



MANAKULA VINAYAGAR INSTITUTE OF TECHNOLOGY

Approved by AICTE, New Delhi and Affiliated to Pondicherry University

Accredited by NBA & NAAC 'A' Grade

Kalitheerthalkuppam, Puducherry - 605107

Accredited by



DEPARTMENT OF MECHANICAL ENGINEERING

NEWS LETTER 2023-24 (EVEN SEM)

Vision

The Mechanical Engineering Department aspires to be acclaimed globally for renowned education and research, to accelerate well qualified Engineers who are creative, entrepreneurial and flourishing in advanced fields of Engineering and Research.

Mission

Higher Order Thinking: To assure quality education to the students and broaden their profession to make them globally competent Mechanical Engineers.

Continuous learning: Nurturing vital state of art, research facility to provide students and faculty with outstanding opportunities to discover, illustrate, implement and disseminate wisdom.

Competency: To develop alliance with world class R&D organizations and Educational Institutions in India and overseas for teaching, research and consultancy services.

Entrepreneurship :To provide the students with academic environment of excellence, leadership and ethical guidelines needed for lifelong prospective career.

ABOUT MECHANICAL DEPARTMENT

The goal of the Mechanical Engineering curriculum is to create a flexible undergraduate educational experience in Design, Mathematics, Modeling, computation, Quality management, Engineering science & humanities. Principal study topics of Mechanical Engineering includes Fluid Mechanics, Thermodynamics & Heat Transfer, Solid Mechanics, Materials Engineering, Manufacturing Technology, Energy systems, Dynamics & Control, Computer Aided Design (CAD), Computer Integrated Manufacturing (CIM) and others. These broad and flexible programs allow students to customize their B. Tech programs to meet their objectives and particular career goals like higher education and placement. Traditional students can prepare for technological careers in small scale industries, graduate school or management. The more interdisciplinary students can utilize this program as a launching pad for various core professional careers/placement in Ashok Leyland, Essar Steels, General Motors, John Deere, Kennametal, Larsen and Turbo etc or public service.

The Mechanical Department is well equipped with excellent laboratories to make the students to easily understand and study the latest research areas such as computational fluid dynamics, Mechanics of Robot, Aerospace and Defense field, etc and also has separate Department library houses best books in the technical field this vast reservoir of knowledge is a source of constant value addition to the students and faculty members the library's rich in manufacturing, design, metallurgy, drawing and materials science. To enhance the Technical Skills of the students, the Department also organizes

various program such Value-added course, Quiz completion, Seminars, Workshops, Industrial visit and Guest lecturers which would make them globally competitive as well as students become an indispensable Engineer and earn the income they deserve.

DEPARTMENT ACTIVITY

SPECIAL LECTURE



A Special lecture was organized by the Department of Mechanical Engineering on 8th February 2024. Dr. B Radjaram, Head of the Department (Mechanical Engineering) delivered a special lecture about Industry 5.0 COBOT Technology to Mechanical Students of Sri Manakula Vinayagar Polytechnic College, Kalitheerthall Kuppam, Puducherry.

GUEST LECTURE



Guest Lecture Programme was conducted by Manakula Vinayagar Institute of Technology organized by the Department of Mechanical Engineering and National Institution for Quality and Reliability (NIQR) Puducherry MIT Students Chapter Mechanical to address the SDG 9 & 11.

Dr. B Radjaram, Controller of Examiner and Head of the department (Mechanical Engineering) honoured & introduced the chief guest, Dr. V Swaminathan, Sr. National Vice President NIQR. Dr. P. Natarajan, Assistant professor, welcomed all. The chief guest addressed the students in the title of Work Ethics and Total Quality Management to educate students about the importance of ethical conduct in the workplace.

Mrs. G. Deeba, Assistant professor gave vote of thanks. The college and National Institution of Quality and Reliability, Puducherry MIT Students Chapter Mechanical are conducting such guest lecture programme as part of Institution's social responsibility.



MITILENCE – A National Level Technical Symposium was conducted on 16-17th February 2024. Every Year, our college is organizing the Two days National Level Technical Symposium MITILENCE on 2nd week of February at our MIT campus as apart of students development activities. The main objective of this technical symposium is to kindle the talents of the Engineering students and to provide opportunities for them to know the technological developments in their field of specialization and share it with others. Various technical and non-technical events like, Paper Presentation, Technical Quiz, Sherlock Holmes and Bottle rocketix were conducted. The winners of the various events are awarded with cash prizes and merit certificates.

GUEST LECTURE



A Guest Lecture on “Occupational Health and Safety for Engineers” was organized by Department of Mechanical Engineering in association with energy club on 5th april

2024 to address the SDG 3 & 8. Mr. K.Vengatesan HSE specialist / advisor, global safety consulting services, puducherry was the Chief guest and addressed the students about inspecting and evaluating workplaces for fire and safety concerns, as well as recommending and implementing safe workplace processes and fire prevention and control measures.

