

PHD SPOT ADMISSIONS 2026 BROCHURE

AEROSPACE
ENGINEERING



INDIAN INSTITUTE OF
TECHNOLOGY KANPUR



PhD Spot admissions

- ≧ We warmly invite you to apply to the PhD program (July 2026) at the Department of Aerospace Engineering, Indian Institute of Technology Kanpur
- ≧ Interviews will be conducted online for eligible students
- ≧ Scholarships of INR 37,000 for the first two years and thereafter, INR 42,000 per month for another three years
- ≧ Register your interest here by June 16:
<https://forms.gle/KjfW8P2DHGgybGLS8>
- ≧ Further details: <https://iitk.ac.in/aero/phd-program>



Resister
—
here

PhD Spot Admissions, Aerospace,
IIT Kanpur, 2026



Eligibility

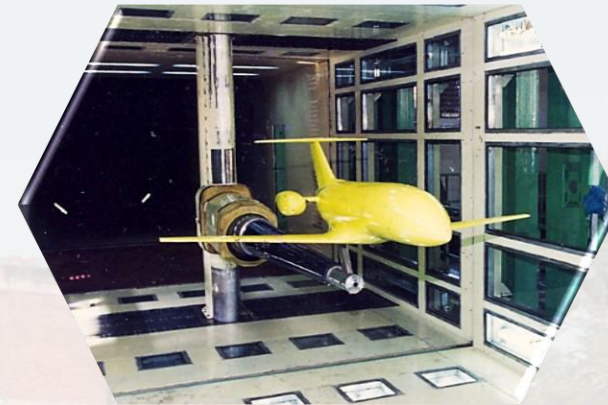
Student should be

- ✓ From a NIRF top 100 institute in Engineering (which is not a CFTI), see full list here:
<https://www.nirfindia.org/Rankings/2025/EngineeringRanking.html>
- ✓ Final year B. Tech. with CGPA > 7.5
- ✓ All Engineering departments including Aero., Mech., Electrical & Civil Engineering
- GATE score is required at the time of application/registration

About the Department



The department houses a one-of-a-kind Flight Lab with three single-engine airplanes, a motored glider and a 1000 m runway



Established in 1964, the Department of Aerospace Engineering at IITK is one of the prominent centers for advanced flight research



The National Wind Tunnel Facility at IITK is one of the few large-scale wind tunnels in all of India (test section: 2.25m x 3m x 8.75 m)

Information

4

NIRF 2025
Engineering
Ranking

5

NIRF 2025
Overall Ranking

72

QS 2025
(Engineering &
Technology)

33

Faculty members
prominent centers
for advanced flight
research

400+

Journal
publications in
past 5 years

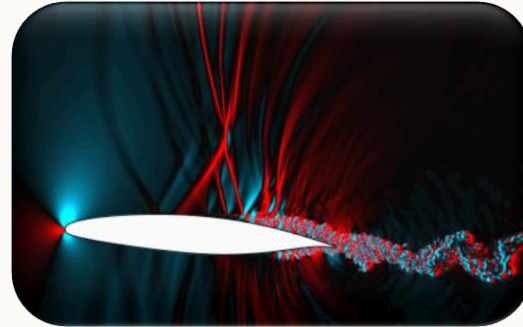
60+

Ongoing
sponsored projects

Research groups



**Flight Dynamics
& Control**



Aerodynamics



Propulsion

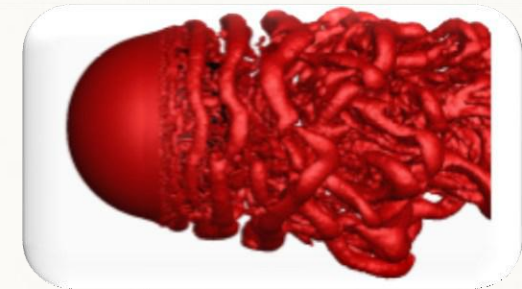


**Structures, Structural
Dynamics &
Aeroelasticity**

Four major research groups (Aerodynamics, Flight mechanics & Control, Propulsion, and Structures, Structural Dynamics & Aeroelasticity) and two Interdisciplinary Specializations (Aero-Thermodynamics & Thermal Sciences and Computational Mechanics)



