

IMQT1001 BUSINESS STATISTICS (3-0-0)

Course Objectives:

1. To learn adequate theoretical; concept of statistics in various applied field in management decision making
2. To understand role of statistical tools in managerial decision making
3. To understand the applications of various quantitative techniques in managerial setting.

Module-I: Statistics Introduction: Meaning and definitions of statistics; importance of statistics in business; limitations of statistics; types of data, collection of data; classification and tabulation of Data; graphic and diagrammatic presentation of Data. Measures of Central Tendency Introduction: The Arithmetic Mean; The Median; The Mode; comparison between mean, median and mode: The geometric Mean; The Harmonic Mean.

Module-II: Measures of Dispersion: Introduction; The Range; The Quartile Deviation; The Mean Deviation; The Standard Deviation; Coefficient of Variation. Introduction, Skewness; Measures of Skewness; Moments; Kurtosis.

Module-III: Probability,Introduction; Basic terminology in Probability; three types of Probability. Probability Axioms; Probability under conditions of statistical independence and dependence: Bayes' Theorem.

Course Outcomes:

- CO-1: Collect, organize, and analyse data using appropriate statistical techniques and software tools.
- CO-2: Demonstrate proficiency in descriptive statistics, including measures of central tendency, dispersion, and graphical representation of data.
- CO-3: Build and evaluate predictive models using statistical methods, enabling them to forecast future trends, identify patterns, and make strategic decisions based on predictive analytics.
- CO-4: Develop a solid understanding of probability theory and its applications in business contexts.

Books:

- Statistics for Management - Lavin &Rubbin (TMH)

Statistical Methods and Quantitative Techniques- Digambar Patri (KP)