



Shri Shivaji Maratha Society's  
**INSTITUTE OF MANAGEMENT & RESEARCH**

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**Number of Value added courses imparting transferable and life  
Skills offered during the last years:**

Sr. NO.	Name of the Subject	Subject Code
1	Human Rights-I	191
2	Introduction to Cyber Security - I	192
3	Skill Development - I	394



  
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## Introduction to Cyber Security / Information Security

Syllabus for 'Introduction to Cyber Security / Information Security' program\* for students of University of Pune is given below.


The program will be of 4 credits and it will be delivered in 60 clock hours\*\*.

\*: Course material for this program will be developed by CINS

\*\* : These clock hours also includes practical sessions and demonstrations wherever required.

SR. NO.	TOPIC	HOURS	MARKS
1	<b>Module 1: Pre-requisites in Information and Network Security</b>	<b>14</b>	<b>25</b>
	Chapter 1: Overview of Networking Concepts	3	
	Chapter 2: Information Security Concepts	3	
	Chapter 3: Security Threats and Vulnerabilities	5	
	Chapter 4: Cryptography / Encryption	3	
2	<b>Module 2: Security Management</b>	<b>13</b>	<b>25</b>
	Chapter 1: Security Management Practices	7	
	Chapter 2: Security Laws and Standards	6	
3	<b>Module 3: Information and Network Security</b>	<b>13</b>	<b>25</b>
	Chapter 1: Access Control and Intrusion Detection	3	
	Chapter 2: Server Management and Firewalls	4	
	Chapter 3: Security for VPN and Next Generation Technologies	6	
4	<b>Module 4: System and Application Security</b>	<b>20</b>	<b>25</b>
	Chapter 1: Security Architectures and Models	5	
	Chapter 2: System Security	5	
	Chapter 3: OS Security	5	
	Chapter 4: Wireless Network and Security	5	



  
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# **Detail Syllabus for Credit Course for University of Pune**

## **Module 1: Pre-requisites in Information and Network Security**

### **Chapter 1: Overview of Networking Concepts**

1. Basics of Communication Systems
2. Transmission Media
3. Topology and Types of Networks
4. TCP/IP Protocol Stacks
5. Wireless Networks
6. The Internet

### **Chapter 2: Information Security Concepts**

1. Information Security Overview: Background and Current Scenario
2. Types of Attacks
3. Goals for Security
4. E-commerce Security
5. Computer Forensics
6. Steganography

### **Chapter 3: Security Threats and Vulnerabilities**

1. Overview of Security threats
2. Weak / Strong Passwords and Password Cracking
3. Insecure Network connections
4. Malicious Code
5. Programming Bugs





6. Cyber crime and Cyber terrorism
7. Information Warfare and Surveillance

## **Chapter 4: Cryptography / Encryption**

1. Introduction to Cryptography / Encryption
2. Digital Signatures
3. Public Key infrastructure
4. Applications of Cryptography
5. Tools and techniques of Cryptography

## **Module 2: Security Management**

### **Chapter I: Security Management Practices**

1. Overview of Security Management
2. Information Classification Process
3. Security Policy
4. Risk Management
5. Security Procedures and Guidelines
6. Business Continuity and Disaster Recovery
7. Ethics and Best Practices

### **Chapter 2: Security Laws and Standards**

1. Security Assurance
2. Security Laws
3. IPR



4. International Standards
5. Security Audit
6. SSE-CMM / COBIT etc

## Module 3: Information and Network Security

### Chapter 1: Access Control and Intrusion Detection

1. Overview of Identification and Authorization
2. Overview of IDS
3. Intrusion Detection Systems and Intrusion Prevention Systems

### Chapter 2: Server Management and Firewalls

1. User Management
2. Overview of Firewalls
3. Types of Firewalls
4. DMZ and firewall features

### Chapter 3: Security for VPN and Next Generation Technologies

1. VPN Security
2. Security in Multimedia Networks
3. Various Computing Platforms: HPC, Cluster and Computing Grids
4. Virtualization and Cloud Technology and Security

## Module 4: System and Application Security



## **Chapter 1: Security Architectures and Models**

1. Designing Secure Operating Systems
2. Controls to enforce security services
3. Information Security Models

## **Chapter 2: System Security**

1. Desktop Security
2. email security: PGP and SMIME
3. Web Security: web authentication, SSL and SET
4. Database Security

## **Chapter 3: OS Security**

1. OS Security Vulnerabilities, updates and patches
2. OS integrity checks
3. Anti-virus software
4. Configuring the OS for security
5. OS Security Vulnerabilities, updates and patches