**Aero-Thermodynamics
& Thermal Sciences**

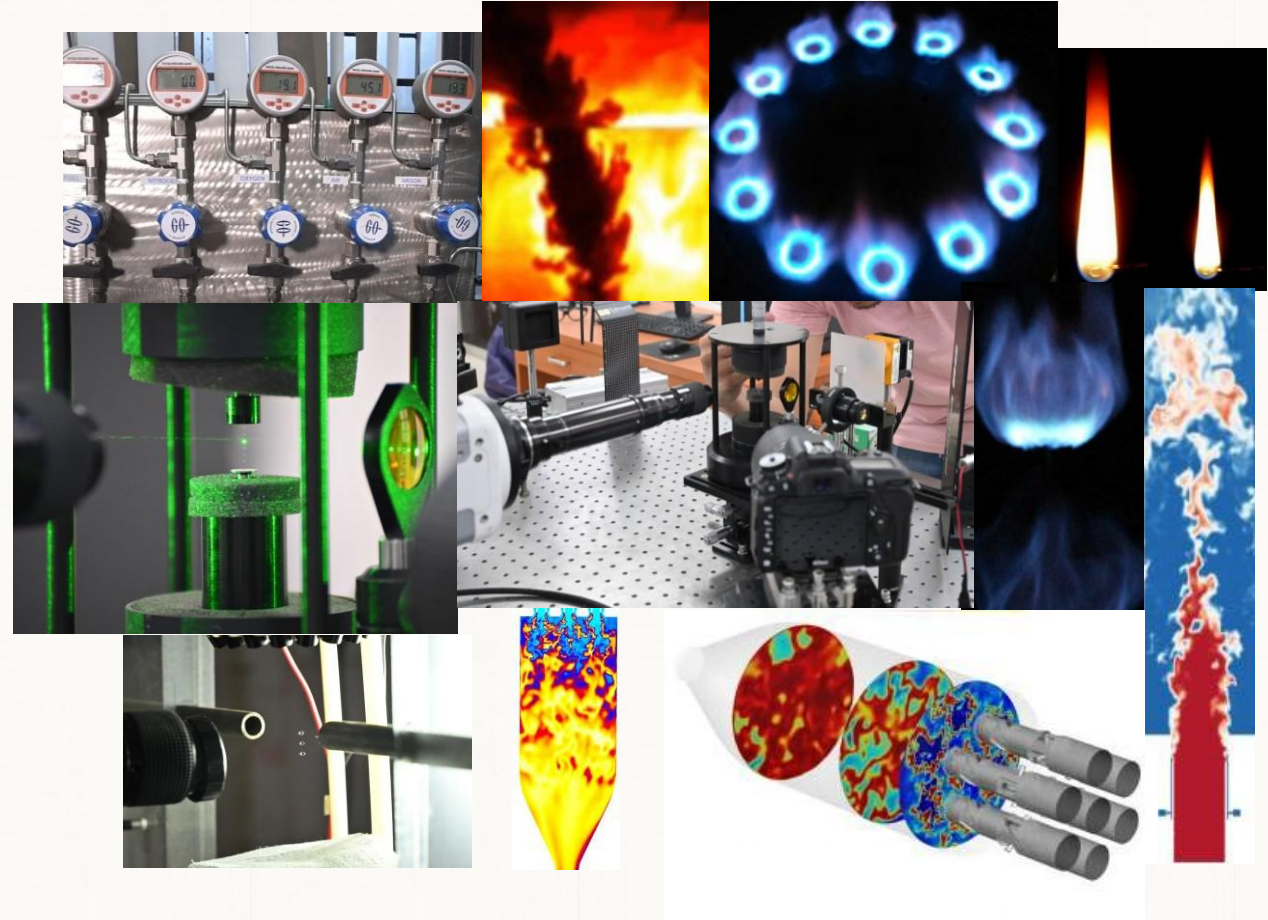


**Computational
Mechanics**

Research Areas

Propulsion

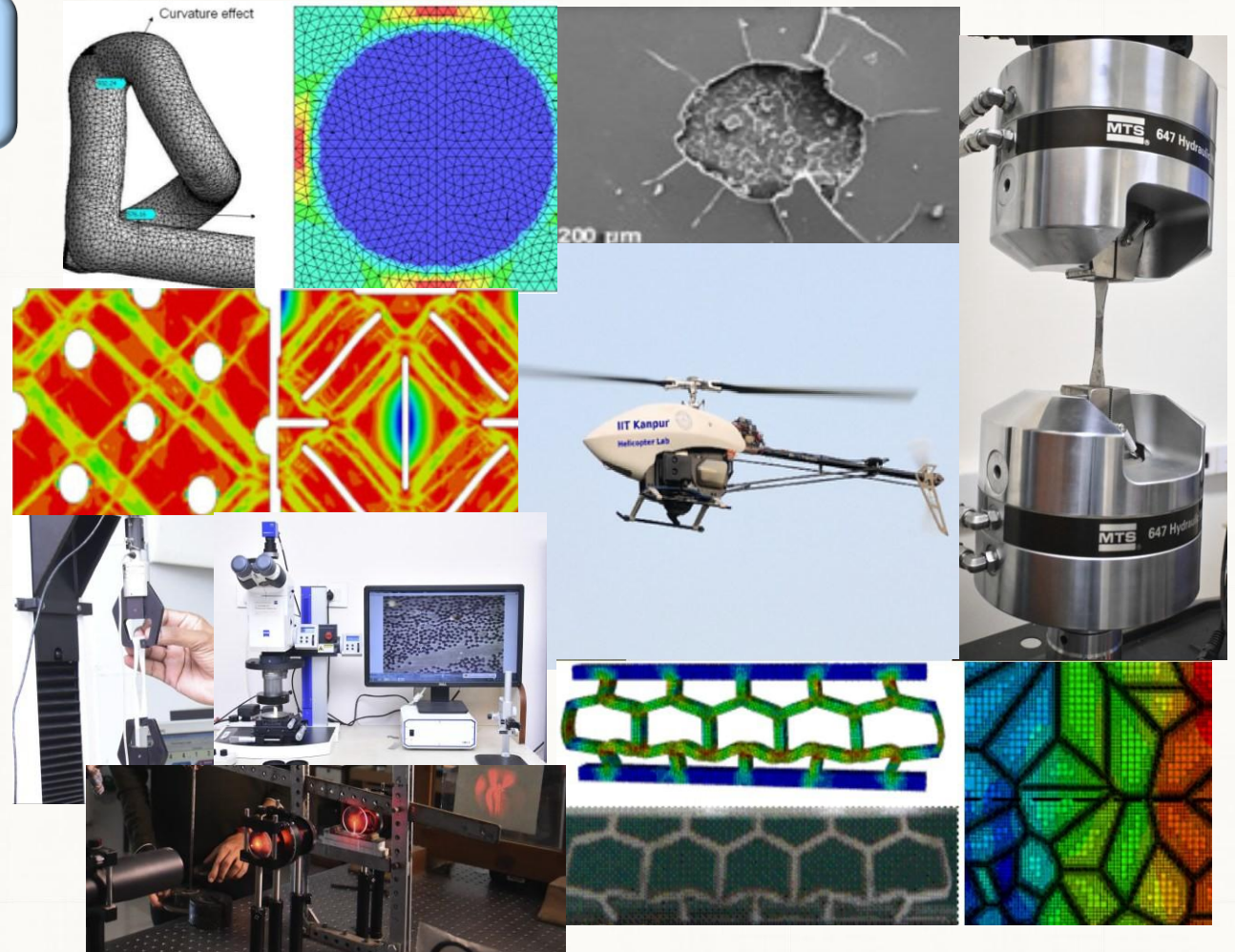
- Experimental Combustion
- Computational Combustion
- Emissions
- Intake Aerodynamics
- Internal Flow Control (Active & Passive)
- Flow Diagnostics
- Turbo machinery
- Thrust vectoring
- Electric propulsion
- Liquid atomization and spray combustion



