

# CNC Machining and Tool-Making Technology AAS Degree Courses

<b>Award</b>	Associate of Applied Science (AAS)
<b>Credits</b>	80
<b>Program Start</b>	Fall
<b>Time to Complete</b>	2 years

## 2022–2023 Suggested Sequence of Study

 **The following suggested sequence of study is for new full-time students starting the program Fall 2022.** Part-time students should visit with a program advisor for a modified sequence of study.

 **When registering for classes refer to Self-Service > Student Planning to view your specific program requirements, your progress, and ensure proper registration.**

 Courses are subject to change.

- ◆ General education course.
- ▣ Non-transfer general education course.
- ▶ Course has a prerequisite and/or corequisite.
- Course meets 100% online.
- E Course meets face-to-face after 5:00pm.
- 8WK1** Course meets the first 8 weeks of the term.
- 8WK2** Course meets the second 8 weeks of the term.

### Term 1

MFG-157	Introduction to CNC Programming I	8WK1	2
MFG-158	Introduction to CNC Programming II ▶	8WK2	2
MAT-772	Applied Math -OR- Math Elective		3 3
MFG-122	Machine Trade Printreading I		3
MFG-211	Basic Machine Theory		2
MFG-222	Machine Operations I ▶		4
MFG-302	CNC Fundamentals		3

**Total Credits 19**

## Term 2

COM-781	Written Communication in the Workplace ▶ -OR-	O E	3	◆
ENG-105	Composition I ▶	O E	3	◆
MFG-142	Geometric Dimensioning Tolerancing ▶		3	
MFG-214	Advanced Machine Theory		2	
MFG-228	Machine Operations II		4	
MFG-309	CNC Programming Theory II ▶		4	
MFG-335	CNC Operations ▶		3	

**Total Credits 19**

## Term 3 — Summer

MFG-320	Computer Aided Machining		3	
MFG-364	Hydraulic Jigs and Fixtures ▶		4	
MFG-380	EDM Fundamentals		2	

**Total Credits 9**

## Term 4

MFG-408	Basic Diemaking ▶		8	
MFG-410	CAD Die Design		3	
SPC-101	Fundamentals of Oral Communication		3	
WEL-402	Tool Steel Welding and Heat Treatment		2	

**Total Credits 16**

## Term 5

MFG-107	Introduction to 3D Modeling		3	
MFG-431	Die Revision and Repair ▶		5	
MFG-452	Moldmaking ▶		3	
MFG-525	CMM Inspection and SPC ▶		3	
PSY-102	Human and Work Relations -OR-	O E	3	◆
PSY-111	Introduction to Psychology -OR-	O E	3	◆
SOC-110	Introduction to Sociology	O E	3	◆

**Total Credits 17**

## Math Electives

MAT-110 Math for Liberal Arts ▶	3
MAT-121 College Algebra ▶	4
MAT-128 Precalculus ▶	4
MAT-134 Trigonometry and Analytic Geometry ▶	3
MAT-156 Statistics ▶	3
MAT-210 Calculus I ▶	4
MAT-216 Calculus II ▶	4
MAT-219 Calculus III ▶	4