



EDIFY TECH SOLUTIONS

HYBRID ELECTRIC VEHICLES

PROGRAM TYPE

PROFESSIONAL

Our Alumni work at



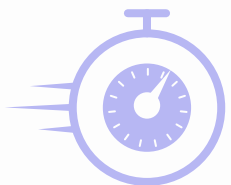
WHO ARE WE?

At **Edufyi Tech Solutions**, we are dedicated to transforming the educational journey for college students by offering cutting-edge virtual internships and comprehensive training programs. Our approach combines industry mentorship with practical experience, providing each student with six real-time and capstone projects per course or domain. These projects are designed to equip students with the skills and experience needed to secure their dream jobs upon graduation



WHY CHOOSE US?

Our unique features are:



Choose your Speed, Master the Skills



Industry Project Playground



Resume Building & Aptitude Grooming



Learn from Industry Mentors from MNCs & Startup Founders



100% Placement Assistance



Exclusive R&D learning content from leading MNCs



Unlimited Mocks & GDs



24*7 Dedicated Support



Wipro Dice ID Accredited Globally Recognized Certifications



Get your Internship with 150+ Companies



1:1 Counselling Sessions



Additional Certifications from Microsoft, Cisco, IBM, Adobe, etc



Certified Bootcamps & Webinars



Lifetime Personalized Learning Management System (LMS)



Access recorded lectures Anytime, Anywhere!!



