

Resource Persons

1. Dr. S. Jayabal - Principal, GCE Thanjavur
2. Dr. T. Sekar - GCT Coimbatore
3. Dr. A. P. Sathiyagnanam - GCE Salem
4. Dr. C. Syed Aalam- GPT Trichy
5. Dr. S. Sudhakar -GPT(W) - Coimbatore
6. Dr. M. Velliangiri - CIT, Coimbatore
7. Dr. K. Kumaravel - GCE, Thanjavur
8. Dr. S. Rajkumar- Annamalai university
9. Dr. A. Hemachander- NIT Trichy
10. Dr. P..Raja- NIT Trichy
11. Dr. L. Ashok Kumar- TCE, Madurai
12. Dr. C. Barathiraja - SRM University Chennai
13. Er.Angappa Velumani - Spark Technologies Coimbatore

Session Timings

Session 1 : 9.30 AM to 11.00 AM

Session 2 : 11.15 AM to 12.45 PM

Session 3 : 1.45 PM to 3.15 PM

Session 4 : 3.30 PM to 5.00 PM

ORGANIZING COMMITTEE

PATRON:

Dr.K.Manonmani
Principal
GCT, Coimbatore

HOD/ FDTC:

Dr. T.Purusothaman
Professor, FDTC,
GCT, Coimbatore

CONVENERS:

Dr.S.Jayabal
Principal
GCE, Thanjavur
Dr.T.Radhika
Head/Mech.
GCE, Thanjavur

CO-ORDINATORS:

Dr. S. Sivasankar, Asso. Prof.
Dr. K. Kumaravel, Asso. Prof.
Dept. of Mechanical Engineering
GCE, Thanjavur

IMPORTANT DATES:

Last Date for Registration : 09/09/2024

Intimation of Selection : 10/09/2024

Address for Correspondence

Dr. N. Karimilla Bi
Assistant Professor/Mathematics
Faculty Development Training Centre
Government College of Technology
Coimbatore - 641 013.
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Tamil Nadu State Government Sponsored

**Two weeks offline - Faculty
Development Programme (FDP)**

on

**Innovative Technology in
Automotive Industry with Electric
Vehicle**

September 17 – 28, 2024

Organized by
Faculty Development Training Centre
Government College of Technology
Coimbatore– 641 013

&

Department of Mechanical Engineering
Government College of Engineering
Sengipatti, Thanjavur – 613 402

ABOUT FDTC, GCT COIMBATORE

Faculty Development training centre (FDTC) was started in the year of 2019 at Government College of Technology Coimbatore by Government of TamilNadu. It has been organizing TamilNadu state government sponsored Technical training programmes to the Faculty members of Engineering and Polytechnic colleges to enhance teaching and learning skills. FDTC has been organizing faculty development programmes throughout the year. To enhance the knowledge and quality of teaching methodologies of the faculties working Engineering and Polytechnic colleges the training is offered by government of Tamilnadu through FDTC Coimbatore. The training programme was prepared and implemented at FDTC Coimbatore by the Department of Mechanical Engineering, Government college of Engineering Thanjavur.

OVERVIEW OF GCE THANJAVUR

Government College of Engineering Sengipatti Thanjavur was started in the year 2013 by Government of Tamilnadu to cater the needs of technical education in emerging areas of engineering and excellence in research in different disciplines of science and engineering. The Tamil Nadu Government has created adequate infrastructural facilities and sufficient funds and is keen on developing the institute for higher education. The Department of Mechanical Engineering offers full time B.E Mechanical Engineering and Ph.D programme. 10 faculty members are doctorates and more than 20 research scholars are pursuing Ph.D. in part time and full time mode. 22 Doctorates have been produced by the Department. The average teaching experience of faculty is more than 15 years. The state Government of Tamilnadu provided special fund to the Department of Mechanical Engineering during the 2019-2020 to make the department Centre of Excellence in Mechanical Engineering. In this fund some special machineries and software's added to our laboratories like CMM, Boiler power production set up, Production CNC milling machine and Turning Centre, 3D printing machine, Power plant simulation software's, Mechatronics simulation software's, Latest Hydraulic and pneumatic kits for industrial automation etc.

ABOUT THE PROGRAMME

This programme aims to provide knowledge on concepts of innovative technology in automotive industry with electric vehicle and its need in this scenario. Automotive design, materials and electric vehicle (EV) play a crucial role in shaping the modern automobile, influencing everything from aesthetic to performance, safety and sustainability. Exterior and interior design focusses on

the vehicle overall shape, proportions and details such as headlights, grills and bodylines. Interior design includes the layout of the cabin seating arrangements, dashboard design and integration of technology and control. The choice of material in automotive design is driven by factors like strength, weight, durability and cost. High strength steel and advanced composites are used to improve safety and reduce weight. HEV combines two or more energy conversion technologies, such as an electric motor and a conventional internal combustion engine, with one or more energy storage technologies, such as a battery or a fuel tank. Hybrid vehicles can switch between or mix the power sources depending on the driving situation, speed, and battery state of charge. This Interdisciplinary FEP offers an overview of electric vehicle technologies and emphasize the energy sources, controls and simulation strategies used for electric vehicle. Upon completion of this FEP, the participants gained the complete knowledge on Hybrid Electric vehicle and its need of today.

PROGRAMME OBJECTIVE

To enhance the knowledge on Development history of automobiles
To impart the knowledge on the structure of automotive and design concepts
To introduce the fuels and fuel flow techniques in conventional automobiles
To teach the concept of stress management system and students counselling
To learn on pedagogical issues and outcome based education
To introduce the concept of hybrid and electric drive trains.
To elaborate on the types and utilisation of hybrid and electric drive trains.
To learn and utilise different types of energy storage systems
To introduce concept of energy management strategies and drive sizing

TARGET AUDIENCE

This Two Weeks faculty development program is deliberately designed for the faculty members of the AICTE approved institutions (Polytechnic Colleges and Engineering Colleges)

RESOURCE PERSONS

Faculty experts from premier academic universities/institutions and experts from leading industries, research and development organizations.

VENUE:

Faculty Development Training Centre(FDTC)
Government College of Technology
Coimbatore.

REGISTRATION

- No registration fee for the training programme.
- Faculty members from AICTE approved Engineering/Polytechnic Colleges are invited to participate in this programme
- Participants will be selected on First - come First- served basis
- Selected candidates will be intimated by e-mail only.
- Accommodation and food (Breakfast, Lunch & Dinner) will be provided in FDTC at free of cost

Registration LINK:

<https://forms.gle/Pa6sKe2bjSRBjZby6>

QR CODE:



Participation Certificate

Certificate will be provided to the participants who attend all the sessions