

MIT AERO Club

Faculty Coordinator : Mrs.Savita Pawar

Student Coordinators :

Sadashiv Vaidya, Final Year, Mechanical

Shubham Takbhate, Final Year, Mechanical

Rohan Hangi, Final Year, Electronics

Atish Bargaje, Final Year, Computer



MIT AERO is an aeromodelling club started in the year 2018–19. Club is initiated by Rohan Hanagi and Shubham Takbhate students and Mrs. Savita Pawar, Assistant Professor, School of Electrical Engineering. The vision of the club is 'To gather and motivate interested students for designing drones and aerodynamic planes '.In MIT Aero club students are trained for designing and flying of drones and planes. Students use XFLR software for aerofoil analysis in plane design. Students are also trained to use firm wares like Ardupilot and Beta flight for handling flight controllers.

Major Achievement:

SAE Aero Design challenge 2019:

In the year 2018-19 two teams participated in Micro and Regular category of SAE Design challenge. They secured All India Rank 17th in both categories.



SAE Team After competition



Micro Model secured All India Rank 17 in SAE Aero Design challenge 2019



Regular Model secured All India Rank 17 in SAE Aero Design challenge 2019

Events conducted by our club in AY 2019-2020 are:

1. Air-O-task, Drone competition:

The competition was held at AISSMS Engineering College on 18th and 19th September 2019. Three teams (9 Students) from MITAero club participated in the competition. The competition was based on finding the agilest and fastest Drone. Flyers were Abhishek Muttath, Sudhanshu Kale and Sumit Sakharkar. One of the team headed by Abhishek secured 2nd rank and other two teams secured 5th and 6th rank out of 14 teams participated in competition.



2. Workshop on Drone and Plane Design

The workshop was conducted by MIT Aero club for all the interested students in MITAOE on plane and drone on 21st to 23rd August 2019 in D011 classroom. The basics of plane design were taught by Shubham Takbhate and Drone design and assembly was taught by Sumit Sakarkar and Abhishek Muttath. Around 80 students participated in the workshop. They all got participation certificate for the workshop and entry to join club.



3. GRAVITAS IDRL:

This IDRL (Indian Drone Racing League) competition was held at VIT Institute of Technology, Vellore on 12th and 13th October, 2019. Major attractions of this competition was design and racing of drone through the given arena. Abhishek Muttath participated in this competition and secured 1st rank in Beginner level and 6th rank in All India Pro level.



4. TESSERACT (Indian Drone Racing League) :

The competition was conducted by IDRL at Pandit Deendaya Petroleum University, Gujarat on 8th, 9th and 10th November. This event was also about design and flying of drone through various obstacles. Abhishek Muttath secured 7th rank in All over India pro level in this competition.



5. SAE Aero Design Challenge workshop:

This workshop was conducted as the first stage of pdpu SAE Aero design challenge competition at MLR Institute of Technology, Hyderabad on 2nd & 3rd November 2019. From two teams, Team Blitzker (Major) and team Falcon (micro) 8 students participated in the workshop. Both teams designed and fabricated a plane. They learned all the basics of design of aerodynamic planes.



6 Internship in MITAOE

MITAero club organised 30 Days internship programme from 16th June 2019 to 17th July 2019 in college. Total 9 students completed training. The outcomes of the internship was PCB Making, Quad-copter assembling, Design of Quad-copter and Technical Report.

7 Quad Copter training

MITAero club organised Drone training in college for MITAOE students from Sept 2019 to Jan 2020 for preparation of IIT Bombay Techfest event. Student trained in assembling, PCB design, flying of Drone. Atish Bargaje BTech Computer and Abhishek Muttath, TY BTech computer contributed lot in training students

8 RC plane design training

MITAero club organised RC plane design and flying training from Sept 2019 to Jan 2020 for preparation of IIT Bombay Techfest event. Shubham Takbhate, BTech Mechanical, Rohan Hangi, BTech, Electronics, Sumit Sakarkar, TYBTech Computer contributed lot in training students.

9 Drone racing competition held at PCCOE Ravet, Pune

PCCOE Ravet organised Drone racing event on 12th to 13th February 2020. Two students participated in event. Event mainly deals with the basic setup of the quad which should pass through different obstacle in a given direction without omitting any of it and without crash. Abhishek Muttath achieved 1st rank.



10 VJTI College of Engineering IDRL:

IDRL competition held at VJTI College of Engineering on 27 and 28 December, 2019. This competition was about flying drone through obstacles in night. Abhishek Muttath secured 4th Rank in competition.



11 BITS PILANI GOA, INDIAN DRONE RACING LEAGUE

IDRL competition was organised by BITS Pilani, Goa on 2nd to 3rd February 2020. This events mainly deals with the basic setup of the quad which should pass through different obstacle in a given direction without omitting any of it in covering three laps. Abhishek Muttath participated in competition and achieved 7th rank all over India

12 Parul University, Drone competition

Projection Line of Sight Event for Drone competition held at Parul University, on 14th and 15th February 2020. This events mainly deals with the basic setup of the quad which should pass through different obstacle in a given direction without omitting any of it and without crash. Abhishek Muttath participated in competition and achieved 3rd rank all over India

13 Boeing competition, in Techfest, at IIT BOMBAY

RC plane design competition was organised by IIT Bombay on 3rd and 4th January 2020. Twenty member (5 teams) of MITAero participated in competition. Round 1 is about carrying maximum possible payload in which we carry the 750 gram of payload. Round 2 was about the dropping the payload in a circle of radius 20 meters the payload is in the form of tennis ball each weigh 45 grams. 3 teams reached in finals.



14 Op Rahat Drone competition in Techfest, at IIT BOMBAY

Drone racing competition was organised by IIT Bombay on 4th January 2020. 16 students (4 teams) of MITAero club participated in competition. The competition was about flying of Drone through objects and another task is Image processing. Team have to scan the barcode and then follow the path. One team achieved 3rd rank.

15. MITAero club interview conducted by SAM TV

Sam TV conducted an interview of MIT Aeromodelling Club on 15th February, 2020 when the students were working in their lab. They were preparing for the SAE competition. The students were asked about their work and Sam TV was delighted hearing from them about their work. Thanks to Sam TV for

giving MIT Aero a great exposure through media and appreciating the students' efforts

16 Club Mela

Every year MITAOE organise various events during College Annual Social Gathering. Part of this on 14th Feb 2020 club mela was organised for all technical & non-technical club of MITAOE. MITAERO team presented 2019 year participation, achievement and RC Plane model designs. Trail of Drone flying was exciting part of event for all.