

# **AUTONOMOUS DRONE**

## **MOTIVATION :**

Normally Drones are Remote Controlled. But when it comes to scan/analyse very large area, using Remote Controlled Drone is cumbersome. So why not make it AUTONOMOUS!!

## **VISION :**

Autonomous Drone once given a task ex. To shoot (Video record) the specified area and comeback to initial position, should be able to do such tasks successfully. Such Drones are very useful in scanning and analysing very large area such as large farms, deserts, oceans, etc. where Remote controlled Drones are useless because of Range factor and/or due to Real time controlling of Drone manually when it's not needed.

## **OBJECTIVE :**

To design and make an AUTNOMOUS DRONE which is able to stabilize itself in the air and is able to Record the specified area with attached camera and to come back to its initial position when the job the done.

## **BREIF IMPLEMENTATION STEPS:**

1<sup>st</sup> step is to build a Quad-Copter.

2<sup>nd</sup> step is to make it self balancing. Which includes a functional quadcopter which is able to balance itself.

3<sup>rd</sup> step is mainly coding step, which includes collecting data from attached sensors like accelerometer, gyroscope, altimeter, etc. and on board Real Time processing of the data.

## **WHAT WE EXPECT TO LEARN :**

Working with microcontrollers and using different sensors.

Extensive Coding.

**APPROX COST** : Around Rs. 30,000.

## **TEAM MEMBERS :**

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