## **Chapter 4: Wireless Networks and Security**

1. Components of wireless networks
2. Security issues in wireless



  
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## The syllabus

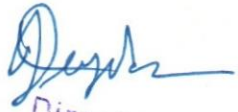
### Course I

#### Introduction to Human Rights and Duties

Credit: 1

- I) **Basic Concept**
  - a) Human Values- Dignity , Liberty, Equality , Justice, Unity in Diversity, Ethics and Morals
  - b) Meaning and significance of Human Rights Education
- II) **Perspectives of Rights and Duties**
  - a) Rights: Inherent-Inalienable-Universal- Individual and Groups
  - b) Nature and concept of Duties
  - c) Interrelationship of Rights and Duties
- III) **Introduction to Terminology of Various Legal Instruments**
  - a) Meaning of Legal Instrument- Binding Nature
  - b) Types of Instruments: Covenant-Charter-Declaration-Treaty-Convention-Protocol-Executive Orders and Statutes
- IV) **United Nations And Human Rights**
  - a) Brief History of Human Rights- International and National Perspectives
  - b) Provision of the charters of United Nations
  - c) Universal Declaration of Human Rights- Significance-Preamble
  - d) Civil and Political Rights-(Art. 1-21)
  - e) Economic, Social and Cultural Rights-(Art.22-28)
  - f) Duties and Limitations-(Art. 29)
  - g) Final Provision (Art. 30)



  
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**Course II**

**Human rights of vulnerable and disadvantaged groups**

**Credit: 1**

**I) General Introduction**

- a) Meaning and Concept of Vulnerable and Disadvantaged
- b) Groups, Customary, Socio-Economic and Cultural Problems of
- c) Vulnerable and Disadvantaged Groups

**II) Social status of women and children in International and national perspective**

- a) Human Rights and Women's Rights –International and National Standards
- b) Human Rights of Children-International and National Standards


**III) Status of Social and Economically Disadvantaged people**

- a) Status of Indigenous People and the Role of the UN
- b) Status of SC/ST and Other Indigenous People in the Indian Scenario
- c) Human Rights of Aged and Disabled
- d) The Minorities and Human Rights

**IV) Human rights of vulnerable groups**

- a) Stateless Persons
- b) Sex Workers
- c) Migrant Workers
- d) HIV/AIDS Victims



  
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**Course III**


**Human Rights and Duties in India: Law, Policy, Society and Enforcement**

**Mechanism**

**Credit: 1**

- I. Human Rights in Indian Context**
  - a) Indian Bill of Rights And Sarvodaya
  - b) Preamble- Fundamental Rights- Directive Principles-Fundamental Duties
  
- II. Human Rights- Enforcement Mechanism**
  - a) Human Rights Act, 1993
  - b) Judicial Organs- Supreme Court (Art 32) And High Courts(Art 226)
  - c) Human Rights Commission- National and State of Maharashtra
  - d) Commission of Women, children , Minority, SC/ST
  - e) Survey of International Mechanism
  
- III. Human Rights Violations and Indian Polity**
  - a) Inequalities in society-population-illiteracy-poverty-caster-inaccessibility of legal redress
  - b) Abuse of Executive Power-Corruption-Nepotism and favoritism
  - c) Human Rights and Good Governance
  - d)
  
- IV. Role of Advocacy Groups**
  - a) Professional Bodies: Press, Media, Role of Lawyers-Legal Aid
  - b) Educational Institutions
  - c) Role of Corporate Sector
  - d) NGO's




  
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## 4 CREDIT COURSE FOR DEPARTMENT OF MANAGEMENT SCIENCES

Rules And Norms for the ease of programme:

1. The department shall provide for four credit course (any two of the following) based on the facilities and resources available.
2. The course shall be taught in the final year of the masters degree program.
3. The department shall decide the evaluation pattern based on the curriculum. It will consist of variety of assessment techniques, and in accordance with the continuous comprehensive evaluation system.
4. Departmental committee will determine both the choice of credits and evaluation pattern.

S. NO.	NAME OF COURSE	CREDITS
1	Soft Skills	2 credits
2	Marketing Associate	2 credits
3	Human Resource Associate	2 credits
4	Finance associate	2 credits
5	Tally – ERP	2 credits
6	SAP – Business One Module	2 credits
7	SAS ( Statistical Analysis System)	2 credits
8	Data Science LAB	2 credits
9	Event Management	2 credits
10	Marketing Analytics	2 credits
11	Customer Analytics	2 credits
12	Risk Analytics	2 credits
13	Web Analytics	2 credits
14	Human Resource Analytics	2 credits
15	Selling Skills	2 credits
16	Corporate Social Responsibility (CSR) & Sustainability	2 credits

  
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Syllabus for Soft Skills (2 CREDIT COURSE – 30 hours)

The syllabi should consist of practical and the theoretical aspects as well. For every component there shall be the practical and theoretical contents as well.

