



VISION OF THE DEPARTMENT

Excel in mechanical engineering education and research to drive technological evolution and sustainable development.

MISSION OF THE DEPARTMENT

Impart quality education to cultivate globally competent, ethically strong, and socially responsible mechanical engineers.

Provide a conducive environment to nurture creativity and entrepreneurship skills in students.

Foster a research ecosystem to support sustainable development.

ORGANIZING COMMITTEE

Chief Patrons

Dr. Thajudin Ahamed V. I.
Director, CAPE

Dr. S. Jayakumar
Joint Director, CAPE

Patron

Dr. V. Praseedalekshmi
Principal,
College of Engineering Muttathara

Convener

Dr. Dileepal J.
HoD - ME

Joint Convener

Dr. Satheesh Kumar M.
Coordinator – Centre for Sustainable Mobility

Coordinators

Prof. Thajudeen A. K.
Assistant Professor in ME
Mob: 9746634561

Dr. Sreejesh S. R. Chandran
Assistant Professor in ME
Mob: 8281589802

INTENDED AUDIENCE

The FDP is intended for faculty members, research scholars and post graduate students in all disciplines from AICTE approved engineering colleges.

HOW TO APPLY

The candidates can register their names through the following link on or before 03/12/2025

<https://forms.gle/GA4P7XG15QFP3jpJ7>

REGISTRATION FEE

The registration fee is Rs. 250. Participants are requested to remit the fee through Google Pay to the number 9746634561.

ONLINE FACULTY DEVELOPMENT PROGRAMME ON

ELECTRIC AND HYBRID VEHICLES FOR SUSTAINABLE MOBILITY: INNOVATIONS, CHALLENGES, AND FUTURE DIRECTIONS

December 15 – 20, 2025

IN ASSOCIATION WITH



Organized by

Centre for Sustainable Mobility
Department of Mechanical Engineering
College of Engineering Muttathara
(Under CAPE, Government of Kerala)
Thiruvananthapuram, Kerala – 695008
www.cemuttathara.ac.in

ABOUT THE INSTITUTE

College of Engineering Muttathara was established in the year 2016 under the Co-operative Academy of Professional Education (CAPE), Government of Kerala. The college has achieved significant growth, offering five undergraduate programs (CE, ME, EEE, ECE, and CSE) in affiliation with APJ Abdul Kalam Technological University (KTU). It holds a distinctive academic stature among engineering institutions in the state.



ABOUT THE DEPARTMENT

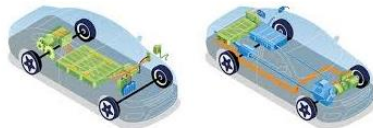
The Department of Mechanical Engineering was established in the year 2016 offering undergraduate programme in Mechanical Engineering. With a right blend of theory and practice, this programme has well laid itself as a prominent option for students. The department has a team of well qualified and experienced faculty in all streams of mechanical engineering who always stride for imparting quality education. State-of-the-art laboratories in the department help to mould engineering graduates as per the curriculum requirements. The department is continuously striving to achieve excellence in mechanical engineering education and research with service to the society.

ABOUT THE CENTRE

The Centre for Sustainable Mobility, functioning under the Department of Mechanical Engineering, focuses on research, training, and innovation in sustainable mobility technologies. It aims to promote advancements in electric and hybrid vehicles, alternative fuels, renewable energy integration, and smart transport systems through academic collaboration and industry partnerships.

ABOUT THE PROGRAMME

The rapid evolution of transportation technologies has positioned electric and hybrid vehicles (EHV) as key drivers of sustainable mobility. The Faculty Development Programme (FDP) on “Electric and Hybrid Vehicles for Sustainable Mobility: Innovations, Challenges, and Future Directions” aims to equip faculty members with the latest knowledge in EHV technologies and trends. It offers a platform to enhance technical expertise, enrich teaching, and support India’s transition to clean and efficient transportation.



TOPICS

- Smart Battery Management and Sustainable Power Systems for EVs
- Smart Energy Management and Fast Charging Innovations in EVs: Role of Machine Learning and Control Strategies
- Role of Fuel Cells in Hybrid Vehicles
- Advanced Power Electronic Controllers for EV Drive Systems
- Validation of EV Chargers using Power HILs
- EV Charging Infrastructure and Power Management

RESOURCE PERSONS



Dr. K. Deepa
Professor,
Amrita Vishwa Vidyapeetham,
Bengaluru



Dr. K. Udayakumar
Professor,
Anna University,
Chennai



Dr. N. Siva Shanmugam
Professor,
National Institute of Technology
Trichy



Dr. Pandikumar Maniraj
Associate Professor,
SIMATS Deemed University,
Chennai



Er. Sajitha Andrews
Project Manager,
Tata Elxsi,
Thiruvananthapuram



Er. J. Manoharan
Head, E-Mobility Division,
ANERT, Government of Kerala
Thiruvananthapuram

