

StatHarbor-001: Introduction to Descriptive Statistics

Overall Objective:

This course is designed to provide participants with an understanding of fundamental statistical concepts and the principles of probability calculations that form the foundation of statistics.

Specific Objectives:

By the end of this course, participants will be able to:

- Apply fundamental principles of probability calculus.
- Accurately describe and summarize datasets.

Prerequisites:

None.

Course Content:

1. Calculation of Probabilities
2. Understanding the Concept of Population, Variable, and Sample
3. Exploring the Different Types of Variables
4. Analysis of Raw and Aggregated Data, Staffing Tables, and Frequency Tables
5. Comprehension of Central Tendency Measures (Mean, Median)
6. Learning Dispersion Measures (Standard Deviation, Interquartile Range)
7. Utilization of Graphical Representations (Histogram, Box Plots)

Learning Process:

This course is conducted entirely online. Participants are expected to engage with the course materials and complete the exercises independently. The course extends over two months, encompassing 16 hours of instruction, divided into weekly 2-hour sessions. These sessions are designed to address participants' queries and enhance their learning experience. Post-session, participants will be provided with practical exercises on R. It is recommended that this course is undertaken concurrently with the 'Introduction to R Software' course. Participants will also have access to video materials for additional learning support. The course begins with a placement test and concludes with a final assessment. Upon successful completion, participants will receive a certificate of achievement.