Department of Aeronautical Engineering – SREC

About Aeronautical Engineering

- Started in **2008**.
- Offers **B.E. Aeronautical Engineering Program** (NBA accredited, permanently affiliated to Anna University, Chennai).
- Dedicated faculty specialized in diverse areas of Aeronautical Engineering.
- State-of-the-art laboratories including a **full-fledged UAV Laboratory** for design, development, analysis, and piloting of UAVs.
- Provisions for students to gain skills and contribute to society.

Department Highlights

- Centre of Excellence in UAV
- Advanced Laboratories & Equipment
- Aero Modelling Courses
- MoUs with **LYNX, Capgemini, IAMPL, AirWorks, Govt. ITI, wethe5pilots**
- Classic Domains: Aerodynamics, Propulsion, Structures, Thermal Engineering, Materials & Maintenance
- Cutting-edge Domains: Flight Mechanics, Avionics, UAV, Simulation, Programming
- Add-on & Value-added Courses
- Internships and In-plant Trainings
- Guest Lectures, Webinars, Seminars, Workshops
- Software Certifications
- Student Associations & Clubs
- Social Responsibility initiatives (Skill development for Govt. ITI, Govt. Schools, underprivileged children)
- Sports & Outbound Training

Head of the Department

- **Dr. P. Chandramohan, B.E., M.E., Ph.D**
    - Provides leadership in Aeronautical Engineering education.
    - Department equipped with **Flight Simulator** and **two trainer aircraft**.
    - Collaborations with industries for **UAV development and training**.
    - Industry tie-ups: **Capgemini, AirWorks, Collins Aerospace, Boeing, ePlane, IITs**.
    - Drone pilot training with **DGCA certification** via Garuda Aerospace.
    - Students trained in **Dassault Solidworks Certification**.
    - Aeromodelling activities: Paper planes, RC planes, Water rocketry, UAV design-build-fly projects.
    - Students gain exposure through **workshops, internships, and industry-led courses**.

Vision

To achieve global recognition as a Centre of Excellence by imparting quality education leading to graduates becoming professionals with specialized knowledge in Aeronautical Engineering.

Mission

1. Provide strong fundamentals in Aeronautical Engineering with problem-solving and application-oriented learning.
2. Create an environment conducive to **research and consultancy projects**.
3. Develop students with strong **social, moral, and ethical values**.

Program Educational Objectives (PEOs)

1. Apply knowledge of sciences, mathematics, and Aeronautical Engineering to solve industrial problems.
2. Utilize engineering techniques, tools, and teamwork in multidisciplinary projects.
3. Exhibit professionalism, ethics, and leadership qualities.

Program Outcomes (POs) – as per NBA

1. **Engineering knowledge** – Apply mathematics, science, and engineering fundamentals.
2. **Problem analysis** – Identify and analyze complex problems.
3. **Design/development of solutions** – Design systems meeting safety and societal needs.
4. **Research** – Conduct investigations and draw valid conclusions.
5. **Modern tool usage** – Use IT tools and modeling techniques effectively.
6. **Engineer & society** – Assess societal, health, legal, and cultural impacts.
7. **Sustainability** – Apply knowledge for sustainable development.
8. **Ethics** – Commit to professional ethics and norms.
9. **Individual & teamwork** – Function as individual and team leader.
10. **Communication** – Write reports, make presentations, and communicate effectively.
11. **Project management & finance** – Apply engineering and management principles.
12. **Lifelong learning** – Engage in lifelong independent learning.

Program Specific Outcomes (PSOs)

1. Demonstrate integration of science and engineering for **UAV design**.
2. Apply aeronautical knowledge to design/develop systems in aeronautical and allied fields.
3. Utilize aeronautical engineering knowledge for **industrial applications**.

Laboratories

- Aerodynamics Laboratory
- Aircraft Structures Laboratory
- Propulsion Laboratory
- Avionics Laboratory
- Aircraft Systems & Maintenance Laboratory
- CAD Laboratory
- UAV Laboratory

Faculty

- **Dr. P. Chandramohan** – Head of the Department
- **Dr. C. J. Thomas Renald** – Associate Professor
- **Mr. R. Sivakumar** – Assistant Professor (Sl. Grade)
- **Mr. T. Ashokkumar** – Assistant Professor (Sr. Grade)
- **Mr. C. Dinesh** – Assistant Professor (Sr. Grade)
- **Mr. K. Robin Johny** – Assistant Professor (Sr. Grade)
- **Mr. V. Siva** – Assistant Professor (Sr. Grade)
- **Mr. P. Sivakumar** – Assistant Professor (Sr. Grade)
- **Mr. R. Velmurugan** – Assistant Professor (Sr. Grade)
- **Mr. S. Gunasekaran** – Technical/Supporting Staff
- **Mr. D. Sabari** – Technical/Supporting Staff
- **Mr. D. Mohanraj** – Technical/Supporting Staff
- **Ms. R. Kalpana** – Technical/Supporting Staff
- **Mr. K. Aravindan** – Technical/Supporting Staff