Pravega AVIAN AEROSPACE INSPIRATION THROUGH INNOVATION Hosted at IISc BANGALORE

# RC Hovercraft

## Content Outline

1. Introduction to air cushion vehicles
2. Introduction to Unmanned vehicles and the market
3. Basic principles of air cushion vehicles
4. Concepts of hovering and forward propulsion
5. Aerodynamics
6. Designing the skirt and pressure chamber
7. Controlling the hovercraft
8. Power plant
9. Electronics - Basics
10. RF control using PWM Signals
11. Controlling BLDC Motors
12. Controlling Servos
13. Working of Brushless DC Motors
14. Basics of autonomous systems and GPS
15. Construction
16. Ground Trials

## Advantages of attending the workshop

1. The program is designed to teach the students in a fun filled way, increasing their interest in
subjects.
2. Workshop to be handled by experienced tutors with aerospace background.
3. Students will learn about the booming Unmanned Vehicles field.
4. Internationally recognized certificate from Avian Aerospace through International Accreditation Organization (IAO)

## Kit details

S. No Items Quantity
1. Coro sheet 3mm Few
2. Coro sheet 5 mm Few
3. Skirt material 1
4. Pins Few
5. Adhesive tape strips Few
6. Horns 1

7. SS Wire 1
8. BLDC Motor 1
9. Propeller hub 1
10. Electronic Speed Controller 1
11. Gold Connector 1 set
12. Tool Kit 1
13. Certificates to Each participant

(The kit doesn't include battery, battery charger and Transmitter (Remote), Receiver)