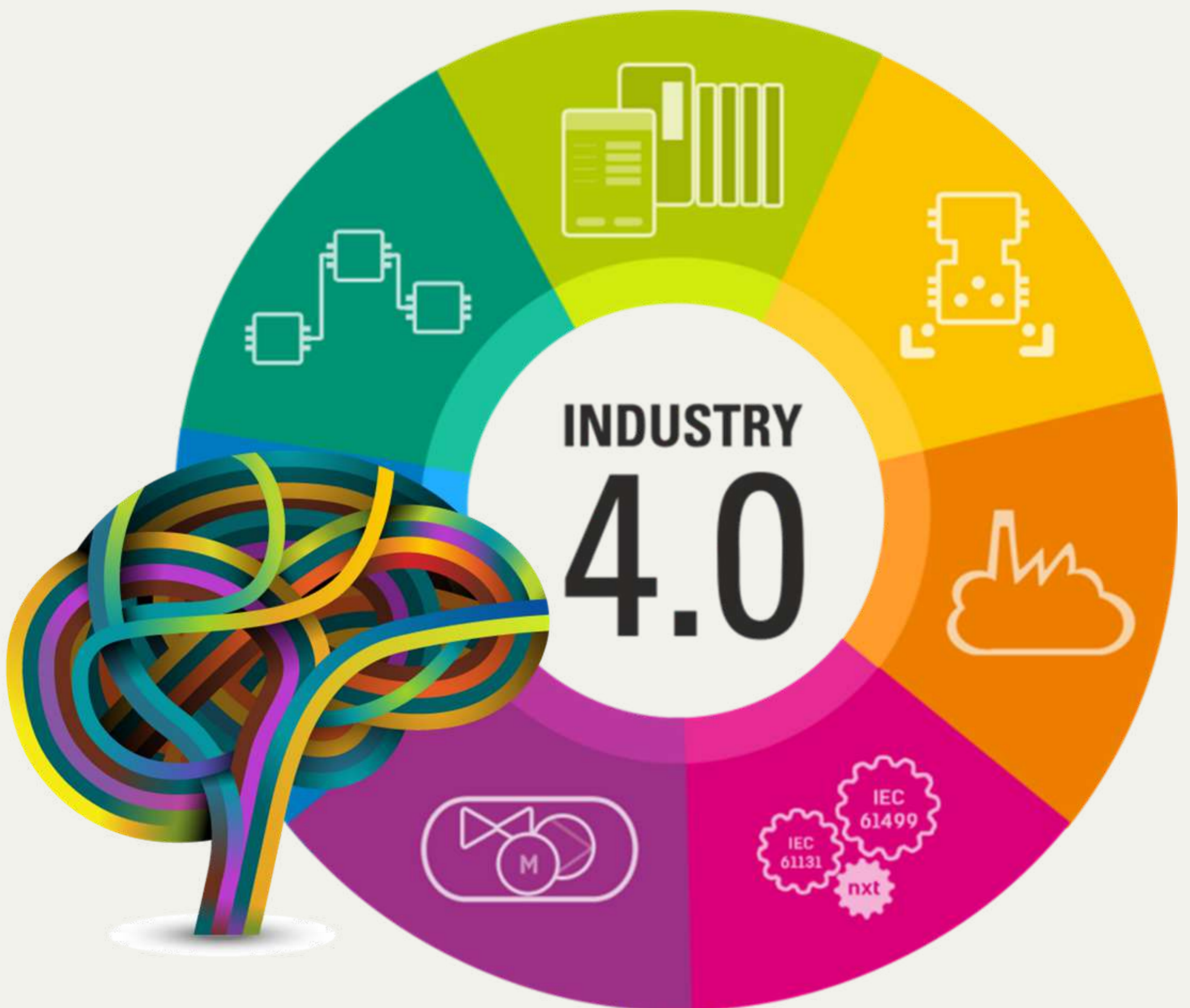


GUIDEBOOK FOR MAKING CAREER IN

AUTOMOTIVE & PRODUCT DEVELOPMENT



Selecting the best Industry 4.0 Course

BY DIYGURU

GUIDE TO SELECT THE BEST COURSE FOR A CAREER IN AUTOMOTIVE AND PRODUCT DEVELOPMENT INDUSTRY.

