

# Dr. MAHALINGAM

### COLLEGE OF ENGINEERING AND TECHNOLOGY

Affiliated to Anna University, Chennai. Approved by AICTE. Accredited by NBA and NAAC with Grade A++ Udumalai Road, Pollachi - 642 003.

## DEPARTMENT OF AUTOMOBILE

## ENGINEERING

# NEWSLETTER



VOLUME - 12 ISSUE- 2 2022 - 2023

### **Institution Vision and Mission**

### **Vision:**

We develop a globally competitive workforce and entrepreneurs.

### **Mission:**

Mahalingam College of and Technology, Engineering Pollachi endeavors to impart high competency based quality, technical education in Engineering and Technology to the younger generation with the required skills abilities face the and to challenging needs of the industry around the globe. This institution is also striving hard to attain a unique status in the international level by means of infrastructure, state-of-the-art computer facilities and techniques.



#### **Department Vision & Mission**

DV:To offer cutting-edge technology in the broad area of automobile engineering and develop globally competitive engineers

DM1:To develop automobile engineering graduates for a successful career in global automotive industry through effective teaching-learning and training.

DM2:To develop the capability of graduates for creating innovative products / systems to enhance the quality of life.

DM3:To inculcate in them the ability to solve societal problems through engineering and professional skills.

#### PEOs, POs & PSOs

**PEO1:** Technical Expertise: Actively apply technical and professional skills in engineering practices to face industrial challenges around the globe

**PEO2:** Higher studies and Research: Own their professional and personal development by continuous learning to create new knowledge

**PEO3**: Ethical Knowledge: Conduct themselves in a responsible, professional and ethical manner supporting sustainable economic development, which enhances the quality of life.

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 analyse 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 anddesign 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 researchmethods including design of experiments, analysis and interpretation of data, and synthesis of theinformation to provide valid conclusions.

PO5.Modern tool usage: Create, select, and apply appropriate techniques, resources, and modernengineering and IT tools including prediction and modeling to complex engineering activities with anunderstanding of the limitations.

PO6. The engineer and society: Apply reasoning informed by the contextual knowledge to assessocietal, health, safety, legal and cultural issues and the consequent responsibilities relevant to the professional engineering practice.

PO7. Environment and sustainability: Understand the impact of the professional engineering solutions in societal and environmental contexts, and demonstrate the knowledge of, and need forsustainable 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 orleaderindiverse 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.

**PSO1**. Analyze the systems behaviour and optimize for the results using modelling, simulation and experiments.

**PSO2.** Design automotive components with due considerations of environment and sustainability.

### Journal Publication

S.No	Name of the Faculty	Title of the Paper	Name of the Journal	Volume No., Issue No., Page No., and ISSN number	Month & Year of Publication
1	Mr. R. Vishnu Ramesh Kumar	Effects of emission and performance characteristics study of rubber seed biodiesel fueled DI diesel engine fumigated with methanol	Materials Today: Proceedings	ISSN: 2214-7853	01/04/2023
2	Dr. D Shanmugam	Experimental investigation on the mechanical, thermal and acoustic characteristics of cellulose/synthetic fiber/nano clay hybrid composites: Influence of treatment, moisture and layering pattern	Composites Part A: Applied Science and Manufacturing	107497	01/05/2023

### Conference Publication

S.No	Name of the Faculty	Title of the Paper	Name of the Conference	Organizer & Venue	Month & Year of Publication
1	Dr. Calvin S King	Future Readiness Through Capstone Project	2nd International Conference On Best Innovative Teaching Strategies	BITS, Pilani	09-11 February, 2023
	Dr. Calvin S King	Developing industry ready engineering graduates in collaboration with industry and other stakeholders	2nd International Conference On Best Innovative Teaching Strategies	BITS, Pilani	09-11 February, 2023

### Online Courses by Faculty

Name of Faculty who attended the programme	Course Name	MM-YYYY of course started	Platform
R.Vishnurameshkumar	Effective Writing	Jan-23	NPTEL
S.mahalingam	Effective Writing	Jan-23	NPTEL
R.B.Rajeshkumar	Innovation By design	Jan-23	NPTEL
Dr.M.Selvakumar	Patent drafting - Certificate	Jan-23	NPTEL
Dr.S.K.Ashok	Patent Drafting for Beginners	Jan-23	NPTEL





### Elite

# NPTEL Online Certification (Funded by the MoE, Govt. of India)



This certificate is awarded to

#### VISHNURAMESHKUMAR R

for successfully completing the course

#### **Effective Writing**

with a consolidated score of

Online Assignments 24.08/25 Proctored Exam

37.5/75

Total number of candidates certified in this course: 3804



Coordinator, Continuing Education Centre IIT Roorkee

Jan-Feb 2023 (4 week course) Priti Maheshwani

Prof. Priti Maheshwari NPTEL Coordinato IIT Roorkee



Indian Institute of Technology Roorkee



Roll No: NPTEL23HS19S14372271

To validate the certificate



No. of credits recommended: 1 or 2



#### Online Certification (Funded by the MoE, Govt. of India)



This certificate is awarded to

#### M SELVA KUMAR

for successfully completing the course

#### **Patent Drafting for Beginners**

with a consolidated score of

Online Assignments | 12.08/25 | Proctored Exam

52.5/75

Deverte Jelihal

Prof. Devendra Jalihal Chairperson, Centre for Outreach and Digital Education, ITM

