

# STEM Academy

## **Mission:**

The mission of the STEM (Science, Technology, Engineering, & Math) Academy is to use an integrated sequence of courses and active involvement of business partners to target essential skills and understandings that prepare students for work and college environments related to careers in STEM.

## **Essential Questions:**

1. How do trends in technology, economics, math and science drive innovation?
2. How will STEM based industries adapt to future challenges including globalization and the environment?
3. How do human wants and needs drive innovation & influence each other?
4. What role do ethics play in design, innovation and creation?
5. How do history and culture influence innovation within the engineering industry?

## **Learning & Assessment:**

Students will complete project-based assessments designed by professionals in the field to demonstrate skills and understanding of both course content and critical skills required for success in these careers. Skills include:

- Productivity and Accountability
- Critical Thinking & Problem Solving
- Creativity & Innovation
- Information & Technology
- Initiative & Self-Direction
- Communication and Collaboration