



Circular No. MSN/SB/12/2024

**Circular - SUPW
Robotics & Aeromodelling
Class IX (2024-25)**

Dear Parent

Date: 15.04.2024

In our constant endeavour to provide holistic learning, we have associated with Robospecies & Mindwize Academy to train and educate our students in Robotics & Aeromodelling. This will increase critical thinking, problem solving and scientific temper. Robotics is the application and implementation of concepts learnt in Science, Technology, Engineering and Maths. It is a natural progression and evolution of learning. This will be a fun filled learning process that inspires interest and motivation to pursue career in the field of Science and Technology.

ADVANCED ROBOTICS

Robotics Kit Charges: 6000/- INR

Course Duration: 20 Hours

Course Details

- Introduction to Infra Red Sensors, and Interfacing IR Sensors with Roboduino Board. Introduction to Advanced Arduino Motor Shield and interfacing it with Roboduino Board.
- Concept of Line Follower, Obstacle Avoider and Edge Avoider Robot.
- Programming Robots to make a Line Follower Robot, Completion and testing of Line Follower Robots.

AEROMODELLING LEVEL-3

Aeromodelling Kit Charges Rs.4000/- per participant (includes 2 kits + Drone technology with hands on flying)

COURSE DURATION: 20 HOURS

Course Details:

The students will learn the vast science of aerodynamics throughout the year. The key take-aways for them will be:

- 1) Building, making and flying the Hunter Balsa Catapult Glider and a Depron Trainer Chuck Glider
- 2) Drone Flying & Drone Technology, by hands-on programming and flying a DJI Tello Programmable Drone.
- 3) Paper models to better understand the effects of different types and sizes of wings.
- 4) Conduct hands-on experiments to better understand key aerodynamic principles like Newton's Third Law of Motion, Bernoulli's Principle, The Coanda Effect, etc.
- 5) Airplane flight simulations which give the experience of flying real planes, along with the ability to control the switches/buttons on the control panel.

For more details, you may watch these videos:

Model flying by students : <https://youtu.be/DTR54A7bCUU>

Glimpses of some models : https://youtu.be/GgvRL_jaiQs

Interested students can submit the consent form and amount to the class teacher in a well-labelled envelope latest by 16th April, 2024.

We believe that it will be a fun and engaging experience for our students.

Warm regards

Alka Awasthi
Principal



Consent Form

My ward _____ Admission No _____ of Class / Section ___ is interested for joining Robotics course option _____. The amount of _____/- INR, (by Cash or Demand Draft No. _____ Dated _____) is being paid for the same.

Parent's Signature:

Parent's Name:

Contact No. :