

Industry Credentials, Concentration Sequences, and Career Clusters

Materials and Processes Technology (8478 / 8433)

Industry Credentials:

These apply only to 36-week courses.

- College and Work Readiness Assessment (CWRA+)
- National Career Readiness Certificate Assessment
- Stratasys Additive Manufacturing Certification – Level 1 Examination
- 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.*

- Construction Technology (8431/36 weeks)
- Construction Technology (8432/18 weeks)
- Manufacturing Systems I (8425/36 weeks)
- Manufacturing Systems I (8426/18 weeks)
- Production Systems (8446/18 weeks)
- Production Systems (8447/36 weeks)
- Sustainability and Renewable Technologies (8414/36 weeks)
- Technical Drawing and Design (8435/36 weeks)
- Technical Drawing and Design (8434/18 weeks)
- Technology Foundations (8403/36 weeks)
- Technology Foundations (8402/18 weeks)

Career Clusters, Career Pathways, and Occupations:

- Manufacturing
 - Health, Safety, and Environmental Assurance
 - Occupational Health and Safety Specialist
 - Safety Engineer
 - Manufacturing Production Process Development

- Industrial Engineer
- Industrial Engineering Technician
- Manufacturing Systems Engineer
- Precision Inspector, Tester, or Grader
- Production
 - Assembler
 - Automated Manufacturing Technician
- Quality Assurance
 - Precision Inspector, Tester, or Grader
 - Quality Control Technician
 - SPC (Statistical Process Control) Coordinator