



# DEPARTMENT OF MECHANICAL ENGINEERING



**MARCH 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.

**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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# International Conference

On 16th and 17th March 2026, the Department of Mechanical and Mechatronics Engineering successfully organized the **3rd International Conference on Advances in Mechanical & Mechatronics Engineering 2026 (ICAMME '26)**. The conference was inaugurated by two eminent personalities, **Dr. Shankar Venugopal**, Vice President – Technology Innovation & Intellectual Property at Mahindra & Mahindra, Chennai, and **Dr. G. L. Samuel**, Professor, Department of Mechanical Engineering, IIT Madras, Chennai.



# International conference

A total of **77 papers** from across India were received and presented during the conference, showcasing diverse research contributions. The valedictory session was presided over by **Mr. Praveen Kumar Seenivasan**, Global Lead – Digital Transformation at Stellantis, Chennai. Their presence and insightful remarks set a strong tone for the conference, emphasizing the importance of innovation, research, and collaboration in advancing the fields of mechanical and mechatronics engineering.



# International conference



# ATVC 2026

our BAJA team, Aurelian Racing and Inferno Racing Participated in ATVC event organized by Monark University, Ahmedabad from 27th March 2026 to 31st MARCH 2026. The event Has 5 Static Events and 4 Dynamic Events for Hydrogen, Electric vehicle category. The glimpses of the events



# Faculty Achievements

- Mr. G. Ashwin Prabhu, Assistant Professor from the Department of Mechanical Engineering has Published a paper entitled "Influence of Aerosil-200 Nanofiller on the Flexural and Compressive Behavior of Glass Fiber Reinforced Epoxy Composites", Scopus Indexed EPJ Web of Conferences held at 4th International Conference on Sustainable Technologies and Advances in Automation, Aerospace and Robotics (STAAAR 2025) by VIT Bhopal on 3rd March 2026 .
- Mr.N.Sathishkumar, Assistant Professor, Department of Mechanical Engineering, published a Journal article titled "Influence of D-gun coating on the thermomechanical, corrosion, and metallurgical behaviour of 1.2709 tool steel fabricated by the LPBF technique" in "Surface Engineering" Journal. (Q1, SCIE & Scopus indexed, Anna University Annexure I Journal with Impact Factor 2.6).
- Mr. K. Gnanasekaran, Mr. G. Ashwin Prabhu & Mr. D. Sakthivel, Assistant Professor from the Department of Mechanical Engineering has Published a paper entitled "Investigation of microstructural and mechanical behavior on cryogenically treated Aluminium 7075 alloy", Scopus Indexed EPJ Web of Conferences held at 4th International Conference on Sustainable Technologies and Advances in Automation, Aerospace and Robotics (STAAAR 2025) by VIT Bhopal on 3rd March 2026 .
- Mr. G. Ashwin Prabhu (AP) & Dr. K. M. Kumar (ASP) from the Department of Mechanical Engineering Published an article titled "Mechanical Characterization of Kevlar 49 and Pina Fiber Hybrid Composites" in "Journal of Polymer & Composite", a Web of Science (ESCI) Indexed Journal on 14th March 2026.

# Faculty Achievements

- Dr. R. Sathish, Professor from the Department of Mechanical Engineering has published a paper entitled "Magnetic Metal -Polymer composites with ferromagnetic Particle networks for EMI Shielding in Flexible Electronics" in Journal of Polymer & Composites. 2026; 14(01):25-39.
- Dr. R. Sathish, Professor from the Department of Mechanical Engineering has published a paper entitled "Thermal Stability and Impact Performance of Basalt-Carbon Hybrid Laminates in Polyimide-Phenolic Matrices" in Journal of Polymer & Composites. 2026; 14(01):247-260. Doi: 10.37591/Jopc.
- Mr. G. Ashwin Prabhu, Assistant Professor from the Department of Mechanical Engineering has Published a paper entitled "Thermal Enhancement of Stir-Casted Al6061-Cu Metal Matrix Composite Fins: Experimental Evaluation Under Forced Convection", Scopus Indexed EPJ Web of Conferences held at 4th International Conference on Sustainable Technologies and Advances in Automation, Aerospace and Robotics (STAAAR 2025) by VIT Bhopal on 21st March 2026 .
- Mr. K. Gnanasekaran, Mr. G. Ashwin Prabhu & Mr. D. Sakthivel, Assistant Professor from the Department of Mechanical Engineering has Published a paper entitled "Investigation of microstructural and mechanical behavior on cryogenically treated Aluminium 7075 alloy", Scopus Indexed EPJ Web of Conferences held at 4th International Conference on Sustainable Technologies and Advances in Automation, Aerospace and Robotics (STAAAR 2025) by VIT Bhopal.

