

DEPARTMENT OF

MECHANICAL ENGINEERING

An AUTONOMOUS Institution Affiliated to ANNA UNIVERSITY **RAMAPURAM CHENNAI**

EASWARI

ENGINEERING COLLEGE

















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VISION

EEC

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)

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- **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 by understanding 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.

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If your hate could be turned into electricity,it would light up the whole world.

- Nikola Tesla

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Vibrance, Volume – 5, Issue – 2

CALENDAR OF EVENTS 2020

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NATIONAL & INTERNATIONAL DAYS (OCT – DEC)							
OCTOBER							
1 st	NATIONAL VOLUNTARY BLOOD DONATION DAY						
1 st	INTERNATIONAL DAY FOR ELDERLY PEOPLE						
1 st -7 th	WILD LIFE WEEK						
2nd	INTERNATIONAL FILM FESTIVAL OF INDIA MAHATMA GANDHI'S BIRTHDAY						
2 nd	ANTI-LEPROSY DAY						
2 nd -8 th	PREVENTION OF BLINDNESS WEEK						
2 nd -8 th							
6""gth	AIR FORCE DAY						
	WORLD POST DAY						
10 th	NATIONAL POST DAY						
11 th -25 th	FAMILY WELFARE FORTNIGHT						
13 th	INTERNATIONAL DAY FOR NATURAL DISASTER REDUCTION (IDNDR)						
14 th	WORLD STANDARDS DAY						
16 ^{ui} 21st	WORLD FOOD DAY						
21							
21	GLOBAL IODINE DEFICIENCY DISORDER(IDD) DAY						
24 2/th							
24	WORLD DEVELOPMENT INFORMATION DAT						
24 ⁱⁱⁱ -30 ⁱⁱⁱ	DISARMAMENT AND DEVELOPMENT WEEK						
28"							
31%	INDIRA GANDHIS DEATH ANNIVERSARY (ANTI-TERRORISM DAY)						
NOVEMBER							
	ALL SAINTS DAY						
2 gth	LEGAL SERVICES DAY						
9 th -14 th	INTERNATIONAL WEEK OF SCIENCE						
14 th	NEHRU'S BIRTHDAY-CHILDREN'S DAY						
14" -20" 15th 21st	WORLD HERITAGE WEEK						
15 -21 16th							
10 toth							
	NATIONAL INTEGRATION DAY (INDIRA GANDHI'S BIRTHDAY)						
19" NOV18" Dec 10 th _26 th							
20	QUAMI EKTA WEEK CHILD RIGHTS DAY						
20 th	QUAMI EKTA WEEK CHILD RIGHTS DAY CONSTITUTION DAY						
20" 26 ^h	QUAMI EKTA WEEK CHILD RIGHTS DAY CONSTITUTION DAY						
20 th 26 th DEC	QUAMI EKTA WEEK CHILD RIGHTS DAY CONSTITUTION DAY						
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INTERNATIONAL JOURNAL PUBLICATION



V Antony Aroul Raj, R Velraj, Fariborz Haghighat "The contribution of dry indoor built environment on the spread of Coronavirus: Data from various Indian states" elsevier 62 (2020) impact factor : 4.5



Coronavirus transmission potential in various climatic zone in Psychrometric chart



Respiratory droplets shrink and become airborne when air is dry

Ballistic



INTERNATIONAL JOURNAL PUBLICATION

K. G Ashok, K Kalaichelvan "Mechanical, ballistic impact, and water absorption behaviour of luffa/graphene reinforced epoxy composites" Polymer Composites. 1–11(2020) impact factor : 2.89



impact tested samples of various composites



Moisture absorption behaviour of composite sample

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Faculty Publications October – December 2020

EEC

SI. No.	Name of the faculty	Research Paper Title	Index	Impact factor	Month & Year	Volume/ Issue/ Pg. no.	Journal Name
1	Ramya Suresh	Experimental investigation on equally treated banana/sisal fibers based hybrid composite	Scopus	0.402	October 2020	Volume 2283, Article number 020083	AIP Conference Proceedings
2	Karthick.S PrasannaRaj Yadav S., Senthilnathan K	Experimental investigation on influence of chemical treatment for natural fibers in hybrid composite of G/SB/SB/SB/G	Scopus	0.402	October 2020	Volume 2283, Article number 020082	AIP Conference Proceedings
3	<u>Antony Aroul</u> <u>Raj .V</u>	The contribution of dry indoor built environment on the spread of Coronavirus: Data from various Indian states	SCIE	7.587	November 2020	Volume 62, Article number 102371	Sustainable Cities and Society
4	Bharath.N.	Emission study of titanium oxide nano-additive blended rice bran biodiesel in a diesel engine	Scopus	0.402	December 2020	Volume 2311, Article number 020047	AIP Conference Proceedings
5	Ashok K.G.	Effect of palmitic and oleic acid mixture on performance and emission analysis of a di diesel engine	Scopus	1.46	December 2020	Volume 45, Pages 6292- 6297	Materials Today: Proceedings

