



iHUB DivyaSampark



Department of Science & Technology
Government of India



EXECUTIVE POST GRADUATE CERTIFICATION IN DATA ANALYTICS

Gain the most relevant skills in the field of data analytics
and make a successful career transition



10 Million
Learners



1:1 Personalized
Mentorship



55% Average
Salary Hike

Executive Post Graduate Certification in Data Analytics

Master machine learning and artificial intelligence with this data analytics course from iHub Divya Sampark IIT Roorkee and Intellipaat. This advanced online boot camp features 1:1 mentorship by IIT faculty and industry experts. The top 2 performers from every batch will be awarded a scholarship of Rs. 80,000. iHub Divya Sampark will also provide funds of up to Rs. 50 Lakhs and incubation support to candidates with great ideas.



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Hottest Job of 21st Century



11.5 Million Job Postings

There is a global estimate of 11.5 million job postings for Data Analytics roles by 2026



Skill Development

Data Analysts are equipped with various relevant skills, fetching lucrative job offers



Growing Industry

Data Analytics market is expected to grow at 30.7% CAGR during the forecast period from 2021 to 2030..



Future-oriented Career

Data Analytics is a budding field in this era. Hence, a head start will prove to be beneficial



Popular Degree

Data Analytics is one of the more popular career options as it is a moneymaking job that offers opportunities to grow.



High Demand

By 2026, India & US will face a demand-supply gap of 1 million Data Analysts professionals.

Our Credentials



10 Million+

Aspiring Active Students



1,000+

Industry-expert Instructors



400+

Hiring Partners



500+

Corporates Upskilled



55%

Average Salary Hike



155+

Countries' Learners

About Program

The program aims to help learners develop a strong skill set including business analytics, descriptive statistics, probability distributions, predictive modeling, time series forecasting, and data architecture strategies as well as master the domain knowledge required to excel in this field.



Learning Format
Online Bootcamp



11 Months
Live Classes



Career Services
by Intellipaat



iHub IIT Roorkee
Certification

Key Highlights

- ✓ 620 Hrs of Applied Learning
- ✓ 218 Hrs of Self-Paced Learning
- ✓ 50+ Industry Projects & Case Studies
- ✓ Designed for Working Professionals & Freshers
- ✓ iHub Divya Sampark - IIT Roorkee Certification
- ✓ 2 Days Campus Immersion at IIT Roorkee
- ✓ Free Career Counselling
- ✓ Top 2 performers will receive Rs.80,000 in Scholarships *
- ✓ 90+ Live Sessions Across 11 months
- ✓ Learn from IIT Faculty & Industry Practitioners
- ✓ One-on-One with Industry Mentors
- ✓ Dedicated Learning Management Team
- ✓ 24*7 Support
- ✓ Designed for Working Professionals and Freshers
- ✓ Up to Rs. 50 Lakhs startup Incubation Support*
- ✓ 3 Guaranteed Interviews upon movement to Placement Pool

