



# Virtual Learning

# Unmanned Flight Safety and Operations

**Career Exploration - Aeronautical Engineer**

May 1, 2020



# Unmanned Flight Safety and Operations

## Lesson: May 1, 2020

### **Objective/Learning Target:**

Students will learn about the career of an aeronautical engineer and what requirements are needed to become an one.



## **Bell Work:**

What do you think are the requirements for someone to become an aeronautical engineer?



## Let's Get Started:

### Watch Videos:

- [A Career in Aeronautical Engineering](#)
- [What is aeronautical engineering?](#)



## **What does an aeronautical engineer do?**

Aerospace engineers generally specialize in one of two types of engineering, aeronautical or astronautical engineering. Aeronautical engineers work with aircraft. These engineers are involved primarily in designing aircraft and propulsion systems. They are also involved in studying the aerodynamic performance of aircraft and materials that those aircraft are made of.



To become an aeronautical engineer, you must complete a bachelor's degree program, usually in aerospace or aeronautical engineering, that has been approved by the Accreditation Board for Engineering and Technology (ABET). These programs can take 4 to 5 years to complete.



Aerospace engineers generally spend a lot of their time working in offices and aeronautical laboratories using computer equipment and software design tools. Aerospace engineers may travel to company sites in and outside of the United States.



Here are some colleges where you can get an aerospace engineering degree:

Virginia Tech

The University of Texas at Austin

Stanford University

The University of Illinois at Urbana-Champaign

University of Maryland College Park

California Institute of Technology

School of Aeronautics and Astronautics of Purdue University West Lafayette

University of Michigan-Ann Arbor

School of Aerospace Engineering of Georgia Institute of Technology

Massachusetts Institute of Technology



Here are some employers that hire you if you have an aeronautical engineering degree:

Honeywell

NASA

Lockheed Martin

Garmin

Black & Veach

Spirit Aerosystems



# Aeronautical Engineering Understanding

Use the internet to research the following questions:

1. Description of the occupation including main duties and responsibilities.
2. What are the education and training requirements for the occupation?
3. List other required qualifications such as licensing, certifications, etc.
4. What field of Engineering works closely with Aeronautical Engineer?
5. List the name of one person that you know of who is in an Aeronautical Engineer (someone famous, use Google).