



WEBINAR ON AERIAL ROBOTICS- A REPORT

The pandemic may restrict us indoors but it cannot dampen our spirits to dabble with new things, pick up new hobbies and learn something new....

Keeping in mind the individual traits, interests and needs of the children, a webinar on "Aerial Robotics- Current and Future Technology" was conducted for the students of Classes VIII to XII on 27th August, 2021 from 1:00-2:00 pm. Mr Soumitra Dey, Mentor of Change, Atal innovation Mission was the guest speaker.

Robotics is an interdisciplinary research between computer Science and engineering to design intelligent machines that can help and assist humans in their day-to-day lives and keep everyone safe.

Mr Dey explained about the Aerodynamics and the basic concepts involved in working of drones. Aerodynamics is the way air moves around things. Bernoulli principle is the fundamental principle of aerodynamics. There are two types of drones, i.e

Based on aero dynamics: It includes fix wings, rotary wings, flapping wings and multi-rotor.

Based on landing: HTOL and is VTOL

Further, he also explained about the different sensors used in drones i.e gyroscope sensor, accelerometer, GPS, speed and distance sensor, infrared and thermal sensors, image sensors, chemical sensors etc.

He briefed the students about the DGCA rules to be followed for key regulations of Drone usage.

The session ended with a Question-Answer round with the students in which students enquired about the courses available in various universities and its scope across the globe.

Ms Kamna Joshi, the teacher emcee proposed the vote of thanks.

Aerial Robotics: Current & Future Technology

DATE : 27th August, 2021
DAY : Friday
TIME : 1:00 To 2:00 PM
CLASSES : VIII-XII



Mr. Soumitra Dey
Mentor of Change
Atal Innovation Mission

Live webinar link:



Classification of Drones

Based on Aerodynamics

- Fixed Wings
- Rotary Wings
- Flapping Wings
- Multi Rotor
 - Tricopter
 - drone
 - Hexacopter
 - Octacopter

Based on Landing

- HTOL Horizontal Take Off & Landing
- VTOL Vertical Take Off & Landing

Type	Maximum Weight	Maximum Range	Category
Nano	200 gm	5km	Fixed wing, medium
Micro	2kg	20km	Fixed wing, medium
Mini	30 kg	40 km	Fixed wing, medium
Light	50 kg	70 km	Fixed wing, Medium
Small	100 kg	100 km	Fixed wing
Tactical	400 kg	100 km	Fixed wing
MALE	1000 kg	200 km	Fixed wing
MALE	4000 kg	200 km	Fixed wing
Heavy	2000 kg	600 km	Fixed wing
Super Heavy	2500 kg	1000 km	Fixed wing

GLIMPSES OF THE WEBINAR

Submitted By- Swati Chawla
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