simplilearn

Data Science

Job Guarantee Program

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About the Program

This Data Science Job Guarantee Program offered by Simplilearn is a six month comprehensive job guarantee program focusing on fast tracking your career in the field of data science.

Key Features

100% refund if you aren't able to secure a job within 180 days of graduation

Mock interviews with industry experts to help you clear any technical interview

Improve your resume and profile with insights and tips from experts

30+ industry relevant projects from the likes of Amazon, Walmart, and Mercedes Benz

10+ cutting edge tools and technologies like Python, R, NumPy, SciPy, and Tableau

8X higher engagement in live online classes by industry experts

LevelUp session by Andrew McAfee, Principal Research Scientist at MIT

Top-notch curriculum with integrated labs

Premium job placements in top Fortune 500 companies and startups

Suitable for technical as well as non-technical graduates

Lifetime access to high quality industry-relevant content

Get easy financing options at 0% interest rate with no hidden costs

About Simplilearn

Simplilearn is the world's #1 online bootcamp provider that enables learners through rigorous and highly specialized professional training programs. We focus on emerging technologies and processes that transform the digital world at a fraction of the cost and time as traditional approaches. Over two million professionals and 2,000 corporate training organizations have harnessed our award-winning programs to achieve their career and business goals.

How to apply

To enroll for this Data Science Job Guarantee program, learners must follow the steps below:

- Register on the website by filling in your profile details
- If your profile is shortlisted, you will become eligible to appear for an online assessment test
- The result of the assessment test will be provided to you via email
- If you successfully clear the test, you will be offered admission into the program
- You can confirm your enrollment by paying the program fee

Eligibility

To be eligible for this program, you should meet the following criteria:

- Hold a B. Tech / M.Tech / MCA / M.Sc / M.A (Economics) / MBA / BCA / B.Sc (IT) degree from an accredited institution. Final year students in any of the degrees of study above are also eligible

- Have a minimum 60% academic record throughout (X, XII, Graduation & Post Graduation (if applicable))
- Must be eligible to legally work in India
- Have a valid PAN Card and Aadhar Card
- Have valid marksheets and certificates to validate your degree
- Must be able to pass any background check from your previous employers/institutes. In case you fail to pass the background check associated with the job offer, you will not be eligible for the program fee refund.
- Have an inclination towards learning programming

NOTE:
In case you are in your final year of college, then all marksheets & certificates (Standard-X onwards) and proof from your college mentioning the month and year of graduation is required (with at least 60% up to your last semester).

SKILLS COVERED

- Multivariate calculus
- Probability and statistics
- Database management
- Data visualization
- Data storytelling
- Linear and logistic regression
- Clustering
- Hypothesis testing and estimation
- Data wrangling
- Supervised learning and unsupervised learning
- Time series modelling
- Ensemble learning
- Neural networks
- Deep learning

Tools Covered

Program Outcomes

At the end of this program, you will:

- Gain an in-depth understanding of data structures and data manipulation
- Understand and use linear and non-linear regression models and classification techniques for data analysis
- Obtain an in-depth understanding of supervised and unsupervised learning models such as linear regression, logistic regression, clustering, dimensionality reduction, k-NN, and pipelines
- Perform scientific and technical computing using the SciPy package and its sub-packages such as Integrate, Optimize, Statistics, IO, and Weave
- Gain expertise in mathematical computing using the NumPy and scikit-learn packages
- Master the concepts of recommendation engines and time series modeling to gain practical mastery over principles, algorithms, and applications of machine learning
- Learn to analyze data using Tableau and become proficient in building interactive dashboards

