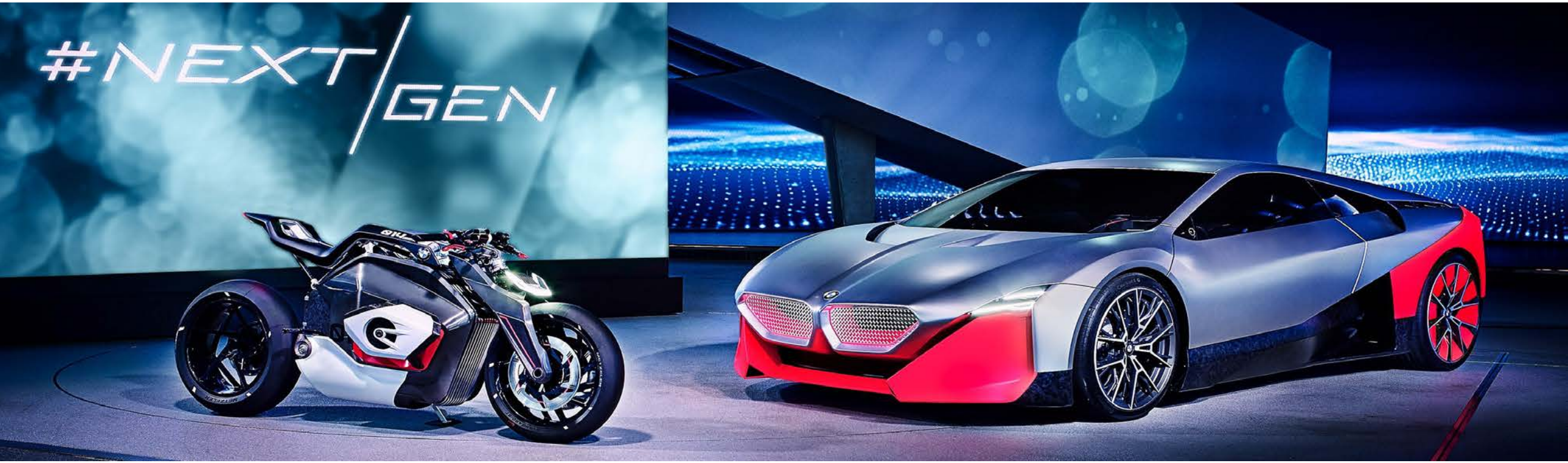
Minor

ELECTRIC VEHCILES

Department of Mechanical Engineering



Starting	September 2020
Credits	20
Capacity	60 Students Only
Eligibility	Students of CE, ECE, EEE, CSE, CST

This is the first and only program in India offering Minors in Electric Vehicles. It gives you the fundamental understanding of Automobile Engineering and Electric Vehicles. It goes in detail how vehicle bodies are engineered; how various components are designed and fabricated. Crucial aspects of power storage, battery management systems are taught in detail. This program is complimented by a specialized lab along with a opportunity of a Mini Project in the advanced technologies.

Occupation	Salary (INR) *
EV Design Engineer	6 – 10 Lakh/ Yr.
EV Technicians	5 – 7 Lakh/ yr.
Transport Planner	5,000/ Hr.
Consultant	8,000/ Hr.
BMS Engineer	8 – 10 Lakh/ Yr.
Power Train Engineer	8 – 11 Lakh/ Yr.
Manufacturing Engineer	10 – 12 lakh/ Yr.
Production Line Engineer	7 – 10 Lakh/ Yr.
Charging Station Installation Engineer	6 – 8 lakh/ Yr.
Dealership Manager	15 – 20 lakh/ Yr.

