College of Engineering Pune, India

(COEP Technical University, A unitary Public University of Government of Maharashtra)

ARAI
Progress through Research

offers

1-Year Post Graduate Diploma in Electric Mobility

in collaboration with

The Automotive Research Association of India (ARAI), Pune, India

ABOUT THE COURSE:

PGD-EM is an apt course for those who wish to dive into exciting careers in future mobility solutions. The course is designed for fresh graduates and experienced professionals working in industries. The course is a brainchild of the Mahratta Chamber of Commerce, Industries and Agriculture (MCCIA), an organization that thinks for a holistic development of nation and has contributed immensely to the Industrial development of Maharashtra, making it the Numero-Uno. College of Engineering Pune and ARAI Pune are jointly hosting the course. The professionals from MCCIA and faculty of COEP and ARAI together with eminent resource personalities, will prepare the students for upcoming challenges and opportunities in transition from ICE mobility to Electric Mobility.

The course includes class room lectures, video lectures, presentations and tutorials, which are all reinforced with practicals on ARAI's the state-of-the-art Centre of Excellence in E-Mobility. Students will be exposed to current developments in EV Technology, charging issues, government polices through case-studies and real world projects. One of the prime objectives of the course is to create innovators in the field of electric Mobility and accordingly, the spectrum of the learning is very wide that goes from fundamentals to advanced technology.

COURSE DETAILS:

Trimester I

- Bridge Course
- Fundamentals of Automotive Electrical & Electronic Systems (for Mechanical group)
- Fundamentals of Automotive Mechanical Systems (for Electrical group)
- Applied Mathematics
- EV System Design and Architecture
- Energy Storage Systems for Electric Vehicles
- EV Motor Drives and Power Electronics
- Lab 1
- Mini Project 1

Trimester II

- Vehicle Dynamics and Traction Systems
- Sensors and Controls in Electric Vehicles
- IOT for Electric Vehicles
- Elective 1
- Elective 2
- Lab 2
- Mini Project 2

Trimester III

- Full time Project

Elective Courses (Elective 1 & 2):

- Thermal Design and Management of EV Systems
- Safety and Automotive Standards
- Energy Management and Vehicle Integration
- Advance Electric Drives
- Embedded Systems and In-Vehicle Communication Protocols
- FEM and CFD for Electric Vehicles
- Design Validation Process

Place of Study/Project :-

Trimester-I
- Students will be at COEP & ARAI Academy

→ **Trimester-II**
- Students will be at COEP & ARAI Academy

→ **Trimester-III**
- Full Time Project @ CoEP/ ARAI / Industry

Total Number of Seats: 20

ELIGIBILITY CRITERIA:

Engineering Graduate in Mechanical /Automobile /Electrical /Electronics & Telecommunication / Instrumentation and allied branches

COURSE FEES:

Rs. 1,75,000/- for Full Course

SELECTION CRITERIA:

Online / Offline Technical and Personal Interviews.

Suitable arrangements of Lecture delivery & Laboratory Practical will be made for Working Professionals

Project Opportunities:

Students will get the opportunities to do their final Trimester projects in:

- ARAI
- Research Institutes
- Vehicle Manufacturers
- Component Manufacturers

How to Apply:-

Admission details can be availed by visiting:

https://pgdadmission.coep.org.in/pgadmission/

Diploma Certificate:-

The final diploma is awarded by College of Engineering Pune in association with ARAI, Pune

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