

# IBM - Data Science Professional Program





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# About the Program

## Unlock the Power of Data

In today's data-driven world, the ability to analyze and interpret complex data sets is crucial for informed business decisions. Our Data Science Professional Program is designed to equip you with essential skills and knowledge to excel in data science. From data analysis and visualization to machine learning and big data technologies, our comprehensive curriculum ensures you gain practical, hands-on experience.



This **IBM - Data Science Professional Program** covers self-paced e-learning materials including course content, Lab/Assignment, hands on experience and Certification of IBM after completing the exam by IBM.

## What You Will Learn

**Python** : Begin your journey with an in-depth understanding of Python, a powerful programming language used extensively in data science. This course covers the basics and helps you build a strong foundation for more advanced topics.

**Introduction to Data Science / Data Science 101** : This course provides a comprehensive introduction to data science, covering fundamental concepts, methodologies, and the overall landscape. Learn the basics of data collection, cleaning, and exploration.

**Python for Data Science** : Delve deeper into Python with a focus on data science applications. This course teaches you to utilize Python libraries such as Pandas, NumPy, and SciPy for data manipulation and analysis.

**Data Science Methodology** : Understand the structured approach to solving data science problems. This course covers the data science lifecycle, from understanding the problem to deploying the model, ensuring a robust methodology.

**Data Visualization with Python** : Learn to create compelling visualizations using Python libraries like Matplotlib and Seaborn. This course emphasizes the importance of data visualization in interpreting and presenting data insights effectively.

**Data Analysis with Python** : Develop advanced data analysis skills using Python. This course covers statistical analysis, data wrangling, and exploratory data analysis techniques to draw meaningful insights from data.

**Data Visualization with R** : Explore data visualization techniques using R. This course introduces you to R libraries such as ggplot2, enabling you to create interactive and informative visual representations of data.

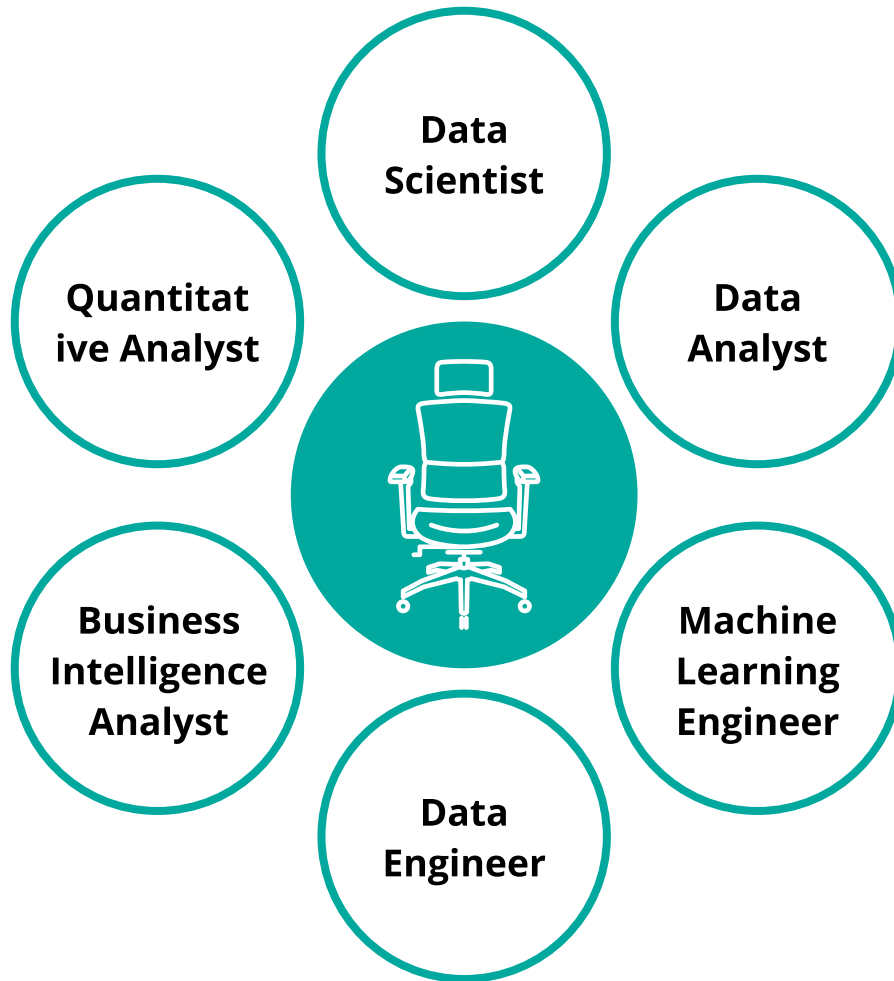
**R for Data Science** : Gain proficiency in R for data science applications. Learn to manipulate and analyze data using R, focusing on its powerful capabilities for statistical analysis and graphical representation.

