

Information Brochure

# The Institution of Engineers (India)

A Century of Service to the Nation

**One Day Seminar**

on

***“Advanced Strategies for Optimizing UAV  
Networks and Operational Efficiency”***

**Date: 08.08.2025**

Organized by



**The Institution of Engineers (India)**  
**Coimbatore Local Centre**

*Under the aegis of*

**Aerospace Engineering Division Board, IEI**

*in association with*



**Department of Aeronautical Engineering**  
**Hindusthan College of Engineering and Technology**  
(An Autonomous Institution)  
**Coimbatore**

**Venue: Ganga Hall, HICET, Coimbatore - 641032**

### About The Institution of Engineers (India):

The Institution of Engineers (India) or IEI is the largest multidisciplinary professional body that encompasses 15 engineering disciplines and gives engineers a global platform for sharing professional interest. IEI has membership strength of above 2.6 lakh. Established in 1920, with its headquarter Kolkata, IEI has served the engineering fraternity close to a century. During this period, IEI has been inextricably linked with the history of modern-day engineering.

In 1935, IEI was incorporated by Royal Charter and remains the only professional body in India, which has been accorded this honour. Today, its quest for professional excellence has given it a place of pride in almost every prestigious and relevant organization across the globe. It provides a vast array of technical, professional and supporting services to the Government, Industries, Academia and the Engineering fraternity, operating through its 125 Centres located across the country and 6 overseas chapters. Besides, IEI has bilateral agreements with about 31 international bodies and membership of another 8 international bodies of the developed nations across the globe.

Being recognized as a Scientific and Research Organisation (SIRO) by the Department of Scientific and Industrial Research, Ministry of Science and Technology, Government of India, IEI promotes the cause of research and development by providing Grant-in-Aid support to undergraduate, postgraduate students and PhD Research Scholars of Engineering Institutions and Universities. IEI has been recognized as Scientific and Industrial Research Organization (SIRO) by the Ministry of Science & Technology, Government of India and besides conducting its' own research, provides Grant-in-Aid to UG / PG / PhD students of Engineering institutes and Universities.

IEI holds the International Professional Engineers (IntPE) Register for India under the global International Professional Engineers Alliance (IntPEA). The institution also awards the Professional Engineers (PE) Certification. IEI in collaboration with Springer regularly publishes peer-reviewed international journal in five series, namely, Series A, Series B, Series C, Series D and Series E covering fifteen engineering disciplines.

### About Coimbatore Local Centre:

The Centre was founded in the year of 1965, under the Chairmanship of Dr G R Damodaran, an educationist, the former Vice - Chancellor of Madras University, philanthropist and the architect of PSG College of Technology, Coimbatore who lived for the technology development of the Nation. For more than five decades, the IEI Coimbatore Local Centre (CLC) has contributed a lot to the engineering community and to the society as a whole. The Institution of Engineers (India), Coimbatore Local Centre has been adjudged the **"Best Local Centre" based on all-round performance during the year 2023 - 2024** and has also received the **Best Local Centre Award in 2019 - 2020 and 2022 - 2023**.

### About the College:

Hindusthan College of Engineering and Technology (HiCET) was established in the year 2000 by the great Industrialist and Philanthropist, Thiru.T.S.R.Khannaiyann, founder Chairman of Hindusthan Educational and Charitable Trust whose determination and dynamism made possible the realization of this institution of excellence. Surrounded with nature's pristine beauty and an excellent infrastructure coupled with dedicated and experienced faculty has made the campus a much sought-after abode of learning.

HiCET is one of the premier technological institutions inculcating quality and value-based education through innovative teaching learning process for holistic development of the students. At present, the college is offering 16 UG Programmes, 6 PG Programmes and 14 Research Programmes. Currently

around 6000 students pursuing various Undergraduate Programmes (B.E./B.Tech.), Postgraduate Programmes (M.E./M.Tech, MBA & MCA) and Research Programs (Ph.D.) in the institution and are mentored by above 366 well qualified and experienced faculty members. The institution is recognized under Section 2(f) and 12B of University Grants Commission (UGC) and is an Autonomous Institution from 2016-17, affiliated to Anna University, Chennai with permanent affiliation for most of the programmes, approved by the All India Council for Technical Education (AICTE). 86.6% of eligible programs are NBA accredited and our institution has been accredited by NAAC 'A++' Grade with CGPA of 3.69 out of 4 in Cycle 2 and Institution Ranked NIRF - India Rankings 2024 in Band 201-300 in Engineering category and Band 11-50 in Innovation category. Also an ISO 9001:2015 certified institution.