PREFACE

1. For Students

ITI / Diploma / B.Tech / M.Tech. / M.S. / Research (Mechanical, Electrical, Electronics & EEE Branch)

1.1 FUNDAMENTALS: For First & Second-year students, who are new to science and engineering and are looking to boost their CV / Resume to stand out

1.2 INTERMEDIATE: For Third-year students who are planning about making their career through Campus Placements in Automotive (Original Equipment Manufacturers – OEMS's & Electric Vehicle) & Product Development Industry.

1.3 ADVANCED: For Final year students, as they are about to appear for Mechanical Engineering companies interview mainly Automotive / Automation & Product Manufacturing companies.

1.4 For students who have passed out from Engineering / Technology / ITI / Diploma background and are looking to enter into Automotive or Product manufacturing/development industry.

2. For Professionals

2.1 For Entrepreneurs who are looking to develop an electric vehicle from beginning till the end of the Product lifecycle

2.2 For Working Professionals (Employees, HR's / Managers / Engineers / Professors) who are looking to upskill themselves in Industrial automation and product manufacturing.

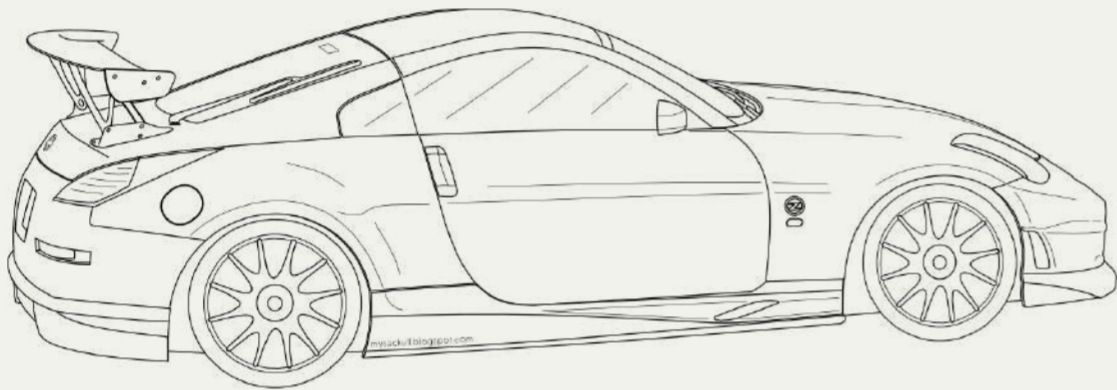
2.3 For Hobbyists who belong from a non-tech background (Commerce / Arts / Law / Hospitality)

Over the last four years, we have seen more than 50,000 + students enrolling on our platform and using the data set for those who have made a successful career in the Automotive and Product Development & Design Industry.

We have compiled the best options based on the success rate to choose the best DIYguru course as per the field of study, level of the profession, and subject knowledge.

1. For Students

ITI / Diploma / B.Tech / M.Tech. / M.S. Research (Mechanical, Electrical, Electronics & EEE Branch)



FUNDAMENTALS:

For First & Second-year students, who are entering to science and engineering and are looking to boost their CV / Resume to stand out of the crowd in getting Internships and preparing base for making their future in Automotive &

Product Development Industry, the best strategy will be to go with the Job oriented Fundamental Certification Courses which includes Fundamentals of Automobile Engineering, Fundamentals of Python for Mechanical Engineers, Motorcycle Engineering Fundamentals, Electrical Machine Fundamentals Training, MATLAB Fundamentals & Additive Manufacturing Fundamentals.

INTERMEDIATE:

For Third-year students who are planning about making their career through Campus Placements in Automotive (Original Equipment Manufacturers – OEMS's & Electric Vehicle) & Product Development Industry the best strategy,



if they have cleared their Fundamentals Job oriented DIYguru Certification Courses which we have recommended above for sophomore students would be to go with the Job oriented Electric Vehicle Engineering Nanodegree Program, Vehicle Dynamics, MATLAB, CATIA/Solidworks for CAD and ANSYS – CAE for structural analysis and MSC Adams for Multibody Dynamics Analysis like Suspension and other moving automotive body part and finally Automotive Sketching to boost your

knowledge of concepts and software required for Automotive Industry and OEM's, This will also enable you to boost your resume. Third year is considered vital for your career growth and you can make the best use of time by adding as many certifications in your resume as possible to stand out of the crowd.



