

## Machine Tool Technology

*April, 2016 Update*

The Machine Tool Technology program is a key program in the manufacturing center curriculum with the Central Louisiana Technical Community College. Career opportunities in the field of Machine Tool Technology exist in manufacturing businesses in Central Louisiana and include CNC operators, machinists, lathe operators, machining specialists, maintenance technicians, machine shop inspectors, maintenance supervisors, maintenance schedulers and planners, maintenance managers and design technicians. Companies that employ machine tool trained technicians include manufacturing operations, fabrication shops, service businesses, oil and gas service business and specialty job shop service businesses. The pay for trained technicians range from entry level positions at \$30,000 to over \$75,000 for experienced technicians.

### Full Time Student Program

The Machine Tool Technology curriculum is a three semester course of study. Additional courses are available to complete an associate degree. Students in this career track can choose their semester 1 (summer) course of study as Certification for Manufacturing (C4M) or Autodesk Inventor. Students that have already obtained the C4M credential, completed 2 years of high school Project Lead the Way curriculum, or obtained an Autodesk Inventor certification are eligible to move directly into the second fall semester course of study.

#### Semester 1 (Summer) Machine Tool Technology Course of Study

##### **Certification for Manufacturing**

or

##### **Autodesk Inventor**

ORNT 1000 – Freshman Seminar

Autodesk Inventor Course of Study

IMFG 1100 – Introduction to Manufacturing

Autodesk Inventor Certified User

IMFG 1120 – Tools and Equipment Used in Manufacturing

IMFG 1200 – Automation

IMFG 1300 – Intro. to Fabrication, Process Technology and Machining

Students enrolled in the semester 2 (fall) course of study are required to apply for work internships. Work internship eligibility will be based on internship availability, academic achievement, course attendance and participation and technical competence.

#### **Semester 2 (Fall) Machine Tool Technology Course of Study**

Jobs 2500 – Critical Skills in the Workplace

IMFG 1100 – Shop Mathematics

IMFG 1310 – Machine Shop I

IMFG 1340 – Basic Lathe

IMFG 1440 – Basic Mill

Work internships will occur during the semester 3 (spring) course of study. These internships provide a source of income for the students while applying machine tool technical learnings to the manufacturing workplace.

#### **Semester 3 (Spring) Machine Tool Technology Course of Study**

IMFG 1410 – Machine Shop II

IMFG 2710 – CNC

Elective