**Scala 101** : Discover the basics of Scala, a versatile programming language that integrates well with big data technologies. This course covers essential Scala concepts and prepares you for handling large-scale data processing.





# Career Opportunities



## Course Benefits

**1600+**  
**Enrolled**

**4.8 / 5**  
**Rating**

**Self Paced  
E-Learning  
Course Material**

**Lab/  
Assignments**

**Hands on  
Practice Test**

**60+  
Hours**

**6  
Months**

**Dought Clearnace  
Session**

**IBM  
Certifications**

**100%  
Job Assistance**

# About TheLearnAge

TheLearnAge is your ultimate online educational platform offering over 350+ online courses designed to upgrade your skills and keep you ahead in today's smart world. With industry-leading partners such as **IBM, Microsoft, Cisco, Tally, Adobe, Autodesk, Apple, PMI, Meta, and many more**, you can learn directly from the experts and get certified in the latest technologies and tools that drive innovation.

TheLearnAge provides certification programs to validate skills and boost career opportunities within a flexible and innovative learning setting. Students have the freedom to engage with state-of-the-art curriculum at their preferred speed, enhancing their market value and competitiveness. With a user-friendly interface and a dedication to excellence, the platform guarantees a top-notch educational journey for skill improvement and career progression.

## Certified By



Master the future with TheLearnAge. Learn from the best, including IBM, Adobe, Autodesk, PMI, Cisco, Microsoft, Tally, Apple, Meta. Get certified in the latest technologies. Advance your career with flexible, expert-driven courses.



# Why TheLearnAge



## Extensive Course Selection

Offers over 350+ online courses covering a wide range of topics to upgrade skills and knowledge.



## Industry-Leading Partners

Collaborates with top industry leaders like IBM, Microsoft, Cisco, Tally, Adobe, Autodesk, Apple, and PMI, Meta, providing expert-led courses and certifications.



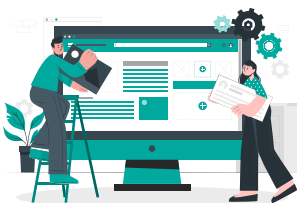
## Official Certification Program

Provides certification programs that validate learner's skills and credentials, enhancing their career prospects and competitiveness in the job market.



## Placement Opportunities

Enables learners to receive placement offers from big companies, boosting their employment potential



## Intuitive Interface

Features a user-friendly learning management system that makes course navigation and usage seamless.



## Marketability and Career Enhancement

Equips learners with the skills and certifications needed to succeed and stay competitive in today's rapidly evolving job market.

# Eligibility Criteria

For admission into this Full Stack Developer, candidates :

- ✓ 12th class or an 1 equivalent level.
- ✓ A degree/diploma in engineering
- ✓ A bachelor's or master's in computer science
- ✓ Inclination towards Programming
- ✓ Working Professional
- ✓ Any technical Degree



# How It Works!!!



## 1. Sign up

Sign Up with Mobile Number / Email Id.

## 2. Browse and Select

Once you have signed up and logged in, you can start exploring our wide range of specialized and job-ready e-learning programs & certifications.

## 3. Add Courses to Cart

After you've found the courses/ programs that align with your learning goals, you can add them to your cart.

## 4. Make Payment

When you are ready to enroll in your selected courses/programs, you can proceed to make the payment securely on our platform.

## 5. Confirmation Email

After successful payment, you will receive a confirmation email acknowledging your course/program enrollment within 24-48 Hours.

## 6. Access Course Materials

Once you receive the email with course links, you can access the course materials and resources.

## 7. Certificate Eligibility

Complete your purchase course/ program within 6 months to be eligible for certifications.

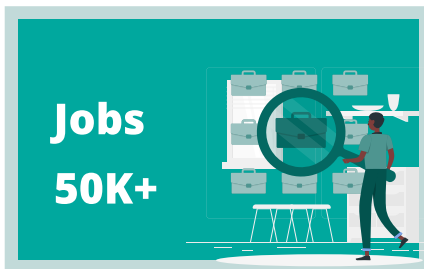
## 8. Completion

You will have to give an online exam conducted by IBM and on passing that exam, you will receive your IBM certificates.