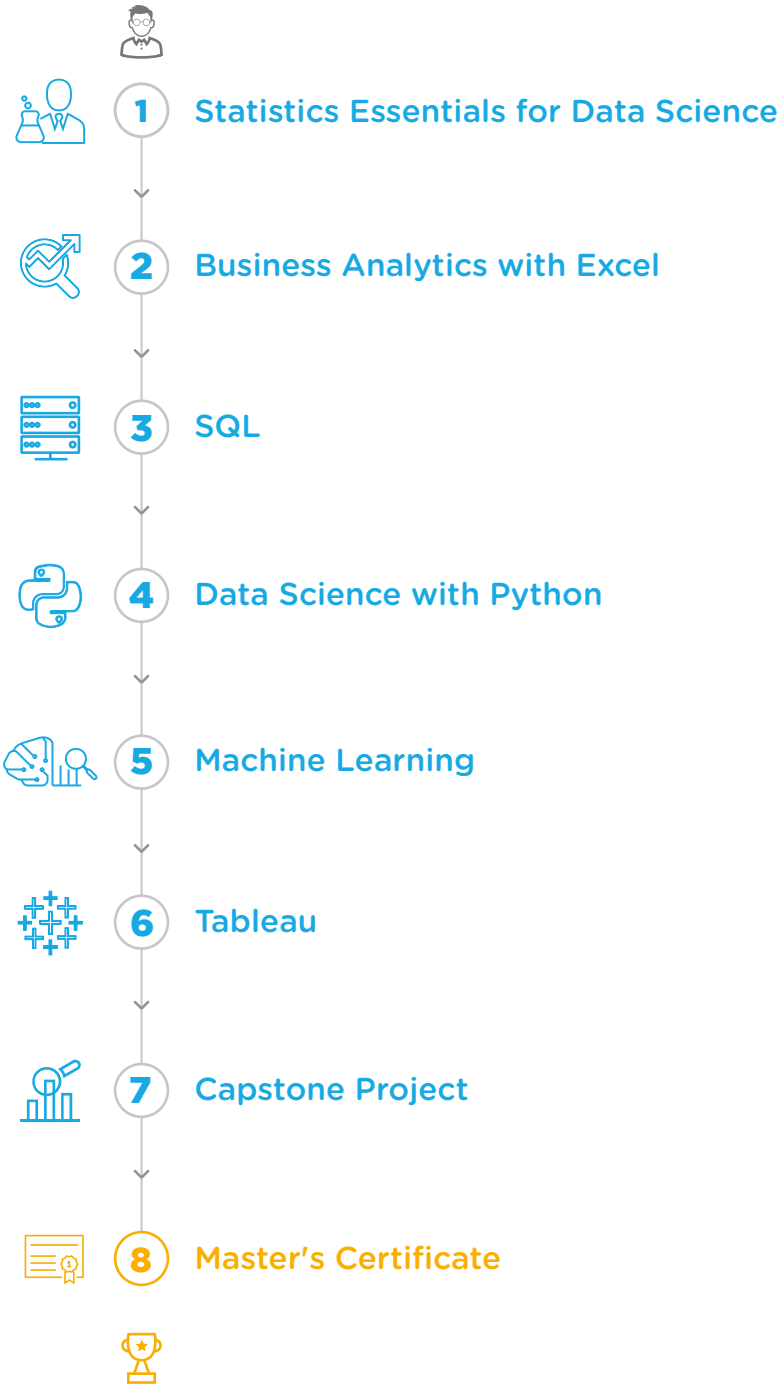
Who Should Enroll in This Program?

This immersive program is ideal for final year students, freshers & early career professionals with a data-oriented mindset, an inclination towards learning programming skills, and those wishing to make an early transition into the world of data.

Potential Roles

After completing the program, you will be eligible for a variety of career opportunities and will be able to build your career in various data related roles across industries. Also, as data science is an evolving field, new job roles and designations keep opening up. Some of the job roles that you can become eligible for after taking this program include Data Analyst, Data Science Generalist, Data Scientist, ML Analyst, ML Engineer, ML Scientist, AI Analyst, AI Engineer, AI/ML Developer, Business Intelligence Analyst, Associate Data Scientist, Data Architect, Business Intelligence Developer, Deep Learning Engineer, Decision Scientist, Data Visualization Specialist, and many others.

Learning Path



Elective

Data Science with R

Deep Learning with Keras and TensorFlow

Statistics Essentials For Data Science

Statistics is the science of assigning a probability to an event based on experiments. It is the application of quantitative principles to the collection, analysis, and presentation of numerical data. Ace the fundamentals of Data Science, statistics, and Machine Learning with this course. It will enable you to define statistics and essential terms related to it, explain measures of central tendency and dispersion, and comprehend skewness, correlation, regression, and distribution. You will be able to make data-driven predictions through statistical inference.

