

Aerospace Engineering

CAREER PROFILE

What is aerospace engineering?



Aerospace engineering is literally rocket science. It involves designing, building, testing, and maintaining flying machines like rockets, planes, satellites, and missiles. If you want to design big things like a Mars Shuttle, or smaller machines like delivery drones, then aerospace engineering is for you.

Aerospace engineering includes:

- **Aeronautical engineering** – building machines that fly in the air.
- **Astronautical engineering** – building machines that go into space.

What do aerospace engineers do?

Aerospace engineers work on every aspect of **aircraft and spacecraft design** including propulsion and engines, aerodynamics, materials and structure, controls and stability, electronics, safety, and production techniques.



How do you become an aerospace engineer?

Physics and mathematics are essential. Therefore, you need to take these subjects in school, and do well in them.

Here are some general tips for choosing a university or college:

- Make sure the program is **fully accredited** locally and/or internationally.
- If your university does not offer an aerospace program, consider **mechanical engineering**, and then take the aerodynamic focused electives or consider an advanced degree after you complete your bachelors or undergraduate degree.
- Consider accredited engineering programs offered by **technical or community colleges**.

What are the careers prospects for an aerospace engineer?

One of the many benefits of aerospace engineering is that it can be a launch pad into many different careers. Aerospace engineers, in most parts of the world, are **highly valued and very well paid**.

WHAT IS AEROSPACE ENGINEERING?



WHAT DO AEROSPACE ENGINEERS DO?



TYPICAL EMPLOYERS

Typical employers include large private companies and research organizations:

- General Electric
- Airbus
- SpaceX
- NASA
- The European Space Agency

Meet some aerospace engineers

Watch the following videos to meet some inspiring aerospace engineers.

PRINCE KUEVOR

Prince Kuevor was inspired to become an aerospace engineer to explore our solar system and galaxy.



DIANA TRUJILLO

Diana grew up in Columbia and was inspired to become an aerospace engineer by her move to another country. What would it be like, she thought, to move to another planet?



WENDY OKOLO

Who says aerospace engineers aren't fun? Wendy, from Nigeria, is an aerospace engineer by day and a DJ by night.