Skill Up & Cash In with Performance Based Stipend



Mentorship by industry experts via live sessions

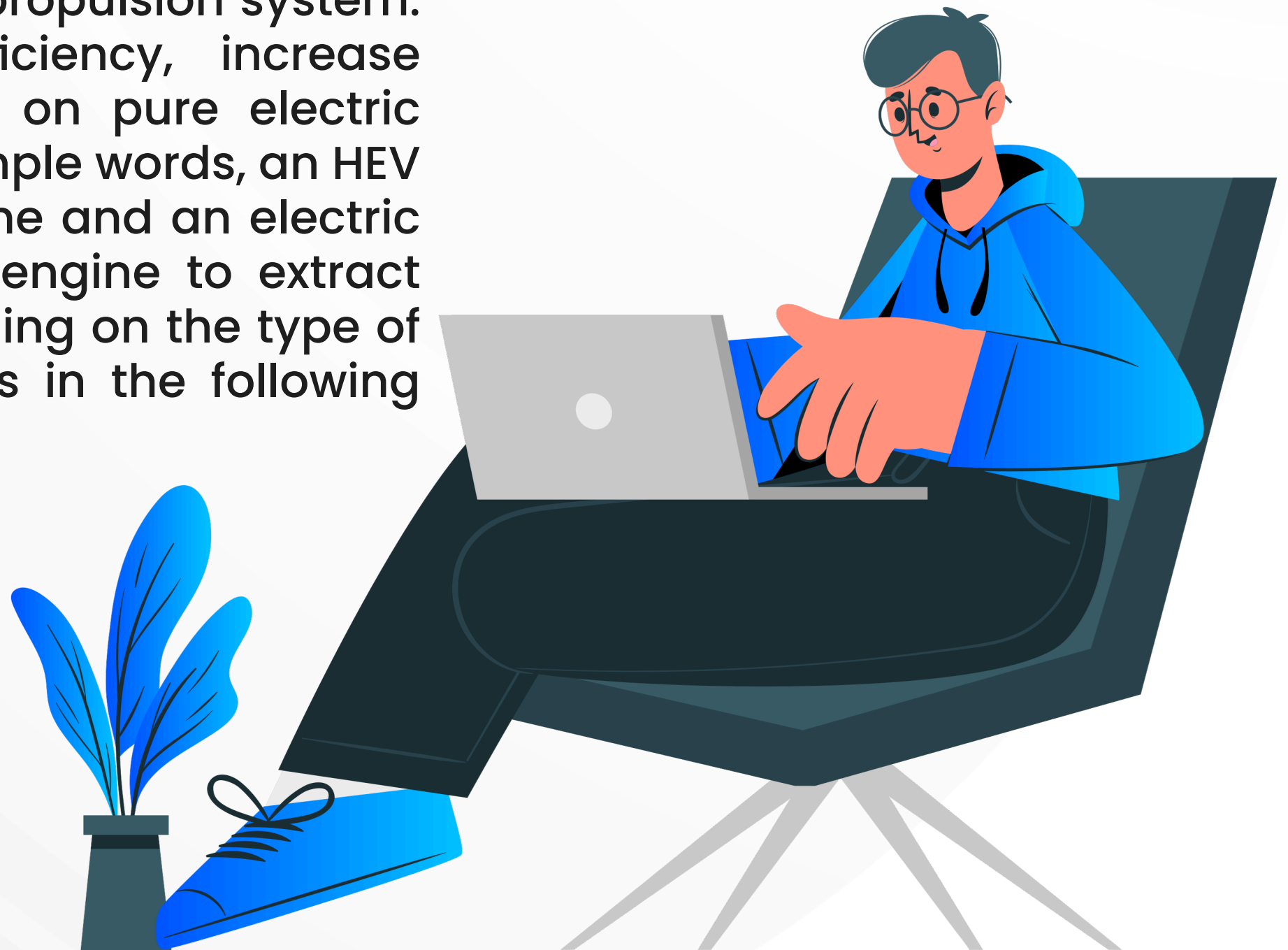


Access to our Hiring Partners



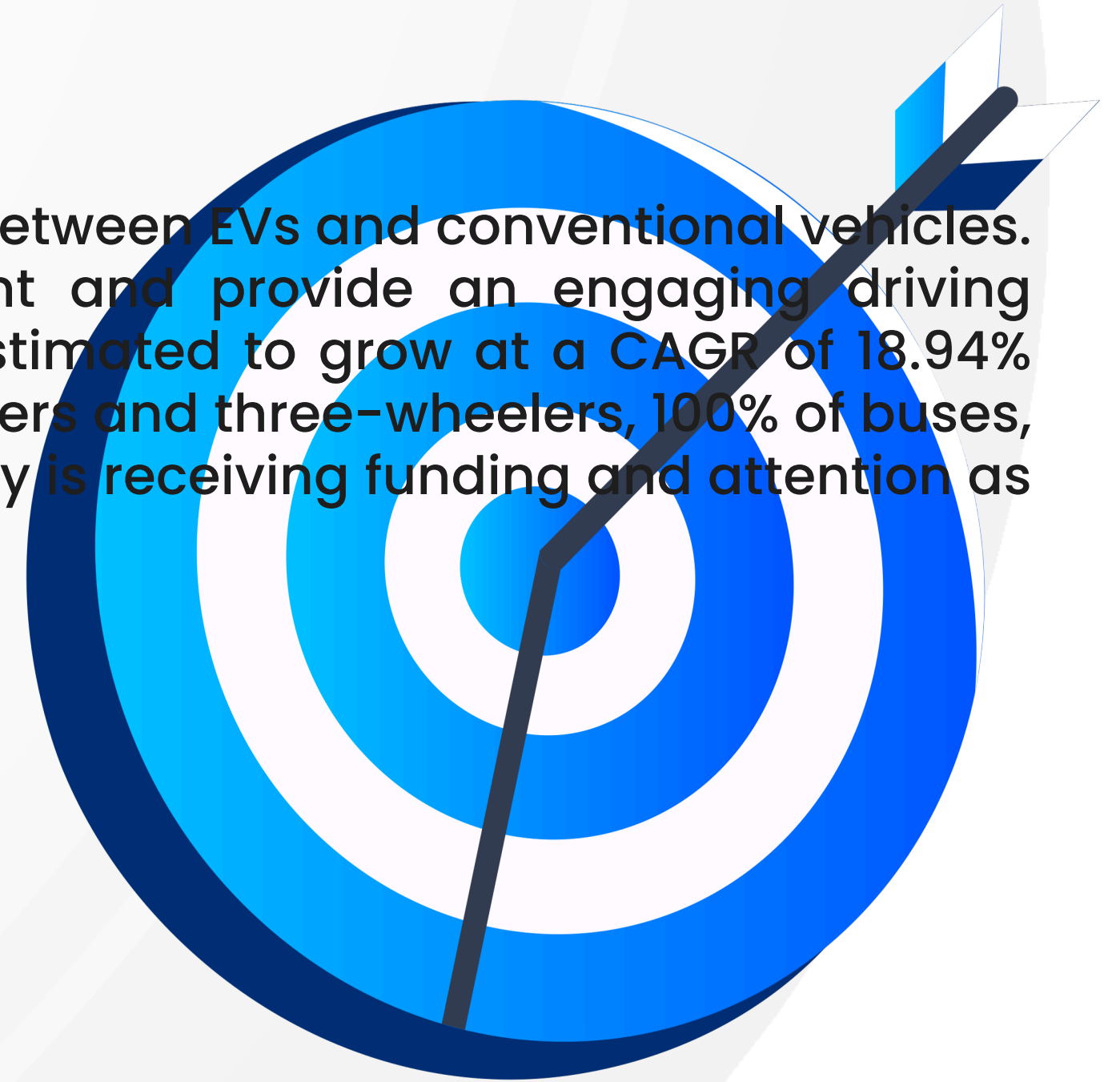
WHAT IS A HYBRID ELECTRIC VEHICLE?

