

MACHINE TOOL TECHNOLOGY

A two-year program based on the National Institute for Metalworking Skills (NIMS) standards and related curriculum

- Core components are Computer-Aided Design (CAD), Computer-Aided Manufacturing (CAM), and Computer Numerical Controlled (CNC) training
- Students learn to use computers for CAD/CAM, Solid Works, Master CAM, CNC programming and operation, operation of conventional equipment, and G-Code Programming
- Students learn advanced math such as geometry and trigonometry
- Heavy emphasis on high tech equipment, programming, and precision machining of component parts
- Students learn computer competency in relation to machining and manufacturing, career management, employee relations, teamwork, interpersonal relations, communication skills, and social skills
- All students are given the opportunity to participate in a Work-based Learning experience, which exposes them to the operation of a business and specific job duties related to careers in the industry

Curriculum includes:

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| • Computer design and programming | • Decision making and problem-solving |
| • Safety | • Engineering drawings and sketches |
| • Job planning and management | • Precision measurement |
| • Blueprint reading | • Metalworking theory |
| • Quality control and inspection | • Word address component codes |
| • Process adjustment and improvement | |
| • General equipment maintenance | |

Certifications & Endorsements

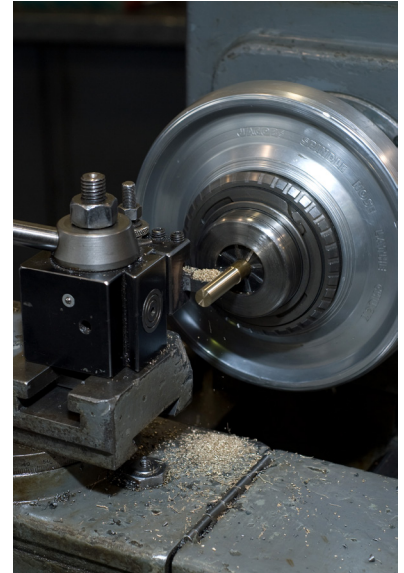
- Students can take a test to become certified NIMS Level I

Students who successfully complete the program qualify as:

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|-------------------------|------------------------|
| • Machine Operator | • Set-up |
| • Entry-level Machinist | • Programmer |
| • CNC Machinist | • Machinist Apprentice |
| • Tool and Die Maker | |

Employment opportunities requiring more skill and further education:

- Machinist
- Maintenance manager
- Mechanical engineer
- Production manager



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