AERONAUTICAL ENGINEER

An aeronautical engineer is responsible for designing, developing and constructing safe and fuel-efficient machines, which can fly in air and space such as aircraft, helicopters, satellites, missiles, drones and spacecraft. He/she is also responsible for regularly inspecting and issuing clearance of the aircraft for air-worthiness.

PERSONAL COMPETENCIES

- · You like to build or assemble things
- · You enjoy figuring how things work and pay attention to details
- You like keeping things in order and analyse problems
- You enjoy drawing



- Merit-cum-Means based Scholarship About 20,000 such engineering scholarships are awarded by the Ministry of Minority Affairs every year. The full course fees of awardees is directly paid to their institutions under this scheme. *
- Indian Oil Educational Scholarship- The IOC Ltd offers 300 scholarships every year to eligible students. Students need to be enrolled in an undergraduate course. The scholarship particularly focuses on students with physical disabilities, women and students from North East and J&K.*
- Visit www.scholarships.gov.in the National Scholarship Portal. Under this portal there are central government schemes offered by different departments, UGC/AICTE Schemes and State Schemes.*
- Visit www.buddy4study.com a gateway to scholarships starting from Class XI.*
- Scholarships are made available by institutes themselves based on merit.*
- *(Availability of these scholarships vary from time to time)

LOANS

- VidyaLakshmi, www.vidyalakshmi.co.in, is a portal for students seeking education loan. This portal has been developed under the guidance of the Department of Financial Services, (Ministry of Finance), Department of Higher Education (Ministry of Human Resource Development) and Indian Banks Association (IBA). Students can view, apply and track the education loan applications on the website.
- Some states have student credit cards with low interest rates, for instance, West Bengal, Odisha, Bihar, etc.
- All banks give education loans.





The approx. course fee ranges between **INR 6,000 - 1,33,333*** for one year

*(The above mentioned figures are approximate numbers. This will vary from Institute to Institute)



- 1. Complete 10+2 in Science (Physics, Chemistry, Maths)
- 2. Complete Bachelor's degree (B.Tech/B.E.) in Aeronautical or Aerospace Engineering

For admissions, you must qualify entrance examination conducted at national level (JEE Main, JEE Advanced etc.) or AME CET for studying aerospace/aeronautical engineering.

Please check the duration of the course during enrolment



EXPECTED INCOME

*The figures are indicative & subject to change

The approx. salary of an Aeronautical/ Aerospace Engineer ranges between INR 18,750 - 1,51,250* per month

Source: https://www.amecet.in/ aeronautical-engineering-salary-inindia.php

WHERE WILL YOU WORK

Places of Work: Indian Air Force, Defence Ministry, Airlines industry, Aviation companies or Research agencies.

Work Environment: It is a full-time job, work hours may extend to more than 8 hours a day. You can either work in offices or at units where equipment is designed, manufactured, assembled or tested.

Opportunities for differently abled exist in this field

EXPECTED GROWTH PATH



Graduate Trainee Engineer → Aircraft Engineer/Air Safety Officer → Senior Engineer → Principal Engineer

Search keywords...



aeronautical engineer, aerospace engineer, aeronautics

WHERE WILL YOU STUDY?

This course is offered by the Department of Aeronautical or Aerospace Engineering.

This list of institutes is indicative only

GOVERNMENT INSTITUTES

- 1. Indian Institute Technology, Guwahati
- 2. Indian Institute Technology, Kanpur
- 3. Indian Institute Technology, Madras
- 4. Indian Institute of Space Science and Technology, Thiruvananthapuram
- 5. College of Engineering, Chennai
- 6. Jawaharlal Nehru Technological University, Hyderabad
- 7. Rajasthan Technical University, Kota
- 8. Punjab Engineering College, Chandigarh

PRIVATE INSTITUTES

(Please check if institute is affiliated and accredited with UGC and AICTE before applying)

- 1. MIT Manipal
- 2. Dayananda Sagar College of Engineering, Bangalore
- 3. Sathyabama Institute of Science and Technology, Chennai
- 4. Kumaraguru College of Technology, Coimbatore
- 5. Dr. Ambedkar Institute of Technology, Bangalore
- 6. Nitte Meenakshi Institute of Technology, Bangalore
- 7. Bannari Amman Institute of Technology, Tamil Nadu
- 8. Madras Institute of Technology

Information on the institute rankings can be found at www.nirfindia.org/2022/Ranking.html

ONLINE COURSE

 NPTEL* Swayam - https://onlinecourses.nptel.ac.in/ noc19_ae05/preview

*NPTEL stands for National Programme on Technology Enhanced Learning which is a programme initiated by the Government of India which offers numerous audio and video courses on a wide variety of subjects and aims to make learning accessible for all.





EXAMPLE FROM THE FIELD



Kalpana Chawla, was the first Indian woman to earn an Aeronautical Engineering degree at the Punjab Engineering College. She joined NASA after pursuing her PhD. and undertook her first space mission in 1997. Her career and life trajectories remain etched in history. She is an inspiration for all professionals in this field.*

Source: https://www.thomasnet.com/insights /famous-aerospace-engineers/

*The above information is for training purposes only and will not be used for any commercial gains