. IN COMPUTER INTEGRATED MACHINING

(A50210) The Computer-Integrated Machining curriculum prepares students with the analytical, creative and innovative skills necessary to take a production idea from an initial concept through design, development and production, resulting in a finished product.

Coursework may include manual machining, computer applications, engineering design, computer-aided drafting (CAD), computer-aided machining (CAM), blueprint interpretation, advanced computerized numeric control (CNC) equipment, basic and advanced machining operations, precision measurement and high-speed multi-axis machining.

Graduates should qualify for employment as machining technicians in high-tech manufacturing, rapid-prototyping and rapid-manufacturing industries, specialty machine shops, fabrication industries, and high-tech or emerging industries such as aerospace, aviation, medical, and renewable energy, and to sit for machining certification examination. Students may be required to take one or more Developmental courses as a result of pre-enrollment placement tests; therefore, the student may need more than the minimum number of contact hours listed for graduation.

Fall Semester 1			Lecture	Lab	Credit
MAC	111	Machining Technology I	2	12	6
MEC	111	Machine Processes	1	4	3
BPR	111	Blueprint Reading	1	2	2
CIS	111	Basic PC Literacy	1	2	2
ENG	111	Writing & Inquiry	3	0	3
MAT	110	Math Measurement & Literacy	2	2	3
			Total		19

Spring Semester 1			Lecture	Lab	Credit
ACA	111	College Student Success	1	0	1
BPR	121	Blueprint Reading: Mechanical	1	2	2
MAC	112	Machining Technology II	2	12	6
MEC	110	Introduction to CAD/CAM	1	2	2
MAC	121	Introduction to CNC	2	0	2
ATR	112	Introduction to Automation	2	3	3
			Total		16

Summer Semester 1			Lecture	Lab	Credit
MAC	122	CNC Turning	1	3	2
MAC	124	CNC Milling	1	3	2
MAC	151	Machining Calculations	1	2	2
*Humanities Gen Ed Requirement			3	0	3
			Total		9

Fall Semester 2			Lecture	Lab	Credit
MAC	114	Introduction to Metrology	2	0	2
MAC	113	Machining Technology III	2	12	6
MAC	222	Advanced CNC Turning	1	3	2
MAC	224	Advanced CNC Milling	1	3	2
			Total		12

Spring Semester 2			Lecture	Lab	Credit
ATR	280	Robotics Fundamentals	3	2	4
ENG	112	Writing/Research in the Disc	3	0	3
MAC	229	CNC Programming	2	0	2
MAC	152	Advanced Calculations	1	2	2
*Social Science Gen Ed Requirement			3	0	3
			Total		14

TOTAL HOURS 70

*Please see the section titled "General Education Requirements for A.A.S. programs" at the end of the Program of Study section for specific courses that fulfill these requirements.



DIPLOMA IN COMPUTER INTEGRATED MACHINING

(D50210)

			Lecture	Lab	Credit
MAC	111	Machining Technology I	2	12	6
BPR	111	Blueprint Reading	1	2	2
ENG	111	Writing & Inquiry	3	0	3
BPR	121	Blueprint Reading: Mechanical	1	2	2
MAC	112	Machining Technology II	2	12	6
MEC	110	Introduction to CAD/CAM	1	2	2
MAC	122	CNC Turning	1	3	2
MAC	124	CNC Milling	1	3	2
MAT	110	Math Measurement & Literacy	2	2	3
MAC	113	Machining Technology III	2	12	6
MAC	222	Advanced CNC Turning	1	3	2
MAC	224	Advanced CNC Milling	1	3	2
				Total	38

2021-2022



CERTIFICATE IN COMPUTER INTEGRATED MACHINING

(C50210)

			Lecture	Lab	Credit
MAC	111	Machining Technology I	2	12	6
BPR	111	Blueprint Reading	1	2	2
MAC	112	Machining Technology II	2	12	6
BPR	121	Blueprint Reading: Mechanical	1	2	2
MEC	110	Introduction to CAD/CAM	1	2	2
				Total	18

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