# Demand for Data Science Engineer

The role of a Data Science Engineer has emerged as one of the most sought-after careers in the modern job market. Organizations across various industries are increasingly relying on data-driven decision-making, creating a high demand for professionals who can effectively analyze and interpret complex datasets.



## Key Drivers of Demand

### 1. Technology and IT

Tech giants and IT firms are at the forefront of leveraging big data. Companies like Google, Amazon, and Microsoft are constantly seeking data science engineers to develop innovative solutions, optimize operations, and enhance customer experiences.

### 2. Healthcare

In healthcare, data science engineers play a crucial role in advancing medical research, improving patient care, and optimizing hospital operations. They work on projects ranging from genomic analysis to predictive analytics for patient outcomes.

### 3. Finance and Banking

Financial institutions are heavily investing in data science to enhance risk management, detect fraud, and personalize customer services. Data science engineers help banks and financial firms make informed decisions by analyzing market trends and consumer behavior.

### 4. Retail and E-commerce

Retailers and e-commerce platforms use data science to understand consumer preferences, optimize supply chains, and create personalized marketing strategies. Companies like Walmart and Alibaba employ data science engineers to drive sales and improve customer satisfaction.



# CAREER PATH WITH SALARY PACKAGES

**Entry-Level / Junior Data Science Engineer**

**INR 6 LPA — INR 8 LPA per year**

**Mid-Level Data Science Engineer**

**INR 10 LPA — INR 15 LPA per year**

**Senior Data Science Engineer**

**INR 18 LPA — INR 22 LPA per year**

**Lead Data Science Engineer**

**INR 25 LPA — INR 30 LPA per year**

**Director of Data Science**

**INR 35 LPA — INR 40 LPA per year**



# Learning Path Structure

**1**

**Python**

**Introduction to Data Science/ Data Science 101**

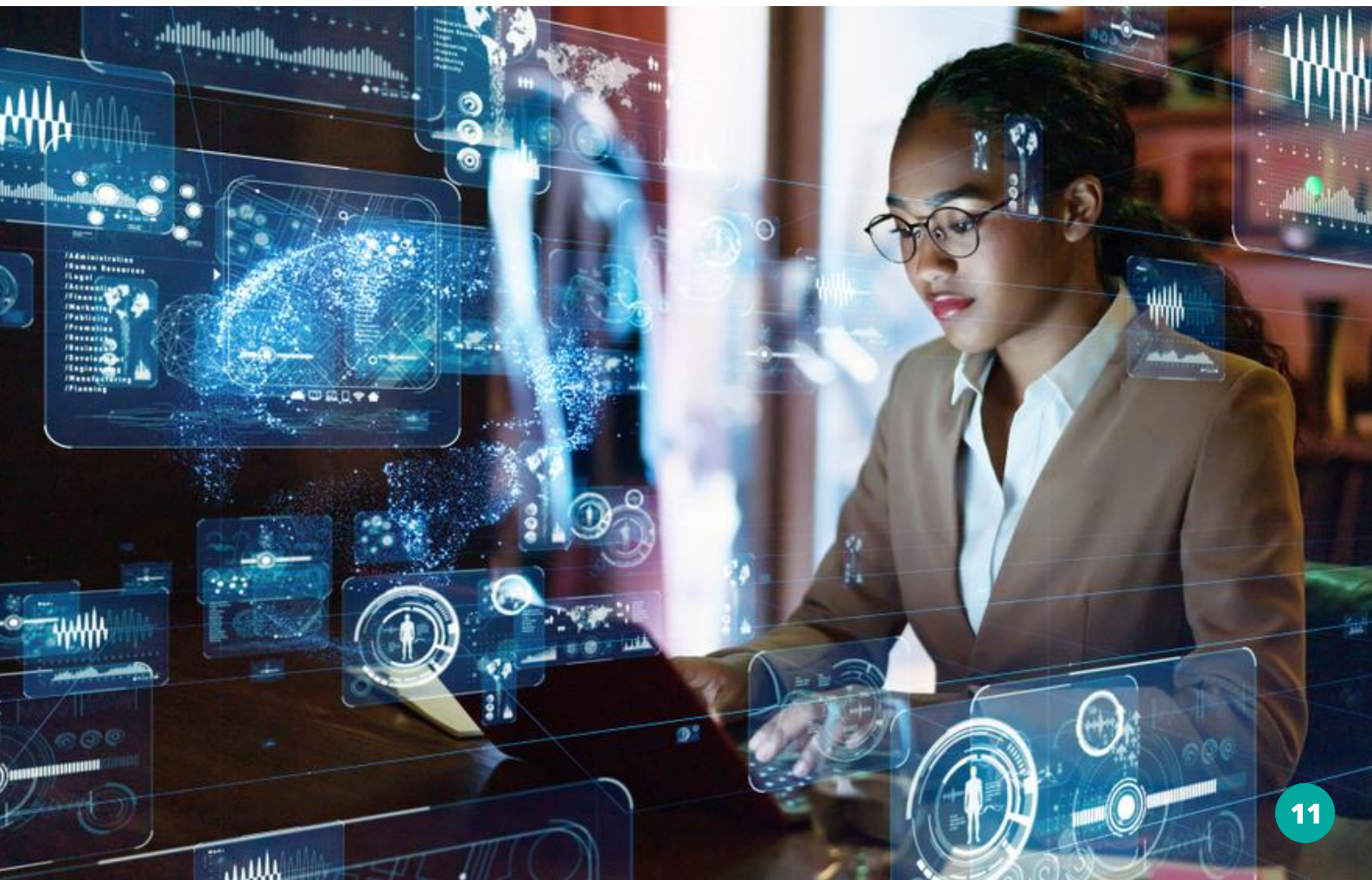
**2**

**3**

**Python for Data Science**

**Data Science Methodology**

**4**





**5**

**Data Visualization with Python**

**Data Analysis with Python**

**6**

**7**

**Data Visualization with R**

**R For Data Science**

**8**

**9**

**Scala 101**





# Learning Path Details

## Course 1 : Python 1

Module 1: Introduction to PYTHON

Module 2: Deep dive into PYTHON

Module 3: Python Libraries

Module 4: Error Handling

Module 5: Other Topics

Module 6: Regression (Use case study)

Module 7: Other Regression related topics

Module 8: Advance

## Course 2 : Introduction to Data Science/ Data Science 101 2

Module 1: Defining Data Science

Module 2: What do data science people do?

Module 3: Data Science in Business