Key Learning Objectives

- Understand the fundamentals of statistics
- Work with different types of datas
- Learn how to plot different types of data
- Calculate the measures of central tendency, asymmetry, and variability
- Calculate correlation and covariance
- Distinguish and work with different types of distribution
- Estimate confidence intervals
- Perform hypothesis testing
- Make data-driven decisions
- Understand the mechanics of regression analysis and carry out regression analysis
- Understand and use dummy variables

Course Curriculum

- Lesson 1-Introduction to Statistics
- Lesson 2-Understanding the Data
- Lesson 3-Descriptive Statistics
- Lesson 4-Data Visualization
- Lesson 5-Probability
- Lesson 6-Probability Distributions
- Lesson 7-Sampling and Sampling Techniques
- Lesson 8 -Inferential Statistics
- Lesson 9-Application of Inferential Statistics
- Lesson 10-Relation between Variables
- Lesson 11-Application of Statistics in Business

Business Analytics with Excel

Business Analytics with Excel training will boost your analytics career with powerful new Microsoft Excel skills. This business analytics training course will equip you with the concepts and hard skills required for a strong analytics career. You'll learn the basic concepts of data analysis and statistics to promote data-driven decision making. Your new knowledge of this commonly used tool combined with an official business analytics certification is guaranteed to ensure career success.

Key Learning Objectives

- Understand the meaning of business analytics and its importance in the industry
- Grasp the fundamentals of Excel analytics functions and conditional formatting
- Learn how to analyze with complex data sets using pivot tables and slicers
- Solve stochastic and deterministic analytical problems using tools like scenario manager, solver, and goal seek
- Apply statistical tools and concepts like moving averages, hypothesis testing, ANOVA, and regression to data sets using Excel
- Represent your findings using charts and dashboards
- Get introduced to the latest Microsoft analytic and visualization tools, such as Power BI

Course Curriculum

- Lesson 1- Introduction to Business Analytics
- Lesson 2- Formatting Conditional Formatting and Important Functions
- Lesson 3- Analyzing Data with Pivot Tables
- Lesson 4- Dashboarding
- Lesson 5- Business Analytics with Excel
- Lesson 6- Data Analysis Using Statistics
- Lesson 7- Power BI

SQL

SQL or Structured Query Language is a domain-specific language used in programming and designed for managing data held in a relational database management system (RDBMS), or for stream processing in a relational data stream management system (RDSMS).SQL is the most mainstream language that is used to access databases because it can work with any database. The databases, with which you interface, are programs that enable clients to store and manage information in a logical manner

Key Learning Objectives

- Understand the basics of SQL
- Understand the basic fundamentals of SQL database
- Learn how to correctly structure your database
- Structure the author efficient SQL statements and clauses
- Manage your SQL database for scalable growth

Course Curriculum

- Lesson-01- Introduction
- Lesson-02- Introduction to SQL
- Lesson-03- Database Normalization and Entity Relationship (ER) Model
- Lesson-04- Installation and SetUp
- Lesson-05- Working with Database and Tables

- Lesson-06- Working with Operators, Constraints and Data Types
- Lesson-07- Functions in SQL
- Lesson-08- Subqueries, Operators and Derived Tables in SQL
- Lesson-09- Windows Functions in SQL
- Lesson-10- Working with Views
- Lesson-11- Stored Procedures and Triggers in SQL
- Lesson-12- Performance Optimization and Best Practices in SQL

Data Science with Python

This Data Science with Python course will establish your mastery of data science and analytics techniques using Python. With this Python for Data Science course, you'll learn the essential concepts of Python programming and gain in-depth knowledge in data analytics, machine

learning, data visualization, web scraping, and natural language processing. Python is a required skill for many data science positions, so jump start your career with this interactive, hands-on course.

Key Learning Objectives

- Gain an in-depth understanding of data science processes, data wrangling, data exploration, data visualization, hypothesis building, and testing. You will also learn the basics of statistics
- Install the required Python environment and other auxiliary tools and libraries
- Understand the essential concepts of Python programming such as data types, tuples, lists, dicts, basic operators, and functions
- Perform high-level mathematical computing using the NumPy package and its vast library of mathematical functions
- Perform scientific and technical computing using the SciPy package and its sub-packages such as Integrate, Optimize, Statistics, IO, and Weave
- Perform data analysis and manipulation using data structures and tools provided in the Pandas package
- Gain expertise in machine learning using the Scikit-learn package