Objektivies:

1. To make students well versed with at the business communication skills.

S.No.	PRACTICAL	THEORY	Duration in hours
1	<b>Development of Proficiency in English :</b> <ul style="list-style-type: none"> <li>Practice on Oral and spoken communication skill &amp; testing – voice &amp; accent, voice clarity, voice modulation &amp; intonation , word stress etc.</li> <li>Feedback and questioning Technique</li> <li>Objectiveness in Argument</li> <li>Development etiquettes and manners</li> <li>Study of different pictorial expression of non-verbal communication and its analysis</li> </ul>	<b>Concepts of effective communication:</b> <ul style="list-style-type: none"> <li>Components of effective communication</li> <li>Communication process and handling them</li> <li>KISS (Keep it short and sweet) in communication – Composing effective messages.</li> <li>Non – Verbal Communication : its importance and nuances : Facial Expression , Posture , Gesture , Eye contact, appearance (dress code).</li> </ul>	9
2	<b>Written Communication Skill Practice for:</b> <ul style="list-style-type: none"> <li>Correction of errors</li> <li>Making of Sentences</li> <li>Paragraph Writing</li> <li>Leave Application and simple letter writing</li> </ul>	<b>Grammatical use:</b> <ul style="list-style-type: none"> <li>Punctuation</li> <li>Meaning &amp; opposites</li> <li>Real Life conversations</li> <li>Vocabulary building</li> </ul> <p>Understanding the Audience, Need analysis through pre presentation feedback form</p>	6
3	<b>Presentation Skill practice</b> <ul style="list-style-type: none"> <li>Preparing in presentation</li> <li>Delivery of presentation</li> </ul>	<b>Concept of 4 method for presentation6</b> <ul style="list-style-type: none"> <li>Preparation &amp; introduction</li> <li>Presentation</li> <li>Evaluation / feedback</li> <li>Summarization / Conclusion</li> </ul> <p>Team Building games, Together Everyone Achieves Miracle (TEAM) , issues when there is no team work, Leadership emerging through team, How to identify team players</p>	6
4	<b>Team Building / Coordination Skills</b> <ul style="list-style-type: none"> <li>Team Building Practices through group exercises , team task / role play</li> <li>Ability to mixing &amp; accommodation</li> <li>Ability to work together</li> </ul>	<b>Concept of</b> <ul style="list-style-type: none"> <li>Group</li> <li>Group Dynamics</li> <li>Team building</li> </ul>	4
5	<b>Telecommunication Skills</b>	<b>Electronic Communication concept</b>	2





	<ul style="list-style-type: none"> <li>• Tele – etiquette</li> <li>• Receiving Calls</li> <li>• Transferring calls</li> <li>• Taking Message/ Voice Mails</li> <li>• Making Outgoing Calls</li> <li>• Receiving Fax</li> </ul>	<ul style="list-style-type: none"> <li>• Working principle of Mini exchange and its features and facilities.</li> </ul>	
6	<b>Self Management</b> <ul style="list-style-type: none"> <li>• Self Evaluation</li> <li>• Self Discipline</li> <li>• Self Criticism</li> <li>• Recognition of one's own limits and deficiencies</li> <li>• Independency etc.</li> <li>• Thoughtful &amp; Responsible</li> <li>• Self Awareness</li> </ul>	<b>Self Management</b> <ul style="list-style-type: none"> <li>• Identifying one's strengths and weaknesses</li> <li>• Planning &amp; Goal setting</li> <li>• Managing self – emotions, ego, pride.</li> </ul>	2
7	<b>Team Management Technique</b> Practice by gameplay & other learning methodology for achieving targets and getting of right first time.	<b>Time Management concept</b> <ul style="list-style-type: none"> <li>• Attendance , Discipline &amp; Punctuality</li> <li>• Act in time on commitment</li> <li>• Quality/ Productive Time</li> </ul>	1

References :

1. Soft skills Training – A workbook to develop skills for employment by Fredrick H. Wentz
2. Personality Development and Soft skills , Oxford University Press by Barun K. Mitra
3. The Time Trap : the Classic book on Time Management by R. Alec Mackenzie

**NOTE: Suggestion is to open a common film club for all the departments, where the movie can be displayed at fixed time and which shall cost minimal charges from the viewers.**



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Syllabus for Marketing Associate (2 CREDIT COURSE – 30 hours)

Objectives:

1. To understand about the various techniques of selling.
2. To develop the required body language in the future marketing professionals.

