

DEPARTMENT OF MECHANICAL ENGINEERING An AUTONOMOUS Institution Affiliated to ANNA UNIVERSITY

EASWARI

ENGINEERING COLLEGE

RAMAPURAM CHENNAI

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VISION

To be an acknowledged leader in imparting Mechanical Engineering education, research and be a recognized resource center for industry and society

MISSION

- M1:To make the students understand the basic and advanced Engineering concepts in the core fields of Mechanical Engineering through Under-Graduate and Post-Graduate Courses.
- **M2**:To prepare the students and expose them to the basic and applied research, thus fostering creativity through recognized research canters.
- **M3**:To make the students undergo training in the Industries, identify the current problems and solve them with multidisciplinary and professional approach.
- M4:To prepare the students to integrate Engineering with business that encourages technological commercialization by inviting eminent entrepreneurs for seminars and workshops.
- **M5**:To make the students do application oriented projects which identify the current problems, solving them and thus contribute to the societal needs.
- **M6**:To inculcate the value of ethics, lifelong learning and widening the knowledge frontiers through long term interaction with other academia and industry.



PROGRAM OUTCOMES (PO)

EEC

- **PO1: Engineering knowledge**: Apply the knowledge of mathematics, science, engineering fundamentals, and an engineering specialization to the solution of complex engineering problems.
- **PO2: 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.
- **PO3: Design/development of solutions**: Design solutions for complex engineering problems and design system components or processes that meet the specified needs with appropriate consideration for the public health and safety, and the cultural, societal, and environmental considerations.
- **PO4: 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.
- **PO5: 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.
- **PO6: The Engineer and society**: Apply reasoning informed by the contextual knowledge to assess societal, health, safety, legal and cultural issues and the consequent
- **PO7: Environment 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.
- **PO8: Ethics**: Apply ethical principles and commit to professional ethics and responsibilities and norms of the engineering practice.
- **PO9:** Individual and team work: Function effectively as an individual, and as a member or leader in diverse teams, and in multidisciplinary settings.
- **PO10: 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.
- **PO11: 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.
- PO12: 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

PROGRAM EDUCATIONAL OBJECTIVES (PEO)

- **PEO1**: Our graduates will have fundamental technical knowledge and develop core competency in diversified areas of Mechanical Engineering along with Mathematics, Science and other allied engineering subjects in a view to expand the knowledge horizon and inculcate lifelong learning.
- **PEO2:** A fraction of our graduates will pursue advanced studies, research and develop products in the field of Mechanical engineering by developing partnerships with industrial and research agencies thereby serving the needs of the industry, government, society and scientific community.
- **PEO3:** Our graduates will be capable of building their own career upon a solid foundation of knowledge and with a strong sense of responsibility serve their profession and society ethically.
- **PEO4:** Our graduates will be prolific professionals with effective communication, leadership, teaming, problem solving, decision making skills byunderstanding contemporary issues and improve their overall personality for career development

PROGRAM SPECIFIC OUTCOMES (PSOs)

- **PSO1**: Students will be competent in design and analysis of thermal and fluid systems.
- **PSO2**: Students will possess the skill to apply design concepts for mechanical structures and systems.
- **PSO3**: Students will be able to design and develop industrial products using modern machines in the field of manufacturing.
- **PSO4**: Students will be able to use software to solve structural, thermal, fluid and manufacturing problems.

EASWARI ENGINEERING COLLEGE

Department of Mechanical Engineering

List of Events (2021)

Event No	Date	Event	Remarks
1.	03.03.2021 to 15.03.2021	Two weeks online workshop on " Computational Fluid Dynamics"	Dr. V. Antony Aroul Raj, Professor, Mechanical Engineering Mr. C. Hariharan, Assistant Professor, Automobile Engineering



Two weeks online workshop on "Computational Fluid Dynamics"

The event was conducted in online mode and about participants, 94 students attended this event. This event has helped all the students to update their knowledge of the topic of computational fluid dynamics.



EXTRA & CO-CURRICULAR ACTIVITIES FOR THE ACADEMIC YEAR 2020 -21 (JANUARY – MARCH) Award/ Name of the S.NO Year **Participa** Name of the Institute/Univ Name of the & tion Date Student ersity/Industr event Sec y Organized 06/ Participa **Online - Sol** Internshala T Sidharth S R idworks Tra tion 100 01/ 1. raining ining % marks 2021 22/ **SSN College** Auto Quiz -Saran G IC of Engineeri **1st Prize** Invente 5.0 01.20 ng 21 2. 27.02. **Kirpa Harihar** Quiz-O-III B **3rd prize** EEC Pedia an 2021 3.

Faculty Publications January – March 2021

SI. No.	Name of the faculty	Research Paper Title	Index	Impact factor	Month & Year	Volume/ Issue/ Pg. no.	Journal Name
1	Ramadoss.R.	Finite element simulation and regression modeling of machining attributes on turning AISI 304 stainless steel	ESCI	2.957	January 2021	Volume 8, Article number 2021022	Manufacturing Review
2	Ajith.D	An overview of additive manufacturing technologies for musical wind instruments	ESCI	2.11	January 2021	Volume 3, Issue 2, Article number 162	SN Applied Sciences
3	Antony Aroul Raj. V	Thermal Management Analysis of Pcm Integration in Building Using a Novel Performance Parameter Pcm Effectiveness Index	SCIE	1.625	January 2021	Vol 26 / Issue 2	Thermal Science
4	Antony Aroul Raj. V	Review on numerical algorithms for melting and solidification studies and their implementation in general purpose computational fluid dynamic software	SCIE	6.583	February 2021 2020	Volume 36, Article number 102341	Journal of Energy Storage
5	NareshBabu M.	Performance of ionic liquid as a lubricant in turning inconel 825 via minimum quantity lubrication method	SCIE	5.684	February 2021	Volume 64, Pages 793-804	Journal of Manufacturing Processes
6	Ashok. K, Ajith. D.,	Influence of Nanofiller Lignite Fly Ash on Tribo- Mechanical Performance of SansevieriaRoxburghiana Fiber Reinforced Epoxy Composites	SCIE	5.323	March 2021	Volume 19,Issue 22, Pages 6000- 6014	Journal of Natural Fibers

