GUJARAT UNIVERSITY

B. K. SCHOOL OF PROFESSIONAL & MANAGEMENT STUDIES

MBA IN BUSINESS INTELLIGENCE

CHOICE BASED CREDIT SYSTEM

COURSE CURRICULUM WITH RULES AND

REGULATIONS FOR TWO-YEAR FULL-TIME PROGRAMME

MBA in Business Intelligence

Sr. No.	Course Code	Semester-I	Credit
1	BI-101	Principles of Management (PoM)	4
2	BI-102	Financial Accounting for Managers (FAM)	4
3	BI-103	Business Communications & Etiquettes (BCE)	4
4	BI-104	Information Systems for Management (ISM)	4
5	BI-105	Applied Statistics for Decision Making (ASDM)	4
6	BI-106	Data Analysis using Spreadsheet (DAS)	4
7	BI-107	Foundation of Data Management in R (FDM)	4
8	BI-108	Tableau For Business Analytics (TBA)	4
Total			32

Sr. No.	Course Code	Semester-II	Credit
1	BI-201	Marketing Management (MM)	4
2	BI-202	Behavioural Sciences and Human Resource Management (BS&HRM)	4
3	BI-203	Corporate Finance (CF)	4
4	BI-204	Data Analysis using SPSS (DA-SPSS)	4
5	BI-205	Business Research & Analytics (BRA)	4
6	BI-206	Fundamentals of SQL (FSQL)	4
7	BI-207	Python For Business Analytics (PBA)	4
8	BI-208	Power BI for Data Visualization (PBI-DV)	4
Total			32

Sr. No.	Course Code	Semester-III (Compulsory Courses)	Credit
1	BI-301	Employment Enhancement Skills (EES)	4
2	BI-302	Structural Equation Modeling (SEM)	4
3	BI-303	Multivariate Data Analytics (MDA)	4
4	BI-304	Contemporary Issues in Business Analytics (CIBA)	4
Total			16

Sr. No.	Course Code	Semester-III (Elective Courses) Any Four Will Be Selected	Credit
1	BI-E101	Supply Chain & Logistics Analytics (SC&LA)	4
2	BI-E102	Digital Marketing, Web and Social Media Analytics (MW&SMA)	4
3	BI-E103	HR Analytics (HRA)	4
4	BI-E104	Financial Technology Services and Management (FTS&M)	4
5	BI-E105	Financial Analysis & Reporting (FAR)	4
6	BI-E106	Fraud And Risk Analytics (FRA)	4

7	BI-E107	Fundamentals of Machine Learning (FML)	4
Total			16
Total 32 Credits in 3rd semester (Compulsory+ Elective)			

Sr. No.	Course Code	Semester-IV (Compulsory)	Credit
1	BI-401	Summer Internship Programme 6 to 8 Weeks after First MBA-I (SIP)	2
2	BI-402	Special Study Report (SSR)	4
3	BI-403	On-site Project Training / On Job Training 4 to 5 Months (Long Term) Dissertation Project Report (DPR)	6
Total			12

SEMESTER - I

Subject Name: Principles of Management (PoM)
Subject Code: BI-101

Course Objective:

This course is designed to allow the students to familiarize with basic management and organization theories. It also aims at helping students see the application of these theories to contemporary situations. By the end of the course, students would have a good understanding of:

1) How to manage organization's functions and other activities in the dynamic world.

2) How and why organizations are structured differently and their implications.

3) How managers can adapt to environmental changes.

4) Various managerial skills.

Total Hours: 40
Number of credits: 4
Lectures per week: 4 of one hour each

Unit	Contents	Credit
I	Business - meaning -business and profession, requirements of a successful business- Organisation - meaning - importance of business organisation. Forms of business Organisation-Sole traders, partnership, Joint Hindu family firm - Joint Stock Companies - Cooperative Organisations - Public Utilities and Public Enterprises.	1
II	Nature and Scope of Management process – Definitions of Management – Management: a science or an art? - Scientific Management - Managerial functions and roles – The evolution of Management Theory. Planning: meaning and purpose of planning - steps in planning - types of planning. Objectives and Policies - Decision making: Process of Decision making - types of Decisions.	1
III	Organizing: Types of organization - Organizational structure - span of control - use of staff units and committees. Delegation: Delegation and centralisation - Line and Staff relationship. Staffing: Sources of recruitment - Selection process - training.	1
IV	Directing: Nature and purpose of Directing. Controlling: Need for co-ordination - meaning and importance of controls - control process - Budgetary and non-Budgetary controls - Modern trends in Management Process - case studies	1
Total		4

Textbooks

1 James Stoner, Edward Freeman, Deniel Gilbert Jr., 'Management' Prentice Hall of India Latest Edition

2 Stephen P. Robbins and Mary Mathew 'Organization Theory – Structure, Design and Applications' Prentice Hall of India Latest Edition

Reference Books

1 Koontz and Weihrich 'Essentials of Management' Tata McGraw Hill 6th Edition, 2004
2 Richard L. Daft 'Organization Theory & Design' Thompson South-Western 8th Edition, 2004

List of Journals / Periodicals / Magazines/ Newspapers etc.

1 Indian Management,
2 Harvard Business Review,
3 Journal of Business Strategy,
4 Vikalpa etc.

Subject Name: Financial Accounting for Managers (FAM)
Subject Code: BI-102

Course Objective:
The objective of the course is to acquaint the students with the language of Accounting and to develop in them the ability to evaluate and use accounting data as an aid to decision making. The main purpose is to assist the students in developing skills in problem solving and decision making in the financial area. Emphasis is laid on analysis and utilization of financial and accounting data for planning and control.

Total Hours: 40
Number of credits: 4
Lectures per week: 4 of one hour each

Unit	Contents	Credit
I	Fundamentals of Accounting Accounting as an Information System Balance Sheet and Profit & Loss Account and Related concepts Accounting Mechanics: Basic Records Accounting Mechanics: Preparation of Financial Statements Revenue Recognition and Measurement Revenue Recognition, Matching of Revenue and Expenses: Inventory Pricing and Valuation, Valuation of Inventories	1
II	Fixed Assets and Deprecation Accounting for Fixed Assets, Depreciation Accounting, Borrowing Costs Intangible Assets Intangible Assets Accounting for Amalgamation Analysis of Financial Ratios	1
III	Analysis of Cash Flow Statements; Cash Flow Statement Foreign Currency Accounting Effects of Changes in Foreign Exchange Rates (Revised 2003) Accounting for Investments Accounting for Taxes on Income	1

IV	Regulatory Framework of Financial Reporting in India Other Accounting Standards: Disclosure of Accounting Policies, Segment Reporting, Earnings Per Share, Interim Financial Reporting Contemporary Issues, Consolidation of Accounts; Consolidated Financial Statements, Accounting for Investment in Associates in Consolidated Financial Statements Trends in Corporate Reporting- Economic Value Added Value Added Statement Corporate Governance Reporting	1
Total		4

Textbooks

1. S. K. Bhattacharya, John Dearden Accounting for Management, Text and Cases Vikas Publishing House
2. D. S. Rawat Students' Guide to Accounting Standards Taxman Allied Services
3. Ambrish Gupta Financial Accounting for Management –An Analytical Perspective Pearson Education
4. Ashok Bannerjee Financial Accounting – A Managerial Emphasis Excel Books

Reference Books

1. Paresh Shah Basic Accounting for Management *Oxford Higher Education*
2. S N Maheshwari, S K Maheshwari A Text Book of Accounting for Management Vikas Publishing, New Delhi
3. N Ramchandran , Ram Kumar Kakani Financial Accounting for Management Tata Mc Graw Hill
4. Robert N Anthony, David F Hawkins, Kenneth A Merchant Accounting: Text and Case The McGraw- Hill companies
5. Harrison and Horngren Financial Accounting Pearson Education
6. P C Tulsian Financial Accounting Pearson Education 2009
7. Pru Marriot, J R Edwards and H J Mellett Introduction to Accounting Sage South Asia Edition
8. Stice and Stice Financial Accounting- Reporting and Analysis Cengage Learning
9. Carl S. Warren, James M. Reeve, Jonathan E. Duchac Financial Accounting: Concepts, Methods, and Applications Cengage Learning, 2009

List of Journals / Periodicals / Magazines/ Newspapers etc.

1. The Chartered Accountant,
2. The Management Accountant,
3. The Chartered Secretary Journal of Finance,
4. Business India / Business Today / Business World,
5. "Vikalpa"

Subject Name: Business Communications & Etiquettes (BCE)
Subject Code: BI-103

Course Objective:
Communication is a very essential skill for the managers to be successful in their professional career. The objective is to acquaint the students with the basic concepts and techniques of communication that are useful in developing skills of communicating effectively.

Total Hours: 40
Number of credits: 4
Lectures per week: 4 of one hour each

Unit	Contents	Credit
I	Concepts of Communications: Definition, Forms of Communication, Objectives of Communication, Characteristics of Communication, Process of Communication, Communication, Roadblocks, Role of Verbal & Non-verbal Symbols in Communication, Barriers to Effective Communication, Overcoming Communication Barriers	1
II	Listening Skills: Definition, Anatomy of poor Listening, Features of a good Listener, Role Play Spoken Communication: Telephone, Teleconferencing, Challenges and etiquette, Oral Presentation: Planning presentation, Delivering presentation, Developing & displaying visual aids, Handling questions from the audience, Audio-visual CD	1
III	Group Discussion & Interviews, Meetings: Ways and Means of conducting meeting effectively, Mock Meetings and Interviews	1
IV	Forms of Communication in Written mode: Basics Body language of Business Letters & Memos, Tone of writing, inquiries, orders & replying to them, sales letters, Job applications & resume, E-mail: How to make smart e-mail, Writing Business Reports and Proposals, Practice for Writing	1
Total		4

Textbooks

1 Murphy Effective Business Communication Tata McGraw-Hill Publishing
2 Koneru Professional Communication Tata McGraw-Hill Publishing
3 Monipally M. M., Business Communication Strategies Tata McGraw-Hill Publishing

Reference Books

1 Bentley, T. J., Report Writing in Business The Chartered Institute of Management Accountants Viva books Pvt. Ltd., New Delhi,
2 Boone, Kurtz, & Block Contemporary Business Communication Wiley Publication
3 McLeod, Raymond and Schell, George P Management Information Systems Prentice Hall, New Jersy, US.
4 Devlin, Frank J, Richard D. Irwin Business Communication Illinois
5 Kaul, Asha Effective Business communication Prentice Hall of India, New Delhi,
6 Lesikar Raymond V. & M. E. Flatley Basic business Communication 10 ed., Tata McGraw-Hill,

7 Ludlow, Ron & F. Panton The Essence of Effective Communication Prentice Hall of India, New Delhi,
8 Monippally, M. M The Craft of Business Letter Writing Tata McGraw Hill, New Delhi,
9 Ray, Reuben, Communication Today Himalaya Publishing House, Mumbai,
10 Thill, John & C. V. Bovee Excellence in Business Communication McGraw Hill Inc.,

List of Journals / Periodicals / Magazines/ Newspapers etc.