GUEST LECTURE



A Guest Lecture was organized by Department of Mechanical Engineering in association with NIQR puducherry on 8th april 2024 to address the SDG 8 & 11. Dr. B Radjaram, Head of the department (Mechanical Engineering) introduced the Chief guest. Mrs. Mahalakshmi Sankar, Entrepreneur, Jagadguru rubber engineering industries, LLP and Executive Council Member, puducherry was the Chief guest and addressed the students on the theme “Problem solving Techniques in an industrial Approach” .

INDUSTRIAL VISIT



Third year students of Mechanical Engg visited Poclain Hydraulics Private Limited, Puducherry on 22nd March 2024 to understand the organizational structure and key stakeholders of a manufacturing company .



IInd,IIIrd & IV year students of Mechanical Engg visited Rajshree Sugars And Chemicals Limited, Villupuram on 27th March 2024 to explore about the industrial processes, machinery operations, and maintenance practices within a real-world manufacturing environment.



Second & Third year students of Mechanical Engg visited Suja Shoei Industries Private Limited, Tindivanam on 26th March 2024 to learn about the strategic decisions involved in operating a private limited company, including market positioning, product diversification, and competitive analysis.



IIIrd & IV year students of Mechanical Engg visited Neyveli Lignite Corporation India Limited, Neyveli on 10th April 2024 to gain insight into the lignite mining industry, including the significance of lignite as a fuel source, mining operations, reserves estimation, and the role of NLC as India's largest lignite mining company.

WORKSHOP COURSE



Er.J.JAGAN Chairman Vector Solutions
Puducherry one day workshop on “Laser Engraving & 3D Printing was conducted on 12.03.2024 for 3rd year Mechanical students.

STAFF ACTIVITIES

JOURNAL PUBLICATIONS

Mr.S.Krishnakumar, Dr.Senthilvelan T Invitro degradation analysis and mechanical characterization of PLA-CF composites prepared by fused filament fabrication technique for bio-medical applications, Journal of Thermoplastic Composite Materials December 1, 2023

INTERNATIONAL CONFERENCE

Dr.S.Krishnakumar, has attended International conference (ICAME-24) at SRM University, Kattankulathur during March 20-22, 2024 and also presented a paper on Determination of Corrosion Characteristics of Al_2O_3 coated Aluminium metal matrix composite .

Dr.P. Natarajan, has attended International conference (ICAME-24) at SRM University, Kattankulathur during March 20-22, 2024 and also presented a paper on Sol-Gel Route investigations of thin film TiO_2 doping with Nano SiO_2 unveiling enhanced characteristics.

FACULTY DEVELOPMENT PROGRAM

1. Mr. A. Thiagarajan has attended 5 days online FDP on “Global Conversations in Mechanical Engineering : Bridging Innovation and Sustainability” organised by Madanapalle Institute of Technology & Science, Andra Pradesh held during February 19th to 23rd 2024.
2. Mr R.Ilandjezian has attended 5 days online FDP on “Global Conversations in Mechanical Engineering : Bridging Innovation and Sustainability” organised by Madanapalle Institute of Technology & Science, Andra Pradesh held during February 19th to 23rd 2024.
3. Dr.P.Natarajan has attended 5 days online FDP on “Global Conversations in Mechanical Engineering : Bridging Innovation and Sustainability” organised by Madanapalle Institute of Technology & Science, Andra Pradesh held during February 19th to 23rd 2024.
4. Dr.P.Natarajan has attended 5 days online FDP on “Advances in Materials Technology For Next Generation Manufacturing” organised by Ballari Institute of Technology & Management, Ballari held during February 1st to 5th 2024.
5. Dr.S.Krishna kumar has attended 5 days online FDP on “Global Conversations in Mechanical Engineering : Bridging Innovation and Sustainability” organised by Madanapalle Institute of Technology & Science, Andra Pradesh held during February 19th to 23rd 2024.
6. Mrs.G.Deeba has attended 5 days online FDP on “Global Conversations in Mechanical Engineering : Bridging Innovation and Sustainability” organised by Madanapalle Institute of Technology & Science, Andra Pradesh held during February 19th to 23rd 2024.

EXTERNAL INTERACTIONS

1. Dr B Radjaram, IP CHAIRMAN, IE(I), MEMBER ISHRAE & HOD/MECH was attended CPSE & MSME CONNECT 2024 vendor development programme cum industrial exhibition on 15th February 2024 at APJ Kalam Convention Hall, JIPMER, Puducherry.
2. Dr.A.Mathiarasu, AP/MECH has attended World Plumbing Day & IPA Founders Day conducted by Indian Plumbing Association, Puducherry state chapter on 9th April 2024 at Athiti Hotel, Puducherry.

3.Dr.P.Natarajan, AP/MECH attended CPSE & MSME CONNECT 2024 vendor development programme cum industrial exhibition on 15th February 2024 at APJ Kalam Convention Hall, JIPMER, Puducherry.