

**Plano Senior High School Aerospace Engineering
Planned Course Outline/Unit Overview**

Aerospace Engineering Planned Course Outline

Unit 1: Introduction to Aerospace

Lesson 1.1: Evolution of Flight

Lesson 1.2: Physics of Flight

Lesson 1.3: Flight Planning and Navigation

Unit 2: Aerospace Design

Lesson 2.1: Materials and Structures

Lesson 2.2: Propulsion

Lesson 2.3: Flight Physiology

Unit 3: Space

Lesson 3.1: Space Travel

Lesson 3.2: Orbital Mechanics

Unit 4: Alternative Applications

Lesson 4.1: Alternative Applications

Lesson 4.2: Remote Systems

Lesson 4.3: Aerospace Careers

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August 24, 2015

Dear Aerospace Engineering Parent,

Plano Senior High School is proud to offer two PLTW on our campus this year from Project Lead the Way (PLTW) - Principles of Engineering and Aerospace Engineering. Your student's course, Aerospace Engineering, is a one year elective course available at the Senior High School level. PLTW is the leading provider of rigorous and innovative Science, Technology, Engineering, and Mathematics (STEM) education curricular programs used in middle and high schools across the U.S. PLTW curriculum is founded in the fundamental problem-solving and critical-thinking skills taught in traditional career and technical education, but at the same time integrates national academic standards and STEM principles to create a model for 21st century learning.

Successful completion of the Aerospace Engineering course could help your student earn college credit. Please see the Aerospace Engineering information sheet sent home with your student for more information.

We are continuing to develop a Partnership Team for our Project Lead the Way program, and we would like to include parents who currently work as engineers or perhaps in another related field to join in this partnership. The Partnership Team will provide leadership to help build and support the development of exceptional STEM learning experiences for students. The Partnership Team provides a unique opportunity for you and/or your company to actively participate in student education and local workforce development in the community.

If you have questions about the program, you may contact me or set up a visit to talk to our students and see the program in action. You can also visit the national Project Lead the Way website at www.pltw.org. The website includes descriptions of the courses and information about the program. It is our goal to prepare the students that graduate from our program to be successful in the pursuit of STEM careers by providing them with a good foundation for postsecondary success. Your and your company's participation would serve as an integral part of this goal.

Please call or email me at your earliest convenience to let me know if you would like to be a part of this Project Lead the Way effort. Thank you for your consideration, and I look forward to an exciting year exploring the Aerospace Engineering with your student.

Warmly,

Suzanne Day,
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