

# Industry Credentials, Concentration Sequences, and Career Clusters

## Geospatial Technology I

### Industry Credentials:

*These apply only to 36-week courses.*

- ArcGIS Desktop Entry Certification Examination
- College and Work Readiness Assessment (CWRA+)
- National Career Readiness Certificate Assessment
- Spatial Projects and Community Exchange (SPACE) Examination
- Spatial Technology and Remote Sensing (STARS) Certification Examination
- 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.*

- Geospatial Technology II (8424/36 weeks)
- Modeling and Simulation Technology (8460/36 weeks)

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

- Agriculture, Food and Natural Resources
  - Agribusiness Systems
    - Agricultural Economist
    - Farm, Ranch Manager
    - Farmer/Rancher
  - Environmental Service Systems
    - Environmental Compliance Inspector
    - Environmental Sampling and Analysis Technician
    - Water Conservationist
  - Natural Resources Systems
    - Ecologist
    - Fish and Game Officer
    - Forest Manager, Forester
    - Forest Technician
    - Geological Technician
    - Outdoor Recreation Guide

- Park Manager
- Park Technician
- Range Technician
- Wildlife Manager
- Architecture and Construction
  - Design/Pre-Construction
    - Civil Engineer
    - Survey Technician
    - Surveyor
- Government and Public Administration
  - National Security
    - Combat Specialty Officer
    - Military Enlisted Personnel
    - Military Intelligence Specialist
    - Military Officer
    - Special Forces Personnel
  - Planning
    - Actuarial Analyst
    - Economic Development Coordinator
    - Economist
    - Urban and Regional Planner
  - Public Management and Administration
    - Eligibility Specialist
    - Government Accountant/Auditor
    - Mail Carrier
    - Postal Service Clerk
    - Postmaster/Mail Superintendent
  - Regulation
    - Aviation Inspector
    - Compliance Officer
    - Environmental Compliance Inspector
    - Financial Analyst
    - Financial Manager
    - Private Detective, Investigator
    - Transit Vehicle Inspector
  - Revenue and Taxation
    - Compliance Officer
    - Financial Analyst
    - Real Estate Appraiser
    - Revenue Agent
- Information Technology
  - Information Support and Services
    - Data Entry Specialist
    - Data Modeler
    - Database Administrator
    - Database Analyst

- Geographic Information Systems (GIS) Technician
- Network Systems
  - Database Analyst
  - Network and Computer Systems Administrator
- Programming and Software Development
  - Applications Integrator
  - Computer Software Engineer
  - Programmer
- Web and Digital Communications
  - Applications Integrator
- Law, Public Safety, Corrections and Security
  - Emergency and Fire Management Services
    - Emergency Medical Technician, Paramedic
    - Firefighter
  - Law Enforcement Services
    - Police Officer
    - Private Detective, Investigator
- Science, Technology, Engineering and Mathematics
  - Engineering and Technology
    - Agricultural Engineer
    - Civil Engineer
    - Civil Engineering Technician
    - Computer Software Engineer
    - Engineering Manager
    - Environmental Engineer
    - Industrial Engineer
    - Petroleum Engineer
    - Power Systems Engineer
    - Telecommunications Specialist
  - Science and Mathematics
    - Botanist
    - Ecologist
    - Economist
    - Environmental Scientist
    - Geodetic Surveyor
    - Geoscientist
    - Hydrologist
- Transportation, Distribution and Logistics
  - Health, Safety and Environmental Management
    - Health, Safety, and Environment Manager
  - Logistics Planning and Management Services
    - Logistics Analyst
    - Logistics Engineer
    - Logistics Manager
  - Transportation Operations
    - Pilot

- Transportation Manager
- Transportation Systems/Infrastructure Planning, Management and Regulation
  - Civil Engineer
  - Civil Engineering Technician
  - Traffic Engineer
  - Traffic Technician
  - Urban, Regional Planner
- Warehousing and Distribution Center Operations
  - Transportation Manager