AUTONOMOUS

ENGINEERING COLLEGE An AUTONOMOUS Institution Affiliated to ANNA UNIVERSITY

EASWARI

RAMAPURAM CHENNAI

MECHANICAL ENGINEERING

DEPARTMENT OF









7114066







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JULY- SEPTEMBER 2019



NEWS



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)

EEC

- **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.

"SAE TIER I EVENTS"

EEC

SAE Tier -1 Competition Has Been Conducted On September 15th to 30th Organized By Mr.A.Deepan Raj Kumar & Mr.C.Hariharan At EEC Ramapuram, Chennai And Conducted 29 Technical Events Such As Modelling And Animation Competition, Competition, Business Plan Competition Analysis competition, Auto Quiz Competition, CFD Contest, Prototype Modelling – Challenge, Welding, Mechatronics, CNC Turning, CNC Milling, Sheet Metal, Manufacturing Tech Challenge, Mechanical Engineering Design Cad, Group Discussion Competition, Design Review Competition, Diagrammatic Reasoning, How Things Work, Process Planning, Material Identification, Oil Seal Design, Reverse Engineering, Threading And Taper Turning, Work Holding, Internet Of Things, Additive Manufacturing, Bridge Building, Big Data And 42 Members Were Selected For Tier-2 Competition **Divisional Level.**

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Faculty Publications July – September 2019

EEC

SI. No.	Name of the faculty	Research Paper Title	Index	Impact factor	Month & Year	Volume/ Issue/ Pg. no.	Journal Name
1	V. Antony Aroul Raj	Performance analysis of concrete block integrated with PCM for thermal management	Scopus	1.46	July - 2019	Volume 22, Pages 370-374	Materials Today: Proceedings
2	Antony Aroul RajV	Effect of phase change material integration in clay hollow brick composite in building envelope for thermal management of energy efficient buildings	SCIE	2.692	August - 2019	Volume 43, Issue 4, Pages 351-364	Journal of Building Physics
3	Ravivarman R.	Performance enhancement of normal contact ratio gearing system through correction factor	ESCI	1.495	September - 2019	Volume 13, Issue 3, 2019, Pages 5242-5258	Journal of Mechanical Engineering and Sciences
4	Karthikeyan K., Naga Chandrika K.K., Deepan Raj Kumar A., Thiagarajan S.,	Research on mechanical behavior of AMMC (Al- SiC) composite in disc brake	Scopus	1.25	September - 2019	Vol 8,Issue6 Special Is. 3, September 2019, Pages 1432-1437	International Journal of Engineering and Advanced Technology
5	Jeremiah R., Prabhakaran D., Jothi Prakash V.M.,	Design and fabrication of centre line marker	Scopus	1.25	September - 2019	Vol 8, Issue 6 Special Is. 3, Sep 2019, Pages 1438- 1442	International Journal of Engineering and Advanced Technology
6	Giridharan, K, Senthilnathan, K., Muthukumaran, S.,	Experimental study on mechanical properties of friction stir welded dissimilar joints of Aluminium alloys AA8011-AA6082	Scopus	0.53	August - 2019	Volume 11, Issue 2, 2019, Pages 135-139	International Journal of Vehicle Structures and Systems

