

# Industry Credentials, Concentration Sequences, and Career Clusters

## Technology of Robotic Design (8420)

### 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 (18 Weeks)
- Electronics Systems I (36 Weeks)
- Engineering Computer Science
- Manufacturing Systems I (18 Weeks)
- Manufacturing Systems I (36 Weeks)
- Technical Drawing and Design (18 Weeks)
- Technical Drawing and Design (36 Weeks)
- Technology Foundations (18 Weeks)
- Technology Foundations (36 Weeks)

### Career Clusters, Career Pathways, and Occupations:

- Information Technology
  - Information Support and Services
    - Applications Integrator
    - Computer Numerical Control Programmer (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 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