



### **VISION**

To be a centre of excellence in Mechanical engineering through quality education and research thereby producing competent engineers, leaders and entrepreneurs to meet the national and global challenges.

### **MISSION**

M1: To provide quality education and training through effective teaching - learning process by adopting innovative pedagogical methods.

M2: To develop competent engineers into professionals, leaders and entrepreneurs with ethical values for the requirements of the nation and beyond.

M3: To strengthen the Research and Development activities to meet the global needs.

M4: To impart knowledge on industry specific needs and cutting edge technologies through seminars, workshops and guest lectures.

### **PROGRAM EDUCATIONAL OBJECTIVES**

PEO1: Preparation

PEO2: Core Competence

PEO3: Multidisciplinary

PEO4: Professional Environment

PEO5: Learning Environment

### **PROGRAM OUTCOMES**

PO1: Engineering knowledge

PO2: Problem analysis

PO3: Design/Development of solutions

PO4: Conduct investigations of complex problems

PO5: Modern tool usage

PO6: The engineer and society

PO7: Environment and sustainability

PO8: Ethics

PO9: Individual and team work

PO10: Communication

PO11: Project management & Finance

PO12: Life-long learning

### **PROGRAM SPECIFIC OUTCOMES**

PSO1: Design, Manufacturing and Industrial Engineering Knowledge: Apply the knowledge of design, manufacturing and industrial engineering for the development of mechanical systems including selection of materials, production processes, fabrication and testing of components.

PSO2: Applied mechanics, Thermal and Fluid science Knowledge: Apply the acquired knowledge in the domain of applied mechanics, thermal and fluid sciences to analyze and solve engineering problems utilizing the latest tools.

### **ABOUT THE DEPARTMENT**

- Established in the year 2012
- 4 Faculty members with Ph.D. and 3 Faculty Members are pursuing Ph.D.
- Under Autonomous System, the syllabi were periodically updated for introducing new scientific, technological developments and to suit the industrial needs
- Industry Orientated Curriculum and updated every year to suit industrial demand.
- Highly experienced faculty with industry and academic background.
- Smart Classrooms for creative learning.
- State-of-the-art Infrastructure at the cost of Rs.1.25 Crores & Well-Equipped Laboratory facilities with latest version of CAD/CAM software.
- Industry supported laboratories and production version of CNC machines and Metrology laboratory.
- Training on Communication Skill, Problem Solving and Aptitude, Soft Skills, Interview Skills, Entrepreneurship Training, Programming Skills, Life Skills, Values, Ethics to all the students in each semester.
- Ensured Placement, 92% placements in core and software industries.
- Our Alumni excels in various leading core and software industries located in various countries viz, USA, UAE, Japan, Germany.
- Special coaching for advanced learners GATE, IES and other competitive exams.
- Active research groups exist for carrying out collaborative research with famous core industries and interdisciplinary research
- Vibrant SAE INDIA collegiate club.
- Students attended International and National level competitions and won prizes worth Rs. 2 Lakhs.

### TEACHING FACULTY

S.No.	Name of the Faculty	Qualification	Designation
1	Dr. M. Jayaraman	ME, PhD, FIE	Principal & Professor
2	Dr. R. Kumaravelan	ME, PhD, FIE	Professor & HOD
3	Dr. S. Velumani	ME, PhD, CIE	Professor
4	Dr. R. Prakash	ME, PhD	Assoc. Prof.
5	K. Ramakrishnan	ME	Asst. Prof.
6	M. Gopi	ME	Asst. Prof.
7	D. Senthilkumar	ME, (PhD)	Asst. Prof.
8	T.C.R. Dinesh	ME	Asst. Prof.
9	V. Mohankumar	ME	Asst. Prof.
10	S. Arunkumar	ME	Asst. Prof.
11	L. Arulshankar	ME	Asst. Prof.
12	A.T. Navin Prasad	ME, (PhD)	Asst. Prof.
13	A. Manojkumar	ME	Asst. Prof.
14	E. Ajaikumar	ME	Asst. Prof.
15	G. Raja	ME, (PhD)	Asst. Prof.
16	S. Karvendhan	ME	Asst. Prof.

### NON TEACHING FACULTY

1. S. Murugesan, DME
2. R. Shanmugasundaram
3. L. Arulkumar, DME
4. N. Manikandaraj
5. K. Rajarajan, DME
6. J. Uthayakumar
7. K. Sadhasivam



### GLIMPSES OF OUR LABORATORIES



**CAD Lab**



**CAM Lab**



**Engineering Practices Lab**



**Manufacturing Technology-II Lab**



**Thermal Engineering-I Lab**



**Dynamics Lab**



**Manufacturing Technology-II Lab**



**Metrology & Measurement Lab**



**Thermal Engineering-II Lab**

## FACULTY ACHIEVEMENTS

### (i) Publication by Faculty Members

Academic Year	Name of the Activity			
	International Journal	International Conference	Book Authored	Patents
2021-22	03	03	-	02
2020-21	07	10	01	02
2019-20	01	01	-	-
2018-19	05	-	-	-
2017-18	03	01	-	-
2016-17	03	07	-	-
Total	22	22	01	04

### (ii) Area of Expertise

- Engineering Design
- CAD/CAM
- Energy Engineering
- Thermal Engineering
- Manufacturing Engineering
- Industrial Engineering

