

Curriculum

Course 1 (5 weeks)

Introduction to Data Management

- Welcome to the Program
- Analytics Problem Solving
- Intro to Python
- Data Science in Python
- Python assignment
- Basic SQL
- Advanced SQL
- SQL Assignment
- Investment Case Study

Course 2 (7 weeks)

Statistics & Exploratory Data Analysis

- Visualisation in Python
- Visualization using Tableau
- Exploratory Data Analysis
- Uber Supply- Demand Gap
- Inferential Statistics
- Hypothesis Testing
- Statistics Assignment
- Statistics Case Study

Course 3 (8 weeks)

Predictive Analysis 1

- Linear regression
- Linear Regression Assignment
- Logistic Regression
- Unsupervised learning: Clustering
- Clustering Assignment
- PCA

- Principles of Model selection
- Case Study - HR analytics

Course 4 (8 weeks)

Predictive Analysis 2

- Advanced Regression
- SVM module
- SVM Assignment
- Tree Models (no deadline)
- Tree Models + Model Selection
- Model Selection Assignment
- Telecom Churn Case Study

Course 5 (5 weeks)

Introduction to Big Data Analysis

- Introduction to Big Data, Big Data Storage and Processing Framework - Hadoop
- Hive and Sqoop, Familiarization with AWS
- Big Data Storage and Processing- Assignment (Hive)
- Big Data Processing using Apache Spark
- Spark Case study

Course 6 (4 weeks)

Domain Elective (elected from given options)

Course 7 (6 weeks)

Capstone Project (elected from given options)