1 Harvard Business Review,
2 Business India / Business Today / Business World,
3 University News,
4 Journal of Business Communication,
5 PR Communication Age, etc.
6 Business Communications Quarterly,

Subject Name: Information Systems for Management (ISM)
Subject Code: BI-104

Course Objective:

The objective of the course is to

- Understand the role of the information systems (IS) function in an organization
- Develop an insight as to how information systems influence business strategy and
- Develop the ability to contribute meaningfully towards information system selection.

Total Hours: 40
Number of credits: 4
Lectures per week: 4 of one hour each

Unit	Contents	Credit
I	Introduction to computers-definition, a simple model of computer, Characteristics of computer systems. Types of Software-Application Software, System Software, Operating systems and types, Windows OS and its applications, introduction to Linux.	1
II	Networking: General features. Concept of LAN, MAN and WAN. Internet, Net browsing– browsers, websites, webpage, portals, web searching, email, blog-ging, social networking sites. Concept of virus, prevention and firewalls.	1
III	Overview of a Management Information System. Computers and information processor, Data, information systems, Information resource management and decision making, MIS structure, Structure base on management activity and organization functions.	1
IV	Documentation and communication decision rules. Relevance of decision making. Age of information and application of information. Type of system and subsystems. Preventing systems entropy. System stress and system change. System concepts and its use in MIS. E-Commerce: Introduction, need, growth, advantages & limitations. Traditional Commerce v/s E-Commerce. E-Commerce opportunities for industries, Models: B2C, B2B, C2C.	1
Total		4

Textbooks

1 James O'Brien Management Information System Tata McGraw Hill Latest Edition
2 Turban IT for Management Wiley Latest Edition

Reference Books

1 Jawadekar, W. S Management Information Systems Tata McGraw Hill Latest Edition
2 Laudon and Laudon Management Information System Pearson Education Latest edition
3 McLeod, Raymond and Schell, George P Management Information Systems Pearson Education 10th edition
4 Miller MIS cases: Decision making with Application software Pearson Education Latest edition
5 A. K. Gupta Management Information Systems S. Chand 2008
6 Sanjiva S. Dubey IT Strategy and Management PHI 2009
7 Jaiswal, M.P & Mittal Management Information Systems Oxford 2009

List of Journals / Periodicals / Magazines/ Newspapers etc.

1 Computer Express
2 Digichip
3 PC World
4 Computer Shopper
5 Dataquest etc.

Subject Name: Applied Statistics for Decision Making (ASDM)
Subject Code: BI-105

Course Objective:

The objective behind this course is to impart the basic art and science of gathering, analyzing and using data to identify and resolve managerial and decision making problems. It also focuses on developing student's skills in structuring and analyzing business problems using quantitative analysis and developing aptitude and statistical thinking approach to business problems. This course highlights the effective use of computer software for resolution of statistical problems.

Total Hours: 40
Number of credits: 4
Lectures per week: 4 of one hour each

Unit	Contents	Credit
I	Introduction to Statistics, Statistics in Business, Data Measurement, Charts and Graphs Descriptive Statistics, Measure of central tendency, measure of variability, for Group and ungrouped data, Measures of shape, measures of association and descriptive statistics on the computer. Introduction to probability, Structure of probability, Results of probability, Revision of probability: BAYES' RULE and examples Random variable and probability distribution,	1

	Discrete and Continuous distribution, Expected value and variance of a distribution. Software exposure to the above concepts	
II	Uniform distribution, Hyper-Geometric distribution, Binomial distribution, Poisson distribution and their relationship, Cases form the text book Continuous distribution, Uniform distribution, Normal distribution, Exponential distribution, Cases form the text book Sampling and Sampling distribution Statistical Inference: Estimation for Single Populations	1
III	Hypothesis Testing for Single Populations- Mean, Proportion and Variance, Cases form the text book Statistical Inferences about Two Populations- Mean, Proportion and Variance , Cases form the text book Design of Experiments and Analysis of Variance (Only one way) , Cases form the text book	1
IV	Goodness-Of-Fit-Test, Cases form the text book Test of Independence, Cases form the text book Simple regression Analysis, and Cases form the text book. Simple Regression Analysis, Cases form the text book, Use of Software in Multiple Regression (output analysis)	1
Total		4

Textbooks

1 Ken Black Business Statistics for Contemporary Decision Making Wiley Student Edition
2 Richard I. Levin and David S. Rubin Statistics for Management Pearson Education

Reference Books

1 T N Srivastava and Shailaja Rego Statistics for Management TMH
2 Amir D Aczel and Jayavel Sounderpandian Complete Business Statistics TMH
3 J. K. Sharma Business Statistics Addison Wesley 2000
4 Levine, Stephen, Krehbiel and Berenson Statistics for Managers, Pearson Quantitative Techniques for Decision Tata Mc Graw Hill
5 K. B. Akhilesh & S. B. Balasubrahmanyam Mathematics and Statistics for Management Vikas Publishing.
6 Naval Bajpai Business Statistics Pearson
7 Anderson, Sweeney, Wiliamy Quantitative Methods for Business Cengage Learning
8 C. R. Kothari, Quantitative Technique Vikas
9 M. S. Excel, D. P. Apte, Statistical Tools for Managers Excel Books
10 Qazi Zameeruds, Vijay K. Khara, S. K. Bhamri Business Mathematics Vikas
11 Gopal K. Kanji, Sage, 100 Statistical Tests SAGE
12 R. S. Bhardwaj Business Statistics Excel Books
13 Levine, Krehbiel, Bernson, Viswanathan Business Statistics; A First Cause Pearson Education
14 Anderson, Sweeney, Williams Statistics for Business and Economics Ceenage Learning
15 D. P. Apte Statistics for Managers Excel Books

List of Journals / Periodicals / Magazines/ Newspapers etc.

1 Economic Times

Subject Name: Data Analysis using Spreadsheet (DAS)
Subject Code: BI-106

Course Objective:

The objective of the course is to acquaint the students in understanding the basics of Data Analysis using a simplest yet a powerful tool Google spreadsheet. This data analysis tools is available to everyone. Spread sheets software's are mostly used in workplace to understand and handle data.

The main purpose of this course is to develop the understanding of use and significance of Data Analysis using a simple tool on day to day entered data in any business or workplace setup. And also it provides solution to business problems with data.

Total Hours: 40
Number of credits: 4
Lectures per week: 4 of one hour each

Unit	Contents	Credit
I	About Excel & Microsoft, Uses of Excel, Excel software, Spreadsheet window pane, Title Bar, Menu Bar, Standard Toolbar, Formatting Toolbar, the Ribbon, File Tab and Backstage View, Formula Bar, Workbook Window, Status Bar, Task Pane, Workbook & sheets, Columns & Rows Selecting Columns & Rows, Changing Column Width & Row Height, Autofitting, Columns & Rows, Hiding/Unhiding Columns & Rows, Inserting & Deleting Columns & Rows, Cell, Address of a cell, Components of a cell – Format, value, formula, Use of paste and paste special	1
II	Using Ranges, Selecting Ranges, Entering Information into a Range, Using AutoFill, Creating Formulas. Using Formulas. Formula Functions – Sum, Average, if, Count, max, min, Proper, Upper, Lower, Using AutoSum, Advance Formulas, Concatenate, Vlookup, Hlookup, Match, Countif, Text, Trim **Spreadsheet Charts** : Creating Charts, Different types of chart, Formatting Chart Objects, Changing the Chart Type, Showing and Hiding the Legend, Showing and Hiding the Data Table	1
III	Creating PivotTables, Manipulating a PivotTable, Using the PivotTable Toolbar, Changing Data, Field, Properties, Displaying a Pivot Chart, Setting PivotTable Options, Adding Subtotals to PivotTables, Moving between Spreadsheets, Selecting Multiple Spreadsheets, Inserting and Deleting Spreadsheets Renaming Spreadsheets, Splitting the Screen, Freezing Panes, Copying and Pasting Data between Spreadsheets, Hiding, Protecting worksheets, Making Macros, Recording Macros, Running Macros, Deleting Macros	1
IV	Measures of central tendency, t test, ANOVA, Correlation, Regression and Time series analysis Spread Sheet Modeling in Finance Forecasting financial statements– Capital budgeting decisions, Bond valuation, Stock valuation, Break even analysis, Budgeting, Ratio analysis, Sensitivity analysis, Simulation analysis, Portfolio construction and Working capital.	1
Total		4

Textbooks

1 Ash Narayan Sah Data Analysis Using Microsoft Excel Excel Books 2009
2 Wayne L. Winston Microsoft Excel 2016 - Data Analysis and Business Modeling PHI Learning Private Limited

Reference Books

1 John Walkenbach Microsoft Excel 2016 Bible: The Comprehensive Tutorial Resource Wiley
2 Fischer W Excel: Quick Start Guide from Beginner to Expert (Excel, Microsoft Office); CreateSpace

List of Journals / Periodicals / Magazines/ Newspapers etc.