ADVANCED:

For Final year students, as they are about to appear for Mechanical Engineering companies interview mainly Automotive / Automation & Product Manufacturing companies, it is best suggested to go with Job oriented Advanced Electric Vehicle Engineering Course

and Battery Management System Course if they have already gone there thinking about making their career in EV sector which is growing exponentially and is about to generate 25 lakh jobs by 2025. Electrical & Electronics Engineering students along with Electric Vehicle Fundamental & Advanced Module should go for added Labview Course as well as Specialization in DATA Analytics with Python to have a firm understanding of the subject and open a wide variety of career option in Industrial automation (Industry 4.0)

JOB ORIENTED:

For students who have passed out from Engineering / Technology / ITI / Diploma background and are looking to enter into Automotive or Product manufacturing/development industry making sure that they land a job after doing DIYguru Job oriented course.



The best use of DIYguru platform would be to go with The Job Guaranteed Program or the Job Assistance Program which will enable you to go extensively through the complete set of modules to be completed in a particular time frame.

2. For Professionals:

Entrepreneurs & Working Professionals (Employees, HR's / Managers / Engineers / Professors)



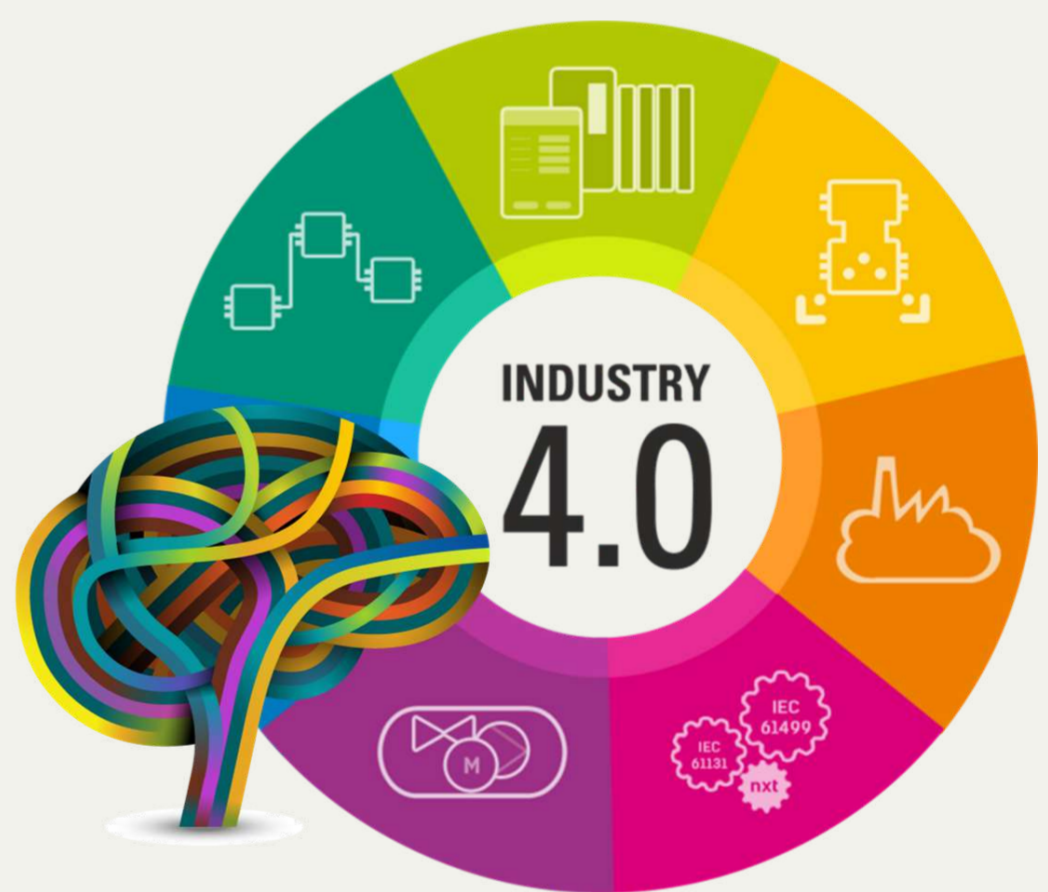
ENTREPRENEURS:

If you are looking to develop an electric vehicle from beginning till the end of the product lifecycle i.e. right from the planning phase and preparing the basic concept note to market research to designing and analysis of different Electric Vehicle OEM parts and then

simulating the components in different software obtaining thermal and fatigue profiles and finally rendering the finished prototype and putting it into manufacturing phase, we have prepared a bundled Industry 4.0 pack which you can buy here – Industry 4.0 Course Package consisting of all required courses with lifetime access.

