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 Fee:
\$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 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.



Manual Machining/ CNC Programming & Operations



Cecil County School of Technology

912 Appleton Road Elkton, MD 21921 Phone: 410.392.8879 Fax: 410.392.8884 Guidance Office: 410.392.8880

Expect Success at CCST
Certifications, Citizenship, Skills & Technology

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