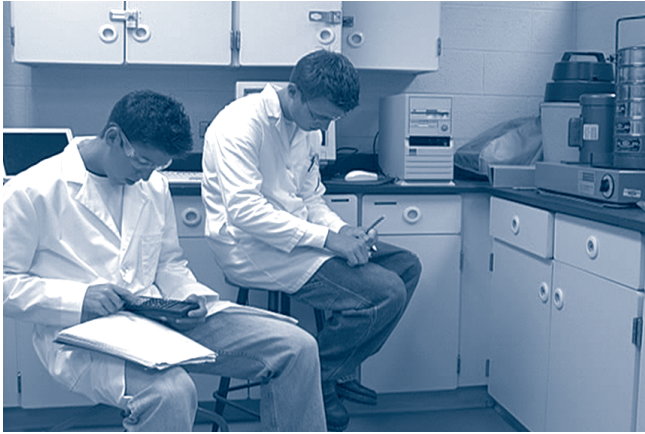


COLLEGE TECH PREP

Manufacturing and Pre-Engineering Academy 

This two-year College Tech Prep Academy combines college prep academics with real-world technical studies. Students rotate through four technology areas – computer-aided design (CAD), electronics, manufacturing and polymers. Math, physics and English are linked with the technology curriculum, and instruction is strongly focused on self-directed learning and occurs through team teaching and project-based learning. Special extracurricular projects include participation in competitions for robotics, miniature bridge building, and cardboard canoe construction. The Academy outlines a career pathway leading to a degree at our partner schools, including The University of Akron, where Credit Banking is available, and Fenn College of Engineering at Cleveland State University. [Separate application process.](#) [See your counselor](#)

GRADE LEVEL: 10, 11, 12 (third year option for those accepted in grade 10)
LENGTH: Two years
SCHOOL: Roosevelt, Stow-Munroe Falls

CREDIT:
Academic credits - Math 1, Physics 1 and English 1; Technology credits 3

Areas of Concentration

- Basic electronic principles
- Primary industrial and manufacturing systems
- Computer-aided design
- Lab testing procedures/standards
- College prep English, including:
 - Academic and technical writing
 - Research and report preparation
 - Communication/presentation skills
 - Literary studies
- Physics
- Algebra II
- Pre-Calculus
- Calculus

Professional Pathway

- Engineering
- Computer-Aided Design (CAD)
- Polymers
- Electronics
- Quality control technology
- Industrial manufacturing
- Electrical, electronic and electromechanical engineering
- Machine tool & die technology
- Apprenticeships
- Business

Prerequisites Required

- Algebra I
- Completion of one college prep credit in science and English

Recommended

- Chemistry (before graduation)
- Geometry (prior to end of tenth grade)
- Average G.P.A. of 2.5 for Algebra I, English, and science for three previous semesters
- Average 95% attendance for three previous semesters
- Passed all sections of OGT

Higher education opportunities

- 15 college credits available at the University of Akron. See page 30.
- Associate's degree
- Bachelor's degree