WORKING PROFESSIONALS (EMPLOYEES, HR'S/MANAGERS/ ENGINEERS/PROFESSORS):

who are looking to upskill themselves in Industrial automation and product manufacturing. They can opt for any of the following courses based on their requirements in the industry which they are currently working or looking forward to.



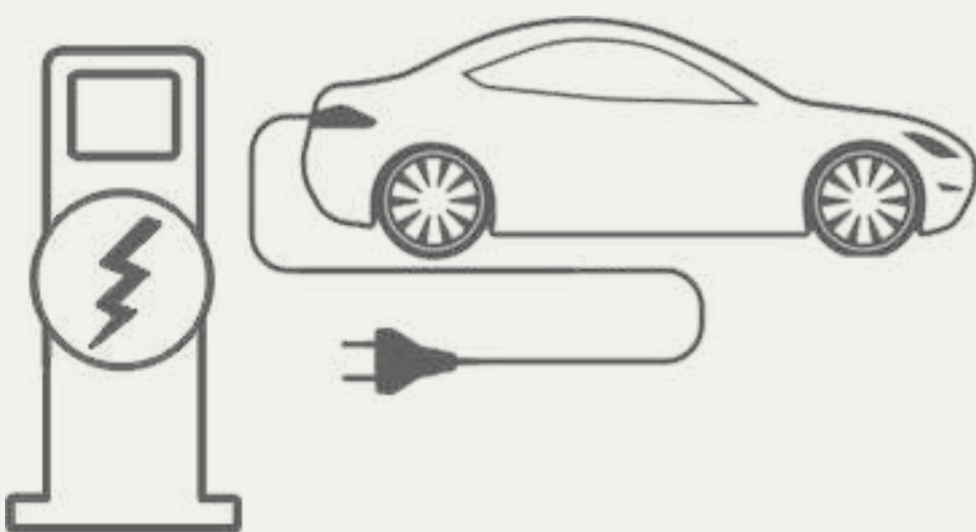
1. Electric Vehicle – <https://www.diyguru.org/course/electric-vehicle/>
2. Vehicle Dynamics – <https://www.diyguru.org/course/vehicle-dynamics/>
3. BS 6 Emission Technology – <https://www.diyguru.org/course/bs-6-emission-norms-and-control-strategies-certification-course/>
4. AUTOMOTIVE SKETCHING – <https://www.diyguru.org/course/automotive-sketching-drawing/>
5. ANSYS – FEA / FEM – <https://www.diyguru.org/course/ansys-fea-fem-online-certification-course/>
6. CATIA – CAD – <https://www.diyguru.org/course/catia/>
7. MULTI BODY DYNAMICS – <https://www.diyguru.org/course/msc-adams-car/>

8. BAJA VIRTUALS – <https://www.diyguru.org/course/sae-baja-virtuals/>
9. SOLIDWORKS – <https://www.diyguru.org/course/solidworks/>
10. LABVIEW – <https://www.diyguru.org/course/labview/>
11. MATLAB – <https://www.diyguru.org/course/matlab-fundamentals/>
12. Fundamentals of Automobile Engineering – <https://www.diyguru.org/course/fundamentals-automotive-engineering/>
13. Additive Manufacturing Course – <https://www.diyguru.org/course/rapid-prototyping-3d-printing/>
14. Advance Electric Vehicle (Powertrain Design) Course – <https://www.diyguru.org/course/advanced-electric-vehicle-design-engineering-certification-course/>
15. Suspension Analysis Course – <https://www.diyguru.org/course/lotus-suspension-analysis/>
16. Electrical Machines Training Course – <https://www.diyguru.org/course/diy-electrical-machines-training/>
17. Python for Mechanical Engineers – <https://www.diyguru.org/course/python/>
18. Batter Management System Course – <https://www.diyguru.org/course/bms/>
19. Specialization in DATA Analytics – <https://www.diyguru.org/specialization-in-data-analytics-with-python/>

3. For Hobbyists:

Non-tech background (Commerce / Arts / Law / Hospitality)

All the courses on the DIYguru platform are project-oriented i.e. after successful completion of any course, you are able to create something out of it, for ex. if you are looking to make an electric car/bike of yourself. We would suggest you go with the Electric Vehicle Engineering Course which will enable you to retrofit a



petrol/diesel variant into an electric one. If you are looking to design a super finished model of Buggati Veron, go for the Solidworks course. If you are good at arts and sketching go for the Automotive Sketching course.