### **About the Department:**

The Department of Aeronautical Engineering is located at Othakalmandapam, Coimbatore, on the sprawling campus of Hindusthan College of Engineering and Technology. It first opened its doors in 2005, with a capacity of 60 students. From the academic year 2008-2009 forward, the sanctioned intake increased to 120 students. The Department is directed by a dedicated team of teaching and non-teaching staff with a wide range of experience, and it has well-equipped laboratories and good infrastructure to support the autonomous curricular needs. Until now, the department has been in the forefront of advancing aeronautical education and indigenous research in the field of aeronautics. This was made possible by a capable, dedicated, and efficient faculty and cutting-edge laboratory facilities.

The department works for student development and overall quality, as well as meaningful object-oriented academic engagement between students and faculty in a healthy environment. It also aids in the development of creativity, uniqueness, and group dynamism among students. The Department is proud of its students who are serving in the Indian Air Force, Indian Army and Indian Navy. Students are also placed in DRDO laboratories, Hindustan Aeronautics Limited, UTC Aerospace System India, Saffron Aerospace, Airbus Group India, Boeing, Collins, BELL Helicopter India, GE, ALTRAN, Indigo Airlines, L&T Infotech, Info view, CTS, Infosys, and other leading companies. A significant number of students are pursuing higher studies in IITs and Foreign Universities. A strong mentoring support are providing to the students to take participation in State/National/International level competitions.

The department has received funds from various funding agencies such as AICTE (RPS & MODROBS scheme), ISRO, IE(I), AeSI. The department has signed functional MoU'S with leading aviation companies. Institute has received the approval for the second DGCA approved Remote Pilot Training Organization (RPTO) which is inaugurated by Honorable Chief minister of Tamilnadu. It is successfully producing the efficient drone pilots. In addition, drone development activities, Helicopter maintenance and operation activities are in full swing towards skill development and job opportunities. A separate helipad and flying area is dedicated for helicopter operations.

### **About the Theme:**

Unmanned Aerial Vehicles (UAVs), commonly known as drones, have transformed industries such as agriculture, logistics, surveillance, and disaster management. With increasing UAV applications, optimizing their networks and operational efficiency is essential for maximizing performance, reducing costs, and ensuring seamless integration into various domains. Advanced strategies, including artificial intelligence (AI), swarm intelligence, edge computing, energy-efficient power solutions, and secure communication, play a crucial role in enhancing UAV capabilities. Multiple drones work together in synchronized operations for large-scale applications such as mapping, surveillance, and disaster response.

This seminar provides a comprehensive understanding of the advanced strategies that enhance UAV networks and operational efficiency. By integrating AI, swarm intelligence, and sustainable energy solutions, UAV networks can achieve greater autonomy, resilience, and efficiency. These advancements will revolutionize industries such as agriculture, logistics, surveillance, and emergency response, making UAVs more scalable, intelligent, and adaptable for future operations.

## **Sub - Themes**

- Explore the latest advancements in UAV technologies and network optimization
- AI-driven approaches to autonomous UAV operations
- Real-time data analysis and decision support systems
- Challenges and solutions for improving UAV efficiency
- Insights into regulatory compliance and cybersecurity in UAV networks

## **Resource Persons:**

Expert members from Industries and leading Academic Institutions.

## **Eligibility:**

IEI Members, UG and PG Students, Research Scholars, Faculty Members and Practicing Engineers.

## **How to Apply:**

Registration\* for the seminar can be made by sending the duly filled application through email or by filling the registration link on or before **05.08.2025**.

**Registration Link: <https://forms.gle/43b4h1e7oD3VF9hK7>**

## **Registration Fee (including GST):**

|                            | ₹             |
|----------------------------|---------------|
| IEI Corporate Members      | <b>236.00</b> |
| UG / PG / Research Scholar | <b>236.00</b> |
| Faculty Members            | <b>354.00</b> |
| Participants from Industry | <b>472.00</b> |

## **Payment:**

All payments are to be made through crossed Demand Draft / at par cheque, drawn in favor of **“The Institution of Engineers (India), Coimbatore Local Centre”** payable at **Coimbatore** or **online payment**.

