

All virtual courses include a state mandated virtual synchronous session at least once per marking period. These sessions will be scheduled and facilitated by the course instructor.

## Technology

### CONCEPTS OF ENGINEERING & TECHNOLOGY (.5 credit)

#### Grades: 9-12

Each day, we are surrounded by technology and engineering projects. From our phones to the bridges we drive over, engineering and technology influence many parts of our lives. In Concepts of Engineering and Technology, you will learn more about engineering and technology careers and what skills and knowledge you'll need to succeed in these fields. You'll explore innovative and cutting-edge projects that are changing the world we live in and examine the design and prototype development process. Concepts of Engineering and Technology will also help you understand the emerging issues in this exciting career field.

### INTRODUCTION TO MANUFACTURING: Product Design and Innovation (.5 credit)

#### Grades: 9-12

Think about the last time you visited your favorite store. Have you ever wondered how the products you buy make it to the store shelves? Whether it's video games, clothing, or sports equipment, the goods we purchase must go through a manufacturing process before they can be marketed and sold. In this course, you'll learn about the types of manufacturing systems and processes used to create the products we buy every day. You'll also be introduced to the various career opportunities in the manufacturing industry including those for engineers, technicians, and supervisors. As a culminating project, you'll plan your own manufacturing process for a new product or invention! If you thought manufacturing was little more than mundane assembly lines, this course will show you just how exciting and fruitful the industry can be.

### RENEWABLE TECHNOLOGIES (.5 credit)

#### Grades: 9-12

Interested in transforming energy? With concerns about climate change and growing populations' effects on traditional energy supplies, scientists, governments, and societies are increasingly turning to renewable and innovative energy sources. In the Introduction to Renewable Technologies course, you'll learn all about the cutting-edge field of renewable energy and the exciting new technologies that are making it possible. You'll explore new ways of generating energy and storing that energy, from biofuels to high-capacity batteries and smart electrical grids. You'll also learn more about the environmental and social effects of renewable technologies and examine how people's energy decisions impact policies.