

## Engineering 1 - 2

Grade: 9-12

Credit: CTE or .5 Math

Come and explore the many sides of engineering and technology in this hands on class. Be a part of creative problem-solving activities ranging from design and build engineering challenges to fun in-class construction competitions. Students will learn to design solutions to problems while developing critical thinking and creativity skills as well as improving communication and collaboration skills. Join in with your classmates in firing catapults, launching rockets, flying paper airplanes, racing CO2 cars and so much more.



## Material Science 1-2

Grade: 10-12

Credit: CTE or Lab Science

This is a hands on course that explores the chemistry of solid materials. Students will work in teams or individually doing precision measuring of metals, chemicals, ceramics, polymers and composites. Students will be doing experiments, demonstrate the effects of reactivity, temperature, stress and they will be manipulating the mixtures. Students will do hands on projects like making rings, glass beads, stain glass, ceramics and much more.



## Engineering 3-4: Mechtronics

Prerequisites: Engineering 1-2 or Drafting Design 1-2

Grades: 11-12

Credit: CTE

In this hands on project based class where students Combine mechanical, electronic, computer and civil engineering. Students will create projects that use motion, energy and force to design and produce machines that solve problems. Students will work in teams to design projects, do presentations and make actual useful projects used here at school.