A **Hybrid Electric Vehicle** is a type of vehicle that uses a combination of an Internal Combustion (IC) engine and an electric propulsion system. The electric powertrain may enhance fuel efficiency, increase performance, or independently propel the vehicle on pure electric power, depending on the type of hybrid system. In simple words, an HEV is a vehicle that comprises a conventional fuel engine and an electric powertrain, wherein the electric motor assists the engine to extract more performance and better fuel economy, depending on the type of the system. We will elaborate on the kinds of HEVs in the following sections of this article.



SCOPE OF HYBRID ELECTRIC VEHICLES.

Hybrid Electric Vehicles will play a vital role in bridging the gap between EVs and conventional vehicles. With better battery technology, they could be more efficient and provide an engaging driving experience. The overall hybrid vehicle market, by volume, is estimated to grow at a CAGR of 18.94% from 2020 to 2030. By the time we reach 2035, 80% of two-wheelers and three-wheelers, 100% of buses, and 30% to 70% of cars would be electric in India. Electric mobility is receiving funding and attention as the nation moves toward its 2075 objective of zero emissions.



CAREER OPPORTUNITIES

- **Electric Vehicle Software Developer**
- **System Engineer – Electric and Hybrid**
- **Electric and Electronics Architect**
- **Electric Motor Design Engineer**
- **Vehicle Integration Engineer**



HOW CAN YOU START YOUR JOURNEY IN HYBRID ELECTRIC VEHICLES?

Enroll in our specialized program, learn from industry experts, get guaranteed internships, job opportunities and work on [6 Advance Industry](#)-based projects. Edufyi provides a certified specialized program in Hybrid Electric Vehicles in collaboration with IITs and growing startups. Be the tech enforcer of tomorrow with the knowledge of machines that are capable of dominating the future by learning the mechanics of the electric vehicle.



SPECIALISED PROGRAM CURRICULUM

INDUSTRIAL TRAINING

● Session 1

- Introduction to HEVs
- What is an HEV
- HEV Objectives
- HEV Advantages over Conventional Engines
- Motor Components
- Vehicle Propulsion
- HEV Challenges
- Impact of Fossil Fuels
- Batteries
- Ultra Capacitors
- Flywheels
- Regenerative Vehicles
- Otto Cycle
- Series and Parallel Configuration
- Examples
- Review



● Session 2

- Electric Vehicles Benefits of EV Choosing
- your EV Maintenance Comparitive Study
- Understanding Emissions Battery
- Electric Vehicles(BEV) Advantages and
- Disadvantages of BEVs Plug-In Hybrid
- Electric Vehicles(PHEV) Advantages and
- Disadvantages of PHEVs All about
- Regular HEVs Comparison Shopping
- Understanding Charging Approach
- What is EVSE Levels and types of
- Chargings Evaluation of Costing
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● Session 3

- Development of HEVs and EVs
- Background
- History
- Components
- Materials
- EV Configuration
- Design
- Manufacturing Process
- Optimisation
- Charging Process
- Electric and Gasoline
- Conclusion