Research Areas

Structures, Structural Dynamics & Aeroelasticity

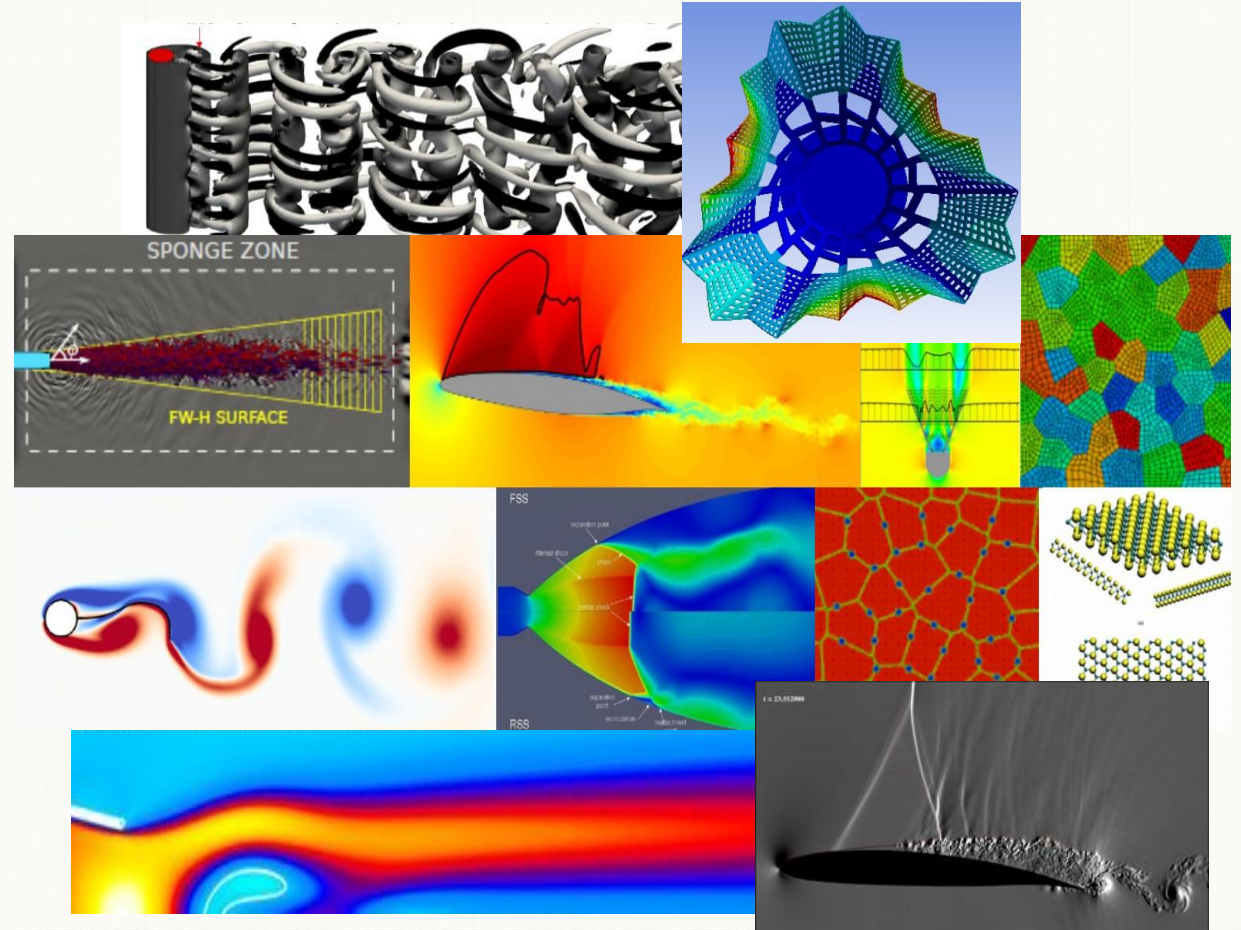
- Material Characterization
- Composite Materials and Smart Structures
- Structural Dynamics and Stochastic Modeling
- Aeroelasticity
- Helicopter Theory (Dynamics & Aerodynamics)
- Structural Design & Optimization
- Damage Modeling
- Design and Dynamics of Autonomous Micro and Mini Air Vehicles



