



# Academic & Career PATHWAYS

## Associate of Applied Science (A.A.S.)

### Computer Integrated Machining and Manufacturing (CIMM) Tool Making

#### Full-Time - Advising Guide

This program, designed by MCC's Precision Machining Consortium industry partners, teaches one to build fixtures and tools to aid in fabrication of other items. Many of these are behind-the-scenes items that most people don't see but are absolutely necessary to produce the things that are seen. We are certified by the National Institute for Metalworking Skills (NIMS).

	Course	Degree Requirements Met	Credits	Action Steps
<b>Semester 1</b>				
<input type="checkbox"/>	CIMM 100 Manual Lathe Operation	Program Requirement	3	▪ Meet with Student Success Advisor to build degree plan
<input type="checkbox"/>	CIMM 105 Machine Trades Print Reading	Program Requirement	2	
<input type="checkbox"/>	CIMM 115 Manual Mill	Program Requirement	3	
<input type="checkbox"/>	CIMM 122 CNC Mill Operation Fundamentals	Program Requirement	4	
<input type="checkbox"/>	CIMM 104 Metrology	Program Requirement	2	
<input type="checkbox"/>	EHSS 111 Introduction to Health and Safety for General Industry	Program Requirement	1	
<b>Total Semester Credits</b>			<b>15</b>	
<b>Semester 2</b>				
<input type="checkbox"/>	CIMM 106 Geometric Dimensioning and Tolerancing	Program Requirement	2	▪ Meet with Student Success Advisor
<input type="checkbox"/>	CIMM 110 Manual Lathe Operation	Program Requirement	3	
<input type="checkbox"/>	CIMM 121 CNC Lathe Operation Fundamentals	Program Requirement	4	
<input type="checkbox"/>	ENGL 101 Composition & Reading I	General Education Requirement	3	
<input type="checkbox"/>	MATH 103 Technical Mathematics I MATH 104 Technical Mathematics II <b>OR</b> MATH 150 PreCalculus or higher <b>Choose one</b>	General Education Requirement	3	
<b>Total Semester Credits</b>			<b>15</b>	
<b>Semester 3</b>				
<input type="checkbox"/>	HIST 120 United States History to 1865 HIST 121 United States History since 1865 <b>OR</b> POLS 136 Introduction to U.S. National Politics <b>Choose one</b>	General Education Requirement/Civics	3	▪ Meet with Student Success Advisor
<b>Total Semester Credits</b>			<b>3</b>	
<b>Semester 4</b>				
<input type="checkbox"/>	CIMM 225 MasterCAM I	Program Requirement	3	▪ Meet with Student Success Advisor
<input type="checkbox"/>	CIMM 141 EDM Technologies	Program Requirement	4	
<input type="checkbox"/>	CIMM 154 Cutter Grinding	Program Requirement	2-3*	▪ Complete <a href="#">Civics</a>



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	<b>OR</b> CIMM 155 Grinding Operations <b>Choose one</b>			<a href="#">Exam</a> with 70% or higher
<input type="checkbox"/>	CIMM 201 Metallurgy	(Program Requirement)	3	
<input type="checkbox"/>	MATH 104 Technical Mathematics II OR MATH 130 Trigonometry <b>Choose one</b>	(General Education Requirement)	3-5*	
<b>Total Semester Credits</b>			<b>15-18*</b>	
<b>Semester 5</b>				
<input type="checkbox"/>	CIMM 226 MasterCAM II	(Program Requirement)	3	▪ Apply for Graduation
<input type="checkbox"/>	<a href="#">CIMM 231-238</a> Choose one	(Program Requirement)	1	
<input type="checkbox"/>	CIMM 255 Tool Design, Jigs and Fixtures	(Program Requirement)	5	
<input type="checkbox"/>	COMM 100 Fundamentals of Speech	(General Education Requirement)	3	
<input type="checkbox"/>	ENGL 215 Technical Writing	(General Education Requirement)	3	
<b>Total Semester Credits</b>			<b>15</b>	
<b>Credits Required for A.A.S. Degree</b>			<b>62-64</b>	
*The A.A.S. in Computer Integrated Machining & Manufacturing - Tool Making Emphasis requires a minimum of 63 total credits to graduate. When selecting a course from multiple options, please consider the number of credits for each course to ensure meeting the minimum requirements for graduation.				

This Pathway Map is an advising tool designed for full-time students and identifies the course recommendations for timely degree completion. All pathway maps can be modified to fit the individual needs of students. All students are encouraged to meet with their success advisor to develop an individualized completion plan that best meets their goals, interests, and objectives. Degree requirements and prerequisite information can be found here: [Computer Integrated Machining & Manufacturing - Tool Making Emphasis](#)

Please note:

Courses may require a prerequisite or appropriate placement, see the [Academic Catalog](#) for additional information.