

Data Analytics Certification

Introduction

This certificate offers a light introduction to data analysis concepts, the job of a data analyst, and the tools employed in routine tasks. You will learn the basics of data analysis, such as data gathering and data mining, as well as the data ecosystem. The soft skills needed to effectively convey your data to stakeholders will next be covered, along with how mastering these abilities can enable you to make decisions based on data. The next step is to identify the key players in the data ecosystem and investigate the various technologies available both locally and online. Explore more of this thrilling voyage and learn about Hadoop, Hive, and Spark, three popular big data technologies. With the help of this certificate, you will be able to picture what a data analyst does on a daily basis, comprehend the various career options in data analytics, and locate the numerous resources that are available to help you become an expert in this field.

The basics of data collection will be explored, and you'll discover how to identify your data sources. The usage of visualizations and dashboard tools will next be covered as you learn how to clean, analyze, and share your data. All of this is brought together in the final project, which will evaluate your understanding of the certificate material, investigate what it means to be a Data Analyst, and present a real-world data analysis problem.

Learning Outcomes

After the completion of this certificate, students would be able to:

- Work with data analysis tools
- Work with data visualization, normalization and big data
- Work as a data analyst

Curriculum

Week	Lecture	Topics
1	1	Introduction to Data and Data Analytics
2	2	Data Structures and Algorithms
3	3	Probability and Statistics Concepts
4	4	Relational Database Management System Concepts
5	5	Business Fundamentals
6	6	Text Analysis
7	7	Data Collection
8	8	Data Visualization
9	9	Statistical Analysis
10	10	Forecasting Data Analysis
11	11	Mid Term Presentations
12	12	Supply chain Analytics
13	13	Customer Analytics
14	14	Retail Analytics
15	15	Social Networking Analysis
16	16	Pricing Analysis
17	17	Marketing Analysis
18	18	Optimization
19	19	Data Reduction and Normalization
20	20	Big Data Analytics
21	21	Machine Learning
22	22	Simulation
23	23	Final Project Presentations
24	24	

Benefits of Certification

- To learn data analysis and data visualization
- Working with Big data platforms

Entry Requirements

- Intermediate/O/A-level
- Basic Programming Skills
- Basic Computer Skills

Mode of Classes

- Online
- On Campus