1 Data Mining and Knowledge Discovery journal published by Springer
2 International Journal of Data Science and Analytics
3 International Journal on Computational Statistics & Data Analysis (CSDA)
4 Analytics India – Magazine
5 International Journal of Business Intelligence and Data Mining

Subject Name: Foundation of Data Management in R (FDM)
Subject Code: BI-107

Course Objective:

This is an introductory course on how to use the R programming language and software environment for data manipulations and munging, exploratory data analysis and data visualizations.

Learning outcomes Students will be familiar to the R ecosystem and learn how to use R for the most common data analysis tasks, including loading, cleaning, transforming, summarizing and visualizing data.

Total Hours: 40
Number of credits: 4
Lectures per week: 4 of one hour each

Unit	Contents	Credit
I	General Introduction into the R Ecosystem Downloading and installing R, History of R, R packages, CRAN, Demonstration of a Data Analysis Project, Brief Overview on R Coding Tools, RStudio, git, GitHub, Constants, operators, functions, variables Random numbers, Vectors and vector indexing, Simple descriptive stats Loops, Conditional expressions, Applying PCA on an image for outlier-detection, Visualizing MDS on a distance matrix Brief Overview on R Coding Tools A Systematic Introduction into Data Types, Levels of measurement (nominal, ordinal, interval, ratio scale), Vector types, data frame objects, rows and columns, indexing, Characteristics of tidy data	1
II	Basic Data Transformations	1

	Create new variables in a data.frame, Filter rows and columns, Merging datasets. Introduction to data.table for More Complex Data Transformations. Filtering and ordering data, Summaries and aggregates New variables, Relational data, Joins on Keys, Introduction into fuzzy joins, Transforming wide and long tables	
III	EDA - Univariate Descriptive Statistics + crosstabs + correlation + ANOVA, EDA - First Steps with Data Visualization: Why not Use Pie Charts, Plots outside of Excel: dotchart and violinplot examples, The Grammar of Graphics in R with ggplot2,Using labels for variable names	1
IV	Introduction to Non-tabular Data Types: Time-series, Spatial data Network data Data Transformations: Converting Numeric Variables into Factors, Data Operations, String Parsing, Geocoding, Dirty Data Problems: missing values, data imputation, duplicates Introduction to R- studio, All univariate, bi-variate and other statistical test using R software.	1
Total		4

Textbooks

1. Dr Mark Gardener Beginning R - The Statistical Programming Language Wrox 2012
2. Dr. Rob Kabacoff R in Action: Data Analysis and Graphics with R Manning Publications 2015

Reference Books

1. Dr Mark Gardener Community Ecology: Methods of analysis using R and Excel Ingram short title 2014
2. Garrett Grolemund Hands-On Programming with R O'Reilly 2014
3. Hadley Wickham R for Data Science: Import, Tidy, Transform, Visualize, and Model Data Shroff/O'Reilly 2017

List of Journals / Periodicals / Magazines/ Newspapers etc.

1. International Journal of Big Data Management
2. International Journal of Information Management
3. International journal of data mining, modelling and management
4. Analytics India – Magazine

Subject Name: Tableau for Business Analytics (TBA)
Subject Code: BI-108

Course Objective:

The main objective behind this course is to provide expertise to students in tableau. This course will help the management students to create visualizations using tableau and utilize storytelling principles for presenting insights in an impactful manner. This also teaches how to apply frameworks to understand business problems and help formulate hypothesis. This course outlines and identifies the different steps of a data science project utilizing the crisp dm framework.

Total Hours: 40
Number of credits: 4
Lectures per week: 4 of one hour each

Unit	Contents	Credit
I	Visualisation using Tableau Data Exploration in Tableau Storytelling in Tableau	1
II	Visualizing and Analyzing Data with Tableau-I Visualizing and Analyzing Data with Tableau – II	1
III	Business Problem Solving with Analytics Understand the Domain, Problem and Implication Formulate Hypothesis	1
IV	The Crisp-DM Framework – Business and Data Understanding Crisp-DM Framework Data Preparation, Modelling, Evaluation and Deployment	1
Total		4

Textbooks

1. Cole Nussbaumer Knaflic Storytelling with Data: A Data Visualization Guide for Business Professionals John Wiley & Sons
2. Ryan Sleeper Practical Tableau: 100 Tips, Tutorials, and Strategies from a Tableau Zen Master O'reilly
3. Ben Jones Communicating Data with Tableau: Designing, Developing, and Delivering Data Visualizations,

Reference Books

1. Jenny Zhang Tableau 10.0 Best Practices Packt online
2. Joshua N. Milligan Learning Tableau 10 Packt online

List of Journals / Periodicals / Magazines/ Newspapers etc.

1. International Research Journal of Engineering and Technology,
2. Journal of Web Librarianship,
3. Journal of Instructional Pedagogies.

SEMESTER - II

Subject Name: Marketing Management (MM)
Subject Code: BI-201

Course Objective:

The objective of this course is to familiarize the students with the marketing concepts and practices and develop their analytical skills, conceptual abilities and substantive knowledge in the aforesaid field. It seeks to achieve the objective by helping the participants to undergo meaningful exercises in decision making in a variety of real life situations. This course is intended to be a foundation course for those who plan to do further work in marketing in the second year. It is also designed to serve as a terminal course for those not intending to specialize in marketing.

Total Hours: 40
Number of credits: 4
Lectures per week: 4 of one hour each

Unit	Contents	Credit
I	**Understanding Marketing Management, Marketing Environment & Marketing information systems** Marketing concepts & practices Developing marketing strategies & plans Scanning the marketing environment Marketing Information system including Marketing Research & demand forecasting and estimation	1
II	**Analyzing Buying Behaviour and Strategic Marketing** Analyzing Consumer markets and Consumer Buying Behaviour. Analyzing Business Markets and Business Buying Behaviour. Market Segmentation & targeting Differentiation & positioning strategies Product life-cycle marketing strategies Dealing with market competition	1
III	**Product Strategies, Designing Services, Branding and Pricing** Setting Product strategy Creating brands and brand equity Developing Pricing strategies and programs Designing and managing Services	1
IV	**Designing Integrated Marketing Channels and Integrated Marketing Communications** Designing and Managing Integrated Marketing Channels Managing Retailing, Wholesaling and Logistics Designing and Managing IMC Managing Mass Communications Managing Personal Communications **Creating Long-term Growth and Contemporary Marketing Practices** Introducing New Market Offerings Tapping Global markets Managing a Holistic Marketing Organization Marketing Ethics New Technology and Marketing	1

Total		4

Textbooks

1. Kotler, Keller, Koshy and Jha "Marketing Management, A South Asian Perspective" Pearson Education
2. Ramaswami & Namakumari Marketing Management: Indian context Macmillan (India) Limited, New Delhi
3. Baines, Fill & Page Marketing Oxford University Press

Reference Books

1. Stanton, Etzel, Walker Fundamental of marketing McGraw Hill Inc. N. York
2. Tapan Panda Marketing Management Excel Books
3. Arun Kumar, N. Meenakshi Marketing Management, Vikas Publishing House N. Delhi
4. Rajan Saxena Marketing Strategies Tata-McGraw Hill Publishing Company, New Delhi.
5. Panwar J. S., Marketing in the new Era SAGE
6. Mazumdar Ramanuj Marketing Strategies, Allied Publishers Ltd. New Delhi.
7. Joel R. Evans, Barry Berman Marketing Management Ceangage Learning

List of Journals / Periodicals / Magazines/ Newspapers etc.

1. Journal of Marketing (American Marketing Association)
2. Indian Journal of Marketing
3. Marketing Master Mind
4. Brand Equity in the Economic Times
5. Business Standard etc.

Subject Name: Behavioural Sciences and Human Resource Management
Subject Code: BI-202

Course Objective:

The Objective behind this course is to sensitize students with the Human side of the organization, present Organizational Behavior as one of the approaches towards Organizational Effectiveness. Additionally, enhance awareness of the students to dynamics of Individual, Group and Organizations. Allow students to understand the importance of Behavioural Science in enhancing their personal effectiveness and improving their contribution to group and organizational processes.

Total Hours: 40
Number of credits: 4
Lectures per week: 4 of one hour each

Unit	Contents	Credit
I	Understanding the Meaning and Context of OB Introduction to OB –What are Organizations, what is OB –Importance, relevance – Disciplines contributing to its knowledge –Evolution of thought in OB –Model of OB	1
II	Understanding Individual Behaviour and Group and team Behaviour Perception -Meaning, sub-processes of perception -Understand how perception influences	1

	behaviour, social perception -Perceptual errors and their outcome Introduction to Groups and Teams -Group Formation, Types, Synergy and Dysfunctions of Group working -Factors affecting group performance -Making Groups and Teams more Effective Work Related Attitudes - Job Satisfaction, Commitment and Organizational Citizenship Behaviour, Employee Engagement and Involvement : Organizational outcomes, Meaning, importance, types of values -Impact of values on Attitudes and Personality	
III	HR Planning And Recruitment Understanding the key HR strategies for the 3 phases of an Employee recruitment, development and assessment	1
IV	Training And Resource Development meaning, types, methods and strategy of effective Training program for employees formulate an effective resource management strategy to create a high performance team Assessment, Compensation And Rewards Effective compensation, compensation strategy, how to determine right compensation for employees, Salary Surveys etc., Financial and non financial rewards for motivation; Meaning and importance of motivation, content and process theories of motivation, linkages between motivation and other OB processes such as leadership, culture development, and more. Motivational challenges	1
Total		4

Textbooks

1. Stephan Robbins, Timothy Judge and Seema Snaghi Organizational Behavior Pearson
2. Fred Luthans Organizational Behavior McGraw-Hill
3. Gargy Dessler and Biju Varkkery– Human Resources Management Prentice Hall India/ Pearson Education – 2003 Indian Reprint
4. Sinha, Sinha and Shekhar Industrial Relations, Trade Unions and Labor Legislations Pearson Education, New Delhi

Reference Books

1. Gregory Moorhead & Ricky W. Griffin Organizational Behaviour Jaico Publication
2. K. Aswathappa Organizational Behaviour Himalaya
3. Niraj Kumar Organizational Behaviour Himalaya
4. PG Acquinas Organizational Behaviour Excel Books
5. Debra L. Nelson & James C. Quick Organizational Behaviour Cengage Learning

List of Journals / Periodicals / Magazines/ Newspapers etc.

