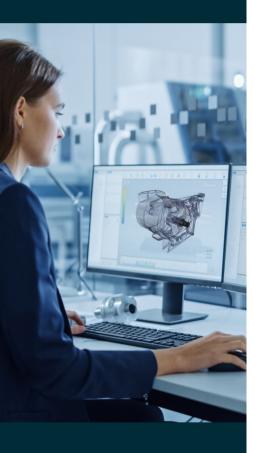


Earn an Individual Certificate for Each Topic Completed!





Start learning on www.myigetit.com

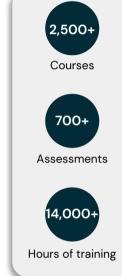




Elevate Your Engineering Skills with the Powerful MCAD + EV Bundle

Full Access to i GET IT's Complete Mechanical CAD and Electric Vehicle Training Library







ADVANCED DOMAIN SKILLS

- Basics of FEA
- Automotive Design for CATIA V5 and NX
- Vehicle Design and Packaging
- · Project Management
- Additive Manufacturing
- Plastics Part and Injection Mold
- GD&T

Engaging Video Training with Hands-On Projects

Skills-Based Learning Framework

Module Assessments

Flexible Learning Path

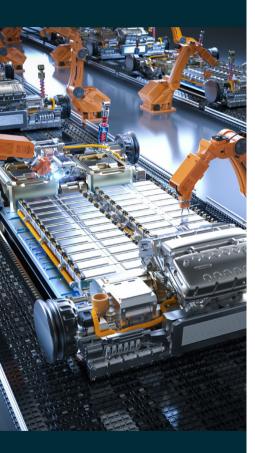
Hours of

Expert Instructors



Earn an Individual Certificate for Each Topic Completed!





Start learning on www.myigetit.com





Elevate Your Engineering Skills with the Powerful MCAD + EV Bundle

EV System Design & Development

EV ESSENTIALS

- Introduction to Electrification in Mobility
- History of EVs and Battery Technology
- Core EV Components
- EV vs. ICE Powertrain Comparison
- Cost and Weight in EV Powertrains
- Functions of EV Components in Different Vehicle Types
- OEM Supply Chain Strategies
- Hybrid Electric Vehicle Architectures
- Electric Vehicle Architectures
- Well-to-Wheel Energy Efficiency of EVs & HEVs

25+ Hours of Learning



Courses



Assessments



Hours of training

EV ENERGY STORAGE SYSTEM

- Energy Storage Requirements for Conventional and Electric Vehicles
- Characteristics of Automotive Energy Storage Systems
- Low Voltage Architectures in Modern Vehicles
- Battery Requirements for xEVs
- Construction and Operation of Energy Storage Systems
- Failure Modes and Challenges in Energy Storage
- Comparison of Energy Storage Systems
- Technology Roadmap for Automotive Energy Storage

30+ Hours of Learning

40+

Engaging Video Training with Hands-On Projects

Skills-Based Learning Framework

Module Assessments

Flexible Learning Path

Expert Instructors

THERMAL MANAGEMENT SYSTEMS

- · Introduction to Thermal Management in EVs
- Fundamentals of Heat Transfer and Thermodynamics
- · Thermal Management of EV Batteries
- Motor and Power Electronics Thermal Management
- · Cabin Climate Control in EVs
- Thermal Management System Components and Design
- Advanced Cooling and Heating Technologies
- Safety Considerations in Thermal Management
- Thermal Management for Fast Charging
- · Case Studies and Industry Applications
- Future Trends in EV Thermal Management





Elevate Your Engineering Skills with the Powerful MCAD + EV Bundle

Full Access to i GET IT's Complete Mechanical CAD and Electric Vehicle Training Library

BATTERY PACK DESIGN

- Guidelines for Designing a Battery Pack System
- Packaging the Battery Pack into Electric or **Hvbrid Vehicles**
- Foundation for Electric Vehicle Battery Systems
- Understanding Battery Cell Chemistries for EV **Applications**
- Criteria for Selecting and Sizing Battery Cells
- Comparing Battery Types for Safety and Performance
- Mechanical and Electrical Packaging in Battery
- Battery Pack Design Considerations for Thermal Management
- Application of Adhesives, Sealants, and Heat Transfer Materials
- International Standards for EV Battery Packs
- Design Considerations for Battery Recycling and Reuse
- Case Studies of Battery Packs from OEMs
- Recent Innovations in Battery Pack Design
- Technology Roadmap for Battery Pack **Evolution**
- Comprehensive Understanding of EV Battery Pack Systems

- **Battery Pack Architecture**
- **Battery Monitoring and Control**
- State-of-Charge (SoC) Estimation
- State-of-Health (SoH) Assessment
- Cell Balancing
- Thermal Management
- Safety and Fault Diagnosis
- Communication and Networking Protocols
- **BMS Integration and Testing**

BATTERY MANAGEMENT SYSTEMS

- Introduction to Battery Technology

HV VOLTAGE SYSTEMS IN EV

- In-depth Understanding of HV Systems in EVs
- Advanced Concepts in HV Systems
- Safety Considerations for HV Systems
- Cutting-edge HV Technologies
- Expertise Development in HV Systems for EVs



Courses



Assessments

38+



Hours of training

Engaging Video Training with Hands-On Projects

Skills-Based Learning Framework

Module Assessments

Flexible Learning Path

Expert Instructors



Start learning on

www.myigetit.com