## **For Online Transfer:**

|             |                                                                     |
|-------------|---------------------------------------------------------------------|
| Name        | <b>The Institution of Engineers (India) Coimbatore Local Centre</b> |
| Bank        | <b>State Bank of India</b>                                          |
| Branch      | <b>Peelamedu Branch, Coimbatore</b>                                 |
| Account No. | <b>10141435551</b>                                                  |
| IFSC Code   | <b>SBIN0007231</b>                                                  |
| GST No.     | <b>33AAATT3439Q6ZW</b>                                              |

## **Note:**

- ❖ Pre-registration is mandatory.
- ❖ Spot registration is strictly not permitted.
- ❖ Limited participants only.
- ❖ No TA / DA will be paid.
- ❖ Kindly bring your college / industry identity card.
- ❖ Registration through email is compulsory.
- ❖ Registration fee includes: refreshments, lunch & participation certificate.

**Chief Patrons:** **Shri T S R Khannaiyann**  
Chairman & Founder, Hindusthan Educational and Charitable Trust, Coimbatore

**Smt T R K Sarasuwathi**  
Managing Trustee, Hindusthan Educational and Charitable Trust, Coimbatore

**Mr K Sakthivel**  
Trustee, Hindusthan Educational and Charitable Trust, Coimbatore

**Dr K Priya**  
Secretary, Hindusthan Educational and Charitable Trust, Coimbatore

**Patron:** **Dr J Jaya**  
Principal, Hindusthan College of Engineering and Technology, Coimbatore

#### **ORGANIZING COMMITTEE**

**Chairman:** **Dr J Krishnamoorthi**  
Chairman, IEI Coimbatore Local Centre

**Secretary:** **Dr G Madhan Mohan**  
Honorary Secretary, IEI Coimbatore Local Centre

**Convener:** **Mr V Saravana Kumar**  
Assistant Professor, Department of Aeronautical Engineering  
Hindusthan College of Engineering and Technology, Coimbatore

**Members** **Dr M Senthilkumar**, Committee Member, IEI Coimbatore Local Centre  
**Dr M Yuvaraja**, Committee Member, IEI Coimbatore Local Centre  
**Dr J Pradeep Kumar**, Committee Member, IEI Coimbatore Local Centre  
**Dr R Sivasankari**, Committee Member, IEI Coimbatore Local Centre  
**Dr V T Gopinathan**, Professor & Head, Department of Aeronautical Engg., HICET

#### **CONTACT**

|                                                                                                                                                                                                                                                                                                                        |                                                                                                                                                                                                                                                      |
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| <p><b>Dr G Madhan Mohan</b><br/>Honorary Secretary<br/>The Institution of Engineers (India)<br/>Coimbatore Local Centre<br/>PSG College of Technology Campus<br/>Peelamedu, Coimbatore - 641004<br/>Phone: 0422 - 2580733 / Office: +91 8056652764<br/>Email: coimbatorelc@ieindia.org<br/>ieicoimbatore@gmail.com</p> | <p><b>Mr V Saravana Kumar</b><br/>Assistant Professor<br/>Department of Aeronautical Engineering.<br/>Hindusthan College of Engineering and<br/>Technology, Coimbatore - 641032<br/>Email: saravanakumar.aero@hiket.ac.in<br/>Mobile: 9952361879</p> |
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**Registration Form**

**One Day Seminar**  
on

***“Advanced Strategies for Optimizing UAV Networks  
and Operational Efficiency”***

**Date: 08.08.2025**

**Venue: Ganga Hall, Hindusthan College of Engineering and Technology,  
Coimbatore - 641032**

**Name: (Block Letters).....**

**Designation:.....**

**Organization / Institution:.....**

**IEI Membership Number & Division.....**

.....

**Address for Communication.....**

.....

**Mobile Number:..... Email:.....**

**I / We enclose a DD / CHEQUE / NEFT details for Rs..... Date:.....**

**Transaction ID Number.....**

**Dated.....**

.....

**Signature**