



Data Science with Python, Machine Learning, SQL and Power BI:

Introduction – SQL

Module 1 : Basic Statistics for Data science

- Basic business statistics, Variable types, Central tendency, Standard deviation and Variance
- Probability Theory – Basics and Baye's theorem
- Data Distributions and 5 -Hypothesis Testing
- Case studies on Hypothesis Testing
- Assignment Case study : probabilities and Hypothesis testing
- Discussion on the Assignment and Query session

Module 2 : Data Visualization – Power BI (there are more detailed topics which I will share during the course)

- Introduction to Power BI , interface and products
- Data Types and basic Visuals
- Data cleaning with Power BI
- Custom Visuals, custom dimensions and measures, slicers and indexing records
- DAX queries
- Complete dashboard and online publishing
- On premises gate way, row level filtering

Module 3: Introduction to Python Programming for Data Science

Data Munging Basics

- Data visualization
- Basic Maths with Python
- Outlier Detection

Module 4 : Introduction to Machine Learning:

- Supervised learning and Unsupervised learning Introduction
- Introduction to regression – simple linear regression
- Multiple linear regression
- Logistic regression
- Random Forest
- Support Vector Machine
- XG Boost
- Cluster Analysis with Python – K means
- DB scan clustering
- Market basket Analysis
- Page Rank Algorithm
- AHP

Module 5 : Optimization

- Introduction to linear programming
- Problems with Linear Programming

Disclaimer: Yes-M Systems and/or their instructors reserve the right to make any changes to the syllabus as deemed necessary to best fulfill the course objectives. Students registered for this course will be made aware of any changes in a timely fashion using reasonable means.