

## CONTACT US

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**Indian Institute of Engineering Science and Technology, Shibpur**  
(An Institute of National Importance, Govt. of India)

## M.Tech in Aerospace Engineering

The M.Tech program in Aerospace Engineering at IEST Shibpur offers advanced education in Aerodynamics, Aerospace structures, and Propulsion. With cutting-edge labs, expert faculty, and research-driven learning, it prepares students for careers in aerospace, defense, and space exploration through industry-aligned training and innovation.

### KEY FOCUS AREAS

- Aerodynamics
- Aerospace Structures
- Propulsion

### ELIGIBILITY CRITERIA

- Candidates must hold a Bachelor's degree in Aerospace, Aeronautical, Mechanical, Civil, or related engineering disciplines.
- Admission is based on a valid GATE score in a relevant paper.
- Non-GATE and sponsored candidates may also apply (eligibility for institute fellowship is subject to institutional criteria).

### PROGRAM STRUCTURE

The M.Tech program is structured into four semesters:

- Semester 1 & 2: Core and elective courses, laboratory training
- Semester 3 & 4: Research project and thesis work

## ABOUT THE PROGRAM

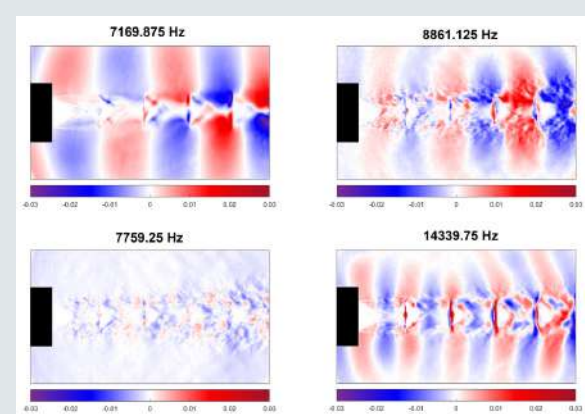
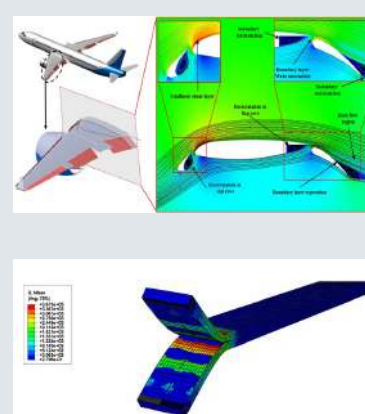
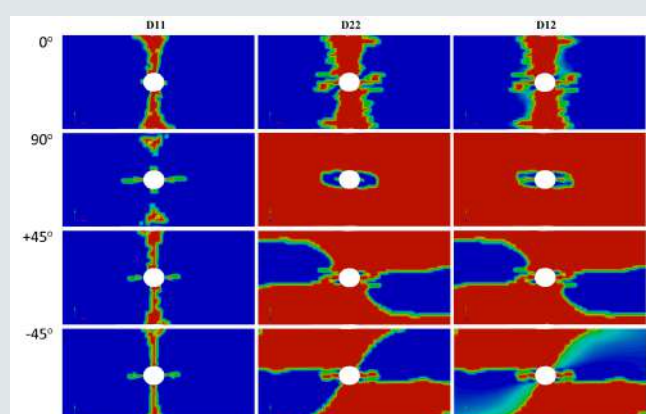
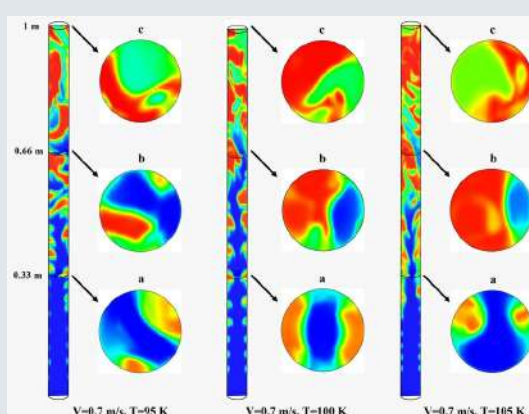
The field of Aerospace Engineering has witnessed remarkable advancements in recent years, with growing applications in aviation, space exploration, and defence technology. The M.Tech program in Aerospace Engineering at IEST Shibpur is designed to equip students with a strong theoretical foundation and practical experience in key areas such as Aerodynamics, Aerospace structures, and Propulsion. The program fosters a research-driven environment that encourages innovation, problem-solving, and interdisciplinary learning.

IEST Shibpur, with its rich legacy of technical education and research, has established itself as a premier institution in India. The Department of Aerospace Engineering and Applied Mechanics houses state-of-the-art laboratories, computational facilities, and faculty expertise that provide students with hands-on training in cutting-edge technologies. The program curriculum is aligned with industry needs, enabling graduates to contribute effectively to aerospace industries, defence research, and space exploration.

This program is ideal for students aspiring to advance their knowledge in aerospace sciences and engineering applications. The curriculum offers flexibility through specialized electives and research opportunities, ensuring that students are well-prepared for both academic and industry careers. By integrating computational and experimental methods, the program aims to develop well-rounded aerospace engineers capable of addressing real-world challenges.

## RESEARCH FACILITIES

- Large-Industry Scale Closed Circuit Subsonic Wind tunnel
- Hypersonic Shock Tunnel and Shock Tube
- Supersonic Open Jet Facility
- Computational Solid Mechanics
- Multiscale modelling
- High Performance Computing Facilities (CFD & FEA)
- Advanced Computational Modelling for Composite Materials
- Water flume facility
- UAV Laboratory.
- Supersonic Wind Tunnel
- Propellant combustion and characterization lab
- Atomization and spray setup



**Some Ongoing Research Activities in the Department of Aerospace Engineering & Applied Mechanics**