

# **FLIGHT 2025**

# MADRAS INSTITUTE OF TECHNOLOGY DEPARTMENT OF AEROSPACE ENGINEERING ASSOCIATION OF AERONAUTICAL ENGINEERS

# **RC PLANE BUILDING WORKSHOP**

#### APRIL 5 – APRIL 6

#### **Introduction:**

Unmanned Aerial Vehicle (UAV) is a rapidly developing sector in all forms. An RC building workshop refers to a hand-on gathering where enthusiasts or hobbyists come together to construct and customize radio-controlled building work ships. Participants in the workshop engage in collaborative learning, sharing insights on design, Construction techniques, and the integration of remote-controlled systems. These workshops provide a practical platform for individuals who are interested in combining their passion for model building with the excitement of remote-control technology. Participants typically exchange ideas, troubleshoot challenges and collectively enhance their skills in creating functional and detailed RC plane building.

#### **Description:**

An RC plane or Radio-Controlled plane, is a scaled-down, model aircraft designed for remote control or by an on-board computer. Constructed from lightweight materials like balsa wood or foam, these planes are powered by electric motors (or) internal combustion engines. The radio control system allows enthusiasts to pilot the aircraft, managing functions like throttle, ailerons for roll control, and elevators for pitch control and rudder for yaw control. You can get to learn the basics and analysis involved in working of flight, electronics, mechanical functions and working of scale-downed flights.

#### **SCHEDULE:**

#### APRIL 5

TIMING	EVENT
09.00 AM - 09.45 AM	Inauguration
10.00 AM - 12.30 PM	Introduction To Rc Planes, Basics Of Flight,
	Theories, Formulae, Overview Of
	Components
12:30 PM - 01:30 PM	Lunch break
01:30 PM - 03:00 PM	Designing and assembling of parts

#### **APRIL 6:**

TIMING	EVENT
09.15 AM – 12.30 AM	Design, Fabrication and assembling of RC
	planes
12:30 PM - 01:30 PM	Lunch break
01:30 PM - 03:00 PM	Validation and testing of RC planes

#### **OUTCOMES**

On completion of this workshop, Participants will be able to:

- 1. Gain in-depth knowledge about processes in building of RC planes.
- 2. Gain Hands-on experience in building of RC planes and use of software.
- 3. Take away the **RC plane** they built with servos and other electronics.

#### **KIT WILL BE PROVIDED**

PARTICIPATION CERTIFICATES WILL BE PROVIDED TO ALL PARTICIPANTS

#### TAKEAWAY KIT DETAILS PER TEAM:

- 1. Model you have done (includes coroplast sheets and boards)
- 2. 4 servos
- 3. \*Required electronics
- 4. Connecting cables
- 5. Propeller

# **REGISTRATION FEE: INR 2699/- per team (A team can contain Min 2 to Max 4 members)**

#### LUNCH WILL BE PROVIDED

# For any queries, feel free to contact:

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