Module 4: Use Cases for Data Science

Module 5: Data Science People



## **Course 3 : Python for Data Science**

# 3

Module 1 : Python Basics

Module 2 : Python Data Structures

Module 3 : Python Programming Fundamentals

Module 4 : Working with Data in Python

## **Course 4 : Data Science Methodology**

# 4

Module 1 : From Problem to Approach

Module 2 : From Requirements to Collection

Module 3 : From Understanding to Preparation

Module 4 : From Modeling to Evaluation

Module 5 : From Deployment to Feedback

## **Course 5 : Data Visualization with Python**

# 5

Module 1 : Introduction to Visualization Tools

Module 2 : Basic Visualization Tools

Module 3 : Specialized Visualization Tools



Module 4 : Advanced Visualization Tools

Module 5 : Creating Maps and Visualizing Geospatial Data

## **Course 6 : Data Analysis with Python**

# 6

Module 1 : Importing Datasets

Module 2 : Cleaning and Preparing the Data

Module 3 : Summarizing the Data Frame

Module 4 : Model Development

Module 5 : Model Evaluation

## **Course 7 : Data Visualization with R**

# 7

Module 1 : Basic Visualization Tools

Module 2 : Basic Visualization Tools Continued

Module 3 : Specialized Visualization Tools

Module 4 : How to create Maps

Module 5 : How to build interactive web pages



# Course 8 : R for Data Science

# 8

Module 1 : R basics

Module 2 : Data structures in R

Module 3 : R programming fundamentals

Module 4 : Working with data in R

Module 5 : Strings and Dates in R

# Course 9 : Scala 101

# 9

Module 1 : Introduction section

Module 2 : Basic Object Oriented Programming section

Module 3 : Case Objects and Classes section

Module 4 : Collections section

Module 5 : Idiomatic Scala section

## Course Inclusions





# Certification

Upon completion of this Self-paced E-Learning course and passing the online examination taken by IBM, you will receive an official IBM certificate to your registered Email ID.

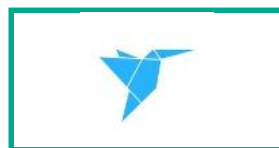
You will receive 9 certifications from IBM for each of the courses in the learning path. These certificates will testify to your skills as an expert Data Science Engineer. These Certificates are recognized across the world.



**So be a part of the IBM Certified online courses program today and begin your journey towards a brighter future!**

# Job Placement Opportunities

All these following Companies are waiting for you :



# Talk to Admissions Counselor

Our admissions counselors are prepared to address your questions or concerns about this program.


Our team is available to:

- Answer your questions about the admission process.
- Provide insight into the curriculum, program outcomes, and related information.
- Give any other queries.
- **Call Us : +91-75728 45000**

## Contact Us



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