Course outline

How does an NPTEL online course work?

Module 1 - Overview of Electric Vehicles in India

Module 2 - Vehicle Dynamics

Module 2 and 3 - Vehicle Dynamics and EV Subsystems

Module 4 - Storage for EVs

Module 4 - Storage for EVs (contd)

Module 5 - Fundamentals of battery pack design

Module 5 and 6 - Battery Pack Design, Motors and Controllers

Module 6 - EV Motors and Controllers

Module 7&8 - Battery Charging and Swapping, Analytics

- Lecture 73 - EV Charger Introduction
- Lecture 74 - Charger Paramaters and Types
- Lecture 75 - Slow/Fast chargers and Swapping
- Lecture 76 - Swapping
- Lecture 77 - Standardization and on board chargers
- Lecture 78 - Public chargers
- Lecture 79 - Public charger economics in Indian Context
- Lecture 80 - Bulk Chargers, Swapping stations and data analytics
- Week 9: Lecture notes
- Quiz: Week 9: Assignment 1
- Quiz: Week 9: Assignment 2
- Quiz: Week 9: Assignment 3
- **Quiz: Week 9: Assignment 4**
- Quiz: Week 9: Assignment 5
- Week 9: Feedback form: Electric Vehicles and Renewable Energy
- Week 9: Solutions

Module 9: Renewable Energy - Introduction

Module 10: Renewable Energy - Solar and Wind Energy

Module 11: Renewable Energy

Live Session

DOWNLOAD VIDEOS

Week 9: Assignment 4

The due date for submitting this assignment has passed.

Due on 2021-09-29, 23:59 IST.

As per our records you have not submitted this assignment.

1) Adjusting charging current in CC mode of charging can help to preserve battery life. ***1 point***

- True
- False

No, the answer is incorrect.
Score: 0

Accepted Answers:
True

2) Chargers with high power factor are inexpensive. ***1 point***

- True
- False

No, the answer is incorrect.
Score: 0

Feedback:
Chargers with low PF are inexpensive

Accepted Answers:
False

3) Bulk charging station is mostly used for swappable batteries where many batteries are charged in a rack. ***1 point***

- True
- False

No, the answer is incorrect.
Score: 0

Accepted Answers:
True

4) EV – EVSE communication is responsible for handling user authorisation and billing. ***1 point***

- True
- False

No, the answer is incorrect.
Score: 0

Feedback:
EV-EVSE communication guarantees safe and secure supply of energy, whereas EVSE-CMS communication handles user authorization and billing.

Accepted Answers:
False

5) AC chargers need on board chargers for AC-DC conversion. ***1 point***

- True
- False

No, the answer is incorrect.
Score: 0

Accepted Answers:
True

6) A EV battery charger works in two modes of charging, they are ____ and ____. ***1 point***

- Fast Charging, Slow Charging
- Constant Current, Constant Voltage
- Varying Current, Varying Voltage
- Constant Power, Constant Powerfactor

No, the answer is incorrect.
Score: 0

Accepted Answers:
Constant Current, Constant Voltage

7) Output voltage in CHAdeMO is upto ___ V DC. ***1 point***

No, the answer is incorrect.
Score: 0

Accepted Answers:
(Type: Numeric) 500