

AEROSPACE ENG PLTW

Course Description

Aerospace Engineering propel students' learning in the fundamentals of atmospheric and space flight. As they explore the physics of flight, students bring the concepts to life by designing an airfoil, propulsion system, and rockets. They learned basic orbital mechanics using industry standard software. They also explore robot systems through projects such as remotely operated vehicles

Strands

1. Students will gain an awareness of the development of Aerospace Engineering.
2. Students will know the basic forces of flight and how they are controlled.
3. Students will have a basic understanding of navigation.
4. Students will gain an understanding of materials used in Aerospace Engineering.
5. Students will have a basic understanding of rocket propulsion and space travel.
6. Students will consider human factors in design.
7. Students will learn about manmade objects in space.
8. Students will make elementary calculations describing orbital motion.
9. Students will consider and improve efficiencies in design.
10. Students will simulate satellite mapping mission.
11. Students will learn about the variety of careers in Aerospace Engineering.

