

# DEPARTMENT OF MECHANICAL ENGINEERING **ACADEMIC YEAR 2023-24(EVEN)**

Date:12.03.2024

#### **CIRCULAR**

As a part of skill enhancement of student community, the Department of Mechanical Engineering is planned to conduct the "Orientation Program" for second year students on 13.03.2024 at Mechanical ICT Class Room (207). Second year students are instructed to attend the program without fail.

## **Session Details**

S. No	Session Time	Staff Name	Topic
1.	09.15 A.M. to 09.25 A.M.	Mr. N. Magesh Mechanical	Welcome Address
2.	09.25 A.M. to 10.00 A.M.	Dr. T. Pushparaj Head /Mechanical	Department Familiarization
3.	10.00 A.M. to 10.45 A.M.	Mr. M. Vivekananthan Mechanical	Basics of Manufacturing
4.	11.00 A.M. to 11.45 A.M.	Dr. V. Suresh Kumar HoD/S&H	Basics of Environmental Sciences and Sustainability
5.	11.45 A.M. to 12.30 P.M.	Dr. B. Barankumar T & P	Aptitude
6.	01.10 P.M. to 04.10 P.M.	Dr. M. Melwin Jagadeesh Sridhar Mr. S. Balaganesh Mechanical	Importance of Fluid Mechanics and Thermal Engineering (Practical)
7.	04.10 P.M. to 04.20 P.M.	Mr. M. Sakthivel Mechanical	Vote of Thanks



# DEPARTMENT OF MECHANICAL ENGINEERING ACADEMIC YEAR 2023 - 2024 (EVEN) STUDENT ORIENTATION PROGRAMME REPORT

As a part of academic activity of the department, Orientation Programme was organized was 13<sup>th</sup> March 2024 for Second year students of Mechanical Engineering. The programme was starts from 9.15 AM. Mr. S. Nelson Raja, Assistant Professor, Department of Mechanical Engineering was delivered the welcome address to the Second year students for Orientation Programme.

#### **Objectives:**

- The objective of the Orientation Program was to familiarize Second year students with the key concepts, tools and practices essential for success in mechanical engineering roles within our organization.
- 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:

Mr. N. Magesh, Assistant Professor, Department of Mechanical Engineering handled a session for second year students on "Department Familiarization" between 9:25 A.M to 10:00 A.M. He discussed the facilities and amenities of the department and lined out the importance and engagement for their carrier development.

# Points Discussed in Session I:

- ✓ Courses of Curriculum and pointed out relativity of subjects.
- ✓ To develop the knowledge, based on core activity.
- ✓ Importance of professional development.

#### Session II:

Mr. M. Vivekananthan, Assistant Professor, Department of Mechanical Engineering handled a session for second year students on "Basics of Manufacturing" between 10:00 A.M to 10:45 A.M. He discussed about the advanced manufacturing techniques and their industrial applications.

# **Points Discussed in Session II:**

- ✓ Choosing the appropriate materials based on factors like strength, durability, cost, and availability.
- ✓ Planning the manufacturing process, including scheduling, resource allocation, and quality control measures.
- ✓ Transforming raw materials into finished products through processes such as machining, casting, molding, and forming.

#### Session III:

Dr. V. Suresh Kumar, Head/ Department of Science and Humanities handled a session for second year students on "Basics of Environmental Sciences and Sustainability" between 11:00 A.M to 11:45 A.M. He discussed the environmental policy and waste management in India.

## Points Discussed in Session III:

- ✓ Laws, regulations, and initiatives aimed at addressing environmental issues and promoting sustainable practices.
- ✓ Strategies for reducing, reusing, and recycling waste to minimize environmental impact.
- ✓ Meeting the needs of the present without compromising the ability of future generations to meet their own needs.

#### Session IV:

Dr. B. Barankumar, Assistant Professor, Department of Training and Placement handled a session for second year students on "Aptitude" between 11:45 A.M to 12:30 P.M. He shared the various aptitude skill development of other than core.

# Points Discussed in Session IV:

- ✓ Grasp the fundamental concepts of mathematics, reasoning, and analytical skills.
- ✓ Regular practice is crucial to enhance problem-solving abilities and speed.
- ✓ Learn time-saving techniques to solve problems efficiently during exams.

#### Session V:

Dr. M. Melwin Jagadeesh Sridhar, Associate Professor, Department of Mechanical Engineering and Mr. S. Balaganesh, Assistant Professor, Department of Mechanical Engineering were handled a practical session on "Importance of Fluid Mechanics and Thermal Engineering" between 01.10 P.M. to 04.10 P.M.

#### **Points Discussed in Session V:**

- ✓ Dealing with fluids at rest, including pressure distribution in static fluids and buoyancy principles.
- ✓ Study of fluid motion, including Bernoulli's equation, Euler's equation, and Navier-Stokes equations.
- ✓ Analyzing flow through pipes, including pressure drop and flow rate calculations.
- ✓ Devices that convert thermal energy into mechanical work, like steam turbines and internal combustion engines.
- ✓ Study of factors affecting human comfort in relation to thermal environment.

#### **Outcomes:**

- Understanding of fundamental Mechanical Engineering principles and concepts.
- Familiarity with mechanical engineering tools and software.
- Knowledge of basic manufacturing processes and materials.
- Ability to apply mathematics and physics concepts to solve engineering problems.
- Development of critical thinking and problem-solving skills.
- Awareness of ethical and professional responsibilities in engineering practice.
- Exposure to interdisciplinary aspects of mechanical engineering.
- Teamwork and communication skills for collaboration on engineering projects.
- Exploration of career paths and opportunities in mechanical engineering.

#### Conclusion:

Mr. M. Sakthivel, Assistant Professor, Department of Mechanical Engineering was delivered the vote of thanks for Orientation Programme. This programme was successful in providing participants with essential knowledge and skills for their roles within the mechanical department. Participants expressed appreciation for the hands-on demonstrations and found them valuable for practical understanding. Feedback was collected from the participants at end of the session.

# **Session Glimpses:**









Snapshots for the Orientation Programme Held on 13.03.2024

Dungdorum Coordinators 25/3/24.

(Mr. S. Nelson Raja Mr. R. Rajadurai) HoD/Mech 25/3/24

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