

An AUTONOMOUS Institution Affiliated to ANNA UNIVERSITY RAMAPURAM CHENNAI

EASWARI

DEPARTMENT OF MECHANICAL ENGINEERING

CHEIF EDITOR:

DR. M VETRIVEL SEZHIAN PROF & HEAD MECH <u>FACULTY :</u> Mr. K .R.SURESH KUMAR ASST.PROF MECHANICAL DEPARTMENT





APRIL – JUNE 2022

STUDENT EDITORS

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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)

FFC

- **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.

EEC



Memorandum of Understanding

EEC

Programs organized with collaboration with Industries

Department of Mechanical Engineering has signed Memorandum of Understanding (MoU) with leading industries for organization of workshops /seminars/guest lectures/ training programs/internship for the students and faculty.

Sl:No.	Name of the Industry	Program	Beneficiary	Date
1	Thejo Engineering	Collaborative Research, Projects, & Consultancy	Staff and Students	28.06.2022
2	TVS Training	Industry Support Corse and Training	Staff and Students	28.06.2022









CO CURRICULAR ACTIVITIES

EEC

Sl.No	Name of the Student	Year	Name of the Event	Name of the Institute/University/Industry Organized	Award/ Participation	Date	
1	Akash R	IV			Ist Place (25k		
2	Dhanush Kumar	IV	Project display	Easwari Engineering College	Prize amount)	21.04.2022,22.4.2022	
3	Yogeswaraan U	IV	Senior-Boys- Under 74 (teakwood club)	15th Chennai District Teakwood Champinship 2021	Gold	31.10.2021	
4	Kripa Hariharan S	IV					
5	Krhizar basha M	IV	Project Grant	ISHRAE Student Chapter (SPRG UG)	50,000 Cash Prize	2021-2022	
6	Nishanth S	IV					
7	S Dharun Praveen		Korfball	3 rd Senior National Korfball Championship-Karnataka	Second Place	10/4/2022	
8	Ashwin Kumar S						
9	Dhanush Kumar K				First Place		
10	Daniel Gladshine IS	IV	Verbattle - Mcadroit 22				
11	Prasanth B	-		EEC		9/5/2022	
12	Neeraj Kumar Borak				Second Place		
13	Tarun Ganesh G	II	Solo Dance - Mcadroit 22		Second Place		
14	Dhinesh	III	Cross Fit - Mcadroit 22		Second Place		

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15	Sathish RS	III	Craftsmen's Arena - Mcadroit 22		First Place	
16	Nikesh	II	Hotdrop(BGMI) - Mcadroit 22		Second Place	
17	Yugeshwaren	III	Valorant - Mcadroit 22		Second Place	
18	Risha	III,IV	Channel Surfing - Talentia 22	EEC	1st place	26.6.2022

23	Ajith Sam	IV	Solo Singing - Talentia 22	EEC	1st place	26.6.2022
24	Kamalesh Kumar.R					
25	Humruth.N					
26	Jagadeeshwaran.K					
27	Gowtham.V					
28	Abishek.M				1st place	26.6.2022
29	Shailesh Kumar			EEC		
30	Manimaran	II,III,IV	Choreo War - Talentia 22			
31	Rajdeepan					
32	Karthigeyan.S					
33	Karthik.E					
34	Ezhilarasan					
35	Srikumar					
36	Vishal Karthik	-				
37	Sanjay					
38	Karthigeyan.S	IV	Solo dance - Talentia 22	EEC	1st place	26.6.2022
39	Aakash	II,III,IV	Variety Show - Talentia 22	EEC	2nd Place	26.6.2022

40	Akash.C				
41	Ashwin	-			
42	Saiful Huq	-			
43	Abishek.K	-			
44	Risha Rajas	-			
45	Salai dharnish hari	-			
46	Vitheeshwaran	-			
47	Kumara Guru	-			
48	Shyam Ganesh	-			
49	Sham.B	-			
50	Ram Kumar	-			
51	Deepu Kanna	-			
52	Praveen Kumar	-			
53	Sabari				

54	Kavya.G.V					
55	Nikesh					
56	Anshudeep					
57	Ajith Sam					
58	Kripa Hariharan	II,III,IV	Battle of Bands - Talentia	EEC	1st place	26.6.2022
59	Nishanth					
60	Shankara Narayanan					
61	Rakan					
62	Ramana					

Department of Mechanical Engineering

63	Dharunkanth						
64	Raghul Adithya.K.S	IV	Photography - Talentia 22	EEC	3rd place	26.6.2022	
65	Karthick						
66	Kavya.G.V	III	Snippet writing - Talentia 22	EEC	3rd place	26.6.2022	
67	Mohan raj	IV	NSS Best Volunteer	EEC	Best Volunteer	29.12.2021	

