# ARAI®
## Progress through Research

# 1 YEAR FULL TIME
# POST GRADUATE DIPLOMA IN
# ELECTRIC & AUTONOMOUS VEHICLES (PGD-EAV)

**rit** — RAJARAMBAPU INSTITUTE OF TECHNOLOGY



## ABOUT THE COURSE:

PGD-EAV is a 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. K.E. Society's Rajarambapu Institute of Technology (RIT), Rajaramnagar, Islampur and ARAI, Pune are jointly hosting this course.

The professionals from various Automotive Industries/ARAI and faculties of RIT together, will prepare the students for upcoming challenges and opportunities in the field of Electric and Autonomous Vehicles. The course includes class room/online lectures, video lectures, presentations and tutorials. Students will be exposed to current developments in EV Technology, charging issues, government policies through case studies and real world projects.

## COURSE DETAILS:

### Trimester I
- Bridge Course
  - Fundamentals of Automotive Electrical & Electronic Systems *(for Mechanical group)*
  - Fundamentals of Automotive Mechanical Systems *(for Electrical group)*
- Vehicle Dynamics and Control
- Power Electronics *(includes Motors and Drives for EVs)*
- xEV Architecture *(incl. Batteries, Fuel Cells & Super Capacitors for EV*
- **Elective-I**
  - Intelligent Transport Systems
  - Battery Management System
- Lab I
- Mini Project-I

### Trimester II
- Modelling and Simulation of EHVs
- Intelligent Algorithms *(Incl. AI, ML & Control Systems)*
- Automotive Embedded System & Communication Protocols
- Autonomous Vehicles
- **Elective-II**
  - Testing & Certifications for EVs
  - Charging Infrastructure
  - EMI/EMC
- Lab II
- Mini Project-II

### Trimester III
- Full time Project

### Place of Study/Project :-



**Trimester-I**
- Students will be at RIT, Islampur

**Trimester-II**
- Students will be at ARAI Academy, Pune

**Trimester-III**
- Full Time Project @ RIT / ARAI / Industry

**Total Number of Seats: 20**

**ELIGIBILITY CRITERIA:**
Engineering Graduate in Mechanical / Electrical / Electronics & Telecommunication / Instrumentation / Automobile and allied branches.

**COURSE FEES:**
Rs. 1,60,000/- for Full Course

**SELECTION CRITERIA:**
Written Test / Interview by joint selection committee

### Contact details:-

**Dr. S. R. Desai (H.O.D.)**
**Dr. Supriya S. More (Coordinator)**

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## *ARAI Academy Laboratories:-*