- Gain an in-depth understanding of supervised learning and unsupervised learning models such as linear regression, logistic regression, clustering, dimensionality reduction, k-NN, and pipelines
- Use the Scikit-learn package for natural language processing
- Use the matplotlib library of Python for data visualization
- Extract useful data from websites by performing web scraping using Python Integrate Python with Hadoop, Spark, and MapReduce

Course Curriculum

- Lesson 01 - Data Science Overview
- Lesson 02- Data Analytics Overview
- Lesson 03- Statistical Analysis and Business Applications
- Lesson 04- Python Environment Setup and Essentials
- Lesson 05- Mathematical Computing with Python (NumPy)
- Lesson 06 - Scientific computing with Python (SciPy)
- Lesson 07 - Data Manipulation with Pandas
- Lesson 08 - Machine Learning with Scikit–learn
- Lesson 09 - Natural Language Processing with Scikit learn
- Lesson 10 - Data Visualization in Python using matplotlib. This lesson teaches you to visualize data in python using matplotlib and plot them.
- Lesson 11 - Web Scraping with BeautifulSoup
- Lesson 12 - Python Integration with Hadoop, MapReduce, and Spark

Machine learning

Simplilearn's Machine Learning course will make you an expert in Machine Learning, a form of Artificial Intelligence that automates data analysis to enable computers to learn and adapt through experience to do specific tasks without explicit programming. You will master Machine Learning concepts and techniques, including supervised and unsupervised learning, mathematical and heuristic aspects, and hands-on modeling to develop algorithms and prepare you for your role with advanced Machine Learning knowledge.

Key Learning Objectives

- Master the concepts of supervised and unsupervised learning, recommendation engines, and time series modeling
- Gain practical mastery over principles, algorithms, and applications of Machine Learning through a hands-on approach that includes working on four major end-to-end projects and 25+ hands-on exercises
- Acquire thorough knowledge of the statistical and heuristic aspects of Machine Learning
- Implement models such as support vector machines, kernel SVM, Naive Bayes, decision tree classifier, random forest classifier, logistic regression, K-means clustering, and more in Python
- Validate Machine Learning models and decode various accuracy metrics. Improve the final models using another set of optimization algorithms, which includes Boosting & Bagging techniques
- Comprehend the theoretical concepts and how they relate to the practical aspects of Machine Learning

Course Curriculum

- Lesson 01 - Introduction to Artificial Intelligence and Machine Learning
- Lesson 02: Data Wrangling and Manipulation
- Lesson 03: Supervised Learning
- Lesson 04: Feature Engineering
- Lesson 05: Supervised Learning-Classification
- Lesson 06: Unsupervised Learning
- Lesson 07: Time Series Modelling
- Lesson 08: Ensemble Learning
- Lesson 09: Recommender Systems
- Lesson 10: Text Mining

Tableau

This Tableau course helps you understand how to build visualizations, organize data, and design charts and dashboards to empower more meaningful business decisions. You'll be exposed to the concepts of data visualization, different combo charts and stories, working with filters, parameters and sets, and building interactive dashboards.

Key Learning Objectives

- Become an expert on visualization techniques such as heat map, treemap, waterfall, and Pareto
- Understand metadata and its usage
- Work with filters, parameters, and sets
- Master special field types, Tableau-generated fields, and the process of creating and using parameters
- Learn how to build charts, interactive dashboards, story interfaces, and how to share your work
- Master the concepts of data blending, create data extracts, and organize and format data
- Master arithmetic, logical, table, and LOD calculations

Course Curriculum

- Lesson 01 - Getting Started with Tableau
- Lesson 02 - Core Tableau in Topics
- Lesson 03 - Creating Charts in Tableau
- Lesson 04 - Working with Metadata 17
- Lesson 05 - Filters in Tableau
- Lesson 06 - Applying Analytics to the Worksheet
- Lesson 07 - Dashboard in Tableau
- Lesson 08 - Modifications to Data Connections
- Lesson 09 - Introduction to Level of Details in Tableau (LODS)

Capstone Project

This Data Science Capstone project will give you an opportunity to implement the skills you learned throughout this program. Through dedicated mentoring sessions, you'll learn how to solve a real-world, industry-aligned Data Science problem, from data processing and model building to reporting your business results and insights. The project is the final step in the learning path and will enable you to showcase your expertise in Data Science to future employers.

