

AADHRITA 2020

MVGR COLLEGE OF ENGINEERING (A)

DRONE TECHNOLOGY

PROGRAM INFO :

Drone Industry has become one of the fastest-growing sectors in the world and there has been the usage of this technology in many diversified fields such as real estate, defence, agriculture, communication, disaster management, logistics, and even medical sciences. Their versatility has been proven at various times. This fever has caught up in India too where technologists have predicted that India will become the next technology hub for Unmanned vehicles by 2020.

In this workshop we are going to introduce you to a new era of technology which is mainly drone technology and help you to build one for your own kind.

CURRICULUM FOR DRONE WORKSHOP:

| DATES | TOPICS COVERED | Timings |
|-----------------------------------|--|------------------------------------|
| DAY 1 (20-02-2020) THURSDAY | <ul style="list-style-type: none">• Introduction to UAVs: History, classifications & Evolution.• UAV operating principles and selections of UAV's.• Design Methodology, parameter selection.• Introductions to Unmanned Vehicle.• Aerodynamics of a drone.• Advanced Technologies used in UAV.• Propulsion systems selection, Material selection.• Introduction to Avionics and navigation systems, Autopilot system.• Understanding of an Ornithopter.• Building a demo model. | 9:30 AM -12:30 PM (3 HOURS) |
| | <ul style="list-style-type: none">• Design Methodology & parameter selection.• Propulsion systems selection, Material selection. | |

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| <p style="text-align: center;">DAY 2 (21-02-2020) FRIDAY</p> | <ul style="list-style-type: none"> • Stability and Control of Drone. • Introduction to Avionics and navigation systems, Autopilot system. • Introduction to Electro-optical payload and other sensor payloads. • Designing and Assembling of a Quadcopter. • Flight Trail. • Tuning and Testing. • Controlling and Flying. • Future Scope in Drone Technology. | <p style="text-align: center;">9:00 AM – 12:30 PM (1 Hr lunch break) 1:30 PM – 3:00 PM (5 HOURS)</p> |
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MISSION :

- Our main aim is to drive the students towards advanced technologies.
- Identify technologies that would enhance more ambitious science missions.
- Getting a complete understanding and overview in this field.
- Teach a step by step process for learning the course and motivating them towards new ideas.
- Let them know the future scope in these new technologies.

Regulations :

- Enrolments must be done before or on the last date of registrations (14th FEB 2020).
- All the participants are divided into equal teams, 3 – 5 members per team. AND ALSO UNDER TEAM LEAD .
- TEAM LEAD will provide a drone assembling kit, tools required to assemble and a workshop brochure.
- Kit should be handled carefully and must be assembled as per the directions given by the TEAM LEAD, if you fail to observe the precautions, you're liable for compensatory charges

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- All the parts and tools should be returned to the TEAM LEAD without missing or any damage.
- Recommended to bring a note with required stationary and it is very helpful to bring your own laptop on Day 2.

Registration fee: 500/- per head.

All the participants will be provided with Certificates.

WORKSHOP EVENT MANAGEMENT:

- This event is conducted by D.E AEROSPACE under the collaboration with MACAULAY.
- Organising team is from **D.E. AROSPACE**.
- This workshop instructor S. TIRUMALA RAJU (Founder of D.E AEROSPACE).

Contact Coordinators:

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