

# Elizabethton CTE

# STEM: Engineering Technology

## Meet the Instructor:

David Campbell

- BS in Engineering Technology from East Tennessee State University
- Occupational Experience includes a total of 10 years in Manufacturing Engineering focusing on Process/Product Development and Project Management

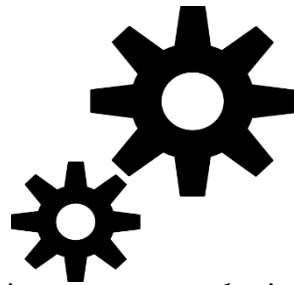


## Freshmen Courses Offered:

### Principles of Engineering and Technology

(Program of Study: STEM--Engineering) This course is a foundational course in the STEM cluster for students interested in learning more about careers

in engineering and technology. This course covers basic skills required for engineering and technology fields of study. Upon completion of this course, proficient students are able to identify and explain the steps in the



engineering design process. They can evaluate an existing engineering design, use fundamental sketching and engineering drawing techniques, complete simple design projects

using the engineering design process, and effectively communicate design solutions to others.



## Courses Offered

- Principles of Engineering and Technology
- Engineering Design 1
- Engineering Design 2
- AP Computer Science Principles
- Work-based Learning

The technology course is created using Science Technology

Engineering & Math (STEM) Education.

The STEM Education program of study is designed for students interested in the exciting careers available in the high-demand fields of science, technology,

engineering, and mathematics. This program of study is uniquely structured to offer students an overview of STEM fields, occupations, and applications, followed by more specialized study of the scientific inquiry or engineering design process. The course uses a project-based learning environment that applies technical skills and the engineering design process to complete a variety of hands-on projects, including: 2D and 3D modeling, CNC and 3D printing.

## STEM Includes:

- Engineering



Students enrolled in the STEM classes have the opportunity to participate in the Battle of the Build Competition Johnson City Home Builders Association's Annual Home and Outdoor Show and the Solar-Powered Go-cart Race at Bristol Motor Speedway.



**STEM** Science, Technology,  
Engineering, Mathematics