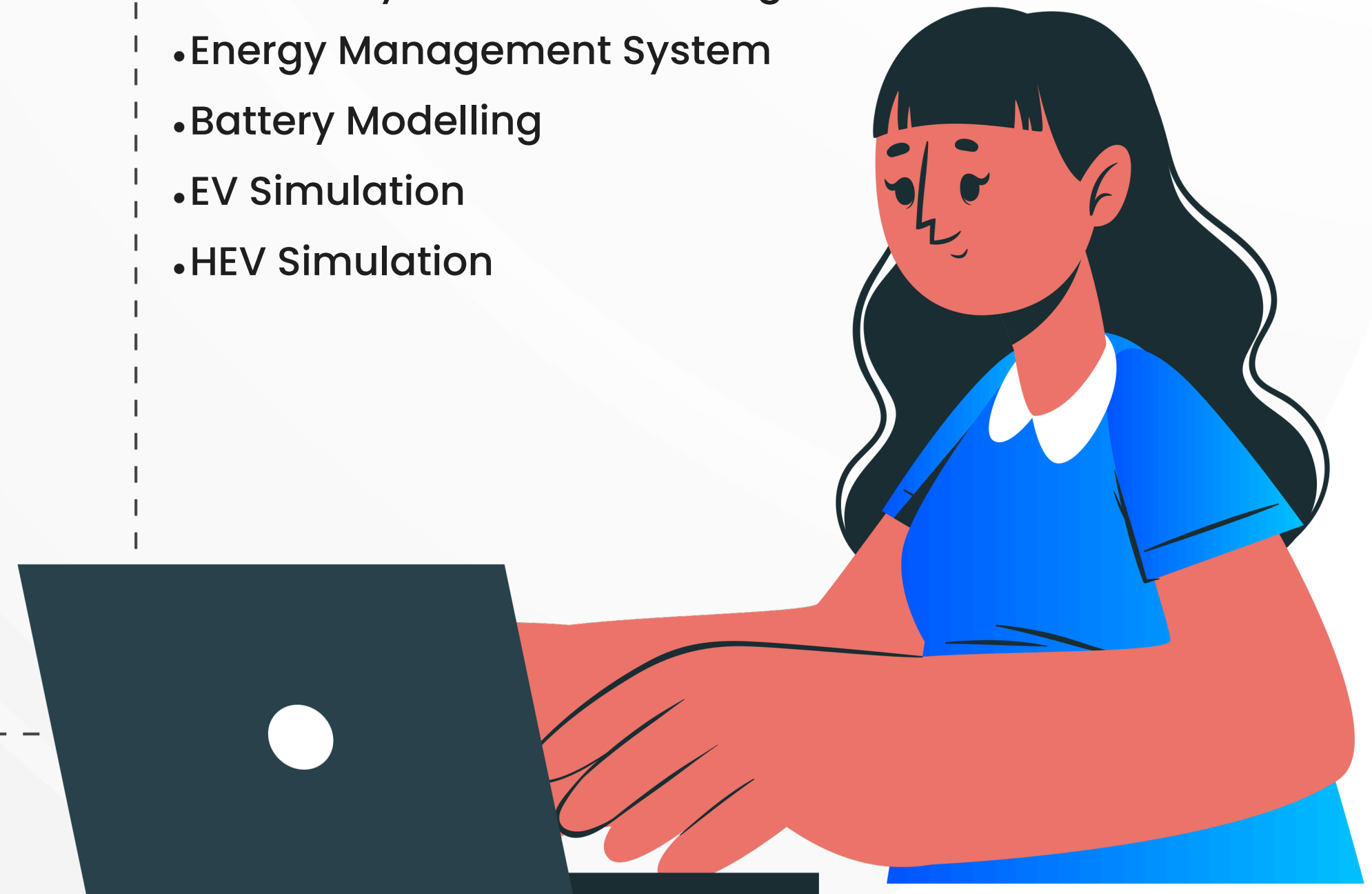


● Session 4

- E-Drive and Working of HEVs
- What are Electrical Drives
- Example on VSD Application
- Constant Speed Drive
- Variable Speed Drive
- Conventional Electric Drives
- Modern Electric Drives
- Components of Electric Drive
- Overview of AC and DC Drives
- Importance of Semiconductors
- Vector Control
- Drives Classification
- of IM Drives
- Principles of Mechanics
- Torque Speed Quadrant
- Thermal Considerations
-
-

● Session 5

- Powertrain and Battery in HEV/EV
- Why Electric Vehicle
- EV Concept and Technology
- EV Mechanical Composition
- Vehicle Modelling and Simulation Tools
- Parallel Hybrid Vehicles Design
- Energy Management System
- Battery Modelling
- EV Simulation
- HEV Simulation



● Session 6

- National Electric Mobility Mission Plan
- EV Market in India
- Government Consumer Interviews- FGD and Surveys
- Initiatives from Government
- Electric Vehicle Initiative(EVI) Forum
- FAME India and it's Importance
- Pie Chart Study of FAME India
- Different Phases of FAME India
- Demand Incentives
- Charging Infrastructure(PCI)
- Battery Leasing and Swap Schemes
- Infrastructure Service Models