S.NO.	PRACTICAL	THEORY	DURATION
1	Understanding of customer's thinking and align products and services to meet the customer need.	Understand the various factors impacting consumer behavior like Personality, Perception, Product life cycle. Role of Consumer behavior in decision making.	6
2	Demonstration of techniques on how to sell the services	Discussion of different types of products and how the selling techniques of different products and services varies from sector to sector.	6
3	Do a simple project work , by designing a research questionnaire for an FMCG product . Forecast Future sales by using forecasting techniques.	<ul style="list-style-type: none"> <li>• Basic Knowledge of Statistical Tools</li> <li>• Devise a questionnaire</li> <li>• Learn Forecasting techniques</li> <li>• Analyze and evaluate the focus group model and assess the total market through primary and secondary data.</li> </ul>	14
4	<ul style="list-style-type: none"> <li>• Demonstrate learning of different types of body languages.</li> <li>• Dress Properly</li> <li>• Demonstrate understanding of business etiquettes.</li> </ul>	Selling Skills <ul style="list-style-type: none"> <li>• Decoding body language</li> <li>• Power Dressing</li> <li>• General Business Etiquette</li> <li>• Self Motivation</li> </ul>	4

References :

1. How customers think : essential Insights into The Mind of the Market, Harvard University Press by Gerald Zaltman
2. The Little Red book of Selling , Jeffrey Gitomer
3. ABC's of Selling with etiquette, Canterbury House Publishing, Dale Brakhage & Edie Hand



Syllabus for Human Resource Associate (2 CREDIT COURSE – 30 hours)

Objectives :

1. To understand various practical applications in HR and its calculation.

S.NO.	PRACTICAL	THEORY	DURATION
1	Practical experience on Excel	Time Office /Excel	2
2	Form filling	Payroll Administration	2
3		Independently handling departments	2
4	Process and Implementation	Recruitment - HRIMS Competency Mapping Manpower Planning Induction Joining Formalities HR audit	6
5	Calculation :	Bonus /Gratuity Break-up of Salary Designing salary components CTC TDS Calculations	4
6	Software used for Attendance and Leave management system shall be introduced while conduction.	Attendance Management Leave Management Medical Reports CL/ SL /PL	6
7	Excel application	V-Look up H- Look up Goal seeking pivot table	4
8	Payroll Administration	Wage Administration Payroll Process (Manual & Software) HR Wage Package Operations E.S.I. / P.F. / PT	4

References :

- 1 Microsoft Excel 2010 Bible, Wiley India Pvt. Ltd. , John Walkenbach
2. HR and Payroll Software Practices demo version : [www.sysforehrms.com/](http://www.sysforehrms.com/)
3. Leave Management Software : [www.mentishrms.com/](http://www.mentishrms.com/)
4. Free books on Attendance Management System at [Freebooez.com](http://Freebooez.com)
5. HR Audit Toolkit – elite edition , Ruben Benmergui
6. [www.humanresourcesiq.com/business-strategies/articles/hr-audit-an-essential-improvement-tool/](http://www.humanresourcesiq.com/business-strategies/articles/hr-audit-an-essential-improvement-tool/)



Syllabus for Finance Associate (2 CREDIT COURSE – 30 hours)

Objectives:

1. To understand about the various practical concepts of accounting and its hand on experience.

S.NO.	PRACTICAL	THEORY	DURATION
1	<ul style="list-style-type: none"> <li>• Prepare receipt and payments account. Income and expenditure account.</li> <li>• Use of Accounting software</li> </ul>	<ul style="list-style-type: none"> <li>• Basic Accounting Principles</li> <li>• Prepare receipts &amp; payments account</li> </ul>	4
2	<ul style="list-style-type: none"> <li>• Use systems of accounting &amp; different methods of investment.</li> <li>• Case studies</li> </ul>	Analyze different methods of investment in associates, different forms of joint venture, bonus issue of capital and capital reduction and impact of currency translation.	4
3	Apply basics of cost accounting	Accounting – Performance analysis <ul style="list-style-type: none"> <li>• How to read balance sheet , preparation of profit and loss account , annual balance sheet account and cashbook ratio analysis.</li> </ul>	4
4	Composite statement , common size statement , trade analysis , CVP analysis.	Theory & Concepts	6
5	Demonstrate how to maximize profits by investing resources in stocks and in international market.	Develop an understanding for evaluation of a project, Cash flow determination, and determination of cost of capital.	6
6	Analyze capital market for investment. Web based training	<ul style="list-style-type: none"> <li>• Evaluate the intricacies of the securities market, capital market and their analysis from the investor's point of view.</li> <li>• Understand the process of making Fundamental Analysis &amp; Technical Analysis of the project , along with the industry analysis.</li> </ul>	6