1. Journal of Organizational Behaviour
2. Harvard Business Review etc.

Subject Name: Corporate Finance (CF)
Subject Code: BI-203

Course Objective:

The objective of this course is to equip the students with conceptual understanding of finance and its practical application. It is expected that the students possess a sound base in accounting principles and practices including financial analysis. Important decisions that come under corporate finance, namely, setting up of projects covering investment in fixed and current assets, raising funds, and allocation of profits are taken within a framework of risk and return. The course also intends to make students gain the mechanical part of various decisions with the help of selected numerical problems available in various suggested text books. Students are expected to solve a large number of numerical and other assignments which would be the preparatory requirements of this course

Total Hours: 40
Number of credits: 4
Lectures per week: 4 of one hour each

Unit	Contents	Credit
I	**Understanding the Meaning of Financial Management, Financial System, and Basics of Valuation** Introduction to Financial Management; Introduction to the Financial System; The concept of Time value of money Valuation of Bonds and Shares	1
II	**Financing Decision and Sources of long term funds** Risk and Return Cost of Capital Sources of Long term funds Raising Long term funds	1
III	**Capital Structure & Capital Budgeting** Capital Structure (Theories) Capital Structure Planning Techniques of Capital Budgeting Estimation of Project Cash Flows	1
IV	**Working Capital Management and Dividend Decision** Introduction to Working Capital Management Cash Management Sources of short term funds Credit Management Inventory Management Dividend Policy Dividend Decision	1
Total		4

Textbooks

1 Prasanna Chandra Financial Management – Theory and Practice Tata McGraw-Hill Publishing Company New Delhi
2 I. M. Pandey Financial Management Vikas Publication

Reference Books

1 Srivastava & Misra Financial Management Oxford University Press
2 Briham & Houston Fundamentals of Financial Management South-Western, Thomson Business Information India (P) Ltd.,
3 Brealey & Myers Principles of Corporate Finance Tata McGraw-Hill Publishing Company
4 Reddy, Sudarsana Financial Management – Principles and Practice Himalaya Publishing
5 Vishwanath, S. R. (2007) Corporate Finance - Theory and Practice Response Books, New Delhi
6 McMenamin, Jim Financial Management – An Introduction Oxford University Press,
7 Sinha, P.K Financial Management Excel Books
8 Bhat, S. Financial Management Excel Books
9 Peter DeMarzo, Jonathan Berk Financial Management Pearson Education
10 Vyuptakesh Sharan Foundations of Financial Management Pearson Education
11 G. Sudarsana Reddy Financial Management Himalaya Publishing
12 Lawrence J. Gitman Principles of Managerial Finance Pearson Education
13 Khan & Jain Financial Management Tata McGraw-Hill
14 James Van Horne & John M. Vachowicz, Jr Fundamentals of Financial Management Pearson Education

List of Journals / Periodicals / Magazines/ Newspapers etc.

1 Chartered Financial Analyst,
2 Journal of Financial Management,
3 Economic Times

Subject Name: Data Analysis using SPSS (DA_SPSS)
Subject Code: BI-204

Course Objective:

The objective of this course is to equip the students with conceptual understanding of main features of SPSS. Students are expected to solve a large number of numerical and other assignments, which would be the preparatory requirements of this course. Students are expected to use the SPSS GUI effectively, perform descriptive analyses with SPSS, perform common parametric and non-parametric tests, perform simple regressions and multivariate analyses (factor and cluster).

Total Hours: 40
Number of credits: 4
Lectures per week: 4 of one hour each

Unit	Contents	Credit
I	**Introduction to SPSS** Data View And Variable View), Measurement Scales, How To Export Data From Excel To Software, Entering, Saving And Printing Data, Viewing A Few Cases, Merge File With Cases, Merge File With Variables, Sort Cases, Spilt File, Select Cases, How To Do Serial Number, Recode Into Same Variable, Recode Into Different Variable, Compute Command, Visual Binning, Generation Of Shell File.	1
II	**Descriptive Statistics**	1

	Tables And Graphs for One Variable, Tables And Graphs for Two Variables, One Variable Descriptive Statistics, Two Variables Descriptive Statistics, Measures Of Central Tendency And Variability, Shape Of Distribution, Stem and Leaf Charts, Box And Whisker Plot. **One - Sample Hypothesis Tests, Two- Sample Hypothesis Tests** The Logic of Hypothesis testing, A More Realistic Case: We Don't know μand Sigma, One-Sample T-Test, The Logic of Hypothesis Testing, Paired vs. Independent Samples, Testing Assumptions of Independent Samples, Normal Populations, Randomness of Data and Equal population Variance, Comparing Three or More Means, Testing Assumptions of Independent Samples, Normal Populations and Homogeneity Population Variance, One- Factor Independent Measures ANOVA, Post Hoc Multiple Comparisons, Family of Anova (all test) **Univariate, bivariate, Multivariate analysis techniques**	
III	**Parametric and Nonparametric Methods** Introduction to Parametric and Nonparametric Methods, Mann-Whitney U test, Wilcoxon Signed Ranks Test, Kruskal- Wallis H Test, Spearman's Rank Order Correlation, Sign Test, Runs Test, One Sample Chi Square Test, Fridman One-Way Anova, Kolmogorov-Smirnov One Sample Test.	1
IV	**Factor analysis and Structural Equation Modelling** What is FA, Hypothetical example of FA, Assumptions of FA, Deriving factors and assessing overall fit, interpreting the factors, Validation of factors analysis, Structural Equation Modelling	1
Total		4

Textbooks

1 Keith McCormick, Jesus Salcedo, Jon Peck (With), Andrew Wheeler (With), Jason Verlen SPSS Statistics for Data Analysis and Visualization Wiley Publication

Reference Books

1 Andy Field Discovering Statistics using SPSS Sage Publication

List of Journals / Periodicals / Magazines/ Newspapers etc.

1 Journals on SPSS

Subject Name: Business Research & Analytics (BRA)
Subject Code: BI-205

Course Objective:

The objective of the course is to familiarize students with the types of business problems often faced by corporate entities and to help them develop insights about basic concepts of research designs and methodology aimed at solving business problems.

Total Hours: 40

Number of credits: 4

Lectures per week: 4 of one hour each

Unit	Contents	Credit
I	**Introduction to Research** Meaning of research; Types of research- Exploratory research, Conclusive research; The process of research; Research applications in social and business sciences; Features of a Good research study. Research Problem and Formulation of Research Hypotheses: Defining the Research problem; Management Decision Problem vs. Management Research Problem; Problem identification process; Components of the research problem; Formulating the research hypothesis- Types of Research hypothesis; Writing a research proposal- Contents of a research proposal and types of research proposals.	1
II	**Research Design** Meaning of Research Designs; Nature and Classification of Research Designs; Exploratory Research Designs: Secondary Resource analysis, Case study Method, Expert opinion survey, Focus group discussions; Descriptive Research Designs: Cross-sectional studies and Longitudinal studies; Experimental Designs, Errors affecting Research Design. Primary and Secondary Data: Classification of Data; Secondary Data: Uses, Advantages, Disadvantages, Types and sources; Primary Data Collection: Observation method, Focus Group Discussion, Personal Interview method.	1
III	**Attitude Measurement and Scaling and Sampling** Types of Measurement Scales; Attitude; Classification of Scales: Single item vs. Multiple Item scale, Comparative vs. Non-Comparative scales, Measurement Error, Criteria for Good Measurement. Questionnaire Design: Questionnaire method; Types of Questionnaires; Process of Questionnaire Designing; Advantages and Disadvantages of Questionnaire Method. **Attitude Measurement and Scaling and Sampling** Types of Measurement Scales; Attitude; Classification of Scales: Single item vs. Multiple Item scale, Comparative vs. Non-Comparative scales, Measurement Error, Criteria for Good Measurement. Questionnaire Design: Questionnaire method; Types of Questionnaires; Process of Questionnaire Designing; Advantages and Disadvantages of Questionnaire Method.	1
IV	**Data Analysis** Descriptive vs. Inferential Analysis, Testing of Hypotheses: Concepts in Testing of Hypothesis – Steps in testing of hypothesis, Introduction to hypothesis testing methods. Research Report Writing: Types of research reports – Brief reports and Detailed reports; Report writing: Structure of the research report- Preliminary section, Main report, Interpretations of Results and Suggested Recommendations; Report writing: Formulation rules for writing the report: Guidelines for presenting tabular data, Guidelines for visual Representations.	1
Total		4

Textbooks

1 Donald R. Cooper and Pamela S. Schindler Business Research Methods (IX edition) Tata McGraw Hill Publishing Company Ltd., New Delhi

2 Zikmund Willium Business Research Methods, Thompson Learning (2003) 8th edition

Reference Books

1 D. K. Bhattacharyya Research Methodology Excel Books 2nd Edition or later

2 Bryman Alan Business Research Methods Oxford University Press (2006) 8th edition
3 Panneerselvam R, Research Methods for Business John Wiley & Sons (2004) 4th edition
4 K. Aswathappa and K. Shridhara Bhat Research Methodology Prentice Hall of India Latest Edition
5 Alan Bryman, Emma Bell Business Research Methods Oxford Press 2nd Edition,

List of Journals / Periodicals / Magazines/ Newspapers etc.

1 Journal of Business Research
2 Electronic Journal of Business Research Methods
3 Jindal Journal of Business Research
4 Review of Business Research
5 Vikalpa,
6 Decision etc.