Program Pedagogy



Instructor-led Training

Get trained by top industry experts



Hackathons

Get a sense of how real projects are built



Dedicated Learning Management Team

To help you with your learning needs



Peer Networking and Group Learning

Improve your professional network and learn from peers



Self-paced videos

Learn at your own pace with world-class content



Gamified Learning

Get involved in group activities to solve real-world problems



Projects and Exercises

Get real-world experience through projects



1:1 Personalized Learning

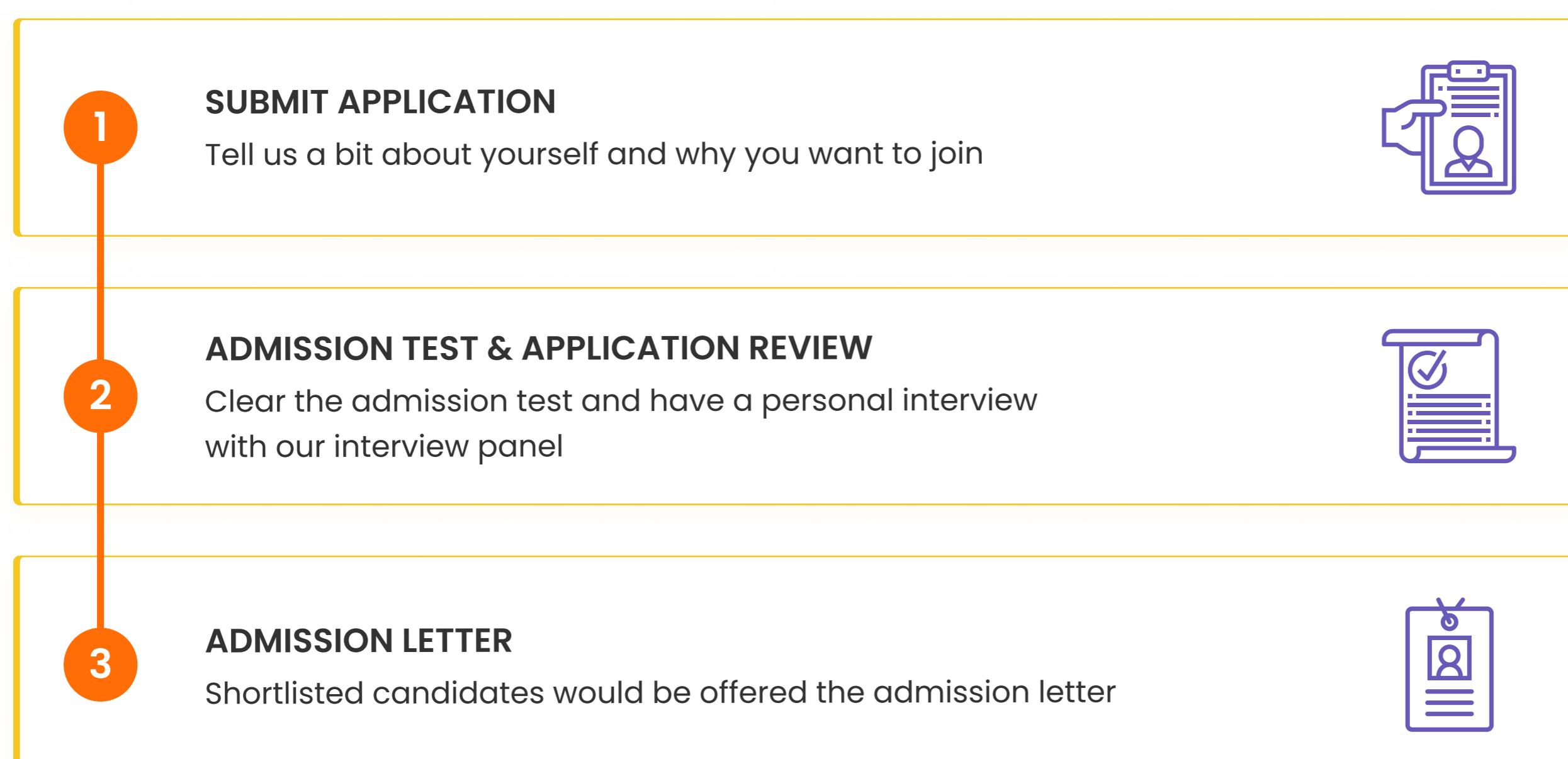
Hands-on exercises, project work, quizzes, and capstone projects

Who Can **Apply for the Course?**

- ✓ Individuals with a bachelor's degree and a strong interest in learning Data Analytics
- ✓ IT professionals looking to make a career transition as Data Analyst and Data Scientists
- ✓ Professionals looking to advance in their careers in IT
- ✓ Business Intelligence professionals
- ✓ Developers and Project Managers
- ✓ Entry-level professionals looking to build their careers in Data Analysis
- ✓ Undergraduate freshers with an interest in Data Analytics
- ✓ Anyone who wants to become an entrepreneur

