

Industry Credentials, Concentration Sequences, and Career Clusters

Technology of Robotic Design

8421 (36 weeks) and 8420 (18 weeks)

Industry Credentials:

These apply only to 36-week courses.

- College and Work Readiness Assessment (CWRA+)
- National Career Readiness Certificate Assessment
- Robotics Certification Examinations
- 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.*

- Electronics Systems I (8416/36 weeks)
- Electronics Systems I (8417/18 weeks)
- Electronics Systems II (8412/36 weeks)
- Engineering Computer Science (8449/36 weeks)
- Manufacturing Systems I (8425/36 weeks)
- Manufacturing Systems I (8426/18 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:

- Information Technology
 - Information Support and Services
 - Applications Integrator
 - Computer Numerical Control (CNC) Programmer
 - Systems Analyst

- Manufacturing
 - Health, Safety, and Environmental Assurance
 - Occupational Health and Safety Specialist
 - Safety Engineer
 - Logistics and Inventory Control
 - Logistician
 - Materials Handler
- Manufacturing
 - Manufacturing Production Process Development
 - Electro-Mechanical Technician
 - Industrial Engineer
 - Industrial Engineering Technician
 - Manufacturing Systems Engineer
 - Precision Inspector, Tester, or Grader
 - Production Manager
 - Programmer
 - SPC (Statistical Process Control) Coordinator
 - Production
 - Automated Manufacturing Technician
 - Quality Assurance
 - Calibration Technician
 - Precision Inspector, Tester, or Grader
 - Quality Control Technician
 - SPC (Statistical Process Control) Coordinator
- Science, Technology, Engineering, and Mathematics
 - Engineering and Technology
 - Computer Hardware Engineer
 - Electro-Mechanical Technician
 - Human Factors Engineer
 - Industrial Engineer
 - Industrial Engineering Technician
 - Manufacturing Systems Engineer
 - Mechanical Engineer
 - Mechanical Engineering Technician
 - Systems Analyst
 - Science and Mathematics
 - Secondary School Teacher
 - Technical Writer