

## Precision Machining and CNC Technology - AAS

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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**

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Instructor  
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Journeyman Machinist  
AAS, Kirkwood Community College

*Southeastern Community College values diversity in all its forms. Please visit <https://www.scciaowa.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.scciaowa.edu/admissions/costaid/finaid/gainemp.aspx>*

**West Burlington Campus (Keokuk campus offers select courses)**

**Program Requirements**

	Credit
Fall Semester I	
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
Spring Semester I	
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
Fall Semester II	
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
Spring Semester II	
SPC-112 Public Speaking	3
MFG-165 Engineering Materials	3
MFG-303 Advanced CNC Programming	6
MFG-323 Mastercam Design	2
ENG-105 Composition I <u>or</u>	3
ENG-110 Writing for the Workplace	3
Program Total.....	64-64