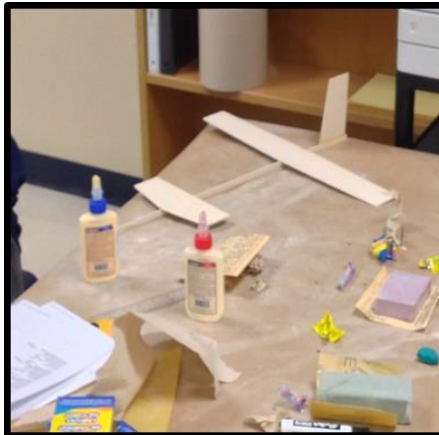
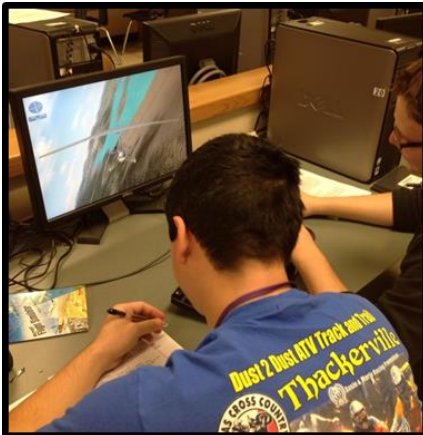


Aerospace Engineering



Prerequisite: Principles of Engineering

Course: 1834CT

Credits: 1

Length: 18 weeks

Placement: 10-12

Course Description

Aerospace Engineering is the branch of engineering that deals with aircraft, spacecraft, and their related systems. The course explores the evolution of flight, flight fundamentals, flight simulation, navigation and control, GPS, aerospace materials, propulsion, space travel, orbital mechanics, ergonomics, remotely operated systems and related careers. Students will analyze, design and build aerospace systems. While implementing these designs, students will continually work on their interpersonal skills, creativity and application of the design process. Students build gliders, build model rockets, use flight simulators, build composite materials, fly model planes, fly model helicopters, etc... Visit Achieve Texas for more information on career opportunities at: <http://www.achievetexas.org/Sciences.htm>

Student Activities

- Build Gliders
- Build Model Rockets
- Fly Planes on Flight Simulators
- Build Composite Materials & Test
- Study Propulsion
- Study Flight Physiology

Additional Considerations

Students must have successfully completed Geometry without modification. Students need fine motor skills and mobility. Cannot modify curriculum.

Organizations/After School/Competitions

Shine Runners Solar Car Racing Team
 FTC Robotics
 Technology Student Association