



DEPARTMENT OF MECHANICAL ENGINEERING



APRIL 2026



OUR COLLEGE VISION AND MISSION



VISION

To become a world class Educational center of the Nation for Engineering, Technology, Computer Applications and Management with moral and professional standards to serve the community at large.

MISSION

To achieve academic excellence in Engineering, Technology, Computer Application and Management Education.

To inculcate high moral and professional standards among our students. To develop the overall personality of our students.

To promote Industry Institute Interaction through more number of collaborative programs with Industries, Research and Development centers.

To venture for sustained placement for our students through campus interviews.

DEPARTMENT OF MECHANICAL ENGINEERING



VISION

To become a center of excellence in Mechanical Engineering, producing competent engineers, who are innovative, entrepreneurial and skilled to meet the global challenges.

MISSION

Excellence: To offer state-of-art education in Mechanical Engineering, by providing opportunity to students to enhance their knowledge base and develop core specific skills.
Research: Build a research capability that is recognized nationally and internationally as a leading source of technological innovation and explore core research.

Professional Integrity: To create opportunities and train students to build leadership qualities blended with entrepreneurial mindset and lead an ethical and environmentally responsible career.

PROGRAMME EDUCATIONAL OBJECTIVES

Engineering graduates will be able to:

PEO1: Profession – Practice manufacturing engineering in a broad range of industries both core engineering and non-engineering fields such as medicine, space, law or business.

PEO2: Continuing Education – Pursue advanced education, research and development, and other creative and innovative efforts in science, engineering, and technology, as well as other professional careers.

PEO3: Technophile – Conduct them in a responsible, professional, and ethical manner and attain professional maturity with deep understanding of the impact of the technological solutions in a societal and global context and a need for sustainable development.

PEO4: Service – Participate as leaders in their fields of expertise and in activities that support service and economic development nationally and throughout the world.

PROGRAMME OUTCOMES

Engineering graduates will be able to:

Engineering Knowledge: Apply the knowledge of mathematics, science, engineering fundamentals, and an engineering specialization to the solution of complex engineering problems.

Problem analysis: Identify, formulate, review research literature, and analyze complex engineering problems reaching substantiated conclusions using first principles of mathematics, natural sciences, and engineering sciences. Design/development of solutions: Design solution for complex engineering problems and design systems components or process that meet the specified needs with appropriate consideration for the public health and safety, and the cultural, societal, and environmental considerations.



You Choose, We Do It

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Conduct investigations of complex problems: Use research- based knowledge and research methods including design of experiments, analysis and interpretation of data, and synthesis of the information to provide valid conclusions.

Modern tool usage: Create, select, and apply appropriate techniques, resources, and modern engineering and IT tools including prediction and modeling to complex engineering activities with an understanding of the limitations.

The engineer and society: Apply reasoning informed by the contextual knowledge to assess societal, health, safety, legal and cultural issues and the consequent responsibilities relevant to the professional engineering practice.

Environmental and sustainability: Understand the impact of the professional engineering solutions in societal and environmental contexts and demonstrate the knowledge of, and need for sustainable development.

Ethics: Apply ethical principles and commit to professional ethics and responsibilities and norms of the engineering practice.

Individual and team work: Function effectively as an individual, and as a member or leader in diverse teams, and in multidisciplinary settings.

Communication: Communicate effectively on complex engineering activities with the engineering community and with society at large, such as, being able to comprehend and write effective reports and design documentation, make effective presentations, and give and receive clear instructions.

Project management and finance: Demonstrate knowledge and understanding of the engineering and management principles and apply these to one's own work, as a member and leader in a team, to manage projects and in multidisciplinary environments.

Life-Long learning: Recognize the need for, and have the preparation and ability to engage in independent and life-long learning in the broadest context of technological change.

PROGRAMME SPECIFIC OUTCOMES

PSO 1: The students graduating in Manufacturing Engineering will have profound foundation in mathematical, scientific and engineering domains necessary to achieve professional and productive excellence in technical and non-technical problem solving and analyzing engineering problems.

PSO 2: The students graduating in Manufacturing Engineering will have the ability to synthesize the engineering data and apply scientific principles for applications involving manufacturing engineering using high end CAD/CAM/CAE computational packages such as CATIA, ANSYS and MATLAB.

