

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

● Lecture 21 - Introduction to Battery Parameters -Part 1

● Lecture 22 - Introduction to Battery Parameters - Part 2

● Lecture 23 - Why Lithium Ion Battery? - Part 1

● Lecture 24 - Why Lithium Ion Battery? - Part 2

● Lecture 25 - Batteries in Future

● Lecture 26 - Li-Ion Battery Cells

○ Quiz: Week 4: Assignment 1

○ Quiz: Week 4: Assignment 2

○ Quiz: **Week 4: Assignment 3**

○ Quiz: Week 4: Assignment 4

● Week 4 - Lecture notes

○ Quiz: **Week 4: Assignment 3**

○ Quiz: Week 4: Assignment 4

● Week 4 - Lecture notes

● Week 4 - Feedback form: Electric Vehicles and Renewable Energy

● Week 4: Solutions

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

Module 9: Renewable Energy - Introduction

Module 10: Renewable Energy - Solar and Wind Energy

Module 11: Renewable Energy

Live Session

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Week 4: Assignment 3

The due date for submitting this assignment has passed.

Due on 2021-09-01, 23:59 IST.

As per our records you have not submitted this assignment.

True or False

1) Li Ion cells offer higher resistance at higher temperatures. 0.5 points

- True
 False

No, the answer is incorrect.
Score: 0
Accepted Answers:
False

2) Specific Energy of Li-Sulphur batteries is higher than Li Air batteries. 0.5 points

- True
 False

No, the answer is incorrect.
Score: 0
Accepted Answers:
False

3) Lower the energy density safer is the battery chemistry. 0.5 points

- True
 False

No, the answer is incorrect.
Score: 0
Accepted Answers:
True

4) Growth of dendrites is one of the reasons responsible for internal short circuits that occur in Li Ion batteries. 0.5 points

Accepted Answers:
True

4) Growth of dendrites is one of the reasons responsible for internal short circuits that occur in Li Ion batteries. 0.5 points

- True
 False

No, the answer is incorrect.
Score: 0
Accepted Answers:
True

5) Recent research on NMC Li Ion chemistries focus on increasing the cobalt content. 0.5 points

- True
 False

No, the answer is incorrect.
Score: 0
Accepted Answers:
False

6) Ni content in NMC811 is lower than in NMC111. 0.5 points

- True
 False

No, the answer is incorrect.
Score: 0
Accepted Answers:
False