



Website : www.citcchandigarh.com

Course Syllabus: Data Analysis with Python

Batch Name: Data Analysis with Python

Eligibility: Graduation

Course Start: 1st of Every Month

Course Duration: 90 Hours

Courses / Modules Paper

Module 1

Paper 1	Paper 2
Data Sets, Data Wrangling and Data Analysis	Model Development, Evaluation and Refinement

Paper 1: Data Sets, Data Wrangling and Data Analysis

Importing Data Sets

- 1.1 Meaning of Data
- 1.2 How to use libraries in Python to import data from multiple sources
- 1.3 Analysis of Imported Data Set

Data Wrangling

- 1.1 Performing data wrangling tasks (like handling missing values in data, normalizing data, grouping data values into bins and converting categorical variables into numerical quantitative variables)

Exploratory Data Analysis

- 1.1 Meaning of Exploratory Data Analysis
- 1.2 Statistical Calculations such as Mean, Median, Mode and Quartile values
- 1.3 Using Pearson correlation method to compare two numerical variables
- 1.4 Using Chi-Square test to find the association between two categorical variables

Paper 2: Model Development, Evaluation and Refinement

Model Development

- 2.1 Define Explanatory and Response Variable
- 2.2 Understanding differences between Simple linear regression and Multi-linear regression models
- 2.3 Interpretation and use of R-squared and Mean-square Errors measures to perform evaluations

Model Evaluation and Refinement

- 2.1 Importance of Model Evaluation
- 2.2 Understanding Data Model Refinement Techniques

