

ADVANCE BUSINESS STATISTICS
COURSE NO: 461

Introduction to basic concepts:

Descriptive statistics, probability, discrete and continuous probability distribution, binomial, Poisson, negative binomial, Hypergeometric, exponential, Gamma and normal distributions.

Sampling; estimation and Confidence intervals:

Estimation of Key parameters, Confidence intervals.

Hypothesis testing and Analysis of Variance:

Testing hypotheses about mean, variance and proportion.

Testing using confidence intervals and p-values.

Regression and Correlation Analysis:

Linear regression, non-linear regression, linear correlation, multiple and partial correlation.

Evaluation and interpretation of results.

Time Series and Forecasting index:

Decomposition Time Series, Simple forecasting techniques.

Non-parametric Statistics:

Sign test, Wilcoxon Signes-rank test, Wilcoxon rank sum test, Spearman rank correlation and the run test.

TEXT:

Siegel, A.F. (2000), Practical Business Statistics,
4th Edition, Irwin/McGraw-Hill, Burr Ridge, Illinois

Aczel, A.D. (1993), Complete Business decision, McGraw-Hills, New York.