



Overview of the FDP

Electric and hybrid electric vehicles are a promising technology for achieving a sustainable mobility sector in the future, due to their very low to zero carbon emissions, simplicity, low noise, high efficiency, reliability, cost, comfort. This Interdisciplinary FDP offers an overview of electric vehicle technologies and emphasize the energy sources, controls and simulation strategies used for electric vehicle. Opportunities and challenges in this thrust area for researchers will be highlighted. The objective of the FDP is to enrich the knowledge of researchers, faculty and industrial professionals.

FDP Highlights: -

- Basic concepts of HEV and Design challenges
- Exposure to Energy sources and management
- Research potentials in batteries, Fuel cells, ultra-capacitor
- Simulation of EV in MATLAB

The Main Focus:

- Maximize the industrial connectivity
- Create centres of excellence in niche areas of research.
- Enrich technological and managerial human capital nurtured in a multicultural ambience.

About GMRIT

Established in the year 1997 by GMR Varalakshmi Foundation-the corporate social responsibility arm of GMR Group-GMRIT offers aspiring Engineer's high quality technical education, Located in Rajam, Vizianagaram district of Andhra Pradesh. It is currently placed among the top 50 colleges in the country and among the top 5 colleges in the state of Andhra Pradesh. It offers nine under Graduate and Six Post Graduate programs. All the UG Programs are accredited by NBA under Tier-1(Phase 4) and the institution is accredited by the NAAC with A Grade (3rd Cycle). In the ranking done by NIRF-MHRD, GMRIT was put in the rank of 188 at the country level for the year 2021-22. Further, GMRIT was declared as the 1st best Clean & Smart campus by AICTE.

About VRSEC

Velagapudi Ramakrishna Siddhartha Engineering College (VRSEC) was established in the year 1977. The institution offers 9 UG programmes and 9 PG programmes. The college has secured an All India NIRF Ranking of 141 for the year 2022.

About Department of Mechanical Engineering-VRSEC

The Department was established in the year 1977. The department is offering B.Tech in Mechanical Engineering with an intake of 120 and M.Tech in Automated Manufacturing Systems. The UG programme of Mechanical Engineering was accredited four times by NBA, GOI, New Delhi, in the years 1999, 2005, 2009 and 2015. High academic standards are maintained in the department with the help of experienced, qualified and dedicated faculty members with various specializations. The Department has established the Centre of Excellence in Composites funded by DST-FIST.

Interdisciplinary FDP Who Can Attend

Faculty/ Industry Persons/ Research Scholars/ PG Students from any Discipline

Registration fees

No Registration Fees.

Registration link: <https://tinyurl.com/2s4he5cp>

Platform

Microsoft teams

The link will be shared after confirmation through mail.

Certificate of Participation

E- Certificate will be issued for the participants who attain 80% of attendance.

Contact

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One Week Online Faculty Development Program

on

Hybrid Electric Vehicles

21st -25th November 2022

Jointly organised by

Departments of Mechanical Engineering

**GMR Institute of Technology
Rajam, Andhra Pradesh**

(UGC-Autonomous Institution, Affiliated to
JNTU, GV- Vizianagaram, NAAC with A-Grade)

&

**Velagapudi Ramakrishna
Siddhartha Engineering College,
Vijayawada, Andhra Pradesh**

(UGC-Autonomous Institution, Affiliated to
JNTU, Kakinada, NAAC with A+ Grade)

Date	Session-I (4.00 PM to 5.00 PM)	Session-II (5.00 PM to 6.00 PM)
21.11.2022	 <p>Dr. T S Kishore Professor Department of EEE GMRIT, Rajam</p> <p>Topic: Sustainable Transportation</p>	 <p>Dr A Hemachander Assistant Professor Department of EEE NIT, Puducherry.</p> <p>Topic: Energy Management Systems for EV</p>
22.11.2022	 <p>Mr. Siva Kumar Sanjeevi Calculation Engineer MesH Engineering GmbH Bangalore, Karnataka</p> <p>Topic: Conventional Vehicles to Electrical Vehicles</p>	 <p>Mr. Siva Kumar Sanjeevi Calculation Engineer MesH Engineering GmbH Bangalore, Karnataka.</p> <p>Topic: Design Challenges and Future of Electrical Vehicles</p>
23.11.2022	 <p>Dr. S. Srinivas Prasad Professor Department of Mech. Engg. VRSEC, Vijayawada.</p> <p>Topic: Fuel Cells-Alternative Energy System to Battery Vehicles</p>	 <p>Dr Phani Teja Bankupalli Assistant Professor Department of EEE SRM, Chennai.</p> <p>Topic: Fuel Cell Control for Electric Vehicle</p>
24.11.2022	 <p>Dr. K Dhananjay Rao Assistant Professor Department of EEE VRSEC, Vijayawada.</p> <p>Topic: Role of Supercapacitors in EVs and Need of Optimal Charging Strategies</p>	 <p>Dr. Sathish Mohan Botsa Director of R&D Bio Enviro Chemical Solutions, Visakhapatnam.</p> <p>Topic: Nano in EVs: Past, Present and Future Perspectives</p>
25.11.2022	 <p>Mr. Vignesh Rajasekar Research Scholar Dept. of Automotive Engg. VIT, Vellore.</p> <p>Topic: Model Based Design and Testing of Hybrid EV Using MAT-LAB</p>	 <p>Mr. Vignesh Rajasekar Research Scholar Dept. of Automotive Engg. VIT, Vellore.</p> <p>Topic: Simulation of Hybrid EV Using MAT-LAB</p>

Organizing Committee	
CHIEF PATRONS	
<p>Dr. J. Girish Director Education GMR Varalakshmi Foundation</p>	
<p>Dr. C. Nageswara Rao President Siddhartha Academy of General & Technical Education</p>	
PATRONS	
<p>Dr. C.L.V.R.S.V. Prasad Principal, GMRIT</p>	<p>Dr. A. V. Ratna Prasad Principal, VRSEC</p>
<p>Dr. V. Rambabu Professor & Head Dept of Mech Engg. GMRIT</p>	<p>Dr. N. Vijaya Sai Professor & Head Dept of Mech Engg VRSEC</p>
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<p>Dr. A. Avinash Associate Professor GMRIT</p>	<p>Dr. S. Srinivas Prasad Professor VRSEC</p>
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FACULTY COORDINATORS	
<p>Mr. G. Dinesh Reddy Asst. Professor, GMRIT</p>	
<p>Dr. K. Dhananjay Rao Asst. Professor, VRSEC</p>	