QUIZ

ADVANCE INTERNSHIP PROJECTS

Project 1

Project 2

Project 3

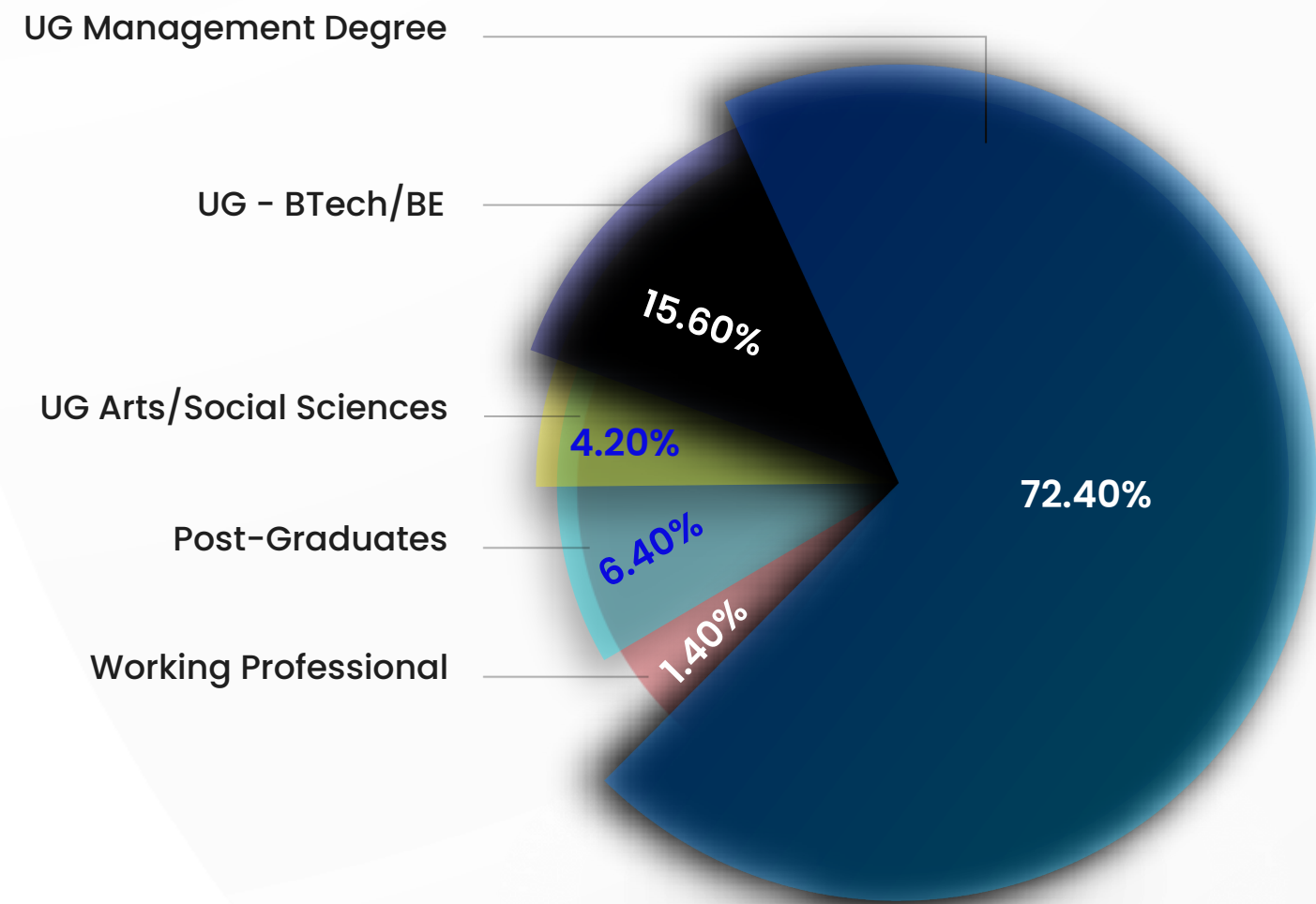
Project 4

Projects 5

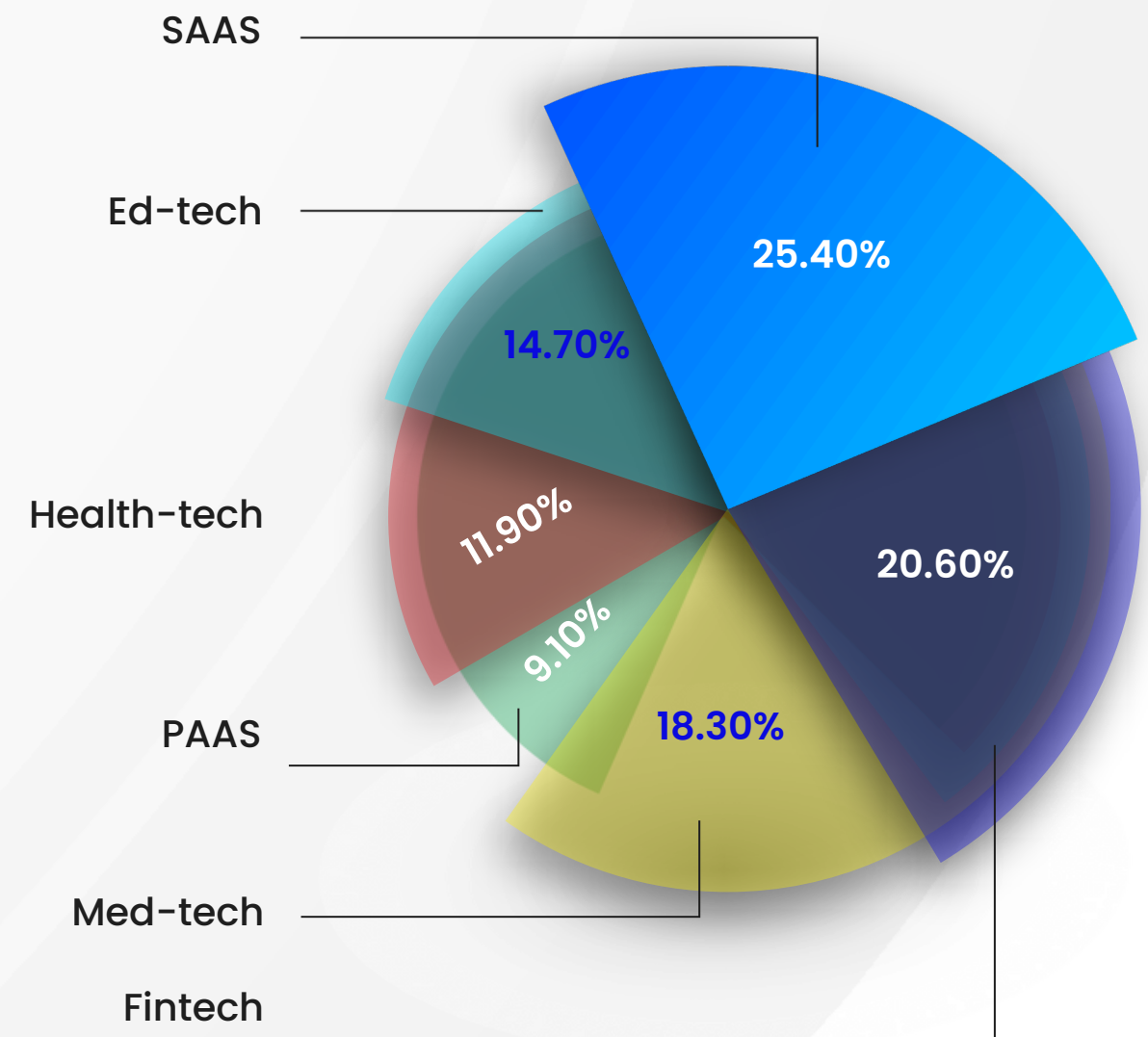
