

# Industry Credentials, Concentration Sequences, and Career Clusters

## Civil Engineering and Architecture (PLTW) (8430)

### Industry Credentials:

*These apply only to 36-week courses*

- College and Work Readiness Assessment (CWRA+)
- Design and Pre-Construction Assessment
- National Career Readiness Certificate Assessment
- Pre-Engineering/Engineering Technology Assessment
- Project Lead the Way End-of-Course Assessments
- 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.*

- Introduction to Engineering Design (PLTW)

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

- Architecture and Construction
  - Construction
    - Construction Manager
    - Construction and Building Inspector
    - Project Manager
  - Design/Pre-Construction
    - Architect
    - Building Code Inspector
    - Civil Engineer
    - Cost Estimator

- Maintenance and Operations
  - Construction Manager
  - General Contractor
  - Project Manager
- Government and Public Administration
  - Planning
    - Urban and Regional Planner
  - Regulation
    - Environmental Compliance Inspector
- Science, Technology, Engineering and Mathematics
  - Engineering and Technology
    - Architect
    - Civil Engineer
    - Engineering Manager
    - Environmental Engineer
    - Petroleum Engineer
    - Project Manager
    - Statistician
    - Systems Analyst
    - Transportation Manager
  - Science and Mathematics
    - Ecologist
    - Environmental Scientist
    - Geodetic Surveyor