Subject Name: Fundamentals of SQL (FSQL)
Subject Code: BI-206

Course Objective:

The objective behind this course is to assist students to be able to solve basic queries of SQL and extract data using SQL and integrate it with different data visualization and analytics tools.

Total Hours: 40
Number of credits: 4
Lectures per week: 4 of one hour each

Unit	Contents	Credit
I	Introduction to Oracle Database · Retrieve Data using the SQL SELECT Statement · Learn to Restrict and Sort Data · Usage of Single-Row Functions to Customize Output. Introduction to SQL, Introduction to Databases and RDMBS, Install a Database Engine, SQL Syntax, SQL Data Types, SQL Operators,SQL Expressions,SQL Comments	1
II	SQL – Data Definition Language Commands and Operations,SQL – Data Manipulation Language Commands and Operations, SQL – Data Control Language Commands,DCL Operations. Invoke Conversion Functions and Conditional Expressions · Aggregate Data Using the Group Functions · Display Data from Multiple Tables Using Joins · Use Sub-Queries to Solve Queries	1
III	The SET Operators · Data Manipulation Statements · Use of DDL Statements to Create and Manage Tables · Other Schema Objects · Control User Access. SQL Functions,SQL Queries and Sub Queries,SQL Clauses,SQL Joins, SQL Views	1
IV	Management of Schema Objects · Manage Objects with Data Dictionary Views Manipulate Large Data Sets · Data Management in Different Time Zones · Retrieve Data Using Sub-queries · Regular Expression Support. SQL Indexes,SQL Transactions,SQL Injection,SQL vs.NoSQL	1
Total		4

Textbooks

1 Thomas Nield Getting Started with SQL 1st Edition O'Rielly
2 Allen G. Taylor Runner-Up, Best for Beginners: SQL All-in-One For Dummies

Reference Books

1 John Viescas SQL Queries for Mere Mortals : 4th Edition Pearson

List of Journals / Periodicals / Magazines/ Newspapers etc.

1 Journal of Data Science,
2 Journal of the American Statistical Association etc

Subject Name: Python for Business Analytics (PBA)
Subject Code: BI-207

Course Objective:

The objective behind this course is to assist students to be able to apply basic syntax and operations in python in order to clean and manipulate the data using python's powerful data analysis libraries-numpy and pandas. This course will also ensure that the students are able to create basic visualizations using python technology.

Total Hours: 40
Number of credits: 4
Lectures per week: 4 of one hour each

Unit	Contents	Credit
I	Introduction to Python Data Structures in Python Control Structures and Functions	1
II	Python Libraries for Data Science Introduction to Numpy Operations on Numpy Arrays	1
III	Introduction to Pandas Introduction to Scipy, Scikit Learn, Beautifulsoup	1
IV	Visualisation on Python Data Collection. Data Extraction and Data Cleaning in Python	1
Total		4

Textbooks

1 Andreas C. Müller & Sarah Guido Introduction to Machine Learning with Python: A Guide for Data Scientists O'Reilly Media
2 Wes McKinney Python for Data Analysis: Data Wrangling With Pandas, NumPy and IPython Shroff/O'Reilly

Reference Books

1 Leonard Eddison Python Machine Learning: A Technical Approach to Machine Learning for Beginners CreateSpace Independent Publishing Platform 2018

List of Journals / Periodicals / Magazines/ Newspapers etc.

1 Journal of Data Science,
2 Journal of the American Statistical Association etc.

Subject Name: Power BI for Data Visualization (PBI-DV)
Subject Code: BI-208

Course Objective:
The objective behind this course is to assist students to be able extract and load data in Power BI and create dashboards with that data. It will give students insights into data visualisation techniques.

Total Hours: 40
Number of credits: 4
Lectures per week: 4 of one hour each

Unit	Contents	Credit
I	Introduction to Power BI · Get Started with Power BI · Overview: Power BI concepts · Sign up for Power BI · Overview: Power BI data sources · Connect to a SaaS solution · Upload a local CSV file · Connect to Excel data that can be refreshed · Connect to a sample · Create a Report with Visualizations · Explore the Power BI portal	1
II	Viz and Tiles · Overview: Visualizations · Using visualizations · Create a new report · Create and arrange visualizations · Format a visualization · Create chart visualizations · Use text, map, and gauge visualizations and save a report · Use a slicer to filter visualizations · Sort, copy, and paste visualizations · Download and use a custom visual from the gallery	1
III	Reports and Dashboards · Modify and Print a Report · Rename and delete report pages · Add a filter to a page or report Set visualization interactions · Print a report page · Send a report to PowerPoint · Create a Dashboard · Create and manage dashboards · Pin a report tile to a dashboard · Pin a live report page to a dashboard · Pin a tile from another dashboard · Pin an Excel element to a dashboard · Manage pinned elements in Excel · Add a tile to a dashboard · Build a dashboard with Quick Insights · Set a Featured (default) dashboard · Ask Questions about Your Data · Ask a question with Power BI Q&A · Tweak your dataset for Q&A · Enable Cortana for Power BI	1
IV	Visualizing Data, Why Visualizations Visualization types, Create and Format Bar and Column Charts Create and Format Stacked Bar Chart Stacked Column Chart Create and Format Clustered Bar Chart, Clustered Column Chart Create and Format 100% Stacked Bar Chart, 100% Stacked Column Chart Create and Format Pie and Donut Charts Create and Format Scatter Charts Create and Format Table Visual, Matrix Visualization Line and Area Charts Create and Format Line Chart, Area Chart, Stacked Area Chart Combo Charts	1

	Create and Format Line and Stacked Column Chart, Line and Clustered Column Chart Create and Format Ribbon Chart, Waterfall Chart, Funnel Chart	
Total		4

Textbooks

1 Brett Powell Mastering Microsoft Power BI Packt Publishing Ltd

2 Marco Russo, Alberto Ferrari The Definitive Guide to DAX Microsoft Press

Reference Books

1 Rob Collie, Avichal Singh Power Pivot and Power BI Tickling Keys, Inc 2015

List of Journals / Periodicals / Magazines/ Newspapers etc.

1 Journal of Data Science,

2 Journal of the American Statistical Association etc.

SEMESTER - III

Subject Name: Employment Enhancement Skills (EES)
Subject Code: BI-301

Course Objective:

This course is designed to allow the students to familiarize with needs of the final placement preparation. It also aims at helping students see the application of the important skills that are required at the Campus Recruitment. The course intends to prepare students at all the three stages i.e. Pre- Placement, During the Placement and Post Placement challenges. By the end of the course, students would have a good understanding of.

Total Hours: 40
Number of credits: 4
Lectures per week: 4 of one hour each

Unit	Contents	Credit
I	**Important Documents for Placement: Resume/CV/Cover Letter/Job Application Email/Letter** Cover Letter-Types-Domain specific Cover Letters- Difference (Resume/CV-Curriculum Vitae /Bio Data), Functional/Chronological Resume, Do's & Don'ts of Resume, Mistakes to be avoided while drafting Resume/Cover Letter, Decipher J.D. Job Description & making changes in Resume & Cover Letter, Sample Template & Format -Resume & Cover Letter, Video Resume/CV, Letter of Reference/ Recommendation, Statement of Purpose, Job Application-Email & Letter	1
II	**G.D, Presentation Skills and Case Study Analysis as selection process** G.D.- Group Discussion, Importance, Types of GD, Common topics, Evaluation Parameter, Do's and Don'ts, Art of Public Speaking, brainstorming of ideas, Case Study Analysis as selection process- Usage & Importance, Evaluation - Parameters & Sheet, Presentation Skills as Selection Process- Channels & medium of Presentation, Evaluation Parameter & Sheet	1
III	**Grooming (Dressing), Body Language & Professional Networking for Job** Grooming tips- for men and women, dos and don'ts, Artefacts (Accessories & its importance) Body Language (Kinesics)- Types (Aggressive, Submissive, Defensive, Relaxed, Interested etc), Oculesics – Eye movement, Proxemics – Distance, & Haptics- Touch Face to Face Networking, Social Capital, right questions for Networking, Online Networking with LINKEDIN, Importance of your database, Knowledge Networking i.e. Industry Associations Checklist for Networking and other online portals for job search.	1
IV	**Job Interview & Soft Skills required during the Job** P.I. Personal Interview Introduction, Why Job Interviews? Types– (Telephonic, Video (Skype), Panel), Preparation before the interview, Common questions asked during the interview, Post interview Follow Up, Approach towards the answers, List of Q n A and with sample answer for reference and perusal, , Question not to be asked at Interviews, Interview Case Study Soft Skills: Introduction/Function/Importance: Short Anecdotes, Time Management, Stress Management & Interviews, Teamwork, Interpersonal Skills, Problems Solving Skills, Decision Making Skills and its connection to Aptitude test	1
Total		4

Textbooks

1 Barun K Mitra 'Personality Development and Soft Skills' Oxford University Press Latest Edition
2 Aruna Koneru Professional Speaking Skills Oxford University Press Latest Edition
3 Mallika Nawal Business Communication

Reference Books

1 Jeff Butterfeild Soft Skills for Everyone Cengage Learning
2 Asha Kaul 'Business Communication' PHI

List of Journals / Periodicals / Magazines/ Newspapers etc.