Projects 6



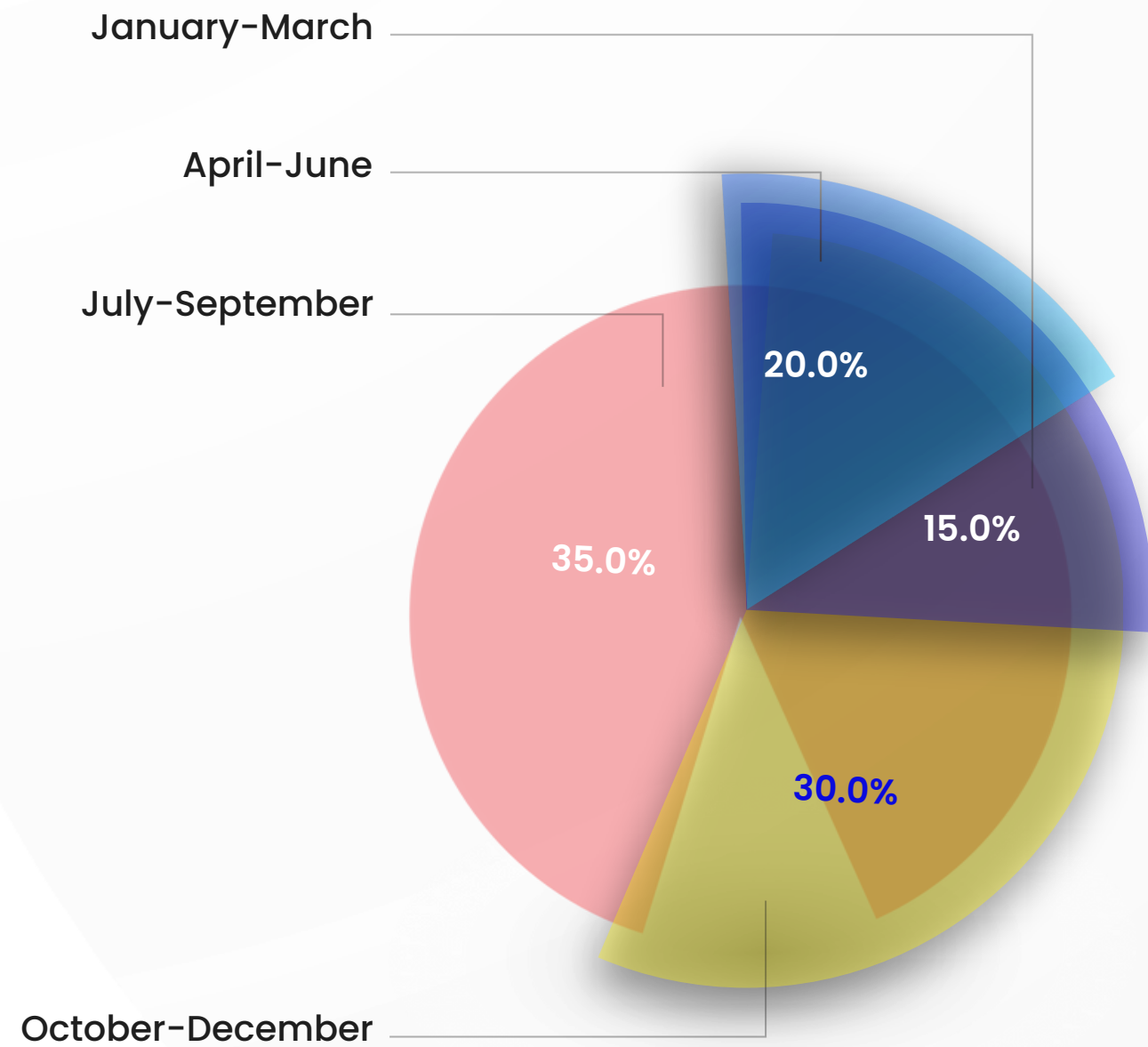
LEARNER'S BACKGROUND



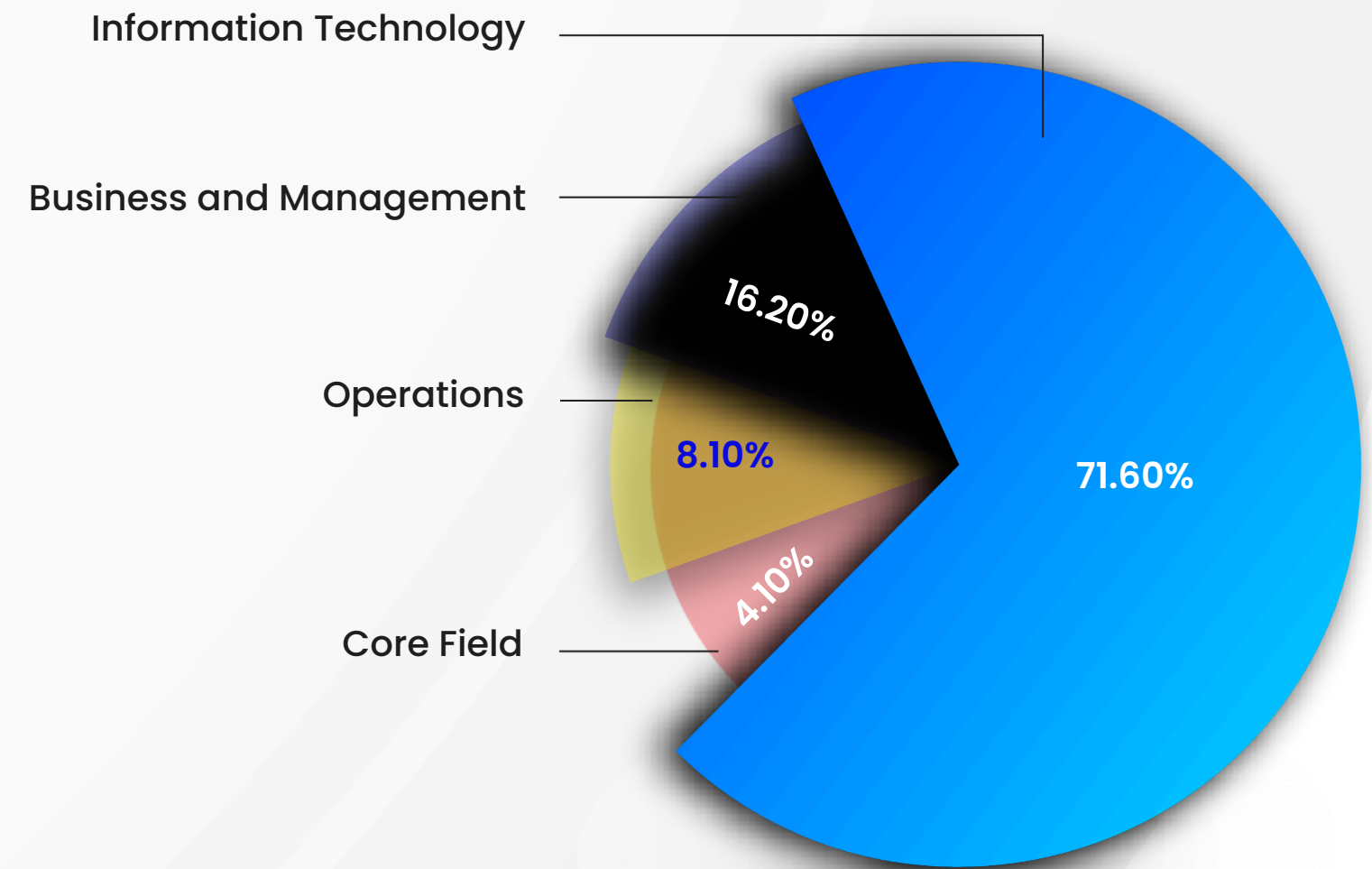
PLACEMENTS RATIO OFFERED AS PER INDUSTRY



