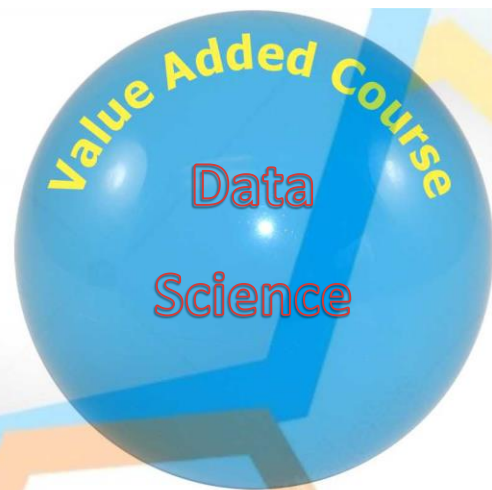


Course Objective

- To develop fundamental knowledge of concepts underlying data science projects.
- To develop practical skills needed in modern data analytics.
- To give a hands-on experience with real-world data



Contents

Module 1: Data Analytics – An Insight (8 Hours)

Introduction
Data Evolution – At Glance
Data Science
Data Analytics
Big Data Analytics
Big Data Applications
Data Analytics case study

Module 2: Exploring Python Basics (9 Hours)

Interactive Execution
Programs in Python
Functions
Strings
Dictionaries
Files
Classes
Functional Programming

Module 3: Data Visualisation in Python (9 Hours)

Introduction
Exploratory Data Analytics
Lattice Pacakage
Datasets
Histogram
Density Plot
Box Plot
Bar Chart
Strip plot and different plots

Module 4: Regression Analysis with Case study (10 Hours)

Introduction
Case study – 1 Simple Linear Regression
Multiple Linear Regression
Case study – 2 Multiple Regression Analysis- PIMA dataset
Diagnostic Plots
Prediction and Confidence Intervals
Case study-3 benign breast disease dataset
Deviation analysis
visualization

Duration

12 weeks course, 3 lectures per week for 12 weeks
Total 36 hours

Faculty

Dr. Sanjeev Goyal, Asst. Prof. (Mechanical Engineering)
Email: ersanjeevgoyal@gmail.com
Mobile: 8700682560

Skill Set Gain

Developed fundamental knowledge of Data Science.

Developed Practical data analysis skill.

Hands on experience and real world data analysis.



J. C. Bose University of Science and Technology, YMCA, Faridabad
(formerly YMCA University of Science and Technology)

A State Govt. University established wide State Legislative Act. No. 21 of 2009

SECTOR-6, FARIDABAD, HARYANA-121006

Website: www.ymcaust.ac.in