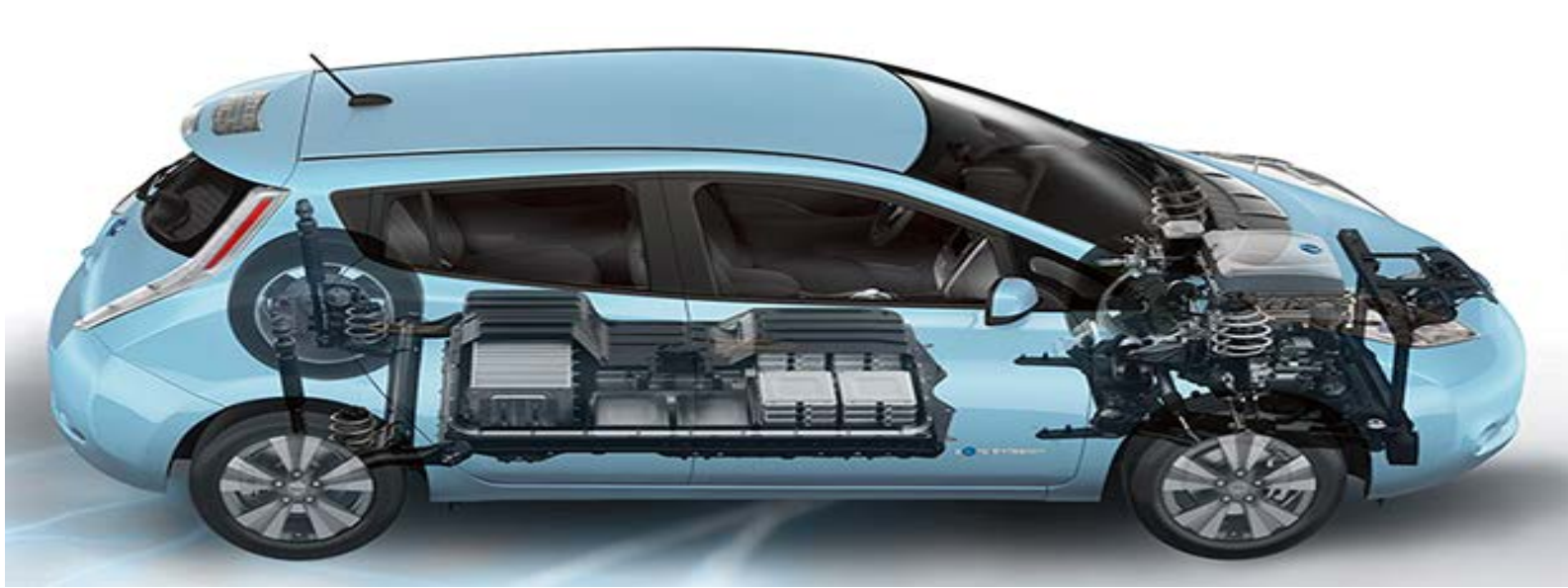
WHY ?

Globally Electric Car market is projected to be at 70 Million by 2025.

It is estimated that by 2022, the World – Electric Vehicle (EV) Chain will likely be greater that ~$ 250 Billion. Energy prices, environmental concerns, and fuel economy targets are driving the demand for hybrid and electric vehicle engineers and technicians now and into future.

It is estimated that Indian EV industry is going to produce at least 1 crore new jobs. All the stake holders including the respective ministries are now focusing to develop infrastructure and human recourses to catch up to the global demand.

* *According to survey done by JP Morgan, India.*



WHO is this Minor For

This Minor is offered to all the Engineering aspirants from Depts. of Civil Engg., ECE, EEE, CSE & CST. The eligibility is based on the regulations as formulated by MITS. Zeal to learn is expected. Fundamental knowledge of Basic Electronics, Engineering Graphics is expected.

WHAT will you Learn

Fundamental knowledge of Automobile Engineering, Hybrid and Electric Vehicle Engineering. Fundamental knowledge of vehicle body engineering, Manufacturing technology and process used for various components of Automobile is taught. You will be expected to gain skill in this domain and come up to a level to execute a mini project, preferable solely.

Program Structure

Sl. No	Category	Course Code	Course Title	Credits
		III Year – I Semester		
1	Professional Core Course	18MDME101	Fundamentals of Automotive Engineering	3
2	Professional Core Course	18MDME102	Fundamentals of Electric Vehicles	3
		III Year – II Semester		
3	Professional Core Course	18MDME103	Production Technology of Automobile Components	3
4	Professional Core Course	18MDME104	Battery Management System	3
5	Professional Core Course	18MDME201	Electric Vehicles Laboratory	2
		IV Year – I Semester		
6	Professional Core Course	18MDME105	Vehicle Body Engineering	3
7	Project	18MDME701	Mini Project	3
			Total	20

Contact Details

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Department of Mechanical Engg. is accredited by NBA – Tier I