



Metropolitan Community College

Computer Integrated Machining & Manufacturing

Campus: MCC-Business & Technology

A.A.S. Computer Integrated Machining & Manufacturing

Machining Emphasis	60-65 Credits
Die Making Emphasis	61-63 Credits
Mold Making Emphasis	61-63 Credits
Tool Making Emphasis	61-63 Credits
Lathe Certificate	18-19 Credits
Mill Certificate	18-19 Credits
Advanced CIMM Certificate	38-41 Credits

Advanced Computer Integrated Machining and Manufacturing workers use manual lathes, manual mills and computer numerical control (CNC) equipment to manufacture precision metal parts.

This program, designed by MCC-BT's Precision Machining Consortium industry partners, begins with an intensive, one-semester certificate that prepares students to begin a career in manufacturing and machining.

CIMM Machining & Manufacturing – Tool Making Emphasis

204005 Approved 10/2017 (Fall 2018)

COLL 100	First Year Seminar	1		
General Education Requirements		Credits	Semester Taken	Prerequisites
ENGL 101	Composition and Reading I	3		ENGL 90 with a minimum grade of S or appropriate placement score
ENGL 215	Technical Writing	3		ENGL 101
HIST 120	United States History to 1865 or	3		
HIST 121	United States History since 1865 or			
POLS 135	Introduction to Political Science or			
POLS 136	Introduction to American National Politics or			
POLS 137	Introduction to State and Local Politics			
Choose one of the following Math options:				
Option #1				
MATH 103	Technical Mathematics I or	5-6		MATH 31 with a grade of S or appropriate placement (MATH 103 and MATH 104) MATH 95 with a grade of C or appropriate placement (MATH 120 and MATH 150) MATH 120 or appropriate placement score (MATH 130)
MATH 120	College Algebra and			
MATH 104	Technical Mathematics II or			
MATH 130	Trigonometry			
Option #2				
MATH 150	PreCalculus or higher			
COMM 100	Fundamentals of Speech	3		ENGL 80/90 with a minimum grade of S or appropriate placement score.
Minimum Total General Education Credit Hours		18		
Special Program Requirements		Credits	Semester Taken	Prerequisites
CSIS 100	Digital Literacy	2		
EHSS 111	Introduction to Health and Safety for General Industry	1		
CIMM 100	Introduction to Machining & Manufacturing	3		
CIMM 104	Metrology	2		
CIMM 105	Introduction to Blueprint Reading	2		
CIMM 106	Geometric Dimensioning and Tolerancing	2		CIMM 105
CIMM 110	Manual Lathe	3		CIMM 100 with a C or better or concurrent enrollment
CIMM 115	Manual Mill	3		CIMM 100 or concurrent enrollment
CIMM 121	CNC Lathe Operation Fundamentals	4		CIMM 110 or concurrent enrollment
CIMM 122	CNC Mill Operation Fundamentals	4		CIMM 115 or concurrent enrollment
CIMM 145	EDM-Wire	3		CIMM 121 or 122 w/ grade of C or higher
CIMM 154	Cutter Grinding or	2-3		CIMM 104, 110 and 115 w/ a C or higher CIMM 100, 105, 110 and 115
CIMM 155	Grinding Operations			
CIMM 201	Metallurgy	3		CIMM 100/105/110/115 & CSIS 100 with a grade of C or higher
CIMM 225	MasterCam I	3		CSIS 100, CIMM 121 or 122
CIMM 255	Tool Design, Jigs, and Fixtures	5		CIMM 106, 121, 122, 201, 225 and CIMM 140 or 145 and CIMM 154 or 155 with grade of C or higher
Choose 1 of the following:				
CIMM 231	Capstone Job Planning, Benchwork & Layout	1		CIMM 100 and 105 (CIMM 231) CIMM 100, 105 and 115 (CIMM 232) CIMM 100, 105 and 110 (CIMM 233) CIMM 100, 105 and 110 (CIMM 234) CIMM 100, 105 and 115 (CIMM 235) CIMM 100, 105 and 122 (CIMM 236) CIMM 100, 105 and 121 (CIMM 237) CIMM 100 and 105 (CIMM 238)
CIMM 232	Capstone Milling			
CIMM 233	Capstone Chucking			
CIMM 234	Capstone Turning			
CIMM 235	Capstone Surface Grinding			
CIMM 236	Capstone CNC Milling			
CIMM 237	Capstone CNC Turning			
CIMM 238	Capstone Drill Press			
Total Credit Hours Required				