In case you are looking to repair or troubleshoot your bike/scooter consider opting for Motorcycle Engineering Course. In case you want to start your future journey of beginning a career in Automobile industry you can opt-in this particular manner –

- Fundamentals of Automobile Engineering
- Vehicle Dynamics
- Suspension Analysis
- SolidWorks
- Automotive Sketching
- ANSYS (CAE)
- Electric Vehicle Fundamentals
- Electric Vehicle Advanced

For full details visit: <https://www.diyguru.org/careerguide>

Electric Vehicle

OCCUPATION OVERVIEW

INDIA AND NEIGHBOURING COUNTRIES

2019-25						
2019 Jobs	2020 Jobs	2021 Jobs	2022 Jobs	2023 Jobs	2024 Jobs	2025 Jobs
34,600	54,000	1,20,000	2,00,000	5 Lakh	7 Lakh	10 Lakh

OCCUPATION

EV Design Engineer
EV Technicians
Transport Planner
Consultant
Marketing Manager
Sales Professional
Service Mechanic
BMS Engineer
Powertrain Engineer
Manufacturing Engineer
Production Line Engineer
Charging Station Installation Engineer
Dealership Manager
EV Maintenance Engineer

SALARY (INR) *

6-10 Lakh / Yr.
5-7 Lakh / Yr.
5,000 / Hr.
8,000 / Hr.
15-20 Lakh / Yr.
10-15 Lakh / Yr.
4-6 Lakh / Yr.
8-10 Lakh / Yr.
8-11 Lakh / Yr.
10-12 Lakh / Yr.
7-10 Lakh / Yr.
6-8 Lakh / Yr.
15-20 Lakh / Yr.
7-9 Lakh / Yr.

* As per the research conducted by JP Morgan, India

COMPANIES HIRING WITH INDUSTRY 4.0 SKILLS

PROMINENT ELECTRIC VEHICLE COMPANIES

Electric Two Wheelers	
TVS Motor	Menza Motors
Honda Motorcycle & Scooter India	SINA Mobility
Electrotherm	Hulikkal Electro India
Tunwal E-vehicles	Tork Motorcycles
UM Lohia Two Wheelers Pvt. Ltd.	Milltex Spero
Ather Energy	Volta Motors
Twenty Two Motors	Ajanta Manufacturing Ltd.
Okinawa Autotech Pvt. Ltd.	GoGreen BOV
Electric Three Wheelers	
Bajaj Auto	Shigan EV
Scooters India Ltd.	Pi Beam Labs
Goenka Electric Vehicles Pvt. Ltd.	Gayatri Electric Vehicles
Volta Automotive India Pvt. Ltd.	Pubang Etron Electric Motor Private Limited
Electric Four Wheelers	
Hyundai Motor India	Tata Motors
Toyota India	Honda Cars India Ltd.
BMW India	Volvo Cars India
Maruti Suzuki	Mean Metal Motors
Electric Buses	
Ashok Leyland	JBM
Goldstone	
Companies that make Multiple Types of EVs	
Hero Electric	Gayam Motor Works
Mahindra Electric	Ultraviolette Automotive
Kinetic Green	Speedways Electric
Lohia Auto Industries	EcoDynaamic Equipments
Emflux Motors	Xxplore Automotive
Ampere Vehicles	Jitendra Motors
Shriram Astral Motors	Panther Electric Vehicles
EV Components & Support Solutions	
EV Component Suppliers	EV Support Solution Providers
Amaron/Amara Raja	TUV Rheinland
Crompton Greaves	ABB India
Exide Industries	Tata Power
BHEL	Fortum
Elcom International Pvt. Ltd.	NATRIIP
Rotomag	ARCI
Axiom Energy	International Centre for Automotive Technology
ION Energy	ARAI
Napino Auto & Electronics Ltd.	India Energy Storage Alliance
Gegadyne Energy	Sun Mobility
Agastya Automotives Pvt. Ltd.	ACME
Denso India	Lithion Power
Altigreen Propulsion Labs	Hero Future Energies

