

# Abhay Natthu Phirke

B.Tech - Mechanical Engineering

Pune, Maharashtra, India

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## Professional Summary

B.Tech in Mechanical Engineering from MIT Academy of Engineering with strong problem-solving skills and hands-on experience in design, manufacturing, and process optimization. Passionate about applying engineering knowledge to solve real-world challenges.

## Key Skills

- **Technical:** CATIA V5, ANSYS, SolidWorks, Autocad, Creo, Python, LEAN Six Sigma, DOE.
- **Soft Skills:** Problem-Solving, Data Analysis, Team Collaboration.

## Professional Experience

Intern, Cummins India Ltd.

June 2024 – Dec 2024

- Conducted mechanical testing for engine components (strain gauging, fatigue testing, vibration analysis).
- Ensured lab safety and documented technical results accurately.
- Collaborated with engineers to analyze test results and contribute to product validation efforts.
- Maintained accurate technical documentation and adhered to lab safety protocols.

## Education

MIT Academy of Engineering, Pune

2022–2025

B.Tech - Mechanical Engineering — CGPA: 8.39/10

Government Polytechnic, Khamgaon

2022

Diploma in Mechanical Engineering — 81.49%

D.E.S. High School, Dharangaon

2018–2019

10th - Maharashtra State Board — 79.40%

## Projects

- **Comparative Study on Additive vs. Traditional Manufacturing** – Material Testing, Material Science and Engineering, LaTeX Report Writing.
- **Water Desalination System** – CAD Modeling (CATIA, SolidWorks), CFD Analysis (ANSYS).
- **Helical Coil Heat Exchanger** – Thermal Simulation, Design Optimization, Fluid Dynamics.
- **Refrigeration System Analysis (CoolPack)** – Thermal Performance, Troubleshooting.

## Certifications

- **CATIA V5:** 3D Modeling, Surface Design (Udemy).
- **SolidWorks:** Part Design, Assembly, Sheet Metal, Drafting, Weldments( RVM CAD).
- **AutoCAD:** 2D Drafting, 3D Modeling( RVM CAD).
- **Creo:** Parametric Modeling, Mechanism Design (Udemy).
- **Hydraulics:** Circuit Design, Maintenance (Udemy).
- **Python:** Classes, Polymorphism, Encapsulation (Infosys Sprigboard).

## Interests and Languages

**Interests:** Traveling, Cooking, Watching Podcasts, Cricket.

**Languages:** English (Professional), Hindi (Fluent), Marathi (Fluent).