



DEPARTMENT OF MECHANICAL ENGINEERING

ACADEMIC YEAR 2024 – 2025 (EVEN)

STUDENT ORIENTATION PROGRAMME – REPORT

As a part of academic activity of the department, Orientation Programme was organized on 12th February 2025 for II and III year students from department of Mechanical Engineering. The programme was held in eight sessions from 9.15 a.m. to 4.30 p.m. and the programme commenced with an opening ceremony featuring welcome address was given by Mr. S. Nelson Raja, Assistant Professor, Department of Mechanical Engineering.

Event Objectives:

- To prepare the students about their career goal and how to work on it.
- To involve and learn about the career development process and develop their skills.
- To create the awareness about the various co-curricular and extracurricular activities and helps the student for their overall development.
- To create awareness among students about the professional etiquettes.
- To promote the students for enhancing their skills and learn about the various innovative ways to enhance their career.

Session I:

Dr. M. Melwin Jagadeesh Sridhar, Associate Professor, Department of Mechanical Engineering handled a session for second year students on “Machine Kinematics and Dynamics” between 9:15 A.M to 10:00 A.M. He discussed the overview of motion specifically the positions, velocities, and accelerations of moving parts in a machine.

Mrs. S. Priyadharshini, Assistant Professor, Department of Computer Science and Engineering handled a session for third year students on “Principles of Data Science” between 9:15 A.M to 10:00 A.M. She highlights the principles guide data scientists in performing their tasks systematically and effectively, ensuring that data insights are derived responsibly, efficiently and accurately.

Session II:

Dr. T. Pushparaj, Professor and Head, Department of Mechanical Engineering handled a session for second year students on “Fluid Power Systems” between 10:00 A.M to 10:45 A.M. He highlights the Key Components of Fluid Power Systems that plays a vital role in Mechanical Systems.

Mr. M. Vivekananthan, Assistant Professor, Department of Mechanical Engineering handled a session for third year students on “Importance of SWAYAM and NPTEL Online Courses” between 10:00 A.M to 10:45 A.M. He highlights SWAYAM plays a crucial role in democratizing education and supporting the continuous development of learners across different demographics and regions.

Session III:

Dr. H. Agilan, Assistant Professor, Department of Mechanical Engineering handled a session for second year students on “Thermal Systems” between 11:00 A.M to 11:45 A.M. He highlights an essential part of various engineering applications including heating, cooling, power generation and refrigeration.

Dr. PP. Shantharaman, Professor, Department of Mechanical Engineering handled a session for third year students on “Thermal and Fluid Transport” between 11:00 A.M to 11:45 A.M. He covered the basics of conduction, convection and radiation.

Session IV:

Dr. H. Agilan, Assistant Professor, Department of Mechanical Engineering handled a session for second year students on “Energy Engineering” between 11:45 A.M to 12.30 P.M. He highlights importance of alternate energy sources and their characteristics.

Mr. N. Magesh, Assistant Professor, Department of Mechanical Engineering handled a session for third year students on “Power Station Engineering” 11:45 A.M to 12.30 P.M. He discussed basics of design, operation, and maintenance of power plants or power stations where electrical energy is generated.

Session V:

Mr. S. Nelson Raja, Assistant Professor, Department of Mechanical Engineering handled a session for second year students on “Importance of SWAYAM and NPTEL Online Courses” 1:15 P.M to 1.40 P.M. He highlights SWAYAM plays a crucial role in democratizing education and supporting the continuous development of learners across different demographics and regions.

Dr. PP. Shantharaman, Professor, Department of Mechanical Engineering handled a session for third year students on “Health and Safety Management” between 1.15 P.M to 2.00 P.M. He discussed about the systematic approach to managing the safety and well-being of workers, as well as minimizing risks and hazards in the workplace,

Session VI:

Dr. M. Melwin Jagadeesh Sridhar, Associate Professor, Department of Mechanical Engineering handled a session for second year students on “Machine Dynamics” between 2 P.M to 2.45 P.M. He highlights the essential and Basic Concepts of Machine Dynamics.

Dr. B. Suresh Babu, Assistant Professor, Department of Training and Placement handled a session for third year students on “Soft Skills” 2 P.M to 2.45 P.M. He highlights the personal attributes, traits, and interpersonal skills that enable individuals to interact effectively and harmoniously with others.

Session VII:

Dr. B. Barankumar, Assistant Professor, Department of Training and Placement handled a session for Second year students on “Aptitude” between 3 P.M to 3.45 P.M. He elaborate the Key types of Aptitude and their importance.

Dr. S. Sabanayagam, Associate Professor, Department of Mechanical Engineering handled a session for Third year students on “Power Generation techniques” 3 P.M to 3.45 P.M. He highlights the various methods used to generate electrical power and their applications.

Session VIII:

Mr. S. Nelson Raja, Assistant Professor, Department of Mechanical Engineering handled a session for Second year students on "Fabrication Technology" 3.45 P.M to 4.30 P.M. He highlights the Key fabrication technologies and their principles.

Mr. M. Vivekananthan, Assistant Professor, Department of Mechanical Engineering handled a session for Third year students on "Welding Techniques" 3.45 P.M to 4.30 P.M. He highlights the various methods used to join materials, typically metals or thermoplastics, by melting the workpieces and adding a filler material.



Snapshots for the Orientation Programme Held on 12.02.2025

Event Outcomes:

- Understanding the concepts of technical writing, project management, or specific engineering software, which are critical for success in the field.
- Understanding industry standards, regulations, and best practices relevant to mechanical engineering.
- Provides insight into current research projects, innovation efforts, and opportunities for involvement.

S. Nelson Raja
26/2/25
Staff Incharge

T. Vivekananthan
26/2/25
HoD/MECH.

S. M. Mani
26/2/2025
Principal