PSO 3: The students graduating in Manufacturing Engineering will have the ability to pursue advanced careers and discharge his/her duties entrusted with high degree of commitment to address professional and ethical responsibilities, including a respect for diversity and provide cost effective engineering solutions.



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The Choice of
Disciplined Toppers



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ATVC 2026

SAE BAJA Teams has bagged **8 trophies** and **Rs 35,000** cash reward in **ATVC Event conducted Monark University Ahmedabad.**

Hydrogen Edition Vehicle:

- **Overall** - All India Rank **(AIR) 3rd position** with Cash award Rs. 10,000/-
- **Business presentation** All India Rank **(AIR) 2nd position** with cash award Rs 5000/-
- **Cost Report** All India Rank **(AIR) 2nd position** with cash award Rs 5000/-
- **Design Evaluation** - All India Rank **(AIR) 3rd position**
- **Aesthetic Vehicle Award**



ATVC 2026



ATVC 2026

ATVC Motorsport Hydrogen Edition - Gujarat

- Overall - All India Rank III | Rs. 10,000/-**
- Business Presentation - All India Rank II | Rs. 5,000/-**
- Cost Report - All India Rank II | Rs. 5,000/-**
- Design Evaluation - All India Rank III**
- Aesthetic Vehicle Award**

Aurelian Racing Team **Total Cash Award - Rs. 20,000/-**
IV, III & II Year students of Mechanical, Electrical and Mechatronics

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ATVC 2026

Electrical Edition Vehicle:

- **Overall** – All India Rank 6th position
- **Endurance** – All India Rank 3rd Position , with cash award Rs 10000
- **Mega Marketing** – All India Rank 2nd , with cash award Rs 5000
- **Acceleration** – All India Rank 3rd Position
- **Maneuverability** – All India Rank 5th Position
- **Design** – All India Rank 4th Position
- **Best Build Up Award – Electric**



ATVC 2026



ATVC 2026

ATVC Motorsport Electrical Edition - Gujarat

Overall - All India Rank VI
Endurance - All India Rank III | Rs. 10,000/-
Mega Marketing - All India Rank II | Rs. 5,000/-
Acceleration - All India Rank III
Maneuverability - All India Rank V
Design - All India Rank IV
Best Build Up Award - Electric

Inferno Racing Team

Total Cash Award - Rs. 15,000/-

IV, III & II Year students of Mechanical, Electrical and Mechatronics

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Faculty Achievements

- Mr.K.Gnanasekaran, Assistant Professor from the Department of Mechanical Engineering published a research article titled Development of Wear Maps for AA7075/Al₂O₃/Ca₂SiO₄ Hybrid Composites in Transactions of the Indian Institute of Metals a SCIE & Anna University Annexure 1 ,Q2 Journal.
- Mr.T.Balasubramanian, Assistant Professor from the Department of Mechanical Engineering, has been authored for book " Metrology and Measurements" published by Quill Tech Publisher, ISBN: 978-93-6786-952-9.
- Mr.K.Gnanasekaran, Assistant Professor from the Department of Mechanical Engineering published a patent under a title of A Method for Producing Self-Lubricating Composite Materials for Tribological Applications application number-202641031147 A
- Dr.M.Ganesh acted as a reviewer for the manuscript titled , "Integration and effectiveness of nano silicon particles on machinability performance of the aluminium alloy hybrid composite" in the journal "Sillicon".
- Mr. T. Balasubramanian, Assistant Professor from the Department of Mechanical Engineering published a patent under a title of " A System and Method for Network Reliability Estimation Using Graph Based Topology Analysis", Application number - 202641031906.
- Mr. K. Gnanasekaran , Assistant Professor from the Department of Mechanical Engineering published a patent under a title of Design and fabrication of solar air heater using doublet pipe channel for boiler applications application number-202641035127.

Faculty Achievements

- Dr. G. Ashwin Prabhu, Assistant Professor from the Department of Mechanical Engineering Published an article titled "Performance, Combustion, and Emission Characteristics of CeO₂-doped Cottonseed Biodiesel in a Non-road Diesel Engine" in "Journal of Environmental Nanotechnology", a Scopus Indexed Journal on 2nd May 2026.
- Mr. G. Ashwin Prabhu, Assistant Professor in the Department of Mechanical Engineering, successfully defended his PhD Viva Voce on 27th April 2026. The research, titled "Investigation on Fire Retardant Hybrid Composite Structures," was conducted under the able guidance of Dr. R. Selvam, with oversight from our Research Coordinator, Dr. K. M. Kumar. His work contributes significantly to the field of advanced materials, focusing on enhancing the fire-resistant properties of hybrid composite structures, which have wide-ranging applications in aerospace, automotive, and construction industries.