# Faculty Achievements

- Mr. T. Balasubramanian, Assistant Professor, Department of Mechanical Engineering published a patent Titled " Embedded Two wheeled autonomous robot navigation system utilizing grayscale optimized vision processing and sensor fusion for efficient path detection" Application no: 202641003454 A.
- Mr. K. Pravinkumar, Assistant Professor, Department of Mechanical Engineering, has successfully published a patent titled "A Universal Adaptive System and Mechanism for Multi-Domain Machinery Applications." The patent has been published with Publication Number: 202641021498 A
- Dr.M.Arun attended One Day Hands-on Training Program titled "Micro-engineered Superhydrophobic Surfaces: Fabrication and Characterization," conducted by the Department of Mechanical Engineering at IITDM Kancheepuram on March 7, 2026.
- Mr. K. Pravinkumar, Assistant Professor, Department of Mechanical Engineering, published a research paper titled "Optimization of Super Plastic Forming Process Parameters of Al 6061 Alloy Reinforced with SiC Nano Composites by Taguchi Method" in EPJ Web of Conferences (Vol. 357, 2026).

# Faculty Achievements

- Mr. K. Gnanasekaran, Assistant Professor, Department of Mechanical Engineering, St. Joseph's College of Engineering, delivered a guest lecture on the topic "Next-Gen Composites: Processing and Characterization" at the One-Day National Level Workshop held at SSN College of Engineering on 10th March 2026.

## DEPARTMENT OF MECHANICAL ENGINEERING

*Congratulations!*

FOR DELIVERING GUEST SPEECH IN ONE-DAY NATIONAL LEVEL WORKSHOP

ON THE TOPIC  
"NEXT-GEN COMPOSITES: PROCESSING AND CHARACTERIZATION"

AT  
SSN COLLEGE OF ENGINEERING

10th March 2026 (Tuesday)



**Mr.K. Gnanasekaran**  
Assistant Professor



# Student workshop

The Department of Mechatronics Engineering, St. Joseph's College of Engineering, Chennai, organized a One Day **Workshop** on **Industrial Automation** on **05 March 2026** at 8.30 a.m. in the Mechatronics Laboratory for II Year Mechatronics students. The workshop was conducted in association with **AGIIT – Axis Global Institute of Industrial Training**. Industry experts delivered sessions on PLC, HMI, robotics, sensors, and industrial automation systems. Students actively participated in the interactive and hands-on learning activities using their laptops. The program provided valuable exposure to real-time industrial automation practices and helped bridge the gap between academic learning and industry requirements.



# INDUSTRY VISIT



III B & III C, RISHABA INDUSTRIES, 06/03/2026

III B & III C Mechanical Engineering students visited Rishaba Industries on 06/03/2026 as part of an industrial visit. The visit provided practical exposure to manufacturing processes and real-time industrial operations. Students gained valuable insights into industry practices, enhancing their technical knowledge and skills.



II MECHANICAL A, SHARDA MOTORS, 04/03/2026

II Mechanical A students visited Sharda Motors on 04/03/2026 as part of an industrial visit. The visit offered hands-on exposure to automotive manufacturing processes and plant operations. Students gained practical insights into industry practices, improving their technical understanding.

# INDUSTRY VISIT



**II MECHATRONICS SHARDA MOTORS 03/03/2026**

II Mechatronics students visited Sharda Motors on 03/03/2026 as part of an industrial visit. The visit provided exposure to automation systems and modern manufacturing processes. Students gained valuable insights into real-time industrial applications, enhancing their technical skills.



