



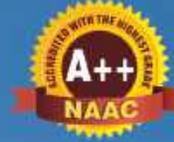
Karunya

DEEMED UNIVERSITY

SOLVING HUMAN PROBLEMS
NAAC Accredited A++



Accredited by NBA for 6 Years



World University
Rankings 2025
1201-1500 Band



Division of **AEROSPACE
ENGINEERING**

ADMISSIONS

2026



CATEGORY 1
Institution
UGC Gol.



About Us

The Division of Aerospace Engineering at Karunya Institute of Technology and Sciences, established in 2009, has become a premier centre for aerospace education and research. The Division is accredited by the National Board of Accreditation (NBA) with the maximum accreditation period of 6 years.

With the abundance of experience gained from DRDO and the Outcome-Based Competency-Focused Curriculum (OBCFC) at the Aerospace Division, we are igniting the minds of young students towards research and publication, enabling them to gain global recognition and enhance their opportunities to secure positions in Fortune-listed companies. Our highly qualified faculty members assign industry-focused projects and problem statements to students and provide continuous guidance to help them excel in Aerospace Industry skills such as ANSYS, FLUENT, ABAQUS etc. Students are also exposed to emerging and high-demand technologies such as Stealth, Infrared (IR) Signature, Radar Cross Section (RCS) Reduction, Acoustics, Satellite, and Space Programs. We also organize International Conferences with active participation and sponsorship from premier organizations such as DRDO and ISRO.

Our Vision

To be a pre-eminent aerospace research centre with faculty committed to fostering creativity and developing leadership skills in budding engineers for a brilliant career progression.

Our Mission

- Enhance student's knowledge and skills to excel as aerospace engineers with strong problem-solving abilities.
- Promote research on practical and societal challenges, enriching aerospace engineering through impactful publications, patents and products.
- Inculcate professional, social and ethical values with leadership qualities, enabling students to drive sustainable societal development.

Programs Offered

- **B.Tech. Aerospace Engineering**
Prepares you for a rewarding career in the aerospace industry with a strong foundation in aircraft, launch vehicles, satellite technologies, and space exploration.
Gain practical experience through hands-on projects and internships with Aircraft manufacturing giants and Space leaders
- **B.Tech. Aerospace Engineering**
(Specialization in Unmanned Aerial Vehicles)
Focus on the design, development, and operation of UAVs, positioning yourself at the forefront of aerospace innovation and technological advancements in unmanned systems.
- **B.Tech. Aerospace Engineering**
(Specialization in Artificial Intelligence and Machine Learning)
Experience the future of Aerospace Engineering through the integration of Artificial Intelligence and Machine Learning.
Our program equips students with creative skills to innovate in aircraft design, autonomous flight systems, and space exploration.
By blending engineering fundamentals with AI technology, students gain the expertise needed to shape the next generation of aerospace solutions.
- **B.Tech. Aerospace Engineering**
(Specialization in Aircraft Maintenance)
This specialization focuses on the inspection, repair, maintenance, and troubleshooting of aircraft systems including airframes, engines, avionics, and control systems ensuring compliance with global aviation standards and safety regulations.
Students gain hands-on experience in aircraft systems maintenance, non-destructive testing (NDT), quality assurance, and airworthiness certification through practical sessions and industry collaborations.
- **M.Tech. Aerospace Engineering**
Offers advanced and specialized education in the field of aerospace engineering.
Dive deeper into specialized areas such as Avionics,

- *Industry 4.0, Digital Aviation and Unmanned Aerial Systems*
- **Ph.D. Aerospace Engineering**
Designed for individuals who wish to engage in advanced research, contribute to the development of new knowledge, and make significant contributions to the field.
Prepare for a career in academia, research institutions, or leadership roles in the aerospace industry.

• Highlights

- **State-of-the-art Research facilities**
 - i) Subsonic Tunnel (45 m/s, 600 mm x 600 mm test section).
 - ii) Supersonic Wind Tunnel (3.5 Mach, 100 mm x 100 mm test section)
 - iii) Aircraft Structures laboratory with Universal Testing Machine (UTM), Poloriscope, Hardness test facility, composite winding machine etc.,
 - iv) High Enthalpy facility with engines, Shock Tube, Kinetic Heating Simulator and Water tunnel
 - v) Cessna 152 Airplane
 - vi) Computational Fluid Dynamics & ANSYS Lab
 - vii) Avionics laboratory with motion sensors control, guidance and navigation systems
 - viii) Unmanned Aerial Vehicles Lab
 - ix) Aircraft Simulation Facility
 - x) Composites Lab (Hand lay-up, Resin Transfer Moulding)
- **Laboratories and Practical Training**
Hands-on experience in laboratories related to aerodynamics, propulsion, structures and UAV.
Practical training in computer-aided design (CAD) and simulation software.
- **International Internships & Industrial Training**
International Internships through Karunya Local Centre of International Association for the Exchange of Students for Technical Experience (IAESTE) and mandatory industrial internships in space organizations and core industries facilitating real-world exposure to aerospace engineering practices