1 Economic Times
2 Business Standard

Subject Name: Structural Equation Modeling (SEM)
Subject Code: BI-302

Course Objective:
The objective behind this course is to assist students to be able to build relationships between variables and make mathematical models for predictive analytics

Total Hours: 40
Number of credits: 4
Lectures per week: 4 of one hour each

Unit	Contents	Credit
I	Introduction to classic structural equation models with latent variables (SEM). method including the origins of the method and two major model components: simultaneous equations and confirmatory factor analysis.	1
II	Model notation and review the matrix algebra and covariance structures that are used to define SEMs. Steps of implementing SEMs will be covered to include: model specification, model identification, parameter estimation, and model evaluation (model fit). Time permitting; we will also discuss various extended topics.	1
III	Reliability and validity estimation in SEM, moderation analysis using multiple groups, estimation for non-normal and categorical outcomes, generalized linear SEM, longitudinal modeling, estimation of complex sample data, and estimation with missing data.	1
IV	Develop a basic understanding of structural equation models including proper application, interpretation, and evaluation of the models Develop an understanding of the underlying statistics including parameter identification and estimation as well as model fit measures. Benefits of SEMs including when it is advantageous to use this modeling approach , Limitations of SEM, including the most common mistakes in using SEMs Be able to apply the method to a topic relevant to your own research Be able to analyze SEM models using a SEM software package Be able to interpret results from a SEM model	1
Total		4

Textbooks

1 Rex B. Kline Principles and Practice of Structural Equation Modeling Guilford Publications
2 David Kaplan Structural Equation Modeling: Foundations and Extensions SAGE Publications

Reference Books

1 Barbara M. Byrne Structural Equation Modeling With AMOS Routledge

List of Journals / Periodicals / Magazines/ Newspapers etc.

1 Journal of Data Science,
2 Journal of the American Statistical Association

Subject Name: Structural Equation Modeling (SEM)
Subject Code: BI-302

Course Objective:

Multivariate statistical analysis is considered a useful tool and refers to multiple advanced techniques for examining relationships among multiple variables at the same time. This method finds patterns and relationships between several variables simultaneously. It lets us predict the effect a change in one variable will have on other variables.

Multivariate statistical methods are used by business analysts and are important for business-major students to develop an understanding of multivariate statistical methods to provide solutions for day to day business problems using data provided by company.

Total Hours: 40
Number of credits: 4
Lectures per week: 4 of one hour each

Unit	Contents	Credit
I	**Regression Analysis.** Overview of multiple linear regression analysis and its applications. Both ordinary regression analysis and partial regression analysis, methods of testing significance of various regression models **Principal Components Analysis.** Overview of principal components analysis (PCA). Relationship to multivariate normal distribution and to eigen structure of covariance or correlation matrix and to SVD of original (mean centered or standardized) matrix of observations by variables.	1
II	**Exploratory Factor Analysis** Principal axis form of exploratory factor analysis (FA) and its relationship to PCA. Computation of factor scores as well as factor loadings, estimation of "communalities",	1
III	**Multidimensional Scaling.** Metric and nonmetric models and methods of "two-way" multidimensional scaling (MDS). Three-way MDS; Methods of multidimensional analysis of preferential choice (or other "dominance") data. Cluster Analysis. hierarchical clustering, specifically single, complete and average linkage, Ward's method, and Kth nearest neighbor clustering, based on direct or derived	1

measures of similarity or dissimilarity, and on K-means clustering for partitioning based on a standard objects by variables multivariate data matrix.

IV	**Canonical Correlation.** Canonical correlation analysis (CCA), methods of computing a set of ordered canonical variates, the Kth set of variates constrained to be orthogonal to the first K-1 (in a certain sense that will be defined) Analysis of Variance and generalizations. A review of standard analysis of variance (ANOVA), plus an introduction of ANCOVA (analysis of covariance), MANOVA (Multivariate ANOVA) and MANCOVA (Multivariate ANCOVA) multiple linear regression analysis, with "dummy" independent variables, while ANCOVA is a special case of partial regression analysis. Both MANOVA and MANCOVA as special cases of canonical correlation analysis. **Multiple Discriminant analysis (MDA)** Canonical correlation analysis, with the (usually continuous) given variables defining one matrix and a set of dummy variables encoding the groups comprising the second one. Confirmatory Factor Analysis and Structural Equations Models with Latent Variables.	1
Total		4

Textbooks

1. Hair Joseph F. Multivariate Data Analysis Cengage Learning India
2. Barbara And Fidell Using Multivariate Statistics Pearson India 2017

Reference Books

1. Richard A. Johnson, Dean W. Wichern Applied Multivariate Statistical Analysis Pearson 20115
2. Johnson, Wichern Applied Multivariate Statistical Analysis Pearson 2008

List of Journals / Periodicals / Magazines/ Newspapers etc.

1. Journal of Multivariate Analysis
2. International Journal of Multivariate Data Analysis (IJMDA
3. Communications in Statistics

Subject Name: Contemporary issues in Business Analytics (CIBA)
Subject Code: BI-304

Course Objective:

The student is expected to select and submit the area/topic of his choice to respective instructor in the beginning of this semester. S/he is required to be in constant interaction with the course instructor and the submission of the Report will be during the end of the semester.

The students are expected to spend around **45-50 hours** on the study of the different topics. There will be **few sessions (5-6)** handled by the faculty to orient the students about the course.

Contents

Contemporary Issues in Business Analytics
Contemporary Issues in HR analytics
Contemporary Issues in marketing analytics
Contemporary Issues in finance analytics
Contemporary Issues in operations analytics
Contemporary Issues in web analytics
Contemporary Issues in digital analytics

Guidelines for Preparing Presentation

- Identification of Contemporary topics and understanding the need for study
- Introduction to Area/topic selected
- Literature Review
- Detail discussion and Understanding of the presenter
- Conclusion & Future Scope of the Research (if any)

Reference Books

1 Thomas W. Jackson, Steven Lockwood Business Analytics: A Contemporary Approach Springer 2018
2 Foster Provost & Tom Fawcett Data Science For Business: What You Need To Know About Data Mining And Data-Analytic Thinking O'Reilly's 2013

List of Journals / Periodicals / Magazines/ Newspapers etc.

1 Journal of Business Analytics
2 International Journal of Business Analytics (IJBAN)
3 Business Perspectives and Research

Subject Name: Supply Chain & Logistics Analytics (SC&LA)
Subject Code: BI-E101

Course Objective:

This course introduces the student to the theory, concepts, and business application of Supply chain and logistics research, data, metrics, systems, analyses, and reporting. The student will develop an understanding of the role and importance of analytics in supply chain and logistics.

This business and management course introduces the primary methods and tools that students will encounter in study and practice of supply chains. They will learn how to apply basic probability models, statistics in supply chains and Formulating and solving optimization models

Total Hours: 40
Number of credits: 4
Lectures per week: 4 of one hour each

Unit	Contents	Credit
I	Supply Chain Analytics (SCA) Relating Operations Management with Supply chain concepts with SC Analytics	1

	The importance of supply chain analytics in the flows involving material, money, information and ownership Key issues in supply chain analytics	
II	Network Planning in Supply Chain Importance of Network Planning Design of Logistics Network using Heuristics/optimization Concept of 3PL/4PL in a Supply Chain	1
III	Forecasting and Planning Demand Forecasting Inventory Planning	1
IV	Procurement Optimization Logistics Analytics	1
Total		4

Textbooks

1. Sunil Chopra, and Peter Meindl Supply Chain Management Pearson
2. Jeremy F Shapiro Modelling the Supply Chain Duxbury Thompson Learning

Reference Books

1. D. Simchi-Levi, P. Kaminsky, E. Simchi-Levi, and Ravi Shankar Designing and Managing the Supply Chain concepts, Strategies and Case Studies. Tata McGraw Hill
2. Lei Lei, Leonardo DeCandia, Rosa Oppenheim, and Yao Zhao) Managing Supply Chain Operations World Scientific.
3. Suman Sarkar The Supply Chain Revolution: Innovative Sourcing and Logistics for a Fiercely Competitive World AMACOM; Illustrated Edition.

List of Journals / Periodicals / Magazines/ Newspapers etc.

1. Supply Chain Management: An International Journal,
2. Supply Chain Management Review,
3. Purchasing World,
4. International Journal of Purchasing and Materials Management,
5. International Journal of Physical Distribution & Logistics Management

Subject Name: Digital Marketing, Web and Social Media Analytics (MW&SMA)
Subject Code: BI-E102

Course Objective:

The objective behind this course is to identify the different applications of analytics in marketing frame as an additional advantage to marketing major students to understand the data science program for Marketing, Web and Social media. On successful completion of the course the learner will be able to DESCRIBE the use of Voice of the Customer data in making data driven marketing decisions; DEMONSTRATE an understanding of utility theory to measure customer preferences and choices; IDENTIFY what customers' value in a product, and assess what they are willing to pay for it; ILLUSTRATE the use of various tools and frameworks to solve strategic marketing problems using marketing data; determine the most effective

target markets; DESIGN a study that incorporates the key tools of Marketing AnalyticsThis business and management course introduces the primary methods and tools that students will encounter in study and practice of supply chains. They will learn how to apply basic probability models, statistics in supply chains and Formulating and solving optimization models

Total Hours: 40
Number of credits: 4
Lectures per week: 4 of one hour each

Unit	Contents	Credit
I	SEGMENTATION ANALYTICS: Market Segmentation Variables, Market Segmentation Types, Marketing Data Landscape, Data for Segmentation, Analytics for Need Based Segmentation - Cross Tabulation Segmentation, Regression based segmentation, Clustering, Conjoint Analysis Segmentation, The Cluster Analysis + Discriminant Analysis Approach.	1
II	PRODUCT ANALYTICS: Approaches to Choosing Target Segment/s: Rationale for Segment Targeting, Analytics for Perceptual Mapping and Product Positioning, Product Positioning, Multi Dimensional Scaling (MDS) and Factor Analysis, Relevance of Mapping for Product Positioning, Preference Mapping, Incorporating Preferences in Perceptual Mapping.	1
III	Analytics for Tracking Customer Growth: Rationale for Customer Analytics, Customer acquisition cost, Customer Churn, Customer Attrition models, Customer lifetime value, Net promoter score, Calculating the number of new customers, Calculating average customer age & Days to convert, Calculating customer acquisition cost & Average purchases, Calculating touch points & Lead conversion, Analyzing age demographics, First contact with customer, Customer satisfaction, Understanding customer engagement, Diffusion Models - The Bass Model.	1
IV	CAMPAIGN PERFORMANCE ANALYSIS Reach & Impact Web and Social Media Analytics Sentiment Analytics MARKETING SPEND EFFECTIVENESS Market Mix Modelling	1
Total		4

Textbooks

1 Mark Jeffery Data-Driven Marketing: The 15 metrics Everyone in Marketing Should Know Wiley
2 Alistair Croll; Benjamin Yoskovitz Lean Analytics: Use data to build a Better Startup Faster O'Reilly Media

Reference Books

1 Chuck Hemann Digital Marketing Analytics: Making Sense of Consumer Data in a Digital World Que Publishing
2 Wayne L. Winston Marketing Analytics: Data-Driven Techniques with Microsoft Excel Wiley

List of Journals / Periodicals / Magazines/ Newspapers etc.

