Industry Credentials, Concentration Sequences, and Career Clusters

Computer Integrated Manufacturing (PLTW) (8442)

Industry Credentials:

These apply only to 36-week courses

- Business Certificate for Manufacturing Examination
- CAD Assessment
- CAD-CAM Assessment
- College and Work Readiness Assessment (CWRA+)
- Electronics Module: AC (EM2) Examination
- Manufacturing Technician Level 1 (MT1) Certification Examination
- National Career Readiness Certificate Assessment
- Pre-Engineering/Engineering Technology Assessment
- Project Lead the Way End-of-Course Assessments
- Workplace Readiness Skills for the Commonwealth Examination

Concentration Sequences:

A combination of this course and those below, equivalent to two 36-week courses, is a **concentration sequence.** *A* **program completer** *is a student who has met the requirements for a CTE concentration sequence and all other requirements for high school graduation or an approved alternative education program. Students wishing to complete a specialization may take additional courses based on their career pathways.*

- Introduction to Engineering Design (PLTW)

Career Clusters, Career Pathways, and Occupations:

- Manufacturing
    - Health, Safety, and Environmental Assurance
        - Safety Engineer
    - Logistics and Inventory Control
        - Logistician
    - Manufacturing Production Process Development

- - - Electro-Mechanical Technician
    - Industrial Engineer
    - Industrial Engineering Technician
    - Manufacturing Systems Engineer
    - Production Manager
    - Programmer
  - Production
    - Automated Manufacturing Technician
  - Quality Assurance
    - Quality Control Technician
- Science, Technology, Engineering and Mathematics
  - Engineering and Technology
    - Commercial and Industrial Designer
    - Computer Hardware Engineer
    - Computer Programmer
    - Electrical Engineer
    - Electro-Mechanical Technician
    - Electronics Engineering Technician
    - Industrial Engineer
    - Manufacturing Systems Engineer
    - Mechanical Engineer
    - Quality Technician
  - Science and Mathematics
    - Secondary School Teacher
    - Technical Writer