• Lab Facilities



• Project Work

Completion of a major project in the final year, allowing students to apply their knowledge and skills to a practical problem in the core domain in collaboration with practicing engineers and scientists.

• Seminars and Workshops

Participation in seminars, workshops, and industry talks to stay updated on the latest trends and technologies in aerospace engineering.

• Skill Development

Development of technical and soft skills, communication skills, coding skills and project management skills necessary for a successful career in aerospace engineering.

• Add-on / Value-added courses

Customized Courses on Product Design with SOLIDWORKS, ANSYS, CFD etc., through industry veterans.

• On Going Sponsored Research

- Gasification Plant - 6.12 Crores from DST, Govt. of India.
- Pulse Detonation Engine - 90.38 Lakhs from AR&DB, DRDO.
- Surveillance Drone- 10 Lakhs from IIT-Palakkad.

• Patents Granted

- Deflagration - To – Detonation Supersonic Igniter
- Improved Blowing Suction System (IBSS) for enhanced aerodynamic performance in aircraft wing
- Hybrid Power source system for elevators
- A half coil manufactured from novel composition for brushless DC motor windings with improved efficiency



Our Academic Associates

- Garuda Aerospace, Chennai
- Tunga Aerospace, Chennai
- ST Advanced Composites, Chennai
- Space Zone India, Chennai
- CAD Solutions Private Ltd, Coimbatore
- Trident Pneumatics Pvt.Ltd., Coimbatore
- Wind Care India Pvt. Ltd., Tamilnadu
- EATON, Pune
- Chicago State University, USA
- Georgia Aviation University

Faculty team

Our faculty team includes experts with diverse industry experience, including former scientists from ISRO, DRDO, and other prestigious institutions Under the leadership of our head, a retired DRDO scientist, we ensure students receive guidance that blends academic knowledge with real-world expertise.



Dr. Kampa Ashirvadam,
HoD, Aerospace Engineering
(Having 32 Years of Research Experience from DRDO)

“ Welcome to the Aerospace Engineering Division at Karunya Institute of Technology and Sciences. Since 2009, we have been committed to developing future aerospace leaders. Our alumni excel in top global organizations across government and private sectors. With my experience as a former DRDO scientist, I guide students through an industry-focused curriculum, advanced labs, and hands-on experience on live projects. We enrich students with technical excellence, integrity, and innovation, preparing students for impactful careers in aerospace engineering, and research. Join us to explore limitless possibilities in aerospace engineering and shape a successful career. ”

Career Opportunities

- Aerospace Engineer
- Aircraft Design Engineer
- Avionics Engineer
- Propulsion Engineer
- Spacecraft Systems Engineer
- Aerospace Analyst
- Flight test Engineer
- Space Industry careers
- Defence and Military roles
- Government Agencies

Notable Placements (2025)



Ms. Sudharwathi M
AgniKul Cosmos Private Limited, Chennai.



Ms. Ebi Ja
AgniKul Cosmos Private Limited, Chennai.



Mr. Nagula Jagruth Raj
StarOps Systems Private Limited, Bangalore.



Mr. T. Sunith Dalin
Tata Technologies,



Mr. Sujin Dhas
Loyal Wingman Technologies Private Limited, Hosur.



Mr. Bavin B
ST Advanced Composite, Chennai.

Notable Higher Studies (2025)



Ms. Anuja P Nair
RMIT University, Australia.



Mr. Akhil S Pillai
Worcester Polytechnic Institute, USA.



Mr. Nagula Jithin Raj
Arizona State University, USA.



Mr. Sharvesh P. P
NEOMA Business School, France.



Ms. Varsha G
SRH University, Berlin.



Mr. Shiju V.S.
Deakin University, Australia.



APPLY NOW

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Head of the Division

Division of Aerospace Engineering

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