1 Journal of Digital & Social Media Marketing
2 Journal of Advertising etc.

Subject Name: HR Analytics (HRA)
Subject Code: BI-E103

Course Objective:

This course introduces the student to the theory, concepts, and business application of human resources research, data, metrics, systems, analyses, and reporting. The student will develop an understanding of the role and importance of HR analytics, and the ability to track, store, retrieve, analyze and interpret HR data to support decision making.

The student will use applicable benchmarks/metrics to conduct research and statistical analyses related to Human Resource Management, and will be able to find solutions to practical business problems.

Total Hours: 40
Number of credits: 4
Lectures per week: 4 of one hour each

Unit	Contents	Credit
I	FUNDAMENTALS OF HR ANALYTICS HR Analytics Overview Understanding HR indicators, metrics and data, Statistical analysis for HR (regression analysis, measures of central tendency)	1
II	Workforce and Talent Analytics Staffing, supply and demand forecasting	1
III	Analytical Performance Management	1
IV	Retention Analytics to Protect Most Valuable Assets Total compensation modeling/analyses Emerging Trends in HR Analytics Planning and implementing a new HRIS	1
Total		4

Textbooks

1 Levenson Strategic Analytics: Advancing Strategy Execution and Organizational Effectiveness Berrett-Koehler
2 Dr Martin Edwards, Kirsten Edwards Predictive HR Analytics: Mastering the HR Metric Kogan Page

Reference Books

1 Lyndon Sundmark Doing HR Analytics - A Practitioner's Handbook with R Examples CreateSpace Independent Publishing Platform
2 Bernard Marr Data-Driven HR: How to Use Analytics and Metrics to Drive Performance Kogan Page Publishers.
3 Kuldeep Singh and Ramesh Soundararajan Winning on HR Analytics: Leveraging Data for Competitive Advantage SAGE Publications India.

List of Journals / Periodicals / Magazines/ Newspapers etc.

1 International *Journal* of Business and Management Invention,
2 Journal of Management,
3 Journal of Organizational Effectiveness: People and Performance etc

Subject Name: Financial Technology Services and Management (FTS&M)
Subject Code: BI-E104

Course Objective:

The objective behind this course is to assist students to be able to understand the modern day financial tools and technologies and their working.

Total Hours: 40
Number of credits: 4
Lectures per week: 4 of one hour each

Unit	Contents	Credit
I	FinTech: Introduction - Transformation – FinTech Evolution: Infrastructure, Banks Startups and Emerging Markets - Collaboration between Financial Institutions and Startups –FinTech Typology - Emerging Economics: Opportunities and Challenges - 8 From too-Small-To-Care to Too-Big-To-Fail – Introduction to Regulation Industry - The Future of RegTech and other Technologies Impacting it. Payments, Crypto currencies and Blockchain – Introduction - Individual Payments –Digital Financial Services – Mobile Money – Regulation of Mobile Money – SFMS - RTGS - NEFT –NDS Systems – Crypto currencies – Legal and Regulatory Implications of Crypto currencies –What is Blockchain? – The Benefits from New Payment Stacks	1
II	Payments, Crypto currencies and Blockchain – Introduction - Individual Payments – Digital Financial Services – Mobile Money – Regulation of Mobile Money – SFMS - RTGS - NEFT –NDS Systems – Crypto currencies – Legal and Regulatory Implications of Crypto currencies –What is Blockchain? – The Benefits from New Payment Stacks.	1
III	Digital Finance and Alternative Finance - Introduction – Brief History of Financial Innovation – Digitization of Financial Services - FinTech & Funds- Crowd funding– Regards, Charity and Equity - P2P and Marketplace Lending – New Models and New Products - What is an ICO : FinTech Regulation and RegTech - Introduction - FinTech Regulations Evolution of RegTech – RegTech Ecosystem: Financial Institutions – RegTech Ecosystem Ensuring Compliance from the Start: Suitability and Funds – RegTech Startups: Challenges –RegTech Ecosystem: Regulators Industry – Use Case of AI in Smart Regulation and Fraud Detection – Regulatory Sandboxes – Smart Regulation – Redesigning Better Financial Infrastructure	1
IV	Data & Tech - Introduction - History of Data Regulation – Data in Financial Services – Application of Data Analytics in Finance - Methods of Data Protection: GDPR Compliance and Personal Privacy – How AI is Transforming the Future of FinTech – Digital Identity – Change in mindset: Regulation 1.0 to 2.0 (KYC to KYD) - AI & Governance – New Challenges of AI and Machine Learning - Challenges of Data Regulation - Data is the New Oil: Risk of Breach – The Future of Data-Driven Finance – Case Studies	1
Total		4

Textbooks

1 Agustin Rubini Fintech in a Flash: Financial Technology Made Easy Zaccheus

2 Susanne Chishti and Janos Barberis The FINTECH Book: The Financial Technology Handbook for Investors, Entrepreneurs and Visionaries John Wiley.

Reference Books

1 Theo Lynn, John G. Mooney, Pierangelo Rosati, Mark Cummins Disrupting Finance: FinTech, and Strategy in the 21st Century Palgrave 1st edition, 2018

2 Abdul Rafay FinTech as a Disruptive Technology for Financial Institutions IGI Globa 2019

3 Bernardo Nicoletti The Future of FinTech: Integrating Finance and Technology in Financial Services Palgrave Macmillan 2018

List of Journals / Periodicals / Magazines/ Newspapers etc.

1 Journal of Data Science

2 Journal of the American Statistical Association etc.

Subject Name: Financial Analysis and Reporting (FAR)
Subject Code: BI-E105

Course Objective:

The objective of the course is to provide students with hands on experience in financial statement analysis. Students will be exposed to general tools of financial analysis, theoretical concepts, and practical valuation issues. Students should be comfortable with using firm's financial statements to develop understanding of their performance and to establish basis for making reasonable evaluation estimates.

Total Hours: 40

Number of credits: 4

Lectures per week: 4 of one hour each

Unit	Contents	Credit
I	**Introduction to financial analysis** Finance and accounting – meaning –Types of companies - Financial statement analysis – on the basis of materials used – on the basis of modus operandi – Comparing financial and nonfinancial listed companies performance through annual as a bench marking against competitor and industry.	1
II	**Financial analysis through ratios 12** Accounting analysis – Factors influencing accounting quality – Steps in accounting analysis Drivers of firms profitability and growth – Measuring overall profitability – Decomposing profitability – Measuring earnings - Evaluating Investment management – Liquidity analysis and net trade cycle - Evaluating financial management& leverage analysis – Assessing sustainable growth rate of companies – Assessing historical pattern of key ratios among financial (CAMEL analysis) and non financial firms – Analysis of cash flow.	1
III	**Prospective and Credit analysis** Prospective analysis – Techniques - Elements of detailed forecast – Sensitivity analysis – - Decision tress analysis of capital budgeting - Credit analysis – Market for credit –Credit	1

	analysis process –Factors driving debt rating – Kalpan – Urwitz model of debt rating – Prediction of distress and turnaround – MDA, PCA and RPA.	
IV	**M & A and Equity analysis** Mergers and acquisition – Motivations for M & A – Valuation of M & A - Valuation of equity and debt – Primary and secondary market analysis - Assessing market value of equity with book value and index, P/B analysis, Price earnings ratio – PEG analysis – F Score – Risk and return of equity – Dividend pattern analysis. **Financial Reporting** Financial reporting –Concepts – users, Objectives of financial reporting – Qualitative Characteristics of information in financial reporting – basic problems of disclosure – Role of SEBI in IFRS – Statutory disclosures in IFRS – Corporate reporting practices in India- Challenges in financial reporting	1
Total		4

Textbooks

1 M Y Khan and P H Jain Management Accounting, McGraw hill, 5th edition

2 Palepu Healy and Bernard Business analysis & valuation South western college publication, 2nd edition.

Subject Name: Fraud and Risk Analytics (FRA)
Subject Code: BI-E106

Course Objective:

The main objective behind this course is to help students identify the different problems existing and cropping in real business world and identify and learn the different applications of analytics in fraud and risk in businesses globally.

Total Hours: 40

Number of credits: 4

Lectures per week: 4 of one hour each

Unit	Contents	Credit
I	Fraud Analytics Fraud Prevention: Classification Models	1
II	Regulatory Analytics	1
III	Credit Risk Analysis Introduction of Credit Risk Modeling (Probability of Default Model - PD Model)	1
IV	Collection Risk Practical Expertise in Analysis	1
Total		4

Textbooks

1 Bart Baesens, Veronique Van Vlasselaer, Wouter Verbeke Fraud Analytics Using Descriptive, Predictive, and Social Network Techniques: A Guide to Data Science for Fraud Detection John Wiley & Sons.

2 Ernst & Young Fraud, the Unmanaged Risk, Ernst & Young.

Reference Books

1 Delena D. Spann Fraud Analytics: Strategies and Methods for Detection and Prevention Wiley; 1st Edition 2013

2 **Bart Baesens , Veronique Van Vlasselaer, Wouter Verbeke,** Fraud Analytics Using Descriptive, Predictive, and Social Network Techniques: A Guide to Data Science for Fraud Detection **Wiley** Kindle Edition **2015**

3 Leonard W. Vona Fraud Data Analytics Methodology Wiley 2017

List of Journals / Periodicals / Magazines/ Newspapers etc.

