# **Manufacturing Cluster**

The Machine Tool Technology program prepares students for entry-level career opportunities in modern computer-integrated manufacturing environments as machinists, tool & die makers, production-control technicians, quality-control technicians, CNC programmers, and CNC setup and operation technicians. Local industry is heavily involved in this program. Students will work from blueprints, sketches, or (CAD) computer-aided design or (CAM) computer-aided manufacturing program files. Students will safely set up, operate, and tear down (manual) drill presses, mills, lathes and grinders. Students will set up, write programs, prove out their programs using HAAS-(CNC) computer numeric controlled simulators. After programs are completed correctly, students will then proceed to run on CNC machines (mill and lathe). Students will adjust machines as necessary to maintain print tolerances and part quality using precision measuring tools.

## **Program Duration & Grade Level**

Machine Tool Technology is a two (2) year program.

Students start in the 11<sup>th</sup> grade and complete the program in their 12<sup>th</sup> grade year.

### **Certifications & Qualifications**

Upon completion of this two-year program, students will receive the following certifications: NIMS Certification and OSHA-10

## Requirements for Program

- Completion of Algebra I
- Complete Machine Tool Technology I with an 75 or higher

#### **Estimated Pay**

Estimated pay salaries for a person in the Machine Tool field

| Job Description  | Degree              | Estimated Starting Salary |
|------------------|---------------------|---------------------------|
| Machinist        | High School Diploma | \$36,840-\$47,620         |
| CNC Programmer   | High School Diploma | \$47,610-\$55,250         |
| Tool & Die Maker | High School Diploma | \$50,410-\$55,750         |

Bonds Career Center accepts students based upon a rubric considering attendance, discipline, grades, and teacher recommendations. Administrators will consider mitigating factors on a case-by-case basis. Administrators may revoke student privileges at any time for failure to meet program requirements. The maximum enrollment for this class is 16 students due to safety requirements, accreditation rules, and facility/equipment limitations.