

Department of Electrical & Electronics Engineering
Centre of Excellence for Electric Vehicles (CoE for EVs)



CoE Coordinator details

Name	: Dr. Chava Sunil Kumar
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Vision:

A Centre of Excellence (CoE) in Electric Vehicles (EVs) at BVRIT HYDERABAD College of Engineering for Women aims to step forward in design of e-mobility vehicles. This cutting-edge centre will centralise innovation, research, and development, propelling the electric transportation sector forward.

Mission:

The CoE in Electric Vehicles

- Promotes sustainability, efficiency, and technological innovation, symbolizing the transition to a greener future.
- Ensures research relevance and seeks relationships with major industrial players, academic institutions, and research organizations.
- Encourages skill growth, training, research, and internships for students.

Objectives

1. To collaborate with industry players in implementing state-of-the-art EV technology in real-world contexts.
2. To develop techniques for improving the performance of electric vehicles.
3. To engage the students in EV technology research and innovations
4. To strive for career growth of students.

Faculty Team

S.No.	Name	Designation	Qualification	Specialization
1	Mr. M Rupesh	Assistant Professor, EEE	M.Tech (Ph.D)	Power System & power Electronics
2	Mr. C Venkata Subba Reddy	Assistant Professor, EEE	M.Tech (Ph.D)	Power Electronics
3	Dr. Ch Saikrishna	Assistant Professor, BS&H (Mech)	Ph.D	Mechanical

Infrastructure

S.No.	Name of the Equipment	Unit Cost	Quantity
1	MG ZEV Electric Vehicle	Sponsored by MG Motors worth of Rs.15,00,000 (Approx.)	1
2	IC Cut Section Engine	MG Motors	1
3	Go-Kart	Rs: 1, 50,000/-	1
4	Honda GX 160 Engine	Rs: 23,000/-	1
5	EV Golf Kart	Rs: 3,00,000/-	1
6	i5 Processor Systems	Rs: 96,000/-	3
7	Solid Works Software	--	unlimited
8	ANSYS Software	Sponsored by Ansys through SAEINDIA	25 licences
9	IPG Car Maker Software	Sponsored by Ansys through SAEINDIA	5 Licences
10	MATLAB/Simulink	Rs: 7,50,000/-	College wide Licence
12	Tool kit	Rs: 30,000/-	1
13	Fire Extinguisher	Rs: 8,000/-	3

List of Software

S.No.	Name of Software
1	Solid Works Software
2	ANSYS Software
3	IPG Car Maker Software
4	MATLAB/Simulink
5	Catia

Outcomes

1. Acquiring cutting-edge knowledge and skills with training.
2. Developing energy efficient electric vehicles.
3. Strengthening research activities in the domain of electric vehicles.
4. Improving the core placements in e-mobility.

List of projects

Completed Projects

S.No.	Title	Specialization	Faculty mentor	Academic Year
1	Electric Golf Kart	EV	Dr. B Srinivasa Rao Dr, Prasanta Jeena	2023-24
2	Range Extended Electric Vehicle	EV	Dr. Ch Sunil Kumar Mr. M Rupesh Dr. Ch Sai Krishna	2023-24 (Software Part Completed)
3	Go-Kart	Automobile	Mr. M Rupesh Dr. Ch Sai Krishna	2023-24

Proposed Projects for the AY 2024-25

S.No.	Title	Specialization	Faculty mentor	Academic Year
1	E-Baja	EV	Dr. Ch Sunil Kumar Mr. M Rupesh	2024-25 & 2025-26
2	Hybrid Scotty	EV/Automobile	Ms. V Sai Leela Ms. Ramya	2024-25
3	EV Bicycle	EV	Dr. Ch Sai Krishna Mr. Venkata Sai Teja	2024-25
4	E-Kart	EV	Dr. Ch Sunil Kumar Mr. M Rupesh Mr. M Gopikrishna	2024-25
5	Go-Kart	Automobile	Dr. Ch Sunil Kumar Mr. M Rupesh Mr. M Gopikrishna	2024-25
5	Range Extended Hybrid Vehicle	EV	Dr. Ch Sunil Kumar Mr. M Rupesh Dr. Ch Sai Krishna	2023-24 & 2024-25

List of Publications

1. Ch Santosh Kumar, N Sri Lakshmi Nanda, K Pragathi, A Spandana, A Srija, J Vaishnavi, M Sanjana, K Deepthi, P Sai Sreeja. “ Implementation of E Bicycle with Smart Display” in “International Journal of Advanced Research in Science Communication and Technology” ISSN: 2581-9429, V-2, I-2, Oct-2022
2. G Sandeep, M Krishna Tejaswi, Ch Praharsha, G Deepika, SK Sana Anjum “Simulation of EV using Simulink” in International Conference on Advances in Signal Processing , VLSI, Communications & Embedded Systems (ICSVCE-2022)” in July 2022
3. K Amritha, Kasoju Mounika, and Kasoju Preethi Balakishna “Design and Implementation of Electric Bicycle with Speed controlling mechanism and Battery Management system” in “International Research Journal of Engineering and Technology” ISSN: 2395-0056V-7, I-9 in Sep 2020

List of Patents

1. R Manojkumar, K Rathnamma, Anusha Pulipati, Ankitha Bodupalli, Deekshitha Kanumuri. Published a Patent titled “Vehicle Speed Control and Accident Avoidance System” with the application no:202441019698, pulished on 29/03/2024.
2. K Bhavya, B Sujatha, Published a Patent titled “Managing EVs in the smart grid using AI and Secured IoT Technology” with application no: 202141053795, published on 10-12-2021.
3. Dr. B Srinivasa Rao published a Patent titled “ Solar Powered Agricultural e-vehicle” with application No: 6256059, published on 30-01-2023



Team Accelerators 🏎️



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