

## DAVIS ESSENTIAL SKILLS AND KNOWLEDGE

## **ENGINEERING PRINCIPLES 2**

## **Course Description**

The second in a sequence of "hands-on" courses that tie observations and concepts common to a variety of different engineering disciplines in order to develop a better understanding of basic math and science principles used in engineering. By utilizing problem-solving skills in the laboratory environment, students will develop skills and attitudes that impact and expand occupational opportunities.

This is a foundation course in the engineering pathway.

## **Strands**

- 1. Students will follow safety practices.
- 2. Students will investigate career opportunities within the world of Engineering.
- 3. Students will understand and develop positive work ethics, communication skills, and leadership skills.
- 4. Students will identify the qualities of successful engineering design, recognize its role in society, and develop projects using an engineering design process.
- 5. Students will understand ways in which Electrical Engineering can enhance health and well-being of individuals
- 6. Students will understand ways in which Chemical Engineering can enhance the lives of individuals.
- 7. Students will understand ways in which Materials Science can enhance health and well-being of individuals.
- 8. Students will understand ways in which Mechanical Engineering can enhance the lives of individuals.