IEI- Student workshop

On 09/04/2026, Department of Mechanical Engineering, in association with the IEI Student Chapter, organized a one-day workshop for 2nd and 3rd year students on "Origin to Insight: Graph Plotting Made Easy". Students received hands-on training with practical exposure to Design Expert, enhancing their research and technical competencies. The session was handled by Dr. G.M. Lionous Leo, Associate Professor, Department of Mechanical.



SAS- Student workshop

On 10/04/2026, Department of Mechanical Engineering, in association with **SAE India Student Chapter**, organized a one-day workshop for 2nd and 3rd year students on "Hands on Training on Energy Conservation in Refrigeration and Air-Conditioning". Students received energy conservation techniques and hands-on training with practical exposure, enhancing their core technical competencies. The session was coordinated and handled by Dr. K. Arun, Associate Professor, Department of Mechanical Engineering.



IEI- Student workshop

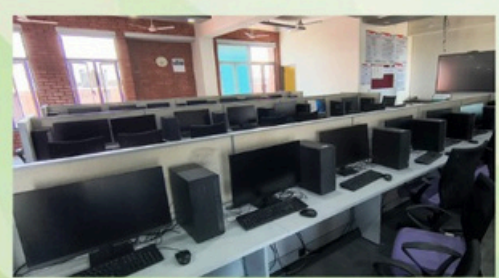
On 10/04/2026, Department of Mechanical Engineering, in association with the IEI Student Chapter, organized a one-day workshop for 2nd and 3rd year students on "OPTIMIZATION BY RESPONSE SURFACE METHODOLOGY". Students received hands-on training with practical exposure to Design Expert, enhancing their research and technical competencies. The session was handled by Dr. M. Ganesh, Assistant Professor, Department of Mechanical.



Industry Institute Interaction

Mr. T. Balasubramanian and Mr. K. Pravinkumar, Assistant Professors, visited IIITDM Kancheepuram and Crescent Engineering College as CATIA 3DEXPERIENCE in-charges, along with EDS Technologies officials. Outcome: Gained knowledge on server-related information, setup of the center, and overall infrastructure

DEPARTMENT OF MECHANICAL ENGINEERING INDUSTRY INSTITUTE INTERACTOIN



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Outcome: Gained knowledge on server-related information, setup of the center, and overall infrastructure

 **21/04/2026**

Student Achievements

Team PURE PATH from Third year mechanical Secured a position among the Top 500 teams out of 24,111 participants in Naan Mudhalvan Niral Thiruvizha 3.0 (2025-2026). The team will be attending several boot camps and presentation for enhancing the project. Mr. K. Pravinkumar, Assistant Professor from Mechanical Department is the Mentor of the team



Mr. K. Pravinkumar
Mentor



Karthikeyan G



Mohanram S



Monica S



Nandhakumar G

Student Achievements

NPT&L

Department of Mechatronics Engineering congratulates top NPTEL performers:

Top 2 percent - 1 student, Silver- 4 students, Elite - 4 students.

DEPARTMENT OF MECHATRONICS ENGINEERING

NPT&L TOP RANK - SILVER MEDAL ACHIEVERS





Jan-Apr 2026

2024-2028 Batch

JAGANATHAN V
SILVER

Congratulations !!!



AKASH ANDAKUDI ARUN
SILVER



ASHWIN J
SILVER



MOHAMED ARAFATH AHMED
SILVER



THARUN KUMAR G
SILVER

NPT&L **Elite** ACHIEVERS



JAGADHISH S V
ELITE



KUTHALINGOM A V
ELITE



LACSHAN SHAKTHIVEL K K
ELITE



SRI HARI VETRIVEL S
ELITE



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Department of Mechanical Engineering ,
St. Joseph's College of Engineering



St. Joseph's Mechanical



St. Joseph's College Mechanical
Alumni



St. Joseph's Mechanical, OMR,
Chennai



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The Choice of
Disciplined Toppers



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Mr. Nandha Kumar M M
Mech III-B