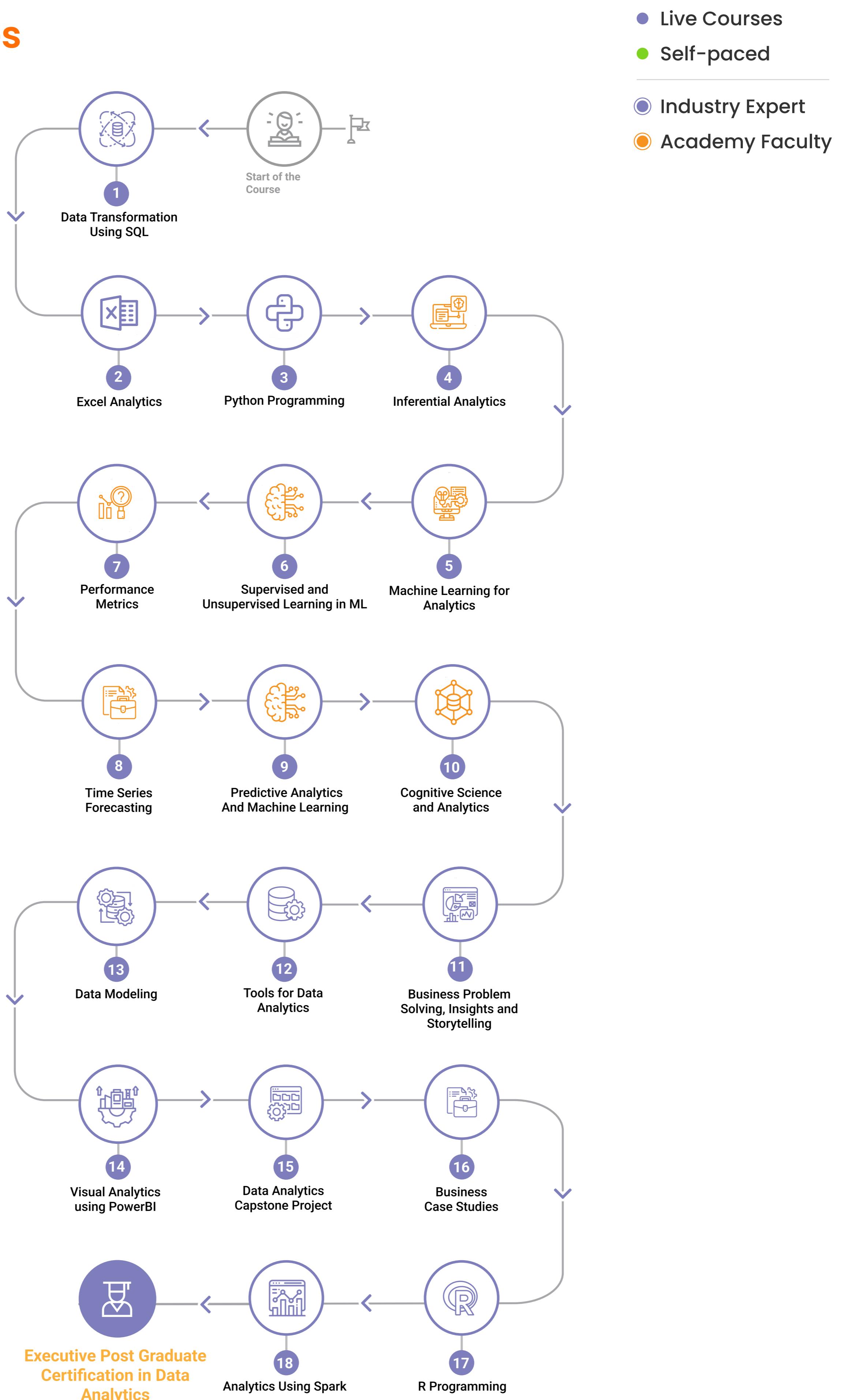
Application **Process**

The application process consists of three simple steps. Candidates have to submit their application. An offer of admission will be made to the selected candidates, and their application will be accepted upon the payment of the admission fee.



