



Centre of Excellence in e-Mobility

RV College of Engineering and Greaves Cotton limited signed an MoU on 11-01-2020, to set up CoE in e-Mobility ,

Primary objective of this MoU is

- Students of RVCE will work as interns in the various research projects like Battery chemistry, Battery Management Systems, Traction Motors, Control Mechanism and algorithms.
- The Engineers, Graduate Engineer Trainees of GCL together with faculty and students of RVCE will work on the Electric Vehicles Technology through **EV Mentorship Model for Future of Mobility** an Idea conceived Mr.Nagesh Basavanahalli MD of GCL , Mr Umesh Krishnappa CTO, Operations, GCL and Prof.Dr. K.N.Subramanya , Principal of RVCE.
- To harness energetic students hungry for learning and adopting and creating new Technology in the area of E-mobility RVCE -GCL “Centre of Excellence For Electric Mobility -COEEM” will be established at RVCE Campus. COEEM shall indulge in developing futuristic Electrical vehicle solutions such as Next Generation Controller, Battery Thermal Management - GCL IP project, Embedded Design for Connected vehicles and Application development for Electric Mobility.
- Platform for academia and industry to interact, innovate and co-create newer technologies for the EV industry, all made in India.”
- To transform an emerging sector such as EV with scope for constant innovation and product development.
- Focused on creating an industry-relevant curriculum in a fast-evolving ecosystem.

The Following scope would be covered under the Vision of “**Centre of Excellence for Electric Mobility**” (COEEM) :

Competence Development : GCL would create competence in RVCE through its Internship and training Exchange program in the following areas :

- i. Electric vehicle Design
- ii. Electric vehicle Architecture
- iii. Functional Safety in Electric vehicles through ISO26262
- iv. Vehicle Styling and Industrial Design
- v. Sub Systems Design like Controller, Motor, Battery Systems, Regenerative Braking, Connected Vehicles etc.
- vi. Verification and Validation of Sub Systems and Reliability Engineering
- vii. Concepts of HALT, HAST and MEOST in Accelerated testing.
- viii. EMI/EMC of sub systems and Vehicles

Projects to be done Together: During the 1st year of the ‘COEEM’ – GCL and RVCE would work on following projects :

- i. Controller Design for 1.2 kw and 3 kw BLDC Traction Motors
- ii. BMS Design for Lion battery
- iii. CAN Based telematics Gateway Unit for Preventive Diagnostics
- iv. Application Software for Special Features in EV’s – IP shared by RVCE and GCL
- v. Research in developing Hybrid battery solution with Ultra Capacitors.

Photos:



