

# STEM Endorsement – Engineering

## Required courses:

8616 – Principles of Applied Engineering  
8602 – Engineering Design & Presentation  
8615 – Engineering Science  
8660V – Practicum in STEM (Miller)

## What can students expect:

The Engineering program of study focuses on the design, development, and use of engines, machines, and structures. CTE learners will learn how to apply science, mathematical methods, and empirical evidence to the innovation, design construction, operation, and maintenance of different manufacturing systems.

## Traits of students who excel:

- Analytical
- Creative
- Team players
- With leadership skills
- Flexible & Intuitive

## Traits of students who struggle:

- Fear of computers
- Not a team player, cannot work in a group.

## Career & Technical Student Organizations:

Technology Student Association, Robotics Club

## Additional Opportunities:

Autodesk AutoCAD Certification  
TSA Competition

Autodesk Inventor Certification  
UIL Contest

## Career & Salary Information (*Figures from [payscale.com](https://payscale.com), accessed May 2022*):

Aerospace Engineering: \$122K  
Chemical Engineering: \$121k  
Electrical Engineering: \$107k  
Mechanical Engineering: \$107k

Biomedical Engineering: \$101K  
Civil Engineering: \$95k  
Environmental Engineering: \$101k  
Advertising/Marketing: \$40k - \$70