

Industry Credentials, Concentration Sequences, and Career Clusters

Engineering Design and Development

8443 (36 weeks)

Industry Credentials:

These apply only to 36-week courses.

- College and Work Readiness Assessment (CWRA+)
- Design and Pre-Construction Assessment
- Engineering Technology Examination
- 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.*

- Engineering Practicum IV (8453/36 weeks)
- Introduction to Engineering Design (PLTW) (8439/36 weeks)

Career Clusters, Career Pathways, and Occupations:

- Science, Technology, Engineering, and Mathematics
 - Engineering and Technology
 - Aerospace Engineer
 - Biomedical Engineer
 - Marine Engineer
 - Mechanical Engineer
 - Nuclear Engineer
 - Petroleum Engineer