

DEPARTMENT OF MANAGEMENT

RATHINAM COLLEGE OF ARTS AND SCIENCE (AUTONOMOUS)

Rathinam Tech zone, Pollachi Road, Eachanari,

Coimbatore – 641021



Syllabus for

BBA Computer Applications

2024-2025 Batch on-wards

Vision and Mission of the Institution:

VISION

To emerge as a world-renowned Institution that is integrated with Industry to impart Knowledge, Skills, Research Culture and Values in youngsters who can accelerate the overall development of India.

MISSION

To provide quality education at affordable cost, build academic and research excellence, maintain eco-friendly and robust infrastructure, and to create a team of well qualified faculty who can build global competency and employability among the youth of India.

MOTTO

Transform the youth into National Asset.

Vision and Mission of the Department:

VISION

To establish the Management Department as a dynamic and continually evolving center of excellence, dedicated to providing students with a transformative learning experience. Our aim is to nurture global leaders who not only excel in business but also contribute significantly to the growth of society and the nation."

MISSION

Empower students to become agile, forward-thinking leaders who drive positive change in the business world, contribute to the betterment of society, and foster economic growth and prosperity on a national and global scale.

Program Educational Objectives (PEO)

| | |
|--------------|---|
| PEO1: | Pursue a career as a globally competent and universally employable professional in core and related fields in diverse sectors who accelerates the overall development of India. |
| PEO2: | Pursue lifelong learning opportunities including graduate degrees to improve and expand domain specific and professional skills. |
| PEO3: | Advance personally and professionally by accepting professional and societal responsibilities, and pursuing leadership roles. |

Mapping of Institute's Mission to PEO

| Institute's Mission | PEO's |
|--|---------------|
| To provide quality education at affordable cost, build academic and research excellence maintain eco-friendly and robust infrastructure, and | PEO1, PEO2 |
| To create a team of well qualified faculty who can build global competency and employability among the youth of India. | PEO2, PEO3 |

Mapping of Department Mission to PEO

| Department Mission | PEO's |
|--|---------------|
| Imparting critical thinking | PEO 1, PEO 2 |
| Enhancing research skills | PEO 1, PEO 2 |
| Developing professionalism | PEO 2, PEO 3, |
| Viable technical knowledge and core competency | PEO 1. PEO 3 |

Program Outcomes (PO):

| | |
|-------------|--|
| P01 | : Demonstrate knowledge competency in core discipline |
| P02 | : Apply the appropriate knowledge and suitable skills in solving the complex problems |
| P03 | : Conduct investigations of complex problems through various scientific approaches |
| P04 | : Design solutions for complex and open ended real-life or real-time problems |
| P05 | : Use appropriate and advanced tools for wide range of practices with an understanding on its associated limitations |
| P06 | : Work effectively and responsibly as a member or a leader in a team |
| P07 | : Express complex concepts within the profession and with society at large |
| P08 | : Understand the professional roles and responsibilities |
| P09 | : Analyze social and environmental aspects of the professional practices |
| P010 | : Practice higher moral and ethical standards during the discharge of professional duties |
| P011 | : Incorporate finer finance and business practices in all professional engagements |
| P012 | : Identify and address their professional development through lifelong learning |

Program Specific Outcomes (PSO):

| | |
|--------------|--|
| PSO 1 | : Students should be able to apply modern practices and strategies in software project development using open-ended programming environments to deliver quality product for business success in context with societal needs. |
| PSO 2 | : An ability to gain knowledge on design and control strategy; techniques to secure information and adapt to the fast changing world of information technology needs |
| PSO 3 | : An ability to use and develop cloud software, administrative features, infrastructure services and architectural patterns; ethical hacking and forensic security technologies. |

Correlation between the PO/PSO and the PEOs

| Program Outcomes | | PEO 1 | PEO 2 | PEO 3 |
|------------------|---|-------|-------|-------|
| PO 1 | : | 3 | 1 | 3 |
| PO 2 | : | 3 | 2 | 3 |
| PO 3 | : | 1 | 2 | 3 |
| PO 4 | : | 3 | 1 | 3 |
| PO 5 | : | 3 | 3 | 2 |
| PO 6 | : | 2 | 3 | 3 |
| PO 7 | : | 2 | 3 | 1 |
| PO 8 | : | 3 | 2 | 1 |
| PO 9 | : | 2 | 2 | 3 |
| PO 10 | : | 3 | 2 | 1 |
| PO 11 | : | 2 | 1 | 1 |
| PO 12 | : | 3 | 2 | 2 |
| PSO 1 | : | 2 | 3 | 1 |
| PSO 2 | : | 3 | 2 | 2 |
| PSO 3 | : | 2 | 3 | 3 |

3 – Strong correlation; 2-moderate correlation; 1-Less correlation; Blank-no correlation

Components considered for Course Delivery is listed below:

