

Aero Innovators



Club project spotlights : The Aero Innovators Club continues to combine creativity with real-world problem solving. This month's spotlight is to research on AquaGuardian – smart drone designed to monitor river pollution and safely remove harmful waste from water bodies.



Aero Innovators
Dream It. Build It. Fly It.



Student Voices : "Working on AquaGuardian made us realize how engineering can directly help nature." - Arham
"Designing a pollution-detecting drone taught us responsibility along with innovation." - Gurpreet

Club Name:
Aero Innovators

Motto
Crafting the future of flight technology

Manager
BalwinderKaur

Project Report and Skill Development

DEEPER DIVE

Balwinder Kaur- 11/01/2026



- Project Goals:**
- To design a drone capable of detecting different types of water pollutants
 - To promote environmental protection using technology
 - To create awareness about water pollution through real-time data

- Process/ Steps:**
- Research on water pollution
 - Sensor and design planning
 - Drone framework drafting
 - Prototype development

- Skills Learned:**
- Environmental Science Applications
 - Drone Engineering & Aerodynamics
 - Sensor Technology & Data Analysis
 - Robotics & Mechanical Design
 - Team Collaboration & Problem Solving

- Challenges and solutions :**
- Challenge: Researching about a safe waste-collection system.
 - Solution: A lightweight robotic arm could be used to avoid disturbing aquatic life while removing harmful materials carefully



Meet the Team :



Rashmeet Kaur- 11A



Gurmanat Kaur- 11A



Jasmeet Kaur- 11A



Chetan Kumar- 11A



Arham Jain- 11A



Gurpreet Singh- 11A



Brahmjot Singh- 11A

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