

Precision Machining & CNC Technology - AAS

The Precision Machining and CNC Technology program is designed to provide students with the skills necessary to enter the production environment as entry level computer numeric controls programmers or production technicians. The program provides broad theoretical and hands-on education for those seeking careers in the production field, emphasizing various levels of the production process.

Each level builds upon the previous section, continuing the students' education and knowledge base of the production process.

Students will learn skills in safety, 2D and 3D production design, machining, and quality control with an emphasis placed on emerging trends including 5-axis design and machining principles.

The OSHA 10 General Industry card is awarded upon the successful completion of the MFG-212 course.

Where will this take me?

Computer Numerical Controls Machine Programmer (CNC)
Production Maintenance Technician
Tool and Die Maker
Manufacturing Production Technician
Manufacturing Engineering Technologist

Instructor and Staff

Brad Junker
Instructor
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Journeyman Machinist

Southeastern Community College values diversity in all its forms. Please visit <https://www.scciowa.edu/non-discrimination-statement.aspx> to view our non-discrimination statement.

For more information about our graduation rates, the median debt of students who completed the program, and other important information, please visit SCC's financial aid website at <http://www.scciowa.edu/admissions/costaid/finaid/gainemp.aspx>

West Burlington Campus (Keokuk campus offers select courses)

Program Requirements

Fall Semester I		Credit
CAD-101	INTRODUCTION TO CAD	3
DRF-113	FUNDAMENTALS OF TECHNICAL DRAFTING	3
MAT-702	INTRODUCTION TO MATH APPLICATIONS	3
MFG-212	BASIC MACHINE THEORY	3
SOC-114	CONFLICT RESOLUTION IN THE WORKPLACE	3
Semester Total.....		15

Spring Semester I		Credit
MFG-142	GEOMETRIC DIMENSIONING TOLERANCING	3
CAD-277	3-D DIMENSIONAL (3-D) MODELING I	3
EGT-116	CONTINUOUS QUALITY MANAGEMENT	3
MFG-237	INTRODUCTION TO MACHINE TRADES	3
MFG-398	INTRODUCTION TO MACHINE SHOP	3
Semester Total.....		15

Fall Semester II		Credit
CAD-140	PARAMETRIC SOLID MODELING	3
MFG-156	INTRODUCTION TO CNC MACHINING	3
MFG-206	MANUFACTURING PROCESSES I	3
MFG-228	MACHINE OPERATIONS II	4
PHY-106	SURVEY OF PHYSICS	4
Semester Total.....		17

Spring Semester II		Credit
SPC-112	PUBLIC SPEAKING	3
MFG-165	ENGINEERING MATERIALS	3
MFG-303	ADVANCED CNC PROGRAMMING	6
MFG-323	MASTERCAM DESIGN	2

Take 1 of 2 courses:

ENG-105	COMPOSITION I	3
ENG-110	WRITING FOR THE WORKPLACE	3
Semester Total.....		17

Program Total..... 64