References :

1. Financial Management – I M Pandey
2. How to read a balance sheet by IBH, Oxford
3. International Research Journal of applied Finance , Case studies in Finance & Accounting
4. Short Stories from the stock market , Kindle Edition, Amit Kumar.





Syllabus for Tally – ERP (2 CREDIT COURSE – 30 hours)

**Objectives:-**

1. Understand the nature of a Service organization.
2. Under the requirements in relation to accounting data maintenance of a Business Organization
3. Understand the statutory implications in various Business Activities.

S.NO.	CONTENT	INSTRUCTIONAL HOURS
1	Introduction – Tally a Accounting and Inventory Management Solution to Business	2
2	Maintenance of Company Data	2
3	Maintenance of Company Data - Practical	2
4	Back up Creation & Key Functions	2
5	Creating Masters	2
6	Advanced Voucher Entry – Contra, Payment & Receipt	2
7	Advanced Voucher Entry - Practical	2
8	Advanced Voucher Entry – Sales, Purchase, Journal	2
9	Advanced Voucher Entry – Practical	2
10	Advanced Voucher Entry – Debit Notes & Credit Notes	2
11	Case study, Case solution, Cost centres, Short – cut keys,	2
12	Creating – Inventory Masters, Groups & Ledger	2
13	Inventory Transactions	2
14	Accounting & Inventory Reports in Tally.ERP	2
15	Technology advantage of Tally.ERP 9	2

**References:**

1. Lab Notes
2. Tall. ERP 9 Training Guide, BPB Publications, Nadhani.
3. Tally 9 book.com





Syllabus for SAP – Business One Model (2 CREDIT COURSE – 30 hours)

**Objectives:-**

1. Understand the basic concept of SAP.

S.NO.	CONTENT	INSTRUCTIONAL HOURS
1	<b>Introduction to SAP Business One:</b> Introduction to ERP and SAP business One.	4
2	<b>Module-1 Administration:</b> How to get started with SAP-B1, Basics of SAP B 1	4
3	<b>Module-2 Financial:</b> Chart of Accounts, Edit Chart of Accounts, Journal Entry, Journal Vouchers, Profit Centers, General Ledger	4
4	<b>Module-3 Sales opportunities:</b> Sales Stages, Various Sales Reports	4
5	<b>Module-4 Sales A/R:</b> Sales quotation, Sales order, Delivery document, Return Document, A/R Invoice, A/R credit Memo, Document Generation Wizard, Dunning Wizard, Reports.	4
6	<b>Module-5 Purchase A/P:</b> Purchase Order, Goods Receipt PO, Goods Return, A/P Credit Memo, Landed Costs, Purchase Analysis	4
7	<b>Module-6 Banking:</b> Incoming Payments, Deposits, Outgoing Payments.	4
8	<b>Cases and Exercises</b>	2

**References:**

1. Notes
2. Free books download at [pdf.docdownload.org/sap-business-one-s3.pdf](http://pdf.docdownload.org/sap-business-one-s3.pdf)
3. [www.businesserp.org/learning/sap-b1-book.htm](http://www.businesserp.org/learning/sap-b1-book.htm)
4. Introduction to SAP Business One , Galileo Press, Robert Mayerhofer.
5. SAP Business One : Simple But Powerful, Premier Press, Thomas Teufel, Monika Nquyen Nam & Roland Heun.



Syllabus for Statistical Analysis System (SAS) (2 CREDIT COURSE – 30 hours)

Objectives:

