



## **Electric Vehicle And System Designing & Analysis**

**Duration:- 4 Weeks**

### **Course Content**

#### **Electric Vehicle**

- Introduction to EV
- Indian EV Market
- EV Battery
- Motors
- Controllers
- Battery Management System
- EV Chargers
- Introduction to Hybrid Electric Vehicles (HEV)
- Hybrid Electric Power train
- Technologies used for Increasing Energy Efficiency in HEV
- Introduction to Fuel Cell EV
- Types of Fuel Cells



## **MATLAB & Simulink**

- Introduction to MATLAB
- Scripting in MATLAB
- Advanced Scripting Functions
- Introduction to Simulink
- Model Vibrating Mass
- Model Hybrid Electric Vehicle
- Model Wind Turbine In Simulink
- Model Three Phase Grid Connected Solar PV System
- Introduction to Neural Nets
- Machine Learning in MATLAB
- MNIST data processing
- Predictive Maintenance
- Model walking Robot in MATLAB