QUATERLY PLACEMENT ANALYSIS REPORT



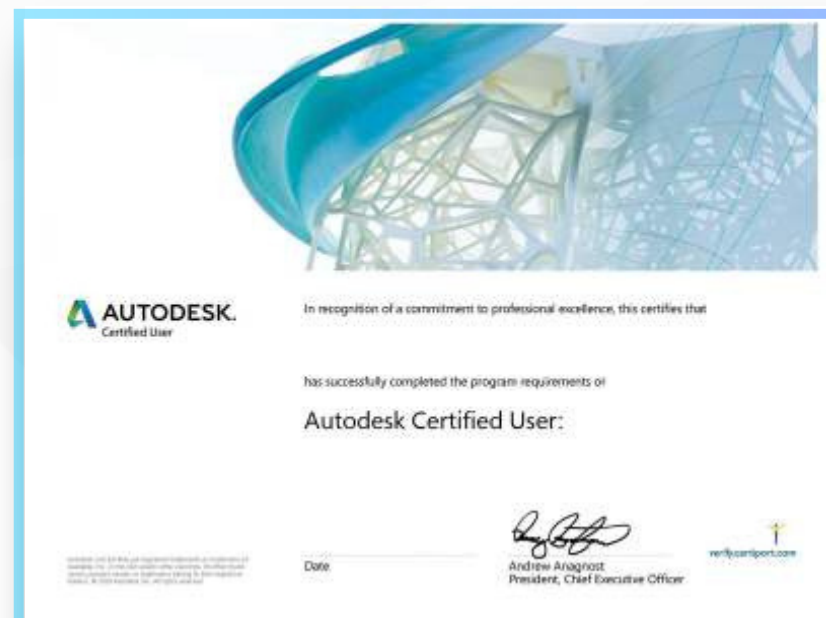
OFFERED PROFILES & FIELDS VIA EDUFYI



WIPRO DICE ID ACCREDITED CERTIFICATIONS



PROFESSIONAL MNC CERTIFICATIONS



OUR AUTHORISED CERTIFICATION PARTNERS



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ESB



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