1. To learn and understand the basic concepts of SAS and its application.

S.NO.	PRACTICAL	THEORY	DURATION
1	Installation of the software	Introduction to SAS, Early history of SAS, Version history	3
2	<b>Essentials of SAS Programming</b> Accessing Data <ul style="list-style-type: none"> <li>• Use FORMATTED and LIST input to read raw data files.</li> <li>• Use INFILE statement options to control processing when reading raw data files.</li> <li>• Use various components of an INPUT statement to process raw data files including column and line pointer controls , trailing @ controls.</li> <li>• Combine SAS Data sets</li> <li>• Access an Excel workbook.</li> <li>• Creating Data Structures</li> <li>• Create temporary and permanent SAS data sets.</li> <li>• Create and manipulate SAS data values</li> <li>• Export data to create standard and comma – delimited raw data files.</li> <li>• Control which observations and variables in a SAS data set are processed and output.</li> </ul>		8
3	<b>Data Manipulation Techniques</b> Managing Data <ul style="list-style-type: none"> <li>• Investigate SAS data libraries using base SAS utility procedures.</li> <li>• Sort observations in in a SAS data set.</li> <li>• Conditionally execute SAS statements.</li> <li>• Use assignment statements in the DATA step.</li> <li>• Modify variable attributes using options and statements in the DATA step.</li> <li>• Accumulate sub – totals and totals using DATA step statements.</li> <li>• Use SAS functions to manipulate character data , numeric data , and SAS date values.</li> <li>• Use SAS functions to convert character data to numeric and vice versa.</li> <li>• Process data using DO LOOPS</li> <li>• Process data using SAS arrays.</li> <li>• Validate and clean data.</li> </ul>		6
4	<b>Generating Reports</b> <ul style="list-style-type: none"> <li>• Generate list reports using the PRINT procedure.</li> <li>• Generate summary reports and frequency tables using BASE SAS procedures.</li> <li>• Enhance reports through the use of user – defined formats, titles, footnotes and SAS system reporting.</li> <li>• Generate reports using ODS system.</li> </ul>		7
5	<b>Handling Errors</b> <ul style="list-style-type: none"> <li>• Identify and resolve programming logic errors.</li> <li>• Recognize and correct syntax errors.</li> <li>• Examine and resolve data errors.</li> </ul>		6



References:

1. Lab Notes by Trainer
2. Base SAS Programming, Black Book, Dreamtech Press, N. Jyoti Bass K. Madhavi Lata Kogent Solutions Inc.
3. The Little SAS Book: A Primer, Third Edition.



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Syllabus for Data Science Lab (2 CREDIT COURSE – 30 hours)

**Objectives:-**

1. Leveraging students with latest statistical innovative techniques using excel and excel add-ins.
2. This course shall prepare the students for various technical profiles like Business analytics.

S.NO.	CONTENT	INSTRUCTIONAL HOURS
1	Clustering Techniques – I; What is cluster , visualization techniques.	4
2	Clustering techniques – II; Hierarchical clustering (including linkage methods ) divisive vs. agglomerative approaches; distance measures ; the dendogram.	5
3	Decision Tree – multistage decision problems, constructing the tree, evaluation of decision, value of perfect and imperfect information.	4
4	Time Series Forecasting	4
5	Introduction to Predictive Modelling	4
6	Fitting a model to data – model based clustering	4
7	Optimization techniques; use of dissimilarity matrices and the partition about medoids approach ; choosing the number of groups ; evaluating clusters.	5

**References:**

1. Introduction to cluster analysis ; visualizing clusters: Everitt et al., Cluster analysis (4<sup>th</sup> ed)
2. Cluster analysis : Everitt & Dunn , applied Multivariate Data Analysis.
3. Cluster Analysis: Manly , Multivariate Statistical Methods , A Primer (2<sup>nd</sup> Ed.)
4. Finding groups in data : an introduction to Cluster Analysis , Kaufman & Rousseeuw.



  
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Syllabus for Event Management (2 CREDIT COURSE – 30 hours)

Objectives:

- To understand about planning and managing an event.
- To understand how to market an event, publicize it, generate interest and attract participants.

S.NO.	CONTENT	INSTRUCTIONAL HOURS
1	Principles of Project/ Event Management – Understand project management, resources, activities, risk management, delegation, project selection, role of the event manager.	3
2	Understanding the facts – Conducting market research, establishing viability, capacities, costs and facilities, plans, time scales, contracts.	3
3	Preparing a proposal – Clarity, SWOT analysis, estimating attendance, media coverage, advertising, budget, special considerations, success.	3
4	Crisis management plan – Crisis planning, prevention, provision, action phase, handling negative publicity, structuring the plan.	3
5	Seeking sponsors – Different types of sponsorship, definition, objectives, target market, budget, strategic development, implementation, evaluation.	3
6	Organising the event – Purpose, Venue, timing, guest list, invitations, food & drink, room dressing, equipment, guest of honour, speakers, media, photographers, podium, exhibition.	4
7	Marketing tools – Types of advertising, merchandising, give aways, competitions, promotions, website and text messaging.	3
8	Media tools – Media invitations, photo calls, press releases, TV opportunities, radio interviews.	3
9	Promotional tools – Flyers, Posters, Invitations, Website, newsletters, ezines, blogs, tweets.	3
10	Evaluation- Budget, cost of event, return on investment, media coverage, attendance, feedback.	2