COMPANIES HIRING WITH INDUSTRY 4.0 SKILLS

EV & OEM COMPANIES

A - A1 Sureja Industries | Aalankritha Premium Interiors | ABB | ACME cleantech solutions | Accura Valves Pvt Ltd | ACR Electronics Pvt Ltd | Adapt Motor | Aditya Solar Energy Systems | Aerovironment | Aftak Motors | Agastya Automotives Pvt. Ltd | Aiden Protech | Ajanta Manufacturing Ltd | Ajay Industrial Ltd | AK Auto Agency | Akshaya Solar Power (India) Pvt Ltd | Alcon Electronics Pvt Ltd | ALCOP Industries | Altigreen Propulsion Labs | Aman Electric Vehicles | Amara Raja Batteries Limited | Amper Data LLP | Ampere Vehicles Pvt Ltd | Amplify Mobility | AMW Motors Ltd | Ananth Technologies Ltd | Anderson Power | Anil Engineering Works Pvt Ltd | ANST Pvt Ltd | Anthargange Power | Apeiron Mobility | ARAI | ARCI | Arkavani Solar Living | Artem Energy Future | Ashish Wheels Ltd | Ashok Leyland | Asmi Energy and Power associates | Aspirations Cleantech Ventures | Ather Energy | Athul auto ltd | ATI Motors | Aton Solar | Atria Power | ATS Road Carriers | Attero Recycling Pvt Ltd | Atulya Motors | AurdinateGlobal | Auroworks | Autofit Pvt Ltd | Automotive skill development Council | Automotive Tyre Manufacturers Association | AutoX Correspondent | Avalon Technologies Pvt Ltd | Axiom Energy | Axis Solar | Axitec.

B - Bajaj Auto | Baleshwar Auto | Banaras Hindu University | Battery Recycling Cos | Baumuller India | Beardsell Limited | Beleyur & Associates | Bestway Agencies Pvt Ltd | BHEL | Bosch India | BPL-FTA Energies Pvt Ltd | Bright Electronics | BRN Dummy AC MOD | Bry Air | BSM Technologies Pvt Ltd | Budding Leaf.

C - Canadian High Commission | Cape Institute of Technology | Carl Zeiss India (Bangalore) Pvt. Ltd | Carz Care Pvt Ltd | Cell Propulsion | Central Electro Chemical Research Institute | Central Institute of Road Transport | Centre for Innovation IIT Madras | Certified Energy Audito | CES Ltd | Cirus Solar | CK Birla Group – AVTEC | Clean motion | Clean Alternative Energy Solutions Pvt Ltd | CleanEnergy Logan Innovations | CleanMax Solar | Cogent Watt Solutions Pvt Ltd | Continental AG | Continental Device India Pvt. Ltd | Contura Solar (India) Pvt. Ltd | COS Light India Telecom Pvt. Ltd | Counto Equipments and Trading pvt ltd | Criolo Automobiles | Croda India Co. Pvt. Ltd | Crompton Greaves | CSM Technologies Pvt Ltd | Cuepen Power Pvt. Ltd.

D - Dajiba Polymer & Chemical Ind | Danfoss Industries Pvt. Ltd | Daxter Tools | Deccan Engineering Enterprises | Desmoto Electric | Delphi Propulsion systems Pvt Ltd | Devise Electronics Pvt Ltd | Dexler Energy Pvt Ltd | Die & Mould Solutions | DIMAN Overseas Private Limited | Dravak Technologies | Driveamp | Drivz | Dukes India Ltd | Dyna Hitech power systems | Dynamech Electro Power Pvt. Ltd.

E - Eagle Press Pvt Ltd | Earth Energy | EASi engineering services | ECE India Pvt Ltd | Eco Dynaamic Equipments | Ecopower Systems | Ecoren Energy | Ecosure Events | EI Group | EILABS India Pvt Ltd | Eko Vehicles (P) Limited | Elcom | Electric-One Auto Pvt. Ltd | Electrotherm | Elektronika Sales Pvt Ltd | Elmex Electric Pvt Ltd | Emflux Motors | Emotion motors | eMotive Systems Pvt Ltd | e-mug Energy Private Limited | Endeavour Solutions | Energiana Consultancy Services Private Limited | EnerGwise Labs LLP | Energy Efficiency Services Limited | Entron Automobiles Pvt Ltd | EnVERT E-Vehicles Pvt Ltd | Eon Electric Ltd | Equad Services | E-truk Mobility Pvt Ltd | Eurotec Engineering Corporation | EV future | EVBay India | Evobsession | Evolute Solutions Pvt Ltd | EVteQ | Excelpoint Systems | Exicom | Exide Industries.