Learning Path

Live Courses



Program Curriculum

Module 1

Data Transformation Using SQL

- Introduction to SQL
- Database Normalization and Entity Relationship
- Model(self-paced)
- SQL Operators
- Working with SQL: Join, Tables, and Variables
- Deep Dive into SQL Functions
- Working with Subqueries
- SQL Views, Functions, and Stored Procedures
- Deep Dive into User-defined Functions
- SQL Optimization and Performance
- Advanced Topics
- Managing Database Concurrency
- Practice Session
- Case Study

Module 2

Excel Analytics

- Excel Fundamentals
- Excel For Data Analytics
- Data Visualization with Excel
- Ensuring Data and File Security
- Getting started with VBA Macros
- Statistics with Excel

Module 3

Python Programming

- Introduction to Python and IDEs
- Python Basics
- Data Manipulation with Numpy, Pandas, and Visualization
- Case Study

Module 4

Inferential Analytics

- Statistics and Descriptive Analytics using MS Excel
- Python for Descriptive, Diagnostic, and Inferential Statistics
- Prescriptive Analytics

Module 5

Machine Learning for Analytics

- Introduction to Machine learning
- Regression
- Classification
- Clustering

```
modifier ob.select=1
 bpy.context.scene.objects.active = modifier_ob
 print("Selected" + str(modifier_ob)) # modifier ob is
 modifier_ob.select = 0
 ob = bpy.context.object.select_set(modifier_ob)
```

Module 6

Supervised and Unsupervised Learning in ML

- Supervised Learning
- Unsupervised Learning

Module 7

Performance Metrics

- Classification reports – To evaluate the model on various metrics like recall, precision, f-support, etc.
- Confusion matrix – To evaluate the true positive/negative, false positive/negative outcomes in the model.
- r2, adjusted r2, mean squared error, etc.

Module 8

Time Series Forecasting

- Making use of time series data, gathering insights and useful forecasting solutions using time series forecasting.

Module 9

Predictive Analytics And Machine Learning

- Regression and Multivariate Analysis
- Classification problems in machine learning
- Data Multidimensionality and Linear Algebra
- Feature engineering and Feature selection
- Hyperparameter Tuning and other optimization techniques

Module 10

Cognitive Science and Analytics

- Understanding Natural Language Processing Applications (e.g. Search Engines and Social Media)
- Web Analytics (Google)
- Machine Learning Applications and Chatbots
- Social Media Analytics Advanced Text Mining like Sentiment Analysis, Topic Modelling, and Text Summarisation

Module 11

Business Problem Solving, Insights and Storytelling

- Business Domains
- Understanding the business problems and formulating hypotheses
- Exploratory Data Analysis to Gather insights
- Data Storytelling: Narrate stories in a memorable way
- Case Study

Program Curriculum

Module 12

Tools for Data Analytics

KNIME

- Introduction to KNIME
- Working with data in KNIME
- Loops in KNIME
- Web scraping in KNIME
- Feature Selection, Hyperparameter optimization in KNIME
- Case Study

Module 13

Data Modeling

- Feature Selection
- Feature Engineering
- Model Tuning

Module 14

Visualizations using PowerBI

- Power BI Basics
- DAX
- Data Visualization with Analytics
- Case Study

Module 15

Data Analytics Capstone Project

- Problem Statement and Project Objectives
- Approach for the Solution
- Optimum Solutions
- Evaluation Metrics
- Gathering Actionable insights

Module 16

Business Case Studies

- Stock Market Analysis
- Banking Problem
- Census
- Housing
- Sales Forecasting
- HR Analytics
- Customer Segmentation
- Inventory Management
- Disease Prediction

Job Readiness

- Job Search Strategy
- Resume Building
- Linkedin Profile Creation
- Interview Preparation Sessions by Industry Experts
- Mock Interviews
- Placement opportunities with 400+ hiring partners upon clearing the Placement Readiness Test.

Elective

Module 17

R Programming

Module 18

Analytics Using Spark

Skills to Master

- SQL
- Advanced Statistics
- Data Wrangling
- Data Mining
- Data Analysis
- R Programming
- Prediction algorithms
- Data visualization
- Time Series
- Machine Learning
- PowerBI

Tools to Master



Course Projects

Projects cover the following industries:



Retail



Social Media



Supply Chain



Entrepreneurship



E-commerce



Banking



Healthcare



Insurance

Beginner

Predicting class of a flower with petals data

This project is made to predict the class of a flower. By analyzing the data about the petal and their dimensions, the class of the flower would be determined using a trained Machine Learning model that has optimum accuracy.

Beginner

Data Analytics on Census dataset

The project is meant to analyze and predict whether an individual has an annual income of more than Rs 50000 or less using various machine learning techniques, some of which are supervised and unsupervised learning.