Key Learning Objectives

Simplilearn's online Data Science Capstone course will bring you through the Data Science decision cycle, including data processing, building a model and representing results. The project milestones are as follows:

- **Data Processing** - In this step, you will apply various data processing techniques to make raw data meaningful.
- **Model Building** - You will leverage techniques such as regression and decision trees to build Machine Learning models that enable accurate and intelligent predictions. You may explore Python or R to build your model. You will follow the complete model-building exercise from data splitting, to testing, training and validating data using the k-fold cross validation process.
- **Model Fine-tuning** - You will apply various techniques to improve the accuracy of your model and select the champion model that provides the best accuracy.
- **Dashboarding and Representing Results** - As the last step, you will be required to export your results into a dashboard with meaningful insights using Tableau.

Electives

Data science with R

The next step to becoming a data scientist is learning R - the upcoming and most in-demand open source technology. R is an extremely powerful Data Science and analytics language which has a steep learning curve and a very vibrant community. This is why it is quickly becoming the technology of choice for organizations who are adopting the power of analytics for competitive advantage.

Deep Learning with Keras and TensorFlow

This Deep Learning with TensorFlow course by IBM will refine your machine learning knowledge and make you an expert in deep learning using TensorFlow. Master the concepts of deep learning and TensorFlow to build artificial neural networks and traverse layers of data abstraction. This course will help you learn to unlock the power of data and prepare you for new horizons in AI.