NPTEL RESULTS

S. No.	Faculty Name	Designation	Title of the course		GRADE
	Dr. M. VETRIVEL				
1	SEZHIAN	Professor & HOD	Product Design and Manufacturing	65	ELITE
2	D ₂ V ELANCO	Vice Principal	Introduction to industry 4.0 and industrial internet of	94	EI ITE SII VED
4	DI. V. ELANGU	vice Finicipai	NBA Accreditation and Teaching and learning in	04	ELITE+SILVER
3	Dr. R.RAMADOSS	Professor	Engineering (NATE)	65	ELITE
			Fundamentals of Automotive systems	54	Completed
	Dr. S. PRASANNA RAJ		NBA Accreditation and Teaching and learning in		F
4	YADAV	Associate Professor	Engineering (NATE)	80	ELITE+SILVER
5	Dr. D. AJITH	Associate Professor	Business Statistics	70	ELITE
6	Mr. R. JEREMIAH	Assistant Professor	Product Design and Manufacturing	66	ELITE
			NBA Accreditation and Teaching and learning in		
7	Mr. C. JOEL	Assistant Professor	Engineering (NATE)	69	ELITE
			Welding Process	56	Completed
	Mr. G.		NBA Accreditation and Teaching and learning in		
8	CHAKRAVARTHI	Assistant Professor	Engineering (NATE)	66	ELITE
9	Mr K G ASHOK	Assistant Professor	NBA Accreditation and Teaching and learning in Engineering (NATE)	68	ELITE
-	MIT ING A BITON	Tibbibtant Trofessor	NBA Accreditation and Teaching and learning in	00	
10	Mr. B. GOPINATH	Assistant Professor	Engineering (NATE)	65	ELITE
			NBA Accreditation And Teaching And Learning In		
11	Mr. K. KARTHIKEYAN	Assistant Professor	Engineering (NATE)	51	Completed
10	Mrs. K.K.		NBA Accreditation And Teaching And Learning In	<i>c</i> 1	
12	NAGACHANDKIKA Ma	Assistant Professor	Engineering (NATE)	64	ELITE
13	D.SAKTHIMURUGAN	Assistant Professor	Engineering (NATE)	70	ELITE
			NBA Accreditation and Teaching and learning in		
14	Mr. B. ELUMALAI	Assistant Professor	Engineering (NATE)	83	ELITE+SILVER
	Mr.		NBA Accreditation And Teaching And Learning In	75	
15	K.THAVASILINGAM	Assistant Professor	Engineering (NATE)		ELITE+SILVER
	Mr. V. M.		NBA Accreditation And Teaching And Learning In		
16	JOTHIPRAKASH	Assistant Professor	Engineering (NATE)	54	completed
17	Mr M RAIII	Assistant Professor	NBA Accreditation And Teaching And Learning In Engineering (NATE)	65	FLITE
17		Assistant i fotessor	NBA Accreditation And Teaching And Learning In	05	
18	Mr. K. GIRIDHARAN	Assistant Professor	Engineering (NATE)	55	completed
	Mr. D.		NBA Accreditation and Teaching and learning in		
19	PRABHAKARAN	Assistant Professor	Engineering (NATE)	64	ELITE
			NBA Accreditation and Teaching and learning in		
20	Dr.M.NARESH BABU	Associate Professor	Engineering (NATE)	62	ELITE
21	Dr. PETER Dushda na tua n	Assistant Drofessor	NBA Accreditation And Teaching And Learning In	75	EI ITE SII VED
41	Dr. K.R.SUPFSH	Assistant Professor	NRA Accreditation And Teaching And Learning In	13	ELIIE+SILVER
22	KUMAR	Assistant Professor	Engineering (NATE)	66	ELITE
			NBA Accreditation And Teaching And Learning In		
23	Dr. M.BABU	Assistant Professor	Engineering (NATE)	72	ELITE
24	Dr. A. PRAVEEN KUMAR	Assistant Professor	Product Design and Manufacturing	72	FLITE

Faculty Publications April – June 2022

SI. No.	Name of the faculty	Research Paper Title	Index	Impact factor	Month & Year	Volume/ Issue/ Pg. no.	Journal Name
1	Babu.M	Design and optimization of linear Fresnel reflector concentrating solar system using particle swarm optimization algorithms	Scopus	1.46	April-22	Volume 66	Materials Today: Proceedings
2	Joel.C	Numerical Investigation on Temperature Distribution of Triangular and Rectangular Shaped Aluminum and Copper Fins	Scopus	0.52	May-22	Pages 225-233	Lecture Notes in Mechanical Engineering
3	Raju. M	Optimization of friction surfaced deposits of aluminium alloy 6068 over low carbon steel	Scopus	1.46	May-22	Volume 62	Materials Today: Proceedings
4	Prasanna Raj Yadav.S	Sustainability Improvement of Ethanol Blended Gasoline Fuelled Spark Ignition Engine by Nanoparticles	SCIE	3.791	May- 2022	Volume 2021	Journal of Nanomaterials
5	Jeremiah.R, Paulmer Pushparaj. J	Optimization of Parameters to Improve Effectiveness of Plate and Fin Heat Exchangers using Taguchi Method and CFD Analysis	Scopus	0.953	June- 2022	Volume 14, Issue 3,397- 400	International Journal of Vehicle Structures and Systems