Jan-Feb 2023 (4 week course)

Total number of candidates certified in this course: 298

Prof. Andrew Thangaraj



Indian Institute of Technology Madras

Roll No: NPTEL23H543S34372747





### Elite

# NPTEL Online Certification (Funded by the MoE, Govt. of India)



This certificate is awarded to R B RAJESHKUMAR

for successfully completing the course

#### Innovation by Design

with a consolidated score of

Online Assignments | 15.92/25 | Proctored Exam | 47.82/75

Total number of candidates certified in this course: 313

Jan-Feb 2023 (4 week course)

IT Bombay



Indian Institute of Technology Bombay



Roll No: NPTEL23DE05544375098

To validate the certificate







This certificate is awarded to

**S MAHALINGAM** 

for successfully completing the course

#### **Effective Writing**

with a consolidated score of

Online Assignments | 13.08/25 | Proctored Exam

Total number of candidates certified in this course: 3804



Jan-Feb 2023 (4 week course) Priti Mahashoani

Prof. Priti Maheshwari



Indian Institute of Technology Roorkee

Roll No: NPTEL23HS19524372537

To validate the certificate



### Consultancy Work by Department

Name of the Faculty	Name of the collaboration partner	Status
Dr. Calvin S King		
Dr. M.Selvakumar	100 100	30
Dr. S.K.Ashok	L&T Defence , Coimbatore	Completed
Mr.R.Vishnurameshkumar		
Mr. M.Mahendran		115.00
Dr. M.Selvakumar	Erbatech Ltd,	Completed
Mr. M.Mahendran	Kinathukadavu, Coimbatore	Completed

### **Funded Projects**

Name of the Faculty	Name of the collaboration partner	Funding Agency	Amount in Rs
Dr. D.Shanmugam	Student Project Scheme,	TNSCST	7500
Dr. M.Selvakumar	Innovation Voucher Program	EDII - TaarkEquipmentsPvt Ltd-	321000

### Events Organized by the Department

S.No	Title of the Event	No of Days	Date of the Event	No of Participants
1	Intellectual Property Rights	1	12-04-2023	77
2	Challenges and Opportunities in Electric Vehicles and Automotive Telematics	2	09-02-2023 & 10-02-2023	18
3	Workshop	2	17-02-2023 to 18-02-2023	43
4	Conference	1	15-03-2023	14















An Autonomous Institution

### Departments of Information Technology and Automobile Engineering

Jointly organizing workshop on

"Intellectual Property Rights - Knowledge session"

12th April 2023 Wednesday 9.00 am to 1.00 pm



Dr. S. P. Subramaniyan Deputy Controller of Patents & Designs, Chennai

Venue: Hall No.12

<u>Conveners</u>
Mr. N. Praveen Sundra Kumar, AP/IT
9003350577
Dr. M. Selvakumar, ASP/Auto
7358272521

### **Students Participation**

Name of the student	Name of the event	Seminar, Workshop, training	Date of Participation (DD-MM-YYYY)
Gokul T	Refuel Recharge Reinvent	Project presentation	15-02-2023 to 18- 02-2023
Anton Andrick F	Refuel Recharge Reinvent	Project presentation	15-02-2023 to 18- 02-2023
Sellakumar M	Refuel Recharge Reinvent	Project presentation	15-02-2023 to 18- 02-2023

Sellakumar M	M Baja 23	Project presentation	12-02-2023 to 18- 02-2023
M.M. Kavin	Electric Hybrid vehicle	Workshop	28-01-2023
V. Vasanth Mani	Electric vehicle	Workshop	27-01-2023
Sanjeev T K	Electric vehicle	Workshop	27-01-2023
M.Dineshkumar	Electric Hybrid vehicle	Workshop	28-01-2023
Gowthamraj P	Electric vehicle	Workshop	27-01-2023
Elladurai S	Electric vehicle	Workshop	27-01-2023
Pranavan B	Electric vehicle	Workshop	27-01-2023
Pranavan B	Electric vehicle	Workshop	27-01-2023
Sivakumaran G	Electric vehicle	Workshop	27-01-2023
Joel Bevin S	Electric vehicle	Workshop	27-01-2023
V. Vasanth Mani	Build your own electric vehicle	Internship	20 Days
Sanjeev T K	Build your own electric vehicle	Internship	20 Days
Gowthamraj P	Build your own electric vehicle	Internship	20 Days
Elladurai S	Build your own electric vehicle	Internship	20 Days
M Mehul Krishna	Build your own electric vehicle	Internship	20 Days
Alagaraja P K		- 44	
MathavaRaj D	11 16		
Allwin M	74	Dr AL	1000000
Mohaneshswar K	Electric Vehicle		27 04 2022
Satyaprakash N	Work Shop 2023	Workshop	27-01-2023
Pravin M			
Alagaraja P K	77.54		
MathavaRaj D			
Gowtham A R			
Sivaprakash D	Fiestaa 23	CAD Design contest	16-02-2023 to 17- 02-2023



