

Two-Day Workshop on Quadcopter

The Two-Day Workshop on Quadcopter was organized by the UAV Lab in association with the Dept. of Aeronautical Engineering, MVJCE. The proposal got approved from the concerned authorities and was scheduled to execute on the dates of 29th and 30th of March 2019. In total 45 students have registered themselves for the workshop, by paying a fee of Rs. 1250 with the Accounts Section. The venue for the workshop was chosen to be the UAV Lab.

On 29th March 2019, the workshop started off with a very brief inaugural function, at 09:30 AM at Seminar Hall No. 5. The function was attended by the participants, the instructors, event coordinators and the HoD of the Dept. of Aeronautical Engineering. The event Coordinator Mr. Akhil A. Chandran, delivered the welcome address and emphasized on the importance of workshop his talk, followed by a brief description of the workshop, its relevance and outcomes were delivered by Mr. Leo Peter Charles, Co- Founder and Managing Partner, Happy Landings India Pvt. Ltd. At 10:00 AM, the first session, 'Theory Session', was conducted by Mr. Charles. In this session he has covered the basic idea about a Quadcopter, its components, operation principle, applications and nuances of the control and implementation. The session came to closure at about 12:40 PM, inclusive of a tea break of 20 minutes in between.

The session two of the day, 'Quadcopter Building', was started at about 01: 40 PM at the UAV Lab after the lunch break. Firstly the students were segregated according their consent into 12 teams consisting of 8 teams of four members, one team of 5 members, two teams of 3 members and one team of 2 members. Among these, 8 teams were taken up to do the 'Quadcopter building' and rest four teams were taken up for the Quadcopter simulator flying session, the simulator flying facility was arranged in the lab itself. These parallel sessions went on till 04:30 PM. By then two teams have finished the fabrication of their Quadcopters, and the flight testing of the same has been executed on the college football ground by Mr. Charles.

On day two of the workshop, the session started at 09:00 AM in the morning. In the morning session of the day, the remaining six teams who were fabricating the Quadcopters were able to complete their systems and accordingly those were taking to flight testing. The flight testing was carried out on the basketball court this time and was executed by Mr. Pradeep Vijay. During this session few of the students were given opportunity to flight test their systems as well, and one such got crashed during the trial flying by a participant. Meanwhile the remaining four teams have started their fabrication session in the lab and the teams who were

completed with fabrication and flight testing of their Quadcopter system were trained in the Flight simulator, set up in Room No. 319. By 01:30 PM, the morning sessions came to an end. After lunch the second round of flight testing was resumed in the college basketball court at 02:30 PM, and this time more students were given opportunity for flight testing the Quadcopter systems. Though there were few crashes during the flight testing carried out by the students occurred in both days, it hasn't resulted in any sort of injury to any personal or property inside the college campus. The Quadcopter fabrication session was led by Mr. Pradeep Vijay, Mr. Leo Peter Charles and assisted by Mr. Arjun. The Quadcopter Simulator flying session was led by Mr. Ranjith Singh..

The workshop came to an end at about 04:00 PM. The valedictory function and organized in room no. 319. The chief coordinator Mr. Akhil A. Chandran, has delivered the vote of thanks to the instructors, Mr. Charles has addressed the gathering and spoke about the necessity to continue the work the students have started on the workshop. As a good will gesture Mr. Charles, on behalf of the company, has donated a Quadcopter frame to the UAV Lab. Later, the workshop came to an official closure by taking the feedback of the participants.



Two-day Quadcopter Workshop on Quadcopter organized by the UAV Lab in association with the Dept. of Aeronautical Engineering, MVJCE on 29th and 30th of March 2019: Mr. Leo Peter Charles, Co – Founder and Managing Partner, Happy Landings India Pvt. Ltd., is conducting the Theory Session, at the Seminar Hall No. 5 on the first day.



Two-day Quadcopter Workshop on Quadcopter organized by the UAV Lab in association with the Dept. of Aeronautical Engineering, MVJCE on 29th and 30th of March 2019: Mr. Pradeep Vijay, Happy landings India Pvt. Ltd., inspecting a Quadcopter fabricated by a participating team, at the UAV lab on the first day.



Two-day Quadcopter Workshop on Quadcopter organized by the UAV Lab in association with the Dept. of Aeronautical Engineering, MVJCE on 29th and 30th of March 2019: (from the left) Ms. Sneha, Ms. Usha G and Ms. Shubhashree D. V, IVth semester Aeronautical Engineering, fabricating their Quadcopter at the UAV Lab on the second day.



Two-day Quadcopter Workshop on Quadcopter organized by the UAV Lab in association with the Dept. of Aeronautical Engineering, MVJCE on 29th and 30th of March 2019: Mr. Pradeep Vijay, Happy Landings India Pvt. Ltd., flight testing a Quadcopter fabricated by a participating team, at MVJCE Basketball Court, on the second day.

Outcome of the Event:

At the end of the workshop the students would be able to understand the basics of Quadcopter design, fabrication, testing and application. This would enable and encourage them to pursue design and development of Quadcopter based UAV systems.