

Connecticut CTE

# **Transportation Technology (Grades 9-12)**

## Transportation Technology

### A Transportation Technology TRAN

- 1 Identify historical, social, economic, environmental, and government regulations impact transportation technology. TRAN.01
  - a Demonstrate historical innovations in the evolution of transportation systems. TRAN.01.01
  - b Demonstrate how technological developments have changed how goods and people are transported. TRAN.01.02
  - c Predict the social, economic and environmental impacts of existing and evolving transportation technologies. TRAN.01.03
  - d Describe the importance of transportation systems to maintaining our quality of life. TRAN.01.04
  - e Explain how governmental regulations impact transportation. TRAN.01.05
- 2 Define transportation technology systems. TRAN.02
  - a Define and properly use common transportation technology terminology (e.g. combustion. pathways. velocity. vehicle. mode. payload. and terminal). TRAN.02.01
  - b Demonstrate and apply how propulsion, control, guidance, payload, and support systems for various land, water, space, air, and materials handling systems are used in transportation technologies. TRAN.02.02
  - c Demonstrate and apply basic applications for transportation technology (e.g. moving people. transporting goods. and recreation) and generate examples of each. TRAN.02.03
  - d Design, build and evaluate a simple fixed path or variable path transportation system. TRAN.02.04
  - e Solve a simple transportation problem by designing, building, and testing a vehicle that will carry a payload a specified distance. TRAN.02.05
  - f Describe and give examples on how transportation plays a vital role of other technologies including but not limited to manufacturing, construction, communications, health and safety and agriculture. TRAN.02.06
  - g Identify, design and apply and the uses of different energy and power technologies. TRAN.02.07
  - h Use design-based learning approaches that intentionally integrate the content and process of science and/or mathematics education with the content and process of technology and/or engineering education. TRAN.02.08