

PRATYAKSH GUPTA

Aspiring Mechanical Engineer

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PROFILE

IB Diploma Programme student (HL Mathematics AA, Physics, Chemistry) passionate about applying scientific principles to practical engineering solutions. Interested in Mechanical Design, Aerospace, and Mechatronics, with hands-on experience in CAD, 3D printing, and control systems.

EDUCATION

IB Diploma Programme — Sancta Maria International School 2025 – 2027
HL: Mathematics AA · Physics · Chemistry | SL: Economics · English · Hindi

INTERNSHIPS & PRACTICAL LEARNING

SolidWorks, 3D Printing & Additive Manufacturing Internship June 2026

IIT Delhi Sonapat

Hands-on training in CAD modelling, additive manufacturing, and rapid prototyping; converted engineering designs into functional 3D-printed components.

Innovation Immersion Program April 2026

IIT Delhi

Product design, prototyping, collaborative problem-solving, and practical engineering workshops.

KEY PROJECTS

Electromagnetic Suspension — Active Maglev with PID Control (Capstone) July 2026

Arduino-based real-time PID feedback control with sensor integration, electromagnet design, and hardware implementation — bridging mechatronics, electronics, and control theory.

Vertical Axis Wind Turbine April 2025

Designed and built a working model to study renewable energy generation and turbine efficiency.

Research: Orbital Mechanics & Rotational Motion (Physics) IBDP 1

Mathematical modelling of angular momentum, circular motion, and satellite dynamics.

CERTIFICATIONS

- SolidWorks CAD Design Certification — Coursera Apr – May 2026
- The Complete Mechanical Engineering — Udemy May – Jun 2026
- Flight Mechanics — Udemy Jun 2026
- Python Programming — Coursera May – Jul 2026
- The Fundamentals of Aerospace — IIT Madras School Connect Program Aug – Dec 2026

TECHNICAL SKILLS

Design: SolidWorks · Fusion 360 · CAD Fundamentals **Programming:** Python · JavaScript (Basic)

ACTIVITIES & INTERESTS

Lawn Tennis · World Scholar's Cup · MUN · Community Engagement · Sketching · Strategy Games