SKYY RIDER PRESENTS



INTERNSHIP ON DRONE & AIRCRAFT DESIGN (2 WEEKS & 4 WEEKS)

BENEFIT OF THE PROGRAM

- Learn About basic and advanced concepts, design aspects of Drones and Aircraft.
- Interact with Experts and get career guidance
- This Internship includes several projects- Participants will execute several projects end of the internship
- Finest program for students seeking for higher study in foreign University in Aerospace
- One of the finest programs for Drone related jobs.
- Globally accepted Certificate, LOR after the program



SKYY RIDER INSTITUTIONS Contact us at: 8800889353 MAIL AT: info@skyyrider.com ,VISIT : www.skyyrider.com

PROGRAM DETAILS:

BASIC AIRCRAFT & DRONE DESIGN (2 WEEKS)



- 1. Aircraft and its details
- 2. Basics of Aerodynamics, Basic of Drones
- 3. Life, Drag, Equations
- 4. Basics of Drone Design(Quadcopter)
- 5. Formulate Propeller's Behaviour and Performance
- 6. Formulate Linear and Rotational Drone Dynamics Equations
- 7. Drone Actuation and control Equations
- 8. Develop Open-loop Drone model in Simulink
- 9. Basics of Control Theory
- 10. Automated altitude control using PID controller (Closed-loop)
- 11. Mini Project of Drone design

ADVANCED AIRCRAFT & DRONE DESIGN (4 WEEKS)

- 1. Aircraft and its details
- 2. Basics of Aerodynamics, Basic of Drones
- 3. Life, Drag, Equations
- 4. Basics of Drone Design(Quadcopter)
- 5. Formulate Propeller's Behaviour and Performance
- 6. Formulate Linear and Rotational Drone Dynamics Equations
- 7. Drone Actuation and control Equations
- 8. Develop Open-loop Drone model in Simulink
- 9. Basics of Control Theory
- 10. Automated altitude control using PID controller (Closed-loop)

- 11. Kinematics and Dynamics of a 6DOF system
- 12. 3D modeling of Drone
- 13. CFD analysis for Design of custom Propellers, in Ansys Fluent
- 14. Applied Control System
- 15. Global controller Architecture modeling in Simulink
- 16. MBD simulation of Drone in SimScape
- 17. 3D motion Visualisation of Drone in SimScape
- 18. MPC altitude controller
- 19. Feedback Controller
- 20. Trajectory Optimization
- 21. Major Project (Multiple Projects)

<u>NOTE:</u> There is Limited seats in each batch. Seats are offered based on first come first serve basis.

REGISTRATION PROCESS:

- 1. Students need to pay the registration fee at the link and get registered.
- 2. After the payment & registration, our training team will get in touch with students regarding batch details.