**III A RISHABA INDUSTRIES 04.03.26**

III A students visited Rishaba Industries on 04/03/2026 for an industrial visit on flask bottle manufacturing. The visit provided insights into the production process, including forming, shaping, and finishing of bottles. Students gained practical knowledge of manufacturing techniques and industrial operations.


# Student Achievements

- The Department of Mechanical Engineering proudly congratulates **Raghu Pandiyan S and Sedhu Kannan M** (2022-2026 Batch) on securing an internship at **VK Fasteners Private Limited**. They have been selected for the role of Trainee Engineer with a stipend of Rs. 15,000 per month. This achievement reflects their dedication, technical skills, and commitment to excellence. We wish them continued success and a bright future in their professional journey.


DEPARTMENT OF MECHANICAL ENGINEERING

*Congratulations!*


For Getting an Internship in V K Fasteners Private Limited



Internship Stipend:  
Rs. 15, 000/- Per Month



**RAGHU PANDIYAN S**  
2022-2026 Batch  
Trainee Engineer



**SEDHU KANNAN M**  
2022-2026 Batch  
Trainee Engineer

WISHING THEM A SUCCESSFUL AND INSPIRING JOURNEY AHEAD

# Student Achievements

- The Department of Mechanical Engineering congratulates **Antony Raja, Renish A M, and Aravind Kumar B** on securing internships at Valeo India Pvt. Ltd.
- They have been offered a stipend of **Rs. 15,000 per month**, recognizing their skills and dedication.



**ANTONY RAJA**  
**RENISH A M**



**ARAVIND**  
**KUMAR B**



- We also congratulate **Sachin M** for securing an internship at **Sicame India Pvt. Ltd.** with a stipend of **Rs. 18,000 per month**.
- These achievements highlight the students' excellence and promise a bright professional future ahead.



**SACHIN M**

# Student Achievements



Our Final year Mechanical Student **Palanisamy. K** got an Internship in **EMR Tap Changers Private Limited** with a stipend of **Rs. 20000/-** for 2 months.



Our Final year Mechanical Student **GIRUBHAKARAN. S** got placed in **Triad Software Private Limited** with **CTC of Rs. 3.75LPA**



**GIRUBHAKARAN S**



**GOURAV PAUL**



**GOVARTHAN S**



Our Mechanical Department Final year students got internship in **Brakes India Private Ltd**, Padi with a Stipend of **Rs 15,000/** month for 3 Months



**JERIEL SAMUEL J**



**SALAMON P**



**VEERAKUMARAN M**

# Student Achievements

- **Saitejas Y** (third year) from 2023-2027 batch has been selected for the prestigious International Summer Internship Program – Autosol 2026. He will visit **Germany** from 14th to 28th June to explore advanced automation, mobility, and industrial robotics. This achievement highlights his excellence and global exposure in emerging engineering technologies.



**Autosol**  
INTERNATIONAL SUMMER INTERNSHIP  
JUNE 2026

**12 YEARS EXPERIENCE**

*Congratulations*

For being selected for this unique Summer Internship program Autosol 2026. Further, He will be invited to Germany between 14th June - 28th June to explore the Advanced Automation, Mobility, Industrial Robotics under the Summer Internship Program 2026.

**SAITEJAS Y**

Indo-Euro Synchronization  
Education and Research Resources

# Student Achievements

- MECHATHON '26, held on 5th March 2026 by St. Joseph College of Engineering, Sriperumbudur, witnessed enthusiastic participation from 2nd year Mechanical and 3rd year Chemical Engineering students. The winning team comprising Monish Deva R, Jaswanth K, Akshaya S, Roshini Priya V, and Siva Durga M demonstrated exceptional creativity and technical excellence, securing the top position along with a cash prize of ₹1,500. The event highlighted teamwork, innovation, and the practical application of engineering concepts.