Beginner

Fraud Detection

The project will be creating a model which would help in detecting Credit Card fraud using Machine Learning subcategories like supervised, unsupervised, and reinforcement learning techniques like Neural Network and Random Forest.

Intermediate

Analyzing impact factors of the pre-paid model in telecom

The goal of this project is to find the factors that have the maximum impact on the preferences of the pre-paid model. It also aims at identifying the variables that are highly correlated with these impacting factors.

Intermediate

Pokemon Analysis

Select a pokemon whose primary type is "Grass", secondary type is "Poison" with the maximum speed. It creates a model that predicts whether the selected pokemon is Legendary or not using Machine Learning and data analysis techniques.

Intermediate

Stock Market Analysis

This project focuses on Machine Learning by creating a predictive data model to predict the future stock prices. It also analyzes the current trends in the stock market using algorithms like Linear Regression and k-Nearest Neighbors.

Advance

Comment Identity & Classification

Work on the comment dataset of Yelp to build a multi-headed model that can identify & categorize various types of toxic comments (obscenity, insults, threats etc.). It must allow the user to find and select the required type

Advance

Book Recommender

This project aims at building a book recommendation engine based on past reading and buying history of an individual. It will analyze the dataset using Machine Learning techniques, R programming and its various libraries.

Advance

Loan Approval Prediction

The project aims to analyze whether the applied loan would be approved or not by identifying the variables correlated with impacting factors. It is predicted using techniques such as Logistic Regression, Decision Tree and Random Forest.

Advance

Recommendation Engine using Netflix prize dataset

The recommendation engine is built using Netflix prize dataset that will collect the data from various sources of a user, anticipate their preferences and will recommend movies according to the user's behavior and choices made earlier.

Course Advisors / Faculty



Manish Anand

CEO at iHUB IIT Roorkee

Manish Anand is an IIT Kanpur alumnus with an MBA in Technology and innovation management from Korea Advanced Institute of Science and Technology (KAIST), Seoul. He currently heads iHUB DivyaSampark, a Technology Innovation Hub hosted at IIT Roorkee.



Dr. Sudeb Das Gupta

Professor at IIT Roorkee

Dr. Sudeb Dasgupta is currently working as Professor at IIT Roorkee. He has completed his PhD from Banaras Hindu University in Electronics Engineering and has more than 20 years of teaching experience.



Dr. Balasubramanian R

Professor at IIT Roorkee

Dr. Balasubramanian R, is currently working as Professor at IIT Roorkee. He has completed his PhD from IIT Madras in Mathematics and Computer Science and has more than 20 years of teaching experience. His areas of interest include computer vision, machine learning, pattern recognition, deep learning, etc.



Mr. Rupesh Nasre

Associate Professor at IIT Madras

Mr Rupesh Nasre is currently working as an associate professor in the CSE Department at IIT Madras. He holds a PhD from IISc Bangalore, and Post-Doctoral Fellowship from the University of Texas at Austin.



Dr. Sushanta Karmakar

Associate Professor at IIT Guwahati

Dr. Sushanta Karmakar is currently working as Associate Professor, at IIT Guwahati. He has completed his PhD from IIT Kharagpur from the Computer Science and Engineering department and has over 15 years of teaching experience.



Nishkam Shivam

Senior Data Scientist at Bristlecone

A Senior Data Scientist in the field of Analytics and AI, Mr. Nishkam Shivam is presently working at Bristlecone. He has 9+ years of experience in this particular field and has also worked in renowned companies like Accenture, Walmart, Emeritus, and many more.



Madhu Babu Cherukuri

Sr. Data Scientist at Intel Corporation

He carries over 15 years of expertise in handling various analytics projects, using several types of ML algorithms in multiple business domains. He also comes with extensive knowledge in SAS, SQL, R, Python and is proficient in Big Data Environment.

Course Advisors / Faculty



Phaneendra Akula

Senior Manager, Data Science at Sunrise Systems

Mr. Akula is presently working at Sunrise Biztech Systems Private Limited. He has 9+ years of experience in the field of Data Science and has worked in many prestigious companies like Genpact, TCS, and Tesco. He is also a research scholar and a speaker.