F - FAS Inergeia Solar Pvt Ltd | FCA Engineering India Pvt Ltd | Feed Back Consulting | Fiber opti Ink | Fichtner Consulting Engineers (India) Private Limited | FIDES Electronics | Fireflys Clean Energy Solutions | Focus Solar | Folks Motor (P) Ltd | Force Motors | Fortum India.

G - G. K Rickshaw Pvt Ltd | Gayam Motor Works | Gayatri Electric Vehicles | GE Solar | Geetha Avula | Gegadyne | Genisys Group | Global Automotive Research Centre – NATRIP | Glorious Technologies | Goel Power Engineers | Goenka Electric Vehicles Pvt Ltd | GoGreen BOV | Goldstone Infratech | Gomassive Incubator | Gosolgen | Goyal Group | GP College of Engineering | GR Greenlife Energy Pvt Ltd | Grace Solar System | Graphite India Ltd | Green India Recycling | Green Life Energy | Green Power Projects Pvt

COMPANIES HIRING WITH INDUSTRY 4.0 SKILLS

EV & OEM COMPANIES

Ltd | Green Secure Energy Pvt Ltd | Green Valley Energy Ventures Pvt Ltd | Green Vision Technologies – Relicell | Green volt | Greenko Energies | GRUN Teckno Innovations Pvt Ltd | GSAS Micro Systems Pvt. Ltd | Guru Industries

H - H & K Energy solutions | Harita Fehrer Limited | Harness Cable Col Hartex Rubber Pvt Ltd | HealthySun Energy | Helios Global Services | Hero Electric | Hicon Electrotech pvt ltd | High Energy Batteries | Himadri Specialty Chemical Ltd | Hinduja Renewables Pvt Ltd | Hindustan University | HM Industrial Products | Honda | Honeywell | Hooghly Motors Pvt Ltd | Horiba India Pvt Ltd | H P Instruments | Hriman Motors | Hulikkal Electro india | Hyundai.

I - iacharya silicon limited | IBM | Icarus Propulsion Research Private Limited | Ideal Industries India Pvt Ltd | IFB Industries Ltd | IIMC | IL&FS Skills Development Corporation Ltd | India Centre Foundation | India Electronics & Semiconductor Association(IESA) | India Energy Storage Alliance | India Yamaha Motor Pvt Ltd | Indiana LED Lighting LLP | INGENIUM | Injected private limited | International Centre for Automotive Technology | Innovative Honda Pvt Ltd | Ioke motors | ION Energy | IT innovation

J - Janpower India | Jayram Industries India Pvt Ltd | JBM | Jezza motors | jitendra new ev tech | Joegeetha Plastic Pipes | JSR Elastomer India Pvt. Ltd | JSW Energy | Jwala Solar

K - K.S. Diesels Ltd | Kaizen Technologies | Kaleesuwari Refinery Private Limited | Kamadenu motors | Katalyst Automotive Pvt. Ltd | Kaynes Technologies | Khan Exim Pvt Ltd | Kinetic Engineering Ltd | Kinetic Green Vehicles | Klueber Lubrication (I) Pvt. Ltd | KPMG India | Krishma Solar Pvt Ltd.

L - L&T | Lakshmi Venkateshwara Builders and Eco Enterprises | Lectrix Motors Pvt. Ltd | Lifeway Solar Devices Pvt.Ltd | Light speed bikes | Light Year Infratech | Lithion Power International Ltd | Lithium Balance A/S | Lithium Urban Technologies | Lithos Motors | Lohia Auto Industries | LOTUS Cars | Lovenssa Motors | L-Tech Technology | Lunar Electronics | Lzen Electronics (India)

M - Macro Solar System | Magenta Power Solutions | Mahindra Electric | Marubeni India Pvt. Ltd | Maruti Suzuki | Marsilli India Pvt Ltd | Mass tech controls | Mean Metal Motors | Menza Motors | Meras Group | Mercor Infrastructure Pvt Ltd | Messe Muenchen | Milestone Solarcom Pvt.Ltd | Milltex Spero | Miracle 5 | Mitray Solar Tech | MPI Automotive | Mutual Industries Ltd | MYM Technologies Ltd

N - Napino Auto and Electronics Ltd | Nappinnai Private | Nash Industries | National Automotive Test Tracks | Nations Pride Energy Systems Pvt Ltd | Natural Energy Developers | Navitas Solar | NDS Eco Motors Private Limited | NEEPCO Ltd | nH2 | Nibe Motors Private Limited | Nisiki Technologies Pvt. Ltd | Niti Aayog | Nitto Denko (I) Pvt. Ltd | NMCAD Lab | NTC Logistics | NTF India Pvt. Ltd | Nuevosol Energy | Nuteck Power Solutions.

