

Self-declared engineering specialty: motorbike repair engineer

[Engineering](#)



**ASSIGN
BUSTER**

Aeronautical or aerospace engineering is broadly concerned with how airplanes and spaceships work. More specifically, the discipline is concerned with the design and manufacture of aircraft, communication systems, flight simulators, and air propulsion and control systems among other structures relevant to aviation (degree directory. org par 2). Typically, aeronautical engineers involve in the creation of models and prototypes for new airplanes, perform tests on prototypes and make necessary changes on them, and design procedures for performing aviation-related tests (degree directory. org par 2). Aeronautical engineers in the U. S. earn a starting median salary of 60, 000USD per annum (cms. montgomerycollege. edu. par 1). Professionals in the middle of their careers earn a median yearly wage of \$120, 000. Statistics from the US Bureau of Labor statistics reveal that as of 2008, the country had 71, 600 aeronautical engineers. The engineers work with airlines, aviation authorities, airplanes, and manufacturers with job prospects high depending on the level of training and experience.

The advantages of taking aeronautical engineering as a career choice include higher pay compared to most other professions and high prestige going by statistics (bls. gov par 1). Disadvantages associated with aeronautical engineering as a career choice include high risks associated with working on the flight and relatively few vacancies with slower than average (5%) growth according to (bls. gov par 1).

One of the greatest achievements in the field of aeronautical engineering is the creation of the X-47B future drone. The drone (unmanned air vehicle) is able to carry out surveillance and attack missions with minimum human intervention. The drone currently undergoing model tests has greater

capabilities compared to its predecessors.

Mechatronics Engineering

Mechatronics engineering combines different features of a computer, electronic, and mechanical engineering to raise the function of manufactured products and efficiency in production (education-portal. com par 1).

Essentially, mechatronics engineers develop and improve automation of systems. The U. S. Bureau of Labor Statistics indicates that mechatronics engineers earn a median yearly wage of about \$89, 560 (education-portal. com, par 2). According to the Bureau, job opportunities for engineers are expected to grow by between 7% and 13% for the next decade.

Two main advantages of taking mechatronics engineering as a career choice are its good employment prospects (about 13% growth) and high pay compared to other careers. The course is however quite demanding as is commonly the case with all other engineering courses. Yet another disadvantage of taking mechatronics engineering is the risks associated with creating and working with dangerous machines.

Mechatronics engineers have created robots that have revolutionized the modern workplace. One such robot is the FANUC LR Mate 200iC/5F which is designed to handle food in primary and secondary work environments. The robot can be mounted on different surfaces and can be used for packing, picking, assembling, material handling, and dispensing with great precision (robots. com par 3).