

B.Sc. (Aeronautics) Program

(Faculty of Engineering & Technology, Jamia Millia Islamia, New Delhi-110025)

INTRODUCTION

The **B.Sc. (Aeronautics) program**, offered under the **Faculty of Engineering & Technology, Jamia Millia Islamia**, has been **running in collaboration with Pawan Hans Limited (PHL) since 2018**, in order to meet the growing demand for skilled professionals in India's aviation sector.

From 2023 onwards, the programme has been **conducted in collaboration with Indocopters Pvt. Ltd., a DGCA-approved CAR-147 (Basic) Maintenance Training Organization**. This collaboration has strengthened industry linkages and provides students with exposure to **real-world aircraft maintenance environments**, thereby enhancing their practical competence and employability.

The programme offers a dual qualification comprising an academic **B.Sc. Aeronautics degree awarded by Jamia Millia Islamia**, along with a **DGCA-recognized Certificate of Recognition (C of R) in Aircraft Maintenance Engineering (AME)**, which is **issued by Indocopters Private Limited, a DGCA-approved CAR-147 (Basic) training organization**.

The programme is designed to develop aviation professionals by integrating strong theoretical knowledge with hands-on practical training required in the aviation and aerospace industries.

VISION

To develop globally competent, safety-conscious aeronautical professionals through excellence in education, practical training, and innovation, fostering strong technical expertise, ethical values, and an unwavering commitment to aviation safety.

MISSION

Jamia Millia Islamia, in collaboration with Indocopters Pvt. Ltd., aims to prepare students for rewarding careers in aircraft maintenance and engineering by combining academic learning with industry-standard practical exposure.

The mission includes:

- Delivering quality education aligned with DGCA and international aviation standards.
- Providing real maintenance environment training through CAR 147 (Basic) approved facilities.
- Promoting holistic development emphasizing safety, discipline, and professionalism.

PROGRAM OFFERED

Undergraduate Dual Qualification Programmes

- **B.Sc. (Aeronautics) – Avionics**

(Degree awarded by Jamia Millia Islamia)

along with **Aircraft Maintenance Engineering (Avionics) training under CAR-147 (Basic)**

(Certificate provided by Indocopters Private Limited CAR-147 (Basic), Approved by Director General of Civil Aviation, Govt. of India)

- **B.Sc. (Aeronautics) – Mechanical**

(Degree awarded by Jamia Millia Islamia)

along with **Aircraft Maintenance Engineering (Helicopter – Turbine Engine) training under CAR-147 (Basic),**

(Certificate provided by Indocopters Private Limited CAR-147 (Basic), Approved by Director General of Civil Aviation, Govt. of India)

These programs integrate academic learning with practical training to prepare students for careers in aircraft maintenance, airworthiness, and aviation technology management.

INFRASTRUCTURE AND FACILITIES

The program is supported by modern laboratories, workshops, and a dedicated aircraft hangar, providing students with hands-on experience in aircraft systems, maintenance procedures, and inspection techniques.

Key Laboratories & Workshops:

- Electrical Laboratory
- Avionics Laboratory
- Structure Laboratory
- Power Plant Laboratory
- Machine Shop
- Welding Shop

Training Hangar

The Jamia Millia Islamia Training Hangar provides a real-world aviation maintenance environment. Students perform aircraft inspection, assembly, troubleshooting, and documentation under the supervision of qualified instructors. The hangar is equipped with helicopter parts such as engines, tail booms, hubs, and propellers, enabling detailed practical learning on rotary-wing aircraft systems.

AMO Training (Actual Environment Training)

In collaboration with Indocopters Pvt. Ltd., Greater Noida, students undergo actual environment Training (AET) at a DGCA CAR-145 Approved Maintenance Organization (AMO) facility. This training provides exposure to:

- Aircraft maintenance procedures and defect rectification
- Maintenance documentation and regulatory compliance
- Safety and quality assurance practices

FACULTY AND SUPPORT STAFF

B.Sc. (Aeronautics) Program – Jamia Millia Islamia

- **Prof. Mohammad Sharif**
Dean, Faculty of Engineering & Technology
- **Prof. M. Nizamuddin**
Nodal Officer, B.Sc. (Aeronautics), Faculty of Engineering & Technology

Indocopters Private Limited CAR-147 (Basic)

- **Shri Sunil Kumar Saxena**
Head of Programme & Training Manager
- **Ms. Ayesha Khanam**
Head of Quality
- **Ms. Rajni**
Head of Examinations

The program is also supported by other qualified faculty and technical staff with extensive experience in aircraft maintenance and engineering education.

STUDY RESOURCES

- Digital copies of all training materials are available through the online learning portal.
- Printed manuals, Civil Aviation Requirements (CARs), and reference books are available in the library.
- PowerPoint presentations and supplementary study materials are accessible through the Digital Library.

INDUSTRY LINKAGES AND PLACEMENT

The B.Sc. (Aeronautics) program maintains active coordination through ICPL with leading aviation organizations for internships, industrial training, and placements. Key partners include:

- Indigo Airlines
- Air India Engineering Services Limited (AIESL)
- Indocopters Private Limited

These coordination provide students with direct industry exposure, bridging academic learning with real-world aviation operations and maintenance practices.

STUDENT DEVELOPMENT AND CO-CURRICULAR ACTIVITIES

The program places strong emphasis on holistic development through various co-curricular activities such as:

- Seminars and Group Discussions to enhance technical understanding and communication skills.
- Guest Lectures by aviation industry experts on maintenance practices, safety procedures, and emerging technologies.
- Sports and Cultural Activities promoting teamwork, leadership, and discipline.

Students demonstrating excellence in academics and activities are recognized through certificates and awards of appreciation.

Why Choose B.Sc. (Aeronautics) at Jamia Millia Islamia

- Collaboration with a DGCA-approved CAR 147 (Basic) training organization.
- Dual qualification – Academic Degree + DGCA-recognized Certificate of Recognition (CoR).
- Real aircraft systems and practical training experience.
- Modern laboratories, hangar facilities, and digital learning resources.
- Strong industry linkages ensuring employability.
- Focus on aviation safety, professionalism, and industry readiness.

Photo Gallery

Snapshots from the B.Sc. (Aeronautics) Program Activities & Facilities:



AMO Facility At Indicopters Private Limited, Greater Noida



Welcome of the New Dean – Formal event marking departmental interaction with the Faculty of Engineering & Technology.



Student Presentations and Group Seminars – Showcasing technical knowledge and presentation skills.



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Certificate Distribution – Recognizing achievements in seminars, group discussions, and competitions.



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JET 108 Seminar – Technical seminar and presentation session held at the University Auditorium.



Engine Laboratory – Practical training on aircraft propulsion systems and components



Structural Laboratory - Practical training on aircraft structural systems and load-bearing components



Electrical Laboratory - Study of electrical circuits, instruments, and systems used in aircraft.



Jamia Hangar - Core hands-on training environment simulating real maintenance conditions.



AMO Hangar (Indoceptors Facility) - Advanced industry-based Practical Exercise on Live Helicopter.



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Classroom Environment – Modern, digitally equipped learning spaces for academic sessions.

Contact

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