



TENNESSEE COLLEGE
OF APPLIED TECHNOLOGY
SHELBYVILLE

**Machine Tool Technology
Dual Credit Agreement**

Program Description: This program is designed to give practical experience on lathes, grinders, vertical and horizontal mills, as well as hand tools and bench work. Students in the advancement phases of the program will receive instruction and perform practical exercises on computer numerically controlled equipment. A variety of work projects give the students actual experience in the fabrication of usable tools and parts from metal and machinable plastics. For more information, visit <https://tcatshelbyville.edu/programs/machine-tool-technology>.

Instructor(s): Ricky John - ricky.john@tcatshelbyville.edu; Trey Sells – trey.sells@tcatshelbyville.edu

Total Time Commitment of Program: 1728 clock hours

Aligned Secondary Program of Study: Machining Technology

Postsecondary Course(s) for which Dual Credit will be Awarded: Worker Characteristics; Shop Theory; Benchwork and Manual Machine Tool; Match Concepts

Assessment Range and Hours Awarded:

- 0-79 = 0 clock hours
- 80-85 = 50% clock hours on scale below
- 86-90 = 65% clock hours on scale below
- 90-95 = 85% clock hours on scale below
- 95-100 = 100% clock hours on scale below

Skill Assessment:

Assessment will include both hands-on and written evaluations.

- Work Ethics Study - 6 clock hours
- Shop Theory – 50 clock hours
- Benchwork & Layout (Layout projects & Filing projects) - 125 clock hours
- Shop Math – 50 clock hours

Aligned Industry Certifications and Hours Awarded:

- Machining Level 1 – Measurement, Materials, and Safety Certification (NIMS) - 30 clock hours

Total Possible Dual Credit Hours Awarded from TCAT Shelbyville Assessment: 231 clock hours

Total Possible Dual Credit Hours Awarded from Industry Certifications: 30 clock hours

Disclaimer: The maximum possible award that a student can earn is 432 clock hours.