# Student Achievements

Elumalai (Third Year), Praveen Kumar S, and Shine Joshua (Second Year) emerged as finalists in India Design Week 2026, held at Sri Ramakrishna Engineering College, Coimbatore, Tamil Nadu, on 26th and 27th March. The team showcased their innovation through the development of a foldable portable stretcher, demonstrating creativity, practical problem-solving, and design excellence, under the guidance of their alumni mentor, Sriram Karthick, and faculty mentor Pravinkumar K, Assistant Professor.



# III Year Placement Training

A total of 32 students enrolled in the PEP (Placement Enhancement Program) successfully underwent an intensive 25-day training program focused on both domain-specific knowledge and programming skills development. As part of this initiative, Advanced C Programming sessions were conducted on March 16<sup>th</sup> to 18<sup>th</sup> and 23<sup>rd</sup> to April 2<sup>nd</sup>. The training aimed to strengthen students' logical thinking, problem-solving abilities, and coding proficiency, which are essential for technical interviews and industry readiness.

During the sessions, students were exposed to core concepts such as pointers, memory management, structures, file handling, and modular programming. Hands-on practice, coding exercises, and real-time problem-solving approaches were



emphasized to ensure practical understanding. The program also helped bridge the gap between academic learning and industry expectations. Overall, the training significantly enhanced students' confidence and technical competence, preparing them effectively for placement opportunities.

# III Year Placement Training

The Programming Skills Training (C/Java) for III Year students was organized specifically for those not enrolled in the PEP/HOPE initiatives, ensuring inclusive skill development across the department. A total of 101 students (51 + 50) actively participated in this focused training program conducted under Slot 2 on March 26<sup>th</sup> to April 2<sup>nd</sup>.

The training aimed to build a strong foundation in programming by covering essential concepts in C and Java, including control structures, arrays, functions, object-oriented principles, and basic problem-solving techniques. Emphasis was placed on hands-on coding efficiency. Interactive sessions, guided exercises, and real-time examples helped students gain clarity in fundamental programming concepts. Overall, the training served as a crucial step in preparing students for technical assessments and placement opportunities, enhancing their confidence and readiness for industry requirements.



# II Year Placement Training

One Week Placement Training Program on "C Programming" for  
**MECHATRONICS ENGINEERING students.**

Date: [16/03/2026 – 18/03/2026, 23/03/2026 – 25/03/2026]

Trainer name: Mr. Jagadeesh

Course Content:

Day 1 Basics of C programming

Day 2 Loops and Functions

Day 3 Structures and Interview  
problems (Basic Idea)

Day 4 Union and Dynamic  
memory allocation

Day 5 File management and  
Practice of programs

Day 6 Test on all the topics  
covered for 150 marks



## OUTCOMES

- Ø Improved understanding of fundamental C programming concepts
- Ø Enhanced problem-solving and logical thinking skills
- Ø Increased confidence in writing and debugging programs
- Ø Exposure to commonly asked technical interview questions
- Ø Better ability to approach and solve coding problems effectively
- Ø Strengthened foundation in C programming
- Ø Improved readiness for placement assessments and technical interviews

## STUDENT FEEDBACK

At the end of this training, we got a great exposure for C programming and even about problem solving and logical thinking and we even got some idea about the technical round programs that could be asked while we face a interview Overall, we had a great opportunity to deepen our knowledge on C programming - LACSHAN SHAKTHIVEL K K (312324115016)

# II Year Placement Training

The Generic Training – C Programming was conducted successfully for the students of II Year Mechanical A & B Sections over a period of 6 days on 16/03/2026 to 18/03/2026 and 23/03/2026 to 25/03/2026.

The training was organized at Block 8, Room No. 65 & 66. A total of 69 students participated in the training program. The sessions were handled by Mr. K. Jagadesan and Mrs. V. Gayatri, who guided the students throughout the program in a clear and effective manner.

The main objective of this training was to provide students with a strong foundation in C Programming and to enhance their technical knowledge, logical thinking, and problem-solving skills.





*You Choose, We Do It*

# St. JOSEPH'S COLLEGE OF ENGINEERING

(An Autonomous Institution)

St. JOSEPH'S GROUP OF INSTITUTIONS

OMR, CHENNAI - 119



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



**St. JOSEPH'S**  
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*The Choice of*  
**Disciplined Toppers**



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