

# Aerospace Engineering – Syllabus (DIYguru)

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## **Fundamentals**

Basic Concepts of Physics  
Basic Understanding of Computer  
Engineering Graphics  
Presentation Skills for Beginners  
Manufacturing Technology  
History of Aerospace Development  
Opportunities and Scopes in Aerospace Industry  
How Different Parts of Airplane Works? (Working Principles)  
Computer Aided Design: CATIA / SOLIDWORKS / AUTOCAD

## **Intermediate**

Flight Mechanics  
Space Dynamics  
Aerodynamics  
Structural Dynamics  
Noise & Vibration  
Avionics

## **Advanced**

Propulsion  
Rockets & Missiles  
Computational Fluid Dynamics  
Aircraft System & Instrumentation

## **Selective**

Air Transportation  
Aircraft Maintenance  
Drones  
UAV  
SAE Aero design (Mini & Micro)

## **Course Materials**

Available on <https://courses.diyguru.org>

## Course Schedule

Stage	Duration	Learning Outcomes
Fundamentals	3 Months	Learn Basics (Statics)
Intermediate	3 Months	Understand Various Parts in Detail
Advanced	3 Months	Able to Design & Manufacture a Aeroplane
Selective	6 Months	Competition and Industry Specific

