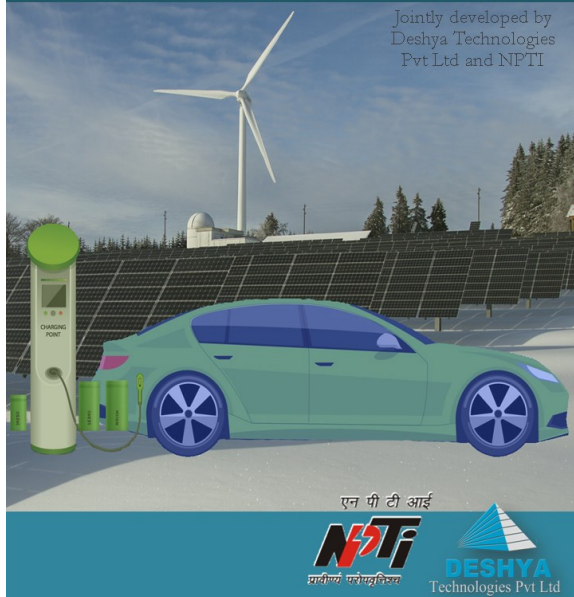


e-Mobility and Charging Infrastructure



Module	Detail
1	EVs : A clean mobility option
2	Motion and dynamic equations for vehicles
3	Propulsion requirements for vehicles
4	HEV architectures
5	EV architectures
6	Mechanical systems used in EVs and HEVs
7	Fundamentals of Regenerative Braking
8	Electrical machines for EVs and HEVs
9	DC-DC Converters
10	Boost and Buck-Boost Converters
11	Multi Quadrant DC-DC Converters
12	Voltage Control of DC-AC Inverters Using PWM
13	Control Systems for the HEV and EVs
14	The fuzzy logic based control system
15	Batteries for EVs
16	Fuel cell and supercapacitors
17	Electric vehicle charger
18	Electric vehicle charger technology
19	The EV charging station architecture
20	EV chargers and portfolio management
21	EV charging and the grid
22	Smart grid and EVs

Preamble: This course is ideal for 3rd year and 4th year engineering students and is equivalent to 3 credit. Furthermore, this course gives a comprehensive overview of the e-mobility and charging infrastructure and is apt for working professional who wish to upgrade their skills.

For registration and payment please contact NPTI, Dr. N.V.Kumar Director (Training/R&D), email: nvkumar@npti.gov.in, Ph.9899990981

Course format

Reading Material	eBook with 2D/3D Animation
Practice tools	Virtual Labs and Projects
Assessment tool	Proctored online exam
Video Lectures	With audio
Industrial training	1 week—one of the NPTI Center

Other Info

Interactive session	Monthly webinar (on request)
Content Availability	On cloud 24/7
Course Duration	12 Weeks
Credit Equivalent	3

Fee - for students (non refundable, need valid Student ID, Bonafied Certificate)	Fee - for Others (non refundable)
For Indian nationals: Rs. 6,000/- (incl. taxes)	For Indian nationals: Rs. 25,000/- (incl. taxes)
For foreign nationals: \$100/- (incl. taxes)	For foreign nationals: \$1000/- (incl. taxes)

Certifying Agency - National Power Training Institute (NPTI)

According to the gazette of India July 1993, NPTI is a national **apex body** for **training and human resources development** in Power Sector. NPTI is an ISO 9001 & ISO 14001 organization is an autonomous organization of the **Ministry of Power, Govt. of India** with its existence of over 50 years operates through its Corporate Office at Faridabad and institutes at New Delhi, Nangal, Bengaluru, Neyveli, Durgapur, Guwahati & Nagpur.

Deshya technologies Pvt Ltd, incubated at IIT Guwahati is the technical partner of NPTI. **Deshya** is a single-source provider for e-Learning environment in Electrical Engineering education. Its e-Learning environment for the Electrical Engineering Education simplifies complex topics and makes learning fun.