





CENTRE OF EXCELLENCE ELECTRIC MOBILITY (e-Mobility)

Established and funded by **AMPERE By GREAVES and RVCE**

E-mobility is an abbrevation of electro mobility and is a general term used to describe the principles and concepts of utilizing electric powered technologies (e.g. Drive trains). E- mobility moves away from existing carbon emitting fossil fuels to using energy from electrical power sources (e.g national grid) through external charging capability.

Objectives

Collaborate and get involved in the latest EV technology, typesof EVs, policy frame work and to build controllers and charging infrastructure which helps industry and institute in this endeavour

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

- Electric vehicle Design
- 2. Electric vehicle Architecture
- 3. Functional Safety in Electric Vehicle through ISO26262 7. EMI/EMC of suv systems and vehicles
- 4. Vehicle styling and industrial design

- 5. Sub system design
- 6. Verification and validation

Ongoing Projects

- Controller design for 1.2kW and 3kw BLDC traction motors
- BMS design for LION battery
- 3. CAN Based telematics Gateway unit for preventive diagnostics
- 4. Application soft ware for special features in EVs
- 5. Research in developing Hybrid battery solution with ultra capacitors

MoU

- GREAVES COTTON LIMITED.
- 2. Fachhochschule Dortmund University of Applied Sciences and Arts University of Dortmund, Germany. (Faculty exchange, student exchange Program: 4 students and 3 prof visited RVCE)







Project funded by Greaves

- 1. Design of Field Oriented Control of motors for two wheelers.
- 2. Design and development of Battery management systems
- 3. Design of vehicle dynamics
- 4. Hybrid Electric vehicle design

Industry Institute Interaction:

Employment opportunity

Year	No of students Employed
2019	7
2020	3
2021	5
2022	9
2023	5

Internship for UG and PG Students

Year	No of students
2020	2+5
2021	17
2022	14
2023	13 + 2 batches did Live Market survey
2024	6

Prototype Developed : Electric Bike. Specifications : 1. Speed : 130 Kph ,

2. Charge And Charging Time : < 4 Hours

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