

Industry Credentials, Concentration Sequences, and Career Clusters Technological Systems (8477, 8457, 8486, 8462, 8463)

Industry Credentials:

These apply only to 36-week courses.

- College and Work Readiness Assessment (CWRA+)

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.*

- Title (XXXX/XX weeks)
- Title (XXXX/XX weeks)

Career Clusters, Career Pathways, and Occupations:

- **Science, Technology, Engineering and Mathematics**
 - **Engineering and Technology**
 - **Aerospace Engineer**
 - **Aerospace Engineering Technician**
 - **Agricultural Engineer**
 - **Architect**
 - **Assembler**
 - **Biomedical Engineer**
 - **Chemical Engineer**
 - **Civil Engineer**
 - **Civil Engineering Technician**
 - **Commercial and Industrial Designer**
 - **Computer Hardware Engineer**
 - **Computer Programmer**
 - **Computer Software Engineer**
 - **Electrical Engineer**
 - **Electrical Engineering Technician**

- **Electro-Mechanical Technician**
- **Electronics Engineering Technician**
- **Engineer**
- **Engineering Manager**
- **Engineering Technician**
- **Environmental Engineer**
- **Human Factors Engineer**
- **Industrial Engineer**
- **Industrial Engineering Technician**
- **Landscape Architect**
- **Machine Setter, Operator**
- **Manufacturing Systems Engineer**
- **Marine Engineer**
- **Materials Engineer**
- **Mechanical Engineer**
- **Mechanical Engineering Technician**
- **Network and Computer Systems Administrator**
- **Network Systems and Data Communication Analyst**
- **Nuclear Engineer**
- **Petroleum Engineer**
- **Power Systems Engineer**
- **Production, Planning, Expediting Clerk**
- **Project Manager**
- **Quality Engineer**
- **Quality Technician**
- **Statistician**
- **Stockroom, Warehouse, or Storage Yard Stock Clerk**
- **Systems Analyst**
- **Technical Writer**
- **Telecommunications Specialist**
- **Transportation Manager**

- **Science and Mathematics**
 - **Animal Nutritionist**
 - **Animal Scientist**
 - **Atmospheric Scientist**
 - **Biologist**
 - **Botanist**
 - **Ecologist**
 - **Economist**
 - **Environmental Scientist**
 - **Geoscientist**
 - **Hydrologist**
 - **Materials Scientist**
 - **Oceanographer**

- **Plant Biologist**
- **Plant Breeder and Geneticist**
- **Plant Pathologist**
- **Research Chemist**
- **Secondary School Teacher**
- **Technical Writer**
- **Toxicologist**
- **Veterinarian**
- **Veterinary Assistant**