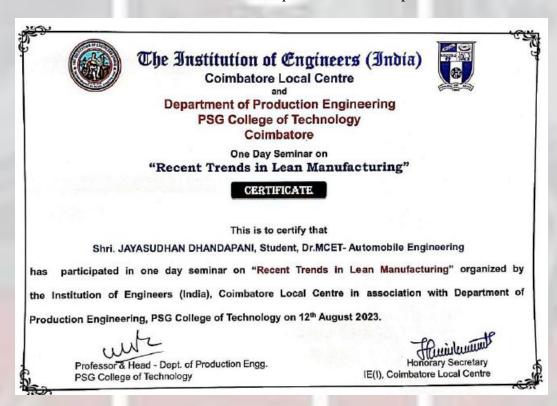
Students Participating the Event at IITM



Certificate of Participation in Workshop



#### Certificate of Participation in Workshop



Certificate of One Day Seminar

### Industrial Visit

S.No	Industry Name	Date	Participants
1	Sakthi Auto Component, Tiruppur	28-02-2023	56
2	SakthiSugars, Erode	15-03-2023	46



Industrial Visit at Sakthi Auto Component

### Students Conference Presentation

Name of Student(s) who attended the programme	Title of paper presented	Level of Conference (National/International)	
K.KavinPrabhu			
S.Mugeshwaran	Simulation Of Automobile Braking System Based On Pid Controller	International	
P.Venuvasanth	Controller		
K.Manikandan			
S.Thamaraiselvan	Traffic Sign Recognition System Using CNN	International	
R.Thulasiram			
K.Surendarapradeep			
S.VishnuPrakash	Development Of Low Cost Ball Milling Machine	International	
S.Vasanth			
M.Vimal	- Experimental Investigation On	100 300	
S.Gajendran	Two-Wheeler Chassis	International	
R.SelvaVignesh	Dynamometer		
S.Kumarasan	- CFD Analysis Of Quadcopter		
P.NaveenRaju	Drone Spray Distribution	International	
S.Manovasanth	System		

K.Nallasenathipathi			
T.Ajithkumar	Intelligent Valet Parking Finder	International	
S.Sabarinath			
T.Dhsrun	Heat Transfer Agumentation		
P.Sanjay	And Thermal Management With Nano Embedded Pcms In	International	
S.Gowtham	A Li-Ion Battery Cell For Electric Vehicles Application		
R.Pawn Kumar	Putton Operated Coor	1000	
P.Manoj	Button Operated Gear Changing System In Two	International	
T.Ganesh Murthy	Wheeler		
T.Rubakeswaran	Prepartinadndthemal		
P.Prasanna Kumar	conductivity Enhancemnt of faty Acid /SIo2 Nano pcm for	International	
Y Mohammed Nalifudeen	passive thermal production		
M.Vishal	Machine Learning Based		
B.Abishekraja	Automatic Detection On Vehicle Battery And Diesel	International	
A.Rubaneshwaran	Lifespan Prediction System		
D.AsirvathSekar	Efficent Auditing Scheme Forsecure Data Storage And Decentralisation Using Fog Cloud Computing	International	

### Alumni Reflections



Mr. Manobalaji S BATCH 2007-2011 Managing Director Sri Balaji Industries

I am grateful and satisfied to have been a student at MCET. Our Automobile Engineering department boasts excellent laboratories equipped with state-of-the-art machines and models, facilitating easy comprehension of the subject matter for students. The staff, with their nurturing care and active involvement, played a pivotal role in shaping us into successful engineers.



Mr.Sivakumar.V
BATCH - 2008-2012
Deputy Manager
Mahindra and
Mahindra, Chennai

The phrase "College is what you make of it" suggests that individuals bear full responsibility for the outcome of their college experience, whether it be success or failure. However, in my case, MCET provided immense support, emphasized empowerment, and development of a diverse range of skills crucial becoming a successful Automobile for Engineer. Throughout my time at MCET, I had the opportunity to learn from every member of the department, and I cherished every moment of it.

### **Editorial Board:**

Editor: K R Ranjith Assistant Professor/Auto

Student Coordinator:Mr.G.Sivakumaran (21BAU304)

S Dhanush Narayanan (727621BAU009)

S Mathesh(727621BAU012)

