

COURSE BROCHURE

Aerospace Mechanics & Flight Foundations

Space Science & Engineering / Aerospace & Satellite Engineering

One-time full-course fee

INR 1,499

Access

6 months course access

Study plan

4-6 weeks suggested self-paced study; 6 months access

Learning format

Six self-paced written learning units in English, developed worked examples, practical exercises, 30 questions with explained answers and a final project with a self-assessment rubric. No scheduled live classes, recorded lecture series, laboratory access or personal marking is included.

Programme overview

Six written units on force balance, ideal fluid reasoning, lift and drag models, axial structural response, momentum and useful power, and a spreadsheet comparison capstone. Classroom calculations and simulation only; no aircraft or propulsion construction or operational qualification. Six self-paced written learning units in English, developed worked examples, practical exercises, 30 questions with explained answers and a final project with a self-assessment rubric. No scheduled live classes, recorded lecture series, laboratory access or personal marking is included. Independent ZELVU learning and preparation. Not affiliated with, endorsed by or certified by NASA, ISRO or IIRS. No engineering degree, professional licence, admission, recruitment or employment is awarded or guaranteed. Current recruitment conditions are set by each official notification. Related courses revisit some foundational physics and data concepts. Each has distinct original lessons and a different project; compare the unit lists before choosing multiple courses.

Who this is for

- 1 Engineering entrants and learners interested in the mechanics of flight.
- 2 Basic algebra, units, Newtonian force concepts and spreadsheet access.
- 3 A parent or guardian should manage a minor learner's account and purchase.
- 4 Independent ZELVU learning and preparation. Not affiliated with, endorsed by or certified by NASA, ISRO or IIRS. No engineering degree, professional licence, admission, recruitment or employment is awarded or guaranteed. Current recruitment conditions are set by each official notification.

Published topics and learning focus

- 1 Forces, free-body diagrams and flight equilibrium
- 2 Fluid properties, continuity and pressure reasoning
- 3 Lift, drag and aerodynamic coefficients
- 4 Structures, stiffness, strength and fatigue
- 5 Propulsion, momentum and useful power
- 6 Flight-analysis spreadsheet capstone

Before you choose

- 1 These are published programme highlights, not certification of complete syllabus coverage. Review the available reading index and programme trial before enrolling.
- 2 ZELVU provides learning support. It does not award the underlying degree, professional registration or an examination result.
- 3 Current checkout terms and refund policy apply. Payment and access require successful provider verification.

Take the next step

[Explore the programme trial](#)

[View current details, scope and terms](#)

Ask ZELVU about this programme

Save this brochure for reference. Details can change: confirm the current programme page and checkout before making a purchase.