



FLIGHT 2024

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

RC PLANE BUILDING WORKSHOP

MARCH 16- MARCH 17

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:

March 16

TIMING	EVENT
09.00 AM- 09.45 AM	Inauguration
09:45 AM- 10:45 AM	Introduction of processes and formulae involving in building of RC planes
10:45 AM- 11:45 AM	Calculations for different set of constraints
11:45 AM- 12:30 PM	Designing of parts with different set of constraints in Solid works or CATIA
12:30 PM– 01:25 PM	Lunch break
01:30 PM- 03:00 PM	Fabrication and assembling of parts (wing and fuselage)

March 17

TIMING	EVENT
09.15 AM- 10:30 AM	Fabrication and assembling of parts (horizontal tail and vertical tail)
10:30 AM- 12:30 PM	Introduction to electronics used in RC planes.
12:30 PM- 01:25 PM	Lunch break
01:30 PM- 03:00 PM	Testing of control surfaces (if possible, flying can be done)

Outcomes:

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

1. Gain in-depth knowledge about process in building of RC planes
2. Hands-on experience in building of RC planes and uses of software
3. Participants get to take away the RC plane they built.

KIT WILL BE PROVIDED

PARTICIPATION CERTIFICATES WILL BE PROVIDED TO ALL PARTICIPANTS

REGISTRATION FEE: INR 699/- per head

For any queries, feel free to contact:

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