VALUE ADDED COURSE
SYLLABUS
VACMAFD22 - Fundamentals of Data Analytics

Course Objective:

To help the students rekindle their critical thinking and widen their knowledge of data analytics.

Unit 1 - Working with Data (6 hours)

Introduction - Working with Data - The OSEMN Framework - Obtaining Data - Scrubbing Data - Exploring Data - Modelling Data -Interpreting Data

Unit 2 - Python for Data Analysis (6 hours)

Introduction - Python for Data Analysis - Data and Data Formats - Myths of Programming

Unit 3 - Variables and data Structures in Python (6 hours)

Introduction to Python: Variables Part 1 - Introduction to Python: Variables Part 2 Introduction to Python: Variables Part 3 - Introduction to Python: Data Structures

Unit 4 - Conditional Statements and Functions in Python (6 hours)

Introduction to Python: Conditional Statements – Iteration - A Simple Marketing Analysis with Example - Functions in Python - Built In Functions - Function Writing

Unit 5 - Data Cleaning and Processing (6 hours)

Introduction: Data Cleaning and Processing - Working with Data in Spread sheets - Number - Formats and Sorting in Google Sheets - Filtering Data with Google Sheets - Functions in Google Sheets - Data Visualization in Google Sheets

Book for Study:

Rudolf Mathar, Gholamreza Alirezaei, Emilio Balda, Arash Behboodi - Fundamentals of Data Analytics _ With a View to Machine Learning-Springer International Publishing_Springer (2020)

Book for Reference:

LjubomirPerkovic, " Introduction to computing using Python", 2nd Edition, John Wiley & Sons, 2012.

ASSESSMENT METHOD

A Practical Examination of two hours duration for 50 marks will be conducted at the end of the course.