



Department of Electrical and Electronics Engineering

CENTRE OF EXCELLENCE

The Centre of Excellence in Smart E-Mobility and Skill Development at Sri Ramakrishna Institute of Technology was established on 15 February 2025 with a vision to drive innovation, research, and advanced training in electric mobility and allied domains.

Objectives:

- To promote interdisciplinary learning and innovation in Electric Vehicle design, development, and smart mobility solutions by integrating mechanical, electrical, and electronic system knowledge.
- To develop industry-ready skills through hands-on training, simulation, and prototyping in areas such as electric powertrain systems, battery management, IoT-enabled vehicle monitoring, and sustainable mobility technologies.
- To serve as a research and training hub for students and professionals by fostering collaborations with industry and academic partners, supporting projects, startups, and technology transfer in the field of e-mobility.
- To offer specialization-based Honours Degree Programs for B.E. Mechanical and B.E. Electrical & Electronics Engineering students, enabling them to gain in-depth knowledge and practical exposure in Electric Vehicle technology through COE-driven courses.

The department has signed strategic MoUs with the following leading industry partners through the CoE SEMS, including:

- Devise Electronics Pvt. Ltd., Pune
- Magnetics and Control, Coimbatore, and
- AutoSports

As part of its academic initiatives, the Centre offers the Specialization Course on Electric Vehicle Technology, along with a range of skill development programs such as:

- PLC and Industrial Automation (Siemens)
- Motor and Transformer Winding (Magnetics & Control)
- Battery Pack Design and Manufacturing (Jeyam Automotives)

Role under TN Skills and Naan Mudhalvan

The Centre serves as an active training partner under TN Skills through the Naan Mudhalvan – Sigaram Thodu scheme under the MobilityNxt initiative, supporting the State’s mission to enhance employability and future-ready technical capabilities among youth. Through this initiative, students gain access to certified training programs that align with current and emerging industry needs in e-mobility and automation.

The centre hosted Naan Mudhalvan's Sigaram Thodu Programme for upskilling final year Government Engineering students in EV Technology from June 2-25, 2025. 63 students from various parts of the state participated and benefitted through this programme.

The Centre has successfully trained students from Government Engineering Colleges across Tamil Nadu in emerging EV technologies such as:

- Battery Management Systems (BMS)
- Motor and Powertrain Design
- CAN Protocol & Telematics
- Embedded Systems

As a part of this programme, an industrial visit was arranged to Vasantha Advanced Systems on 18 June 2025 and EV Bootcamp Industry Panel Discussion was conducted on 21st June 2025 titled “Future of Mobility: EV Innovations, Industry Needs & Career Pathways for Young Engineers.” The panel featured four eminent industrialist and speakers:

- Mr. Sajeeth Kumar (CEO, ReynLab Technologies & Technical Advisor, MobilityNxt),
- Mr. Vijai Gopalakrishnan (Engineering Group Manager – Vehicle Design, TCS-GM),
- Mr. Pranav Singanapalli (Founder & CEO, Emote Electric) and
- Mr. Venkatesan Natarajan (Former Sr. Director, Cognizant & Consultant, PTC).