References:

1. Event Management : A blooming industry and an eventful career, Har Anand Publication, Devesh Kishore & Ganga Sagar singh
2. The Art of Successful Event Management, APH Publishing Corporation, Leelamma Devasia & V.V. Devasia
3. Start your own event planning business 3/E: Your step by step guide to success, Perseus Books Group, Cheryl Kimball, Entrepreneur Press.



Syllabus for Marketing Analytics (2 CREDIT COURSE – 30 hours)

Objectives:

- To understand about practices of measuring, analyzing, and managing marketing performance to maximize its effectiveness and optimize ROI.

S.NO.	CONTENT	INSTRUCTIONAL HOURS
1	Marketing Mix optimization: Use of various techniques like multivariate regression to analyse sales and marketing time series data, Effects of various marketing tactics in order to find out the optimal mix of various marketing activities to maximize revenue and /or profitability.	8
2	Marketing Mix Modelling : Use of this technique to analyse and optimize the marketing spend.	6
3	Price Analysis : Determination of the price elasticity of a product using historical price and sales data, Application of results to find out expected volume at new prices , key price points, changing price sensitivity, and competitive price matching.	8
4	Promotions Analysis : Analysis of promotions data to understand the sales lift and ROI from various promotional activities such as In-store displays , Newspaper & Pre-print features , coupons, In-store, Mail/ online offers, Special packs, Special events, and discounts etc.	8

References:

1. Marketing Mix Optimization Rules by Andrew A. Mitchell, College of Business Administration , Pennsylvania State University, 1975.
2. Market Response and Marketing Mix Problems : Trends and Research Opportunities , Douglas Bowman and Hubert Gatignon, New Publishers Inc.
3. Pring on Price patterns: the definitive guide to price pattern analysis and interpretation, Martin J. Pring, Mc Graw Hill Publications



Syllabus for Customer/ Loyalty Analytics (2 CREDIT COURSE – 30 hours)

Objectives:

- To understand how to do the analysis of customer behavior and demographics to develop a better understanding of the consumer leading to better business decisions .

S.NO.	CONTENT	INSTRUCTIONAL HOURS
1	Customer Segmentation :Classification of a large customer population into smaller homogeneous groups using modeling techniques such as regression modeling, clustering and decision trees.	10
2	Life time value Analysis : Quantify the life time value of a customer to the business, identification of the most profitable customer. Example of telecom and e-tailing should be discussed.	10
3	Attrition analysis : Identification of customers who attrite in short time, Devising strategies to stop or prevent attrition	10

References:

1. Generalized approach to Customer segmentation and Building Predictive Models of Segmented Behavior, Tianyi Jiang,
2. Customer Segmentation and clustering using SAS Enterprise Miner , Second edition, Randall S. colica , SAS institute
3. Customer Lifetime value analysis : an integrated empirical framework for measurement and explanation, Werner Josef Reinartz, University of Houston, 1999
4. An analysis of Sample attrition in Panel Data : the Michigan Panel study of lcome dynamics , Issue 1156, John Fitzgerald, Peter Gottschalk, Robert Moffitt, National Bureau of Economic Research , 1998.
5. A History of Modern Wars of Attrition , Carter Malkasian, Greenwood Publishing group.





Syllabus for Risk Analytics (2 CREDIT COURSE – 30 hours)

Objectives:

- To understand how to do the analysis to understand, quantify and manage the risk associated with an activity.

S.NO.	CONTENT	INSTRUCTIONAL HOURS
1	Acquisition Modelling: Application of acquisition modeling on application data, Prediction of likelihood of future default.	8
2	Behavioural scoring : Predicting the risk and profitability of existing customers using their transaction and credit history , classification of customers based on their risk profile.	10
3	Base II analytics : Use of Base II Accord (issued by International committee on Banking supervision) to improve risk management practices, Accurate estimation of risk exposures. Applications of Base II analytics – Computation of Probability of Default (CPD), Computation of Loss Given Default (LGD), Computation of exposure at default (EAD), Collection Scorecard development.	12

References:

1. Risk Analysis – A Quantitative Guide, David Vose, John Wiley & Sons.
2. Risk Analysis Foundations, Models and Methods; Louis Anthony Cox Jr. , Springer London Limited.





