

CHAMOS MATRUSANSTHA DEPARTMENT OF MECHANICAL ENGINEERING

(Estd. 2001)

Scope of Mechanical Engineering

- Mechanical engineering is a discipline that applies the principles of engineering, physics & materials science for design, analysis, manufacturing & maintenance of mechanical systems.
- Mechanical engineering provides a foundation to the entire engineering education. Hence, it is known as 'Mother' discipline.
- Mechanical engineers focus their attention towards emerging areas such as nano technology, development of composite materials, bio-medical applications, environmental conservations etc.

Programmes Offered

The CHAMOS Matrusanstha Department of Mechanical Engineering was started in 2001. It offers following programs.

Bachelor of Technology

- Mechanical Engineering (60 Seats)

Master of Technology

- Advanced Manufacturing Technology (18 Seats)
- Thermal Engineering (09 Seats)

Doctor of Philosophy

- Mechanical & Allied Engineering

B. Tech (Mechanical): with Minor Degree Programs

Specialization in 'Electric Vehicle Systems', 'AI & ML' etc. Refer: <https://www.charusat.ac.in/cspit/>

Grants Fetched

- Consultancy and research work : ₹ 1.3 Crore
- Lab development grant (AICTE) : ₹ 35 Lac
- Faculty development programs : ₹ 3 Lac

Faculty Strength

- All Faculty members are having research (Ph.D.) exposure.
- The department is enriched with dedicated faculty members trained from IIT, NIT and various universities of repute.

Professional Society Student's Chapters



Certification Courses

- FESTO: Certificate Programs on Pneumatics, Hydraulics & Industry 4.0.
- Certificate Programs on Software's viz. SOLIDWORKS, ANSYS etc.
- Industry-Integrated Value-Added Course

Faculty Achievements

- **Publications of Journals and Conference Papers :**
535+
- **Research Projects:**
- **SMART Foundry 2020**
Funded By: Technology System Development Program (TSDP) Scheme of DST
- **Time –Varying Performance Evaluation of Boundary Mould Elements**
Funded By: Research Promotion Scheme (RPS) of AICTE
- **Experimental Investigation of Nanofluid Thermal Conductivity Enhancement**
Funded By: Minor Research Project Scheme of GUJCOST
- **Tribological and Wettability Studies of Nano Structured Thin Films**
Funded By: Research Promotion Scheme (RPS) of AICTE
- **“E-Foundry” in collaboration with IIT Bombay**
Funded By: National Knowledge Network (NKN), and GOI

Student Achievements



Runners Up in Robo Soccer
“Prometeo’25” IIT Jodhpur, 2025.



Bronze Medal in Industry 4.0
“World Skills” Lyon, France, 2024.



Silver awards for Innovative Projects
Maker Fest, Vadodara, 2023.



Winners in Robofest 4.0,
Cash prize of ₹10 lakhs,
GUJCOST, 2025.



National Level Representation
NCC Cadet- Students,
Republic Day, 2022 at New Delhi.



National Level Representation
Team Ojaswat Motorsports,
SUPRA SAE India, New Delhi, 2022.

Placement Highlights

<p>Pass out: 2023</p> <p>Reliance Ltd.</p>	 <p>7.5 Lacs</p> <p>Ishan Patel</p>	<p>Pass out: 2024</p> <p>Triton EV</p>	 <p>3.5 Lacs</p> <p>Arpan Gershom</p>	<p>Pass out: 2025</p> <p>Meditab</p>	 <p>6.0 Lacs</p> <p>Dutt Barot</p>	<p>Triton EV</p>	 <p>4.5 Lacs</p> <p>Abishek Gauro</p>
<p>MG Motors</p>	 <p>7.1 Lacs</p> <p>Maitry Gajjar</p>	<p>SMS group</p>	 <p>5.5 Lacs</p> <p>Maneel Parekh</p>	<p>Maharshi Group</p>	 <p>5.0 Lacs</p> <p>Parv Trivedi</p>	<p>Empiro</p>	 <p>5.0 Lacs</p> <p>Rudra Parikh</p>

Outstanding Attributes

CBCS (Choice Based Credit System)

Student Counselling

Paperless Digital Examination

Student Startup & Innovation Cell

CDPC (Career Development & Placement Cell)

Use of LMS (Learning Management System)

Project & Dissertation in Reputed Research Organizations

Innovative Teaching & Learning Methodologies

Student Centric Learning

Project Based Learning

Participatory Learning

Experimental Learning

Blended Learning

Student Support

Competitive Exams Assistance

Parent-Teacher Meeting

Funding for Innovative Projects

Soft Skill Training Programs

Alumni Association

Health Checkups

Financial Assistance for Conferences

Prominent Alumni



Darshan Shah
Founder, Education Consultant
D Vivid Consultant
Passout : 2007



Sujit Patel
Scientific C, Group A,
Gazetted
ISRO
Passout : 2018



Jasoliya Mihir
Assistant Commissioner,
Sales Tax Department
Government of Gujarat
Passout : 2023



Darshan Pandya, Ph.D.
Assistant Professor
**School of Business
Management,
NMIMS University Mumbai**
Passout : 2018

Institute - Industry Interaction

- MOUs with industry associations.
- Faculties undergo industry training every year.
- Students of B.Tech. and M.Tech. final year do their projects and dissertation work as an intern with various organizations like ISRO, L & T, Apollo tyres, TBEA etc.
- Faculties have membership of technical bodies like ISTE, SAEINDIA, AMM, IIF, IE etc. and participated in national / international conferences and workshops to enhance their domain knowledge.

Key Facilities at Department Laboratories



Universal Testing Machine (50kN Capacity)



Wear and Friction Monitor



3D Microscope



Magnetron Sputtering Machine



Goniometer



CNC Vertical Machining Centre



Electro Discharge Machine



Multi-Channel Charge Amplifier



Piezo Based Tool Dynamometer



3D Laser Scanner LPX 60



3D Printer



Thermal Imaging Camera



Stir Casting Machine



Multi-fuel, VCR Engine Test Rig

Research Laboratory

E-Foundry Cell

Surface Engineering Lab

Materials Processing Lab

Manufacturing Technology Lab

Material Testing & Characterization Lab

FESTO Experience Centre

Pneumatics, Hydraulics and Factory Automation.



Major Software



Prime MOUs and Collaboration



Cultural & Sports Events



Industry Tours /Field Visits



Industrial Metal Powders Pvt. Ltd,
Pune

Suryadeep Alloy Steels Castings Pvt. Ltd., Institute of Plasma Research,
V.U.Nagar, Gandhinagar

CREAT UNO MINDA Enterprise,
Pune

Our Major Recruiters



Brochure



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