

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

## AIRCRAFT DESIGN PROJECT

"Creativity is intelligence having fun"

- Albert Einstein

### **Introduction:**

The conventional design procedure involves various assumptions, idealizations and usage of empirical relations to make value approximations. The theme of ADP in FLIGHT'22 is to use the available computational tools or software to innovate and improve the design procedure.

# **Description:**

The participants have to select one specific aspect of the design procedure and implement the tool or software of their choice to improve or frame an alternate design procedure. Few examples for the titles are given below:

- Using Ansys for drag estimation.
- Using XFLR5 to find lift distribution.
- Using MATLAB for stability analysis.
- Using programming to obtain climb curves.

# Rules & guidelines:

- Maximum of 4 members per team.
- Participants must bring their college ID cards without fail.

- The participating teams would have to first present the innovation or improvement to the design procedure with a PPT.
- The teams also have to demonstrate the software/tool they use.
- The demonstration has to be brought as a video and the contents of the video has to be explained.
- The PPT and the video should be brought in a pen drive.
- Each team will be given 10 minutes for presentation and 5 minutes for answering the questions from judges. The time split up for the PPT and demonstration video presenting is left for the team's choice.
- The topic doesn't have to be specified during online registration.
- The judging criterion would be based on the uniqueness in the topic, professionalism in presentation and knowledge over the chosen tool/software.
- Judges' decision will be final.

### **Contact:**

For any queries regarding the event, feel free to contact,

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**Date:** 13<sup>th</sup> May 2022 (Day 1 event)

**Time:** 9 am

**Registration fee per team:** Rs. 149

**Prize worth:** Rs. 1500