

Industry Credentials, Concentration Sequences, and Career Clusters

Engineering Essentials (PLTW) (8906)

Industry Credentials:

These apply only to 36-week courses

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

- Aerospace Engineering (PLTW)
- Civil Engineering and Architecture (PLTW)
- Computer Integrated Manufacturing (PLTW)
- Digital Electronics (PLTW)
- Engineering Design and Development (PLTW)
- Introduction to Engineering Design (PLTW)
- Principles of Engineering (PLTW)

Career Clusters, Career Pathways, and Occupations:

- Science, Technology, Engineering and Mathematics
 - Engineering and Technology
 - Aerospace Engineering Technician
 - Assembler
 - Civil Engineering Technician
 - Computer Programmer
 - Electro-Mechanical Technician
 - Electronic Drafter
 - Engineer

- Engineering Technician
- Industrial Engineering Technician
- Mechanical Engineer
- Nuclear Engineer
- Science and Mathematics
 - Secondary School Teacher