Syllabus for Web Analytics (2 CREDIT COURSE – 30 hours)

Objectives:

- To understand the analysis of internet data to understanding and optimizing web usage..

S.NO.	CONTENT	INSTRUCTIONAL HOURS
1	Off site web analytics : Web measurement and analysis , Measurement of website's potential audience (opportunity), share of voice (visibility), and buzz (comments ) on internet.	10
2	On – site web analytics : Measurement of visitor's journey including drivers and conversations, tracking pages that encourage people to make a purchase and measures the commercial performance of the website. Comparison of data with key performance indicators, Implication to improve marketing campaign's audience response.	10
3	Adequate hands on experience on the above mentioned topics are required	10

References:

1. Web Analytics 2.0 : The art of online accountability and science of customer centricity (Google ebook), Avinash Kaushik, John wiley & sons.
2. Web Analytics : an hour a day, Avinash Kaushik, John Wiley & Sons.



Syllabus for Human Resource Analytics (2 CREDIT COURSE – 30 hours)

Objectives:

- To understand the functions of Human Resource Information systems in an organization.

S.NO.	CONTENT	INSTRUCTIONAL HOURS
1	Understanding human resource information system of an organization. Identification of information that can be extracted like hiring date, compensation , growth over time, promotions, roles , performance ratings, skill ratings, previous experience, trainings attended etc.	6
2	Use of above collected data to predict the employees likely to leave and use measures to retain the desirable one and manage the attrition rate	6
3	Identification of training needs and processes with the help of above data.	6
4	Vendor management systems data : To track efficiency and effectiveness of recruitment process	6
5	Demonstrating examples of sports clubs like AC Milan (Football) , Patriots (American football) etc who have employed quantitative HR techniques.	6

Reference:

1. Human Resource Information Systems: Basics, Applications, and Future directions; Michael J. Kavanagh, Mohan Thite , Richard D. Johnson, Sage Publications.
2. Developing Human resource Information System , Ashok Kumar Gupta, Daya Publishing House
3. Training Needs Assessment : Methods, Tools & Techniques, Jean Barbezette, John Wiley & sons.
4. The vendor Management Office: Unleashing the power of strategic sourcing, Stephen Guth, Lulu.com, 2007.



Syllabus for Selling Skills (2 CREDIT COURSE – 30 hours)

Objectives:

- To learn the basic skill of selling an idea in any organization.

S.NO.	CONTENT	INSTRUCTIONAL HOURS
1	Product Knowledge : Selling technique for B2C and for B2B, Taking apptmt through tel call, How to prepare sales pitch for telecallers, FAB, Objection handling	4
2	Prospect Identification through cold calls etc.	4
3	Seek Appointment via Telephone, E-mails etc.	6
4	Product presentation – Demonstration etc.	6
5	Closing skills & Order Processing	6
6	In – store selling	4
	The syllabus should be taught as training and full practical sessions should be adopted.	

References:

1. Notes by trainer
2. The complete idiot's guide to cold calling, Keith Rosen
3. How to master the art of selling, Tom Hopkins
4. Spin Selling , Neil Reckham
5. Words that sell , Richard Bayan



Syllabus for Corporate Social Responsibility (CSR) & Sustainability (2 CREDIT COURSE – 30 hours)

Objectives:

- To develop an understanding for corporate citizenship and sustainability from business perspective.
- To learn how to strategically manage CSR within your organization.
- To understand how to improve your company's sustainability performance.

S.NO.	CONTENT	INSTRUCTIONAL HOURS
1	Understanding about various issues related to Corporate citizenship. Various corporate players and risk involved in mismanaging corporate citizenship.	4
2	Identification of Corporate Social Responsibility and role of the organization in CSR, Assessment of the organization's performance in regards to CSR.	4
3	Elements of CSR, Importance of CSR, Role of CSR commitments,	4
4	Importance of capturing the value created from CSR efforts, Role of annual reporting in Value capture, Difference between tangible and intangible CSR value.	4
5	Application of CSR strategy to a real life example	4
6	A survey on how different companies has fulfilled their corporate social responsibilities	6
7	Assessing how well a company is capturing the value of its CSR efforts.	4

References:

1. Notes by trainer
2. Corporate Social Responsibility : doing the most good for your company and your cause, Philip Kotler & Nancy Lee
3. Small Giants companies that choose to be great instead of big – Bo Burlingham, Penguin 2007
4. Investing in Corporate Social Responsibility: A guide to Best Practice, Business Planning & the UK's Leading Companies, Kogan Page Publishers, John Hancock



  
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