Research Areas

Computational Mechanics

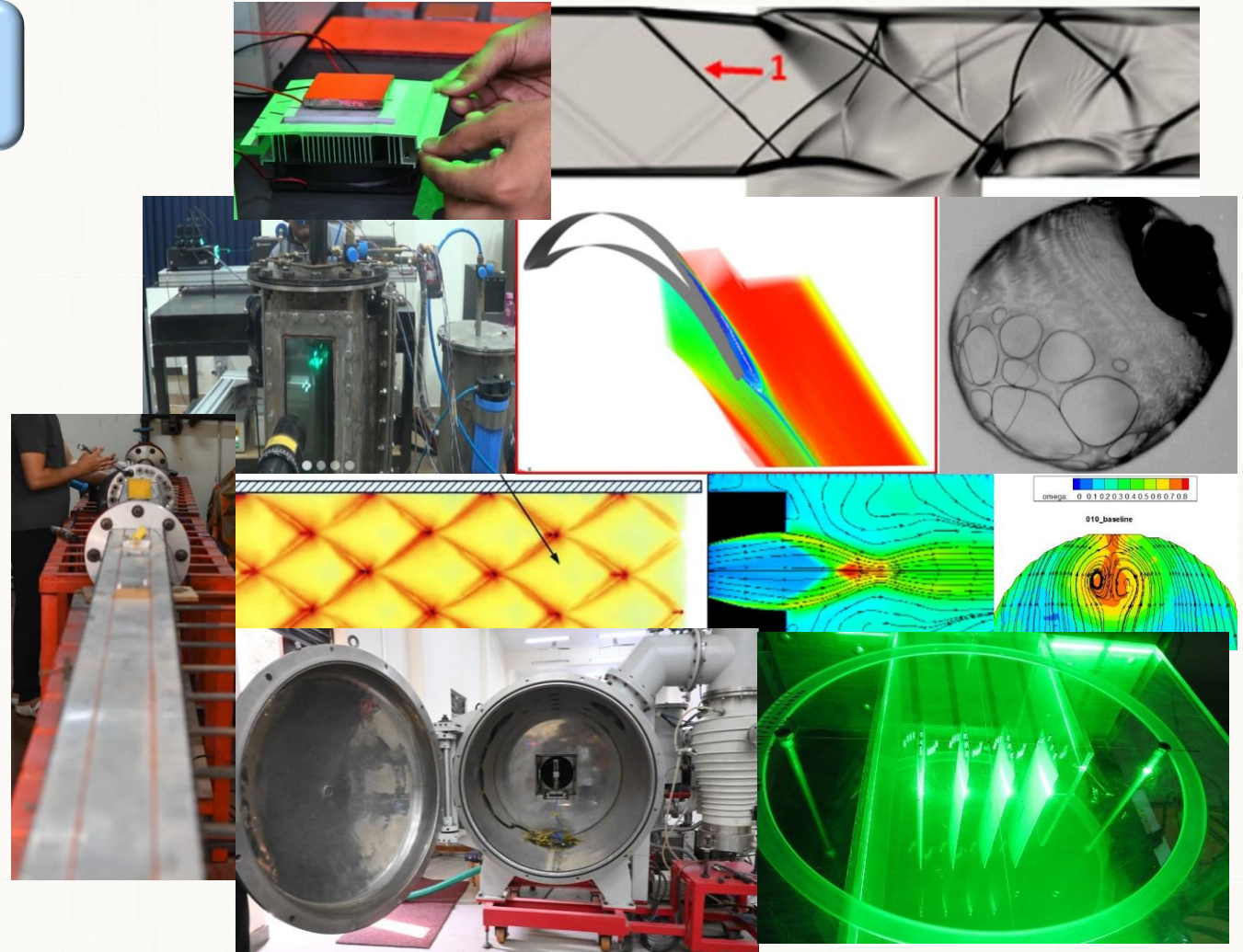
- Computational material modeling
- Machine learning and AI
- Reduced-order models
- Multi-functional composites
- Metamaterials
- Plasticity, fatigue, fracture
- Uncertainty quantification
- Optimization and inverse models
- Fluid-Structure interactions
- Computational fluid dynamics
- Finite Element Method (FEM)
- Theoretical and computational aeroacoustics (CAA)
- Wave mechanics



Research Areas

Aero-Thermodynamics and Thermal Sciences

- High Speed Flows
- Turbomachinery
- Acoustics and Noise
- Multiphase Flows
- Heat Transfer
- Fire Dynamics
- Detonation & Explosions



*Thank you
& hope you
begin your
exciting
research
journey
@AE, IITK*

CONTACT



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<https://iitk.ac.in/aero/>

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REGISTER