Program Course Sequence

Junior Year, All Year

Principles of Competitive Manufacturing

Senior Year, First Semester

Manual Milling

Senior Year, Second Semester

CNC Turning: Programming Set-up & Operations



Program Fees:

OSHA 30 Certification $160

$100 for Uniforms

Expect Success at CCST
Certifications, Citizenship, Skills & Technology

Students from the five county high schools have the opportunity to begin programs during their junior year by a designated application process. Students will complete their programs during their senior year.



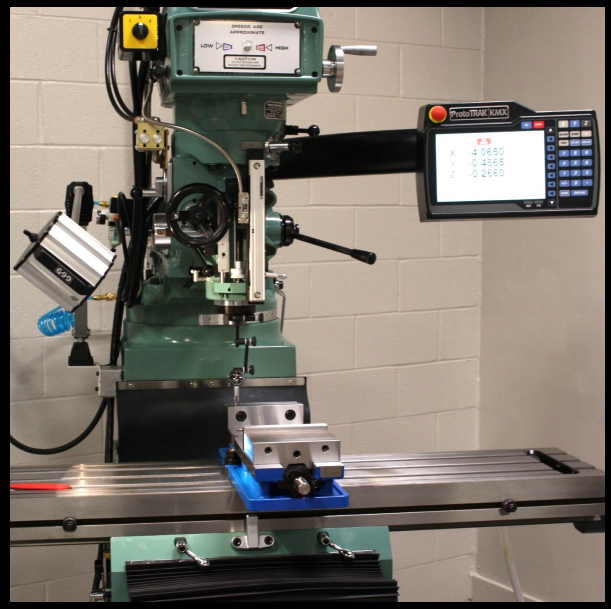
CECIL COUNTY SCHOOL OF TECHNOLOGY

Exploring Your Tomorrow!

Cecil County Public Schools does not discriminate in admissions, access, treatment or employment in its programs and activities on the basis of race, color, gender, age, national origin, religion, sexual orientation, or disabling condition.

Revised 10/2025

Manual Machining/ CNC Programming & Operations



Cecil County School of Technology
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Elkton, MD 21921
Phone: 410.392.8879
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Guidance Office: 410.392.8880

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MANUAL MACHINING/CNC PROGRAMMING & OPERATIONS

PROGRAM OVERVIEW

This program prepares students for a beginning career in manufacturing and machine technologies and aligns with the National Institute of Metalworking Skills (NIMS) Machining Level I Credentials. The program involves classroom instruction and hands-on education in precision machining while developing competency in process control, manual operations, process adjustment, part inspection, as well as demonstrating safety in machine operations. Students will also develop the work place skills necessary for success in the industry.



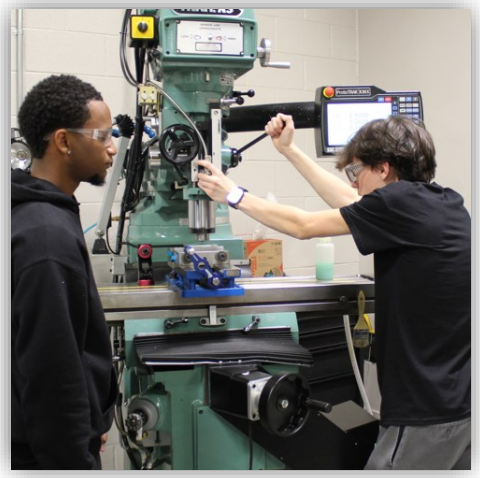
EXAMPLES OF PROGRAM TOPICS

- Develop inspection plans and inspect simple parts using precision tools and techniques
- Learn and demonstrate quality assurance, process planning, and quality control
- Read and develop technical drawings
- Perform bench work drilling, threading, tapping, and reaming operations
- Produce a part that matches a process plan and the print specifications
- Perform routine milling and location of hole centers
- Apply principles of 3D coordinate planes and develop a program for producing a part on a CNC lathe or CNC turning center



MAIN PROGRAM AREAS

- Manual Milling
- Measurement, Materials, & Safety
- Job Planning, Bench work, & Layout
- CNC Turning: Programming Set-up & Operations



AVERAGE WAGE FOR ALL TYPES OF MANUFACTURING JOBS

Average Hourly Wage:
$35.93

Average Annual Wage:
$74,724