

BUSINESS ANALYTICS AND VISUALIZATION

Course	BUSINESS ANALYTICS/WITH DATA VISUALIZATION AND ANALYSIS	Credits	NA
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No. of contact hours : 16 (Sixteen Hours)

Session Duration : 8 Hours

Objectives

Business analytics (BA) refers to the skills, technologies, practices for continuous iterative exploration and investigation of past business performance to gain insight and drive business planning with emphasis on statistical analysis. Analytics is used to derive insights from an organization's data and find opportunities for performance improvement.

Analytics help managers gain improved insight about their business operations and make better, fact-based decisions with use of data, information technology, statistical analysis, quantitative methods, and mathematical or computer-based models. The course is intended to take students through different processes, tools and techniques used in Business Analytics with the help of hands-on case studies.

At the end of the course the students should be able:

- To understand basics of Business Analytics
- To assess a business problem and to think a possible solution
- To get started with analytics/BI tools Advanced Excel, Tableau

4. DETAIL SESSION OUTLINE

Session Plan (This plan may change depending upon the pace of the course)

Session No.	Topic	Reading	Schedule
1	Overview of Business Analytics - Provides overall understanding of business analytics as a discipline <ul style="list-style-type: none"> • Introduction • Difference between Business intelligence, Business analytics and Business Analysis. • Predictive Analytics • Use Cases of Analytics in different business domains • Business Analytics Framework • Analytical Tools/software and techniques employed in Analytics 	<i>Analytics at Work: Smarter Decisions, Better Results</i>	<i>2 hours</i>
	Advanced Excel/ SPSS Statistics <ul style="list-style-type: none"> a) Excel <ul style="list-style-type: none"> • Introduction to Advanced Excel • Lookup Functions 		

BUSINESS ANALYTICS AND VISUALIZATION

2-4	<ul style="list-style-type: none"> • Index and Match Functions • If Functions • Text Functions • Text Strings • Scenarios and Goal Seek • Pivot Tables • Financial Functions • String Functions <p>b) Basic Statistics</p> <ul style="list-style-type: none"> • Data Types, Sampling • Measures of Central Tendency • Estimation, Confidence Interval & Hypothesis Testing • Correlation, Regression, Other Multivariate Techniques <p>c) Automation using Excel</p> <ul style="list-style-type: none"> • Automated Power points 		6 hours
5-7	<p>Analytics using Tableau- Use of Tableau and Statistics to understand different processes in Analytics framework</p> <p>a) Understanding of predictive modeling processes</p> <ul style="list-style-type: none"> • Business Process Understanding • Data Understanding • Data Preparation • Model Building • Model Evaluation • Implementation 		6 hours
8	<p>Business Case Study</p> <p>Conclusion/exams/discussions</p>		2 hours

Class Protocol:

- Laptop is mandatory (which will be installed with requisite analytics softwares as and when required) and to be used in class when specifically told to use them
