

**Type of Event:** Workshop

**Name of the Event:** WORKSHOP ON DEVELOPMENT OF UNMANNED AERIAL VEHICLES (UAVs)

**Coordinator Details:**

Dr. Jaiprakash Dwivedi, Phone - 98198 54415, email ID-[jaiprakash.e10013@cumail.in](mailto:jaiprakash.e10013@cumail.in)

Dr. Harmmeet Singh, Phone – 7986366250, email ID- [harmeetsingh.ece@cumail.in](mailto:harmeetsingh.ece@cumail.in)

**Student Coordinators**

Anmol Kaur, Phone -7888728363, email ID - kauranmol254@gmail.com

Rijul Shakya, Phone - 8429164415, email ID - rijulshakya27@gmail.com

Hemant Kumar, Phone – 8708872262, email ID - hemantkingo14@gmail.com

**About the Workshop:**

An unmanned aerial vehicle (UAV) or uncrewed aerial vehicle, commonly known as a drone, is an aircraft without any human pilot, crew, or passengers on board. UAVs are a component of an unmanned aircraft system (UAS), which include additionally a ground-based controller and a system of communications with the UAV. The flight of UAVs may operate under remote control by a human operator, as remotely piloted aircraft (RPA), or with various degrees of autonomy, such as autopilot assistance, up to fully autonomous aircraft that have no provision for human intervention.

UAVs were originally developed through the twentieth century for military missions too "dull, dirty or dangerous" for humans. As control technologies improved and costs fall, their use in the twenty-first century is rapidly finding many more applications including aerial photography, product deliveries, agriculture, policing and surveillance, infrastructure inspections, science, smuggling, and drone racing.

**Key takeaways from the Workshop**

- Knowledge on the needs and parameters of UAV Systems.
- Understand the functioning of the Drones and their components.
- Understand the need for UAV Traffic Management.

**Course Content**

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<u>S.no</u>	Topics	Speaker
1	Introduction Unmanned Aerial Vehicles and the Need for Understanding Them	FT. LT. Kishore A T

2	How Does a UAV Work: Introduction to the Components of the UAVs and Their Functioning	Vamsi Krishna Varigonda
3	Applications of UAVs in Real Life	FT. LT. Kishore A T
4	Introduction to Autonomous UAVs and Swarm Drones	Vamsi Krishna Varigonda
5	Introduction to UAV Traffic Management (UTM) and Its Significance in Beyond visual line of sight (BVLOS) Missions	Vamsi Krishna Varigonda
6	How can anyone get started with UAVs and Significant Research Areas	FT. LT. Kishore A T

### **Tentative Schedule:**

3rd September 2021- 4th September 2021

Duration: 2 Days

### **Expert Talk By:**

1. FT. LT. Kishore A T
2. Vamsi Krishna Varigonda, BIS

### **Topics to be covered in the Workshop**

- Fabrication of Drones
- Simulation models of Drones.

### **Registration Process**

- The google form link will be shared for the participants to register for the workshop including details like Name, Designation, Present Organization, Place.
- At the end of the workshop participants are required to fill the feedback form for the betterment and learning.

- Filling the feedback form will be compulsory for the candidates to receive the workshop certificates.

**Participation Certificate to be Given**