

INACTIVE PROGRAM

(H96) Certificate

Graduates of this program will be qualified as skilled machinists and will be prepared to work in various machine trades.

Work and Employment

Skilled machinists use their knowledge of mechanics to turn a piece of metal into a precisely machined part for automobiles, aircraft or other equipment. Lathes, drill presses, milling and grinding machines and other tools shape the metal to precise dimensions. The workers plan and set up the correct sequence of machine operations according to blueprints, layouts, or other instructions. They adjust speed, feed and other controls, and select the proper instruments or tools for each operation. Machinists plan and carry out all the steps necessary to make a final product.

Special Considerations

Workers usually have the following skills and aptitudes: work independently, accurately and carefully; follow directions closely; show mechanical and mathematical aptitude, patience, and ability to concentrate on detail.

Program Contacts at Sauk Valley Community College

Counseling Office, 815/835-6208.

Major Field Requirements - Sem/Hrs: 19

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- IND 116 - Industrial Print Reading 3 Semester hour(s)
 - IND 125 - Machining and Manufacturing Processes 3 Semester hour(s)
 - IND 203 - Advanced Machining and Manufacturing Processes 3 Semester hour(s)
 - IND 207 - Computer Numerical Control Programming I 3 Semester hour(s)
 - IND 208 - Computer Numerical Control Programming II 3 Semester hour(s)
 - IND 214 - Industrial Hydraulics 2 Semester hour(s)
 - IND 216 - Industrial Pneumatics 2 Semester hour(s)

Related Requirements

Select 11 hours from the following courses

- DFT 121 - Geometric Dimensioning and Tolerancing 2 Semester hour(s)
- DFT 209 - Advanced Computer-Aided Drafting 3 Semester hour(s)
- EET 107 - Introduction to DC and AC Circuits 4 Semester hour(s)
- EET 245 - Programmable Controllers 3 Semester hour(s)
- EET 252 - Industrial Electronics 3 Semester hour(s)
- EGR 103 - Engineering Graphics 3 Semester hour(s)
- ELT 160 - Fundamentals of Electricity 3 Semester hour(s)
- ELT 262 - Electrical Controls 3 Semester hour(s)
- HRS 114 - Sheet Metal Fabrication 3 Semester hour(s)
- HRS 120 - Basic Refrigeration 3 Semester hour(s)
- HRS 130 - Basic Heating** 3 Semester hour(s)
- IND 105 - Industrial Computers Applications 2 Semester hour(s)
- MAT 106 - Applied Mathematics 3 Semester hour(s)
- MET 205 - Die Design 2 Semester hour(s)
- MET 206 - Jig and Fixture Design 2 Semester hour(s)
- MET 230 - Metallurgy and Heat Treatment 3 Semester hour(s)
- QLT 106 - Metrology 2 Semester hour(s)
- WLD 101 - Industrial MIG Welding 2 Semester hour(s)

- WLD 102 - Shielded Metal Arc Welding 3 Semester hour(s)
- WLD 103 - MIG Welding 3 Semester hour(s)
- WLD 104 - TIG Welding 3 Semester hour(s)

Total Hours Required for Certificate: 30

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