Vishwath Parthasarathy

Data Scientist-III at InMobi

Mr. Parthasarathy is currently working as a Data Scientist-III at InMobi. He has also worked at Amazon and PipeCandy. His expertise extends to Machine Learning, Deep Learning, MLOps, and Algorithmic Trading. He has been working since 2017 as a Data Scientist.



Anurag Singh

Principal AI Architect at Schneider Electric Hub

Mr. Singh works at Schneider Electric Hub as a Principal AI Architect. He started as a Software Engineer in 2007 and has been working as Data Scientist since 2018. He specializes in Big Data, Data Science, Machine Learning, and AI System Architecture.



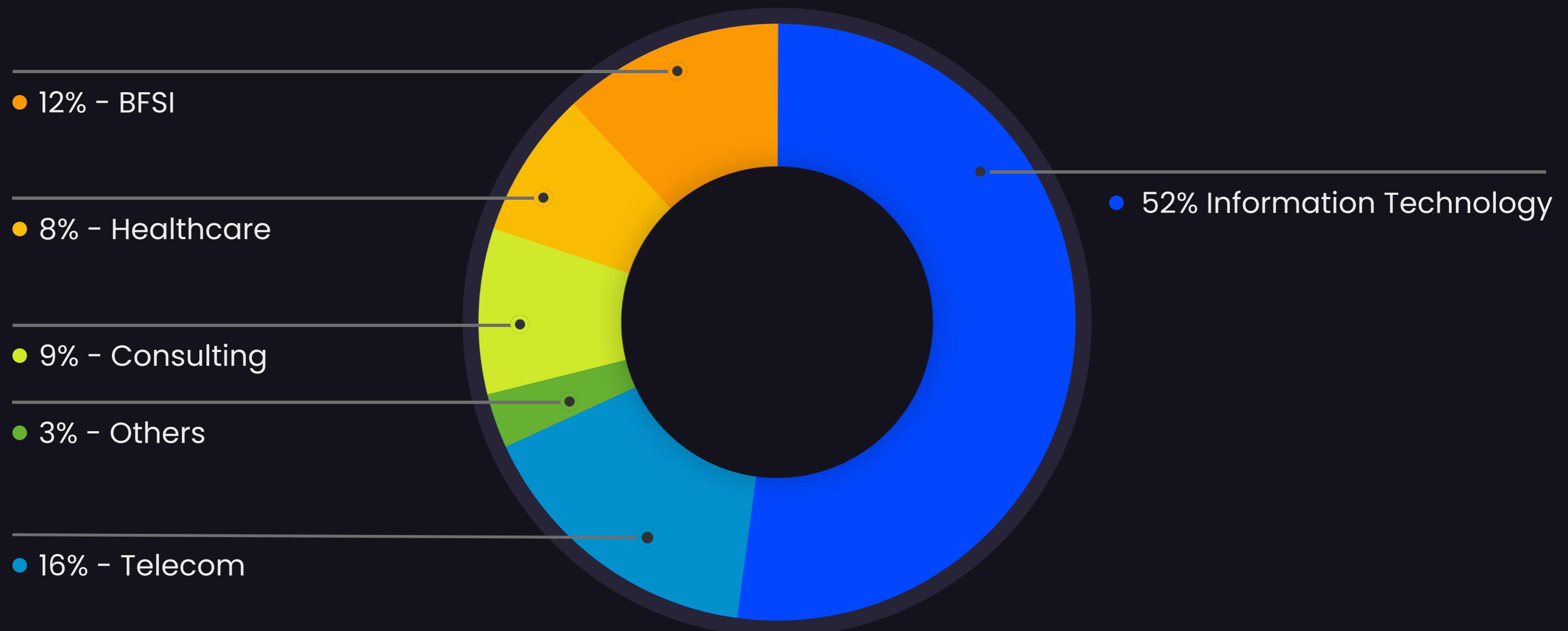
Muthusamy Manigandan

Data Science Consultant, Ex- Apple

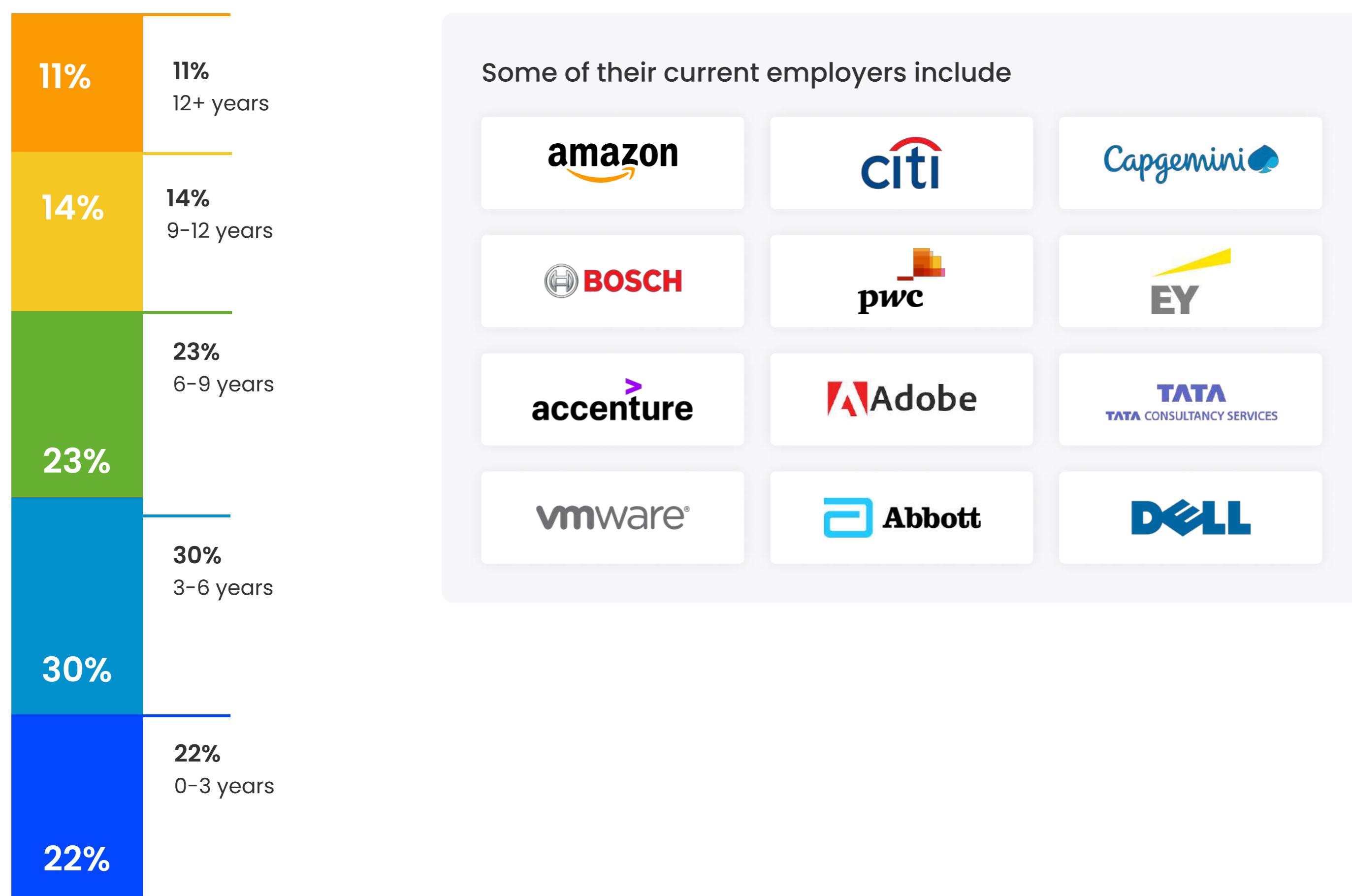
Manigandan has 16+ years of experience in cloud projects for Fortune 500 companies. He comes with a strong background in architecture and implementation of AWS, Azure, GCP, along with hands-on experience in DevOps tools.