### (iii) Major Equipments

- IC Engine test rig with Eddy current Dynamo meter
- Flue gas analyzer
- Vibration Analyzer & FFT Analyzer
- Tool Maker Microscope
- Gear Hobbing Machine
- Centre less Grinding Machine
- CNC Lathe & Milling Machine
- All Measuring Instruments (Calibrated)

### (iv) Infrastructure Facilities

- Department Library with latest books
- Classrooms equipped with LCD Projector
- Air Conditioned Seminar Halls
- Wi-Fi
- NPTEL Video Lectures @ digital library
- ASME, IEEE (ASPP) online Journals @ digital library

### (v) MoU Signed

- M/s. CADD Centre, Erode
- M/s. FRIGATE, Trichy
- M/s. Sree Andavar Looms, Namakkal
- M/s. MaxCADD, Coimbatore
- M/s. M-TOTAL Instrumentation Solutions Pvt. Ltd., Coimbatore

### TNSCST - National level seminar



### FOSSEE Workshop



### CSIR - National level seminar



## EMINENT PERSONS VISITED OUR DEPARTMENT



**Dr.S.Selvakumar, Scientist-SF, SPROB,  
SDSC-SHAR Centre, Sriharikota  
Symposium - 11.03.2017**



**Mr.V.M.Dhanasekar, Manager,  
Global Automotive Research Centre,  
Chennai - 25.07.2016**



**Dr.S.Ramachandra, Scientist 'G' &  
Technical Director, GTRE, DRDO,  
Bengaluru- 05.03.2016**

## SYMPOSIUM MODELS BY STUDENTS



## STUDENT ACTIVITIES

### (i) Students Participation in various events

Name of the Programme	No. of Events					
	2021-22	2020-21	2019-20	2018-19	2017-18	2016-17
Webinar/Seminar	10	45	47	05	232	46
Workshop	08	20	124	47	126	94
Technical events	12	33	54	61	94	94
Total	30	98	225	113	452	234
Grand Total	1152					

### (ii) Special Awards/Recognitions



M.Ajay Dev won third prize in the International level RC nitro buggy event held at Colombo, Srilanka in the year 2018-19

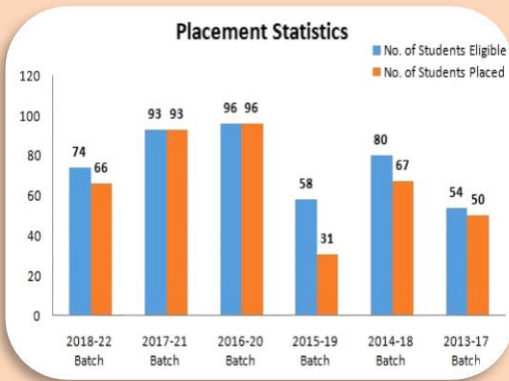


SAE southern section conducted a National level aero design challenge 2020 which held at BIT, Sathy and secured 16th place in the year 2019-20



International level project event participated by third year students in ASME as 'Human Powered Vehicle Challenge Asia Pacific 2020

### (iii) Placement Statistics



### (iv) Our Recruiters

Core		Software
➤ Ashok Leyland	➤ Faurecia	➤ Cognizant
➤ Caparo	➤ Pricol	➤ TCS
➤ Engineering	➤ Robert Bosch	➤ HCL
➤ Milacron India	➤ TVS	➤ Technologies
➤ Tenneco	➤ Delphi TVS	➤ DXC
➤ Automotives	➤ ELGI	➤ Technologies
➤ Apex Hydraulics	➤ Equipments	➤ Wipro
➤ Sakthi Auto	➤ VPG Sensors	➤ Infosys
➤ Components	➤ Renault Nissan	➤ Tech Mahindra
➤ Macbro	➤ Boeing	➤ Focus
➤ Technologies		➤ Edumatic
➤ Leewon Precision		
➤ LGB Ltd		

### (v) Student Training Activities

- 100 hours Training on various skills are offered to all the students. Communication Skill(30 hours), Problem Solving & Aptitude (30 hours), Soft-Skills & Interview Skills(15 hours), Entrepreneurship Training (10 hours), Programming Skills(10 hours), Life Skills, Values, Ethics(5 hours)
- In past 5 years, Guest Lectures, Lecture Meetings, Seminar, Webinar, Workshops, Hands on Training and Value Added Courses on CAD/CAM Software (CREO, CATIA, ANSYS, UNIGRAPHICS, SCILAB) were offered to improve their technical skills
- Coaching classes for higher studies/competitive exam especially GATE

## STUDENT ASSOCIATION ACTIVITIES



FAME Inauguration – 2019-20



SAE Lecture Meeting



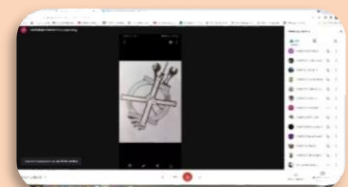
SAE Tier-I Events



Mech Zeal Technical Symposium



MoU Extension Activity



Drafting Competition

## DEPARTMENT OF MECHANICAL ENGINEERING

VELALAR COLLEGE OF ENGINEERING AND TECHNOLOGY, THINDAL, ERODE – 638 012

Phone: 0424 2244201-204, 2244206, Email: hodmechvcet@gmail.com, Web: www.velalarengg.ac.in