# INSTITUTE OF AERONAUTICAL ENGINEERING

**(Autonomous)**

Dundigal, Hyderabad - 500 043, Telangana

## Ph.D Faculty Research Undertaking

**Academic Year: 2025 – 26**

| | |
|---|---|
| **Name of the Faculty** | |
| **Designation** | |
| **Date of Joining** | |
| **Employ ID** | |
| **Department** | |
| **Experience at IARE (in Years)** | |

I, the undersigned, hereby undertake to commit myself to the following research related targets for the academic year **2025 – 26**, in alignment with the institutional vision and objectives for faculty development and research excellence

## Research and Publication Targets

### 1. Journal Article Publications

I will publish a minimum of **two** Journal Articles in **Scopus / Web of Science / SCI / SCIE** indexed journals during this academic year. At least **one** article will be published in journals of Q1 or Q2 quartile ranking.

### 2. Conference Paper Publications

- I will publish and present a minimum of **two** conference papers in an **IEEE / SPRINGER / Elsevier** or equivalent peer-reviewed national/international conference.
- I will also promote **two** student publications as Conference Paper / Journal Article

### 3. Research Proposal Submissions to External Funding Agencies

- I will prepare and submit at least **one** research / project proposal(s) and to recognized external funding agencies such as DST, SERB, DRDO, DBT, AICTE, CSIR, ICMR, MSME, Smart India Hackathon etc.
- I will prepare and submit at least **one** scheme / product development / innovation proposal to a recognized external funding agency such as DST, SERB, DRDO, DBT, AICTE, CSIR, ICMR, MSME, MeitY, MoE, ISRO, Smart India Hackathon, Atal Innovation Mission, or any equivalent national/international body supporting academic R&D initiatives
- I will coordinate with the institutional Research and Development (R&D) Center for timely submission and compliance.

### 4. Patent Filing and Grant

- I will file at least **one** patent during the academic year based on my research innovation.
- I will make efforts towards getting the patent published and progressing toward examination or grant stage.
- I will also promote student participation in patentable works where possible.

## 5. Student Project Mentoring

I will actively mentor and guide a minimum of **four** student project teams during the academic year, under categories such as Summer Research Internship (SRI), Technology Innovation and Product Support (TIPS), Vertically Integrated Projects (VIPs), Projects In Community Services (PICS), Capstone Project, AI in Software Development Life Cycle, Software Engineering / Software Design Projects, Full Semester Internship (FSI), Side Project (SP).

## 6. External Innovation and Hackathon Mentorship

I will actively mentor and guide student teams to participate in at least **three** major ideathons, coding / hardware hackathons, or innovation challenges conducted outside the institution, including but not limited to:

| TCS CodeVita | CodeChef SnackDown | RoboCup India |
|---|---|---|
| InfyTQ | Facebook Hacker Cup | National Robotics Championship |
| Microsoft Imagine Cup | IIT-Bombay Techfest | NI NIYANTRA |
| Google Code Jam | Smart India Hackathon (SIH) | Quest Global Ingenium |
| Google APAC | Tata InnoVent | ACM ICPC |
| SAE Aero Design | SAE Baja | SAE SUPRA |
| Texas Instruments India Innovation Challenge | International Collegiate Programming Contest (ICPC) | ASME Human Powered Vehicle Challenge (HPVC) |

## 7. SDG Mapping of Research and Innovation Activities

- I will ensure that my research publications, funded project proposals, patents, and student mentoring activities contribute meaningfully to one or more of the **17 United Nations Sustainable Development Goals (UN-SDGs)**, as aligned with institutional SDG policy.

- I will **identify and report the SDG(s) addressed** in each of the following academic and research contributions:
    - Journal and conference publications
    - Funded research and product development proposals
    - Patent filings and technology disclosures
    - Student projects and hackathon/problem-solving challenges

- I will specifically map my work to relevant SDGs such as (but not limited to): SDG 3 (Good Health and Well-Being), SDG 4 (Quality Education), SDG 6 (Clean Water and Sanitation), SDG 7 (Affordable and Clean Energy), SDG 9 (Industry, Innovation and Infrastructure), SDG 11 (Sustainable Cities and Communities), SDG 12 (Responsible Consumption and Production), and SDG 13 (Climate Action).

**Signature of the Faculty**