O- Octillion Power systems | Ojaskara Solar | Ok Play Electric Vehicle | Okinawa Autotech Pvt. Ltd | Ola | Oorja Energy | OPG Power Generation Pvt. Ltd | Orange Sorting Machines (India) Pvt. Ltd | Orxa Energies | Overhaul solar.

P - Pallavii Smart Solutions | Panasonic India | PDR Videotronics | Photom Technologies Pvt. Ltd | Photon Energy Systems Limited | Pi Beam Labs Pvt Ltd | Pioneer Industries | Pixy Cars Pvt. Ltd | PlaySolar | Porwal Electric | Power Sport | Power Vault Technology | Prakash India Solar | Pratham Integrated Engineering Solutions Pvt. Ltd | Precision Electronics | Precitor Metal Composites Products Pvt Ltd | Presevi Industries Pvt.Ltd | Prevalence Green Solutions Pvt Ltd | Profuse Energy & Infrastructure Pvt. Ltd | Protod engineering Pvt Ltd | PRS Permacel Pvt Ltd | Pubang Etron Electric Motor Private Limited | Pulse charge.

COMPANIES HIRING WITH INDUSTRY 4.0 SKILLS

EV & OEM COMPANIES

R - Radiant Solar | Raghu industrial corporation | Rajdeep Group of Companies | Raman Power | Ranergy Solutions Private Limited | RAP Motors | Ravi Renewables | Raydeon Energy | RCS Advisors | Recycling Cos | Regen Powertech | Renault Nissan Technology and Business Centre India Pvt Ltd | Renew Sys | Republic Motors | Rexnamo | Richa Engineering | Rogers Corpoartion | Romai Electric Scooter | Romax Solutions Pvt. Ltd | Rotomag | Rototech Technologies | Rural Electrification Corporation Limited

S - S.K.Engineering | S.M.Laser Tech| SA Power Utilities(P) Ltd | Saatvik Green Energy Pvt. Ltd | Sameta Metal Pro Pvt Ltd | Samraj Industries| Samriddhi Foundation | Sanjay Technologies | Sas Infratech Pvt Ltd | SaveEarth Technologies | Savita Oil Technologies | Schneider Electric Infrastructure Limited | SCI | Scooters India Ltd | SemaConnect Systems India Pvt Ltd | Semco Infratech Pvt Ltd | Serene Nest | Shakti pumps India Limited | Shalimar Enterprises | Shell India | Shema E-Vehicle & Solar Pvt. Ltd | Shigan EV | Shree Bharat Motors Ltd | Shri Lakshmi Ganapathy Solar Systems | Shrid Metal Technologies Pvt Ltd | Shriram Astral Motors | Sigma Telecommunication | Silicon Solar System | SimplyJITH Investment Corporation Private Limited | SINA Mobility | SIRIUS Solar Energy System | Slidewell Meilleur Tech Pvt. Ltd | Sloki Software technologies | Smart Dreams Pvt. Ltd | Smart Trak | Smartfence-Solar & Power Fencing | Soham Rickshaws | Solar Idea Private Limited | Solar Promotion International GmbH | Sonieteck | Spectra Innovation | Speedways Electricl Spero Mobility & Energy Solutions | Sree Vaishnavi Mata Engineering | Sri Ravinandana Energy Private Limited | Sri Savitr Solar Private Limited | Sritek Electric | Sujana Group of Companies | Sumitomo Corporation India Pvt Ltd | Sundaram Fasteners Limited | Sun & Wind Inc | Sun Mobility | Sunag Engineering Pvt Ltd | Sungevity Solar Systems Pvt. Ltd | Sunloop Energy | Sunshot Technologies Pvt. Ltd | Suntura Green Energy Pvt Ltd | SuperEco Automotive | Suprennoindustries | Super Highway Labs Pvt Ltd | Suraj Kiran Eximport Energy | Suraj Motor Company | Surana Solar Limited | Sure Energy Systems Private Limited | Suryashakti Enterprises | Surya Batteries | Swastik Tradelink.

INDUSTRY 4.0

NANODEGREE PROGRAMS

ONLINE CERTIFICATION COURSES



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