Meet the **Batch**

Industries Our Learners Come From



Work **Experience**



Glimpse of our Successful Transitions



4.6 ★★★★☆



4.5 ★★★★☆



4.38 ★★★★☆

Career Transitions



Shubham Shinde
Data Analyst | India

From
Business Intelligence
Specialist

To
Data Analyst



Kiran Kulkarni
Sr. Data Analyst | India

From
BPO Associate

To
Sr. Data Analyst



Aditya Ahuja
Data Analyst | India

From
Software Test
Engineer

To
Data Analyst



Lucky Bajetha
Data Analyst | India

From
Human Resource
Executive

To
Data Analyst



Shehzin Mulla
Research Analyst

From
Data Analyst

To
Research Analyst



Jeanette Masso
Big Data Developer

From
Computer Technical
Specialist

To
Big Data Developer



Prosenjeet Saha
Data Scientist

From
Manager Analytics &
Data Science

To
Data Scientist



Pratik Kumar
Product Manager

From
Marketing Manager

To
Product Manager



Intellipaat Career Services



500+
Webinars



600+
Job Shares



400+
Hiring Partners



55%
Avg. Salary Hike*

What Makes Us Tick



Career-oriented Sessions

Attend 25+ career-oriented sessions by industry mentors and plan your career trajectory



Profile Building

Craft a Data Analytics resume and LinkedIn profile to make an impression on top employers



Mock Interview Preparation

Prepare with mock interviews including most asked questions by top employers



1:1 Mentoring Sessions

Get 1:1 guidance at every step in your career transition to Data Analytics



3 Guaranteed Job Interviews

3 Guaranteed Job Interviews will be provided once the learner is moved to the placement pool. Get noticed by our 400+ hiring partners.**



Dedicated Job Portal Access

Get exclusive access to 200 job postings per month on Intellipaat's job portal



Job Fairs

Job fairs are conducted regularly to introduce learners to major organizations



Hackathons

Work in teams and get exclusive access to hackathons

Learner Reviews



Mohit Hinwar
Data Science & Analytics Enthusiast

I am happy to be able to complete this certification from Intellipaat. I appreciate the entire team for providing me with amazing learning experience through real-time projects and case studies.

“



Shubham Gupta
Team Leader (Data Analyst) at Ziff Davis

Intellipaat provides a great learning environment inclusive of new-age technologies. I worked on many Data Science tools through live training and self-paced videos. The trainers are very supportive.

“



Daniel Osei Appiah
Data Scientist | Machine Learning Researcher

After much research and pondering, I started learning from Intellipaat. Given the great tutorials and trainers, with quick query resolution, the decision proves to be best. The experience was wonderful.

“

Program Partners



About Intellipaat

Intellipaat is one of the leading online training providers with more than 1.2 million learners in over 155 countries. We are on a mission to democratize education as we believe that everyone has the right to quality education.

We create courses in collaboration with top universities and MNCs for employability like EICT IIT Roorkee, EICT IIT Guwahati, IITM Pravartak, IIM Ranchi, IIT Jammu, IU, LSBU, University of Essex, University of Liverpool, IBM, Microsoft, etc.

Our courses are delivered by SMEs & our pedagogy enables quick learning of difficult topics. 24/7 technical support & career services help learners to jump-start their careers.



About iHUB DivyaSampark, IIT Roorkee

iHUB DivyaSampark, IIT Roorkee aims to enable an innovative ecosystem in new-age technologies like AI, ML, Drones, Robots, and data analytics (often called CPS technologies). It aims to do this by promoting and enhancing core competencies, capacity building, and manpower training to provide solutions for national strategic sectors and become a significant contributor to Digital India.

Achievements – IIT Roorkee:

- Ranked 7th 'Overall' and 6th in 'Engineering' in India as declared by NIRF 2022
- Ranked 175th in the world for 'Engineering and Technology' by QS World University Rankings 2023
- Ranked as the 369th best institute in the world by QS World University Rankings 2023
- Ranked as the 114th best institute in Asia by QS World University Rankings 2023

Upon the completion of this program, you will:

- Certification from iHUB DivyaSampark, IIT Roorkee



Collaboration with Microsoft

When it comes to new-age technologies and tools, Microsoft is the biggest names and leading innovators. The course is led by experts who will walk you through all of the necessary skills in the domain and get you started on projects relevant to various organisations.



10 Million Learners & 500+ Corporates across 155+ countries
upskilling on Intellipaat Platform



Contact Us

INDIA

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USA

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