1 European Journal of Operational Research,

2 Elsevier

3 Journal of Parallel and Distributed Computing

Subject Name: Fundamentals of Machine Learning (FML)
Subject Code: BI-E107

Course Objective:

The prime objective of this course is to provide the complete expertise and knowledge about the regression analysis part. This course will also help the students to identify different and real world problems where linear and logistic regression can be applied. This course will enable the students after completion to successfully write python code for the algorithms and apply, create and evaluate models as part of the practical application of the knowledge acquired.

The prime objective of this course is to apply basic model selection principles understand the basics of decision trees identify the different problems where decision trees, other advanced ensembles and supervised learning models can be applied.

Total Hours: 40
Number of credits: 4
Lectures per week: 4 of one hour each

Unit	Contents	Credit
I	SUPERVISED LEARNING: LINEAR REGRESSION Simple Linear Regression Multiple Linear Regression Intro to Logistic Regression Multivariate Logistic Regression	1
II	DECISION TREES Intro to Decision Trees ENSEMBLES AND OTHER TECHNIQUES Overview of Ensembles	1
III	MODEL SELECTION AND OPTIMISATION Model Evaluation Principles of Model Selection Advanced Supervised Learning Models	1

	FORECASTING: TIME SERIES ANALYSIS Introduction to Time Series; Concepts of Time Series; Doing the Analysis	
IV	UNSUPERVISED LEARNING: CLUSTERING Introduction to Clustering K-Means Clustering - Algorithm Overview of Principal Component Analysis (Optional) Overview of Advanced Machine Learning Deep Learning Natural Language Processing Applications of Computer Vision	1
Total		4

Textbooks

1. Trevor Hastie, Robert Tibshirani, and Jerome Friedman The Elements of Statistical Learning: Data Mining, Inference, and Prediction Springer.
2. Oliver Theobald Machine Learning for Absolute Beginners: A Plain English Introduction Scatterplot Press
3. John D. Kelleher, Brian Mac Namee, and Aoife D'Arc Fundamentals of Machine Learning for Predictive Data Analytics: Algorithms, Worked Examples, and Case Studies The MIT Press.

Reference Books

1. Nishant Shukla Machine Learning with TensorFlow Manning Publications
2. Aurélien Géron Hands-On Machine Learning with Scikit-Learn, Keras, and TensorFlow: Concepts, Tools, and Techniques to Build Intelligent Systems O'Reilly Media
3. Leonard Eddison Python Machine Learning: A Technical Approach to Machine Learning for Beginners CreateSpace Independent.
4. Andriy Burkov The Hundred-Page Machine Learning Book Andriy Burkov (ebook)

List of Journals / Periodicals / Magazines/ Newspapers etc.

1. Operations Research,
2. JASA (Journal of the American Statistical Association) etc.
3. Journal of Machine Learning Research,
4. International Journal of Machine Intelligence and Sensory Signal Processing,
5. Springer etc.

SEMESTER - IV

Summer Internship Programme (SIP)
Course code: BI-401

Summer placement (summer internship programme, i.e., now popularly known as **SIP**), is an integral part of the academic curriculum of MBA. For the successful completion of the MBA programme, the students are required to complete the SIP. After completion of the 1st year of the programme, i.e., after the 2nd semester and before the commencement of the second year of the programme, the students are required to work with an organization for hands on experience. The duration of the SIP is six to eight weeks. In some cases this period may be a little longer, but in no case the duration should be more than 10 weeks.

SIP aims at widening the student's perspective by providing an exposure to real life organizational and environmental situations. This will enable the students to explore an industry/organization, build a relationship with a prospective employer, or simply hone their skills in a familiar field. SIP also provides invaluable knowledge and networking experience to the students. During the internship, the student has the chance to put whatever he/she learned in the 1st year of MBA into practice while working on a business plan or trying out a new industry, job function or organization.

The organization, in turn, benefits from the objective and unbiased perspective the student provides based on concepts and skills imbibed in the first year at the MBA institute. The summer interns also serve as unofficial spokespersons of the organization and help in image building on campus.

In case the scope of the project is large, even more than one student also can undertake the SIP project jointly. Similarly, if the scope of the project is limited, the student can undertake more than one project during the specified period with the same organization or with another organization.

An additional benefit that organizations may derive is the unique opportunity to evaluate the student from a long-term perspective. Thus the SIP can become a gateway for final placement of the student.

The student should ensure that the data and other information used in the study report is obtained with the permission of the institution concerned. The students should also behave ethically and honestly with the organization.

The SIP process involves working under the mentorship of an executive of the concerned organization and also with a faculty member of the institute where the student is studying, if required. The student is expected to first understand the organization and its setting and the industry/field in which the organization is operating. Thereafter, the student is expected to concentrate on the specific topic of study, its objectives, its rationale, and adopt a methodology and identify a suitable analysis procedure for the completion of the study. Wherever possible the student may provide recommendations and action plans, along with the findings of the study.

Thereafter, the student should prepare a report and submit one copy to the organization and one copy each to the institute and the university. The student should also obtain a certificate from the organization/s where the SIP was done and attach the same with the copy submitted to the institute.

The university will arrange for evaluation of the SIP reports submitted by the students. For the purpose, the university/course coordinator will nominate one faculty from outside the institute and one faculty members from the institute who will be the examiners. The student/s is/are expected to make a 15 minute presentation

before the examiners regarding the SIP project work undertaken, which will be followed by questions by the examiners.

The marks will be awarded for the following aspects:

- **Introduction:** Clear understanding of the topic/subject; understanding of the organization/unit//field.
- **Literature Review:** Published studies**,** review of similar studies
- **Details about the study:** Objectives, formulation of the problem, scope, and rationale of the study.
- **Methods/methodology adopted for the study:** Analytical, Survey, Field Work or any other method with appropriate justification and reasoning.
- **Analysis and conclusions:** The logic of analysis, source of data, whether the conclusions are in line with the objectives, etc.
- **Contribution and learning from the project:** Details of the contribution of the study, the benefits to the organization, the learning from the study for the student, etc.
- **Acknowledgements:** References/Citations and Bibliography and help, if any, received from other individuals/organizations.
- **Presentation of the report, format of the report, flow of the report, style, language, etc.**
- **Presentation of the report to the examiners:** Substance and treatment of the topic, style of presentation, and performance in the question answer session, time management, language, etc.
- **Overall impression.**

Special Study Report (SSR)
Course code: BI-402

1. Course Objective

To prepare the student to conduct a special study of any developments in utilizing the tools and techniques learned during MBA course. The course also aims to carry out an in-depth analysis of developments in area. The student is expected to conduct a detailed survey of literature. In case of a study status related to any industry, it is expected that the student collects all aspects related to a particular industry analyze data and present findings.

2. Course Duration

The student is expected to select and submit the area/topic of his choice to respective instructor in the beginning of this semester. S/he is required to be in constant interaction with the course instructor and the submission of the Special Study Report will be during the end of the semester. The students are expected to spend around 45-50 hours on the study of the different topics. There will be few sessions (5-6) handled by the faculty to orient the students about the course.

3 Guidelines for Preparing Study Report

1. Title Page
2. Preface
3. Acknowledgement
4. Executive Summary
5. Research Methodology

6. Introduction to Industry/ Topic for Special Study
7. Introduction to Company (if any)
8. Detailed discussion of the scope of the Study
9. Data Analysis and Interpretation
10. Key Findings
11. Conclusions
12. Recommendations/Suggestions, if any
13. Bibliography
14. Glossary
15. Annexure

4. Evaluation

The students will be evaluated on a continuous basis and broadly follow the scheme given below:

1.	Study Report & Presentation - Viva voice	50% (Internal Evaluation)
2.	Study Report & Presentation - Viva voice	50% (External Evaluation)

Dissertation Project Report (DPR)
Course code: BI-403

1. Course Objective

The objective of this course is to prepare the students to conduct a study of an Industry/organization utilizing the tools and techniques learned in the two years of the programme by spending one whole semester at corporate.

The focus of the study could be an in depth analysis of an industry and within the industry study of an organization as a case study. The emphasis is on macro and micro level study of issues/problems. Alternatively, if an organization has a problem, its diagnosis and solution in the form of an analytical analysis or model building could be considered which can be implemented. The project study could also be carried out as a comparative analysis of the same industry in different countries, if feasible.

The project should have substantial and primary data. The student is expected to conduct a detailed survey of literature/analysis of secondary and primary data. In case of a status report of an industry, it is expected that the student collects all aspects related to a particular industry analyze data and present the findings.

Prior to conduct of the study, a student in required to prepare a short research proposal of the study recommendations and it is also expected that the study would lead to recommendation and implementable plans of action.

2. Types of Projects

1. Comprehensive case study of Industry.
2. Organizational study aimed at inter-organizational comparison / validation of theory /survey of management practices.
3. Field study (empirical study) with respect to any research issue.

(Feasibility studies as project are not acceptable)

3. Expected format for preparation of the proposal

- Introduction and Statement of Problem
- Short Literature Survey
- Research Design & Hypothesis, if any
- Research Methodology
- Data Sources
- Time Budget
- Tentative Chapter Plan
- Expected Contribution of the study
- Beneficiaries
- A short write up on the researcher
- Bibliography/Appendices, if any

4. Report Framework

- Initial pages
- Executive summary
- Introduction/statement of problem
- Detailed survey of literature
- Methodology / Focus / Scope / Limitations
- Text of the study including analysis
- Conclusions and Recommendations including plan of action
- Bibliography
- Appendices

5. Format of Presentation

- The student in expected to follow the required style for presentation of the report including Tables, References, Bibliography and Appendices.

- Literature Survey should be related to the problem of study. Review of the studies in the area and critical examination of them including conclusions of the student should form part of the literature survey.

- Acknowledgement of all sources of information through footnoting and biography is an essential requirement of the study.