Level Up Sessions Experts

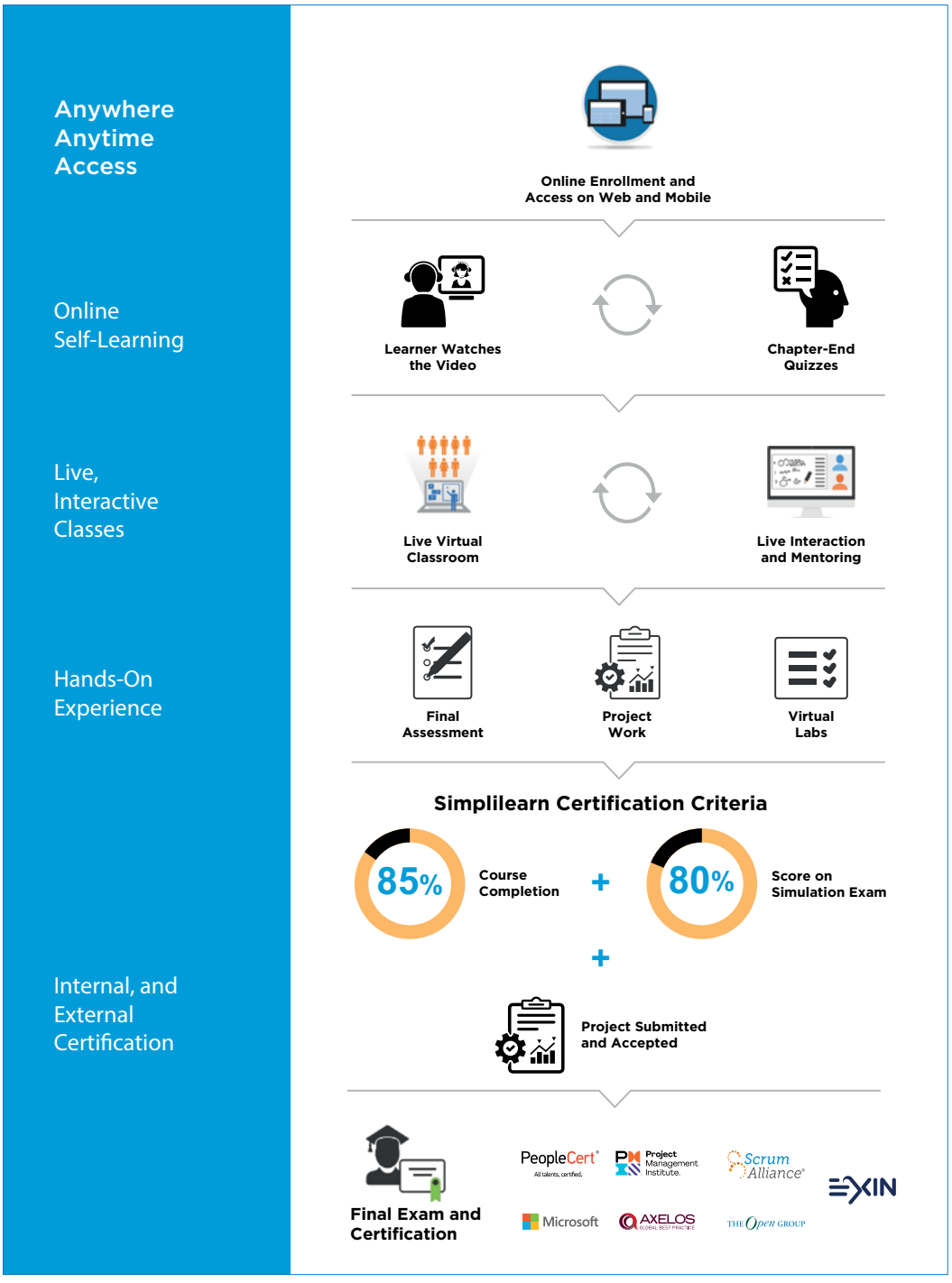
Andrew McAfee

Principal Research Scientist at MIT, author

Andrew McAfee is a Principal Research Scientist at the MIT Sloan School of Management.His research investigates how information technology changes the way companies perform, organize themselves, and compete. At a higher level, his work also focuses on how computerization affects competition, society, the economy, and the workforce. In addition to having numerous papers published, McAfee also writes a widely-read blog, which is at times one of the 10,000 most popular in the world. He is the author or co-author of more than 100 articles, case studies, and other materials for students and teachers of technology. Prior to joining MIT Sloan, McAfee was a professor at Harvard Business School. He has also served as a fellow at the Berkman Center for Internet and Society at Harvard Law School. McAfee received his doctorate from Harvard Business School, and completed two Master of Science and two Bachelor of Science degrees at MIT. He speaks frequently to both academic and industry audiences, and has taught in executive education programs around the world.

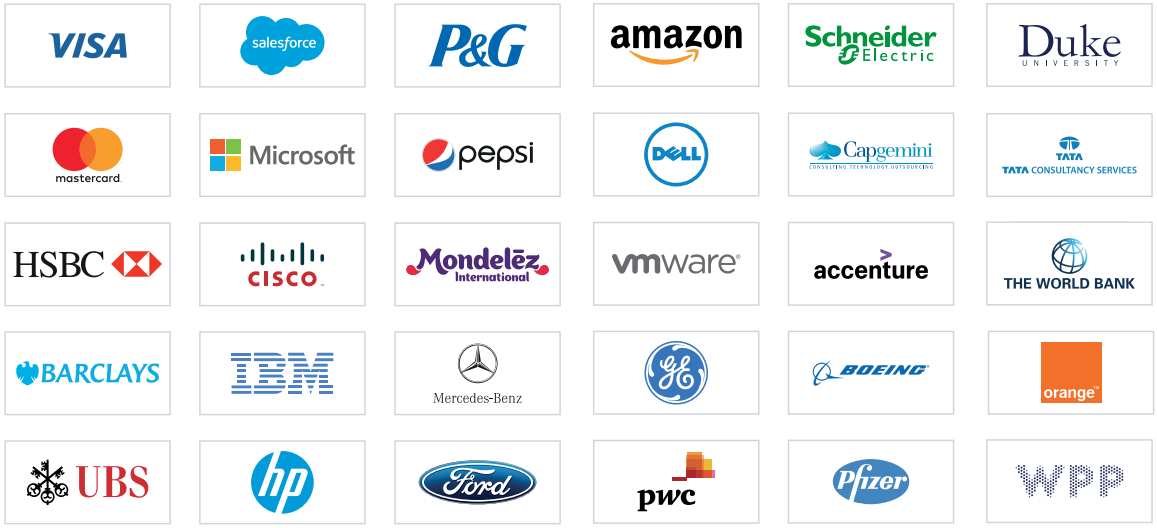
Certificate

Classroom-Level Immersion: Delivered Digitally



Corporate Training

Top clients we work with:



Features of Corporate Training:

- Tailored learning solutions
- Flexible pricing options
- Enterprise-grade learning management system (LMS)
- Enterprise dashboards for individuals and teams
- 24X7 learner assistance and support

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