- a. Class room Lecture
- b. Laboratory class and demo
- c. Assignments
- d. Mini Project
- e. Project
- f. Online Course
- g. External Participation
- h. Seminar
- i. Internship

Mapping of POs with Course Delivery:

| Program Outcome | Course Delivery | | | | | | | | |
|-----------------|-----------------|---|---|---|---|---|---|---|---|
| | a | b | c | d | e | f | g | h | i |
| PO1 | 3 | 3 | 1 | 1 | 2 | 1 | 3 | 3 | 1 |
| PO2 | 3 | 3 | 2 | 3 | 3 | 1 | 1 | 2 | 3 |
| PO3 | 3 | 3 | 1 | 3 | 1 | 1 | 1 | 2 | 3 |
| PO4 | 2 | 3 | 2 | 3 | 3 | 1 | 1 | 3 | 1 |
| PO5 | 3 | 2 | 1 | 3 | 1 | 3 | 3 | 3 | 3 |
| PO6 | 2 | 3 | 1 | 3 | 3 | 1 | 2 | 3 | 3 |
| PO7 | 2 | 3 | 1 | 3 | 1 | 1 | 2 | 3 | 3 |

| | | | | | | | | | |
|------|---|---|---|---|---|---|---|---|---|
| P08 | 2 | 2 | 1 | 2 | 3 | 3 | 2 | 3 | 3 |
| P09 | 1 | 1 | 2 | 3 | 3 | 3 | 2 | 3 | 3 |
| P010 | 2 | 1 | 2 | 3 | 2 | 2 | 2 | 2 | 2 |
| P011 | 1 | 1 | 2 | 2 | 2 | 3 | 3 | 3 | 3 |
| P012 | 1 | 2 | 3 | 2 | 2 | 2 | 3 | 3 | 3 |
| PS01 | 2 | 3 | 1 | 3 | 2 | 3 | 1 | 3 | 3 |
| PS02 | 3 | 2 | 2 | 3 | 3 | 2 | 2 | 3 | 2 |
| PS03 | 2 | 3 | 3 | 2 | 2 | 3 | 3 | 2 | 3 |

3 – Strong correlation; 2-moderate correlation; 1-Less correlation; Blank-no correlation

RATHINAM COLLEGE OF ARTS AND SCIENCE (AUTONOMOUS)**BBA COMPUTER APPLICATION DEGREE PROGRAMME****BBA (CA) Curriculum Structure - Regulation – 2024****(For students admitted from 2024-2025 and onwards)**

| S.No. | Sem | Part | Sub Type | Course Code | Course Name | Credit | Hours | INT | EXT | Total |
|-------|-----|------|----------|-------------|---|-----------|-----------|------------|------------|------------|
| 1 | 1 | 1 | L1 | | Language - I | 3 | 5 | 50 | 50 | 100 |
| 2 | 1 | 2 | L2 | | English - I | 3 | 5 | 50 | 50 | 100 |
| 3 | 1 | 3 | Core | | Core Course – I Theory | 4 | 5 | 50 | 50 | 100 |
| 4 | 1 | 3 | Core | | Core Course – II Theory /Practical | 4 | 4 | 50 | 50 | 100 |
| 5 | 1 | 3 | Allied | | Allied-I | 4 | 5 | 50 | 50 | 100 |
| 6 | 1 | 4 | SEC | | Skill Enhancement Courses – I Practical / Training - | 4 | 4 | 50 | 50 | 100 |
| 7 | 1 | 4 | AEC | | Ability Enhancement Course I Environmental Studies or Universal Human Values & Professional Ethics | 2 | 2 | 50 | 0 | 50 |
| | | | | | | 24 | 30 | 350 | 300 | 650 |
| 1 | 2 | 1 | L1 | | Language - II | 3 | 5 | 50 | 50 | 100 |
| 2 | 2 | 2 | L2 | | English - II | 3 | 5 | 50 | 50 | 100 |
| 3 | 2 | 3 | Core | | Core Course – III Theory | 4 | 5 | 50 | 50 | 100 |
| 4 | 2 | 3 | Core | | Core Course – IV Theory / Practical | 4 | 4 | 50 | 50 | 100 |
| 5 | 2 | 3 | Elective | | Elective - I Entrepreneursip Development | 4 | 4 | 50 | 50 | 100 |
| 6 | 2 | 3 | Allied | | Allied-II | 4 | 5 | 50 | 50 | 100 |
| 7 | 2 | 4 | AEC | | Ability Enhancement Course II Design Thinking | 2 | 2 | 50 | 0 | 50 |
| 8 | 2 | 5 | Ext | | Extension Activity - I (NASA) | 1 | 0 | 25 | 0 | 25 |
| | | | | | | 25 | 30 | 375 | 300 | 675 |
| 1 | 3 | 1 | L1 | | Language - III | 3 | 4 | 50 | 50 | 100 |
| 2 | 3 | 2 | L2 | | English - III | 3 | 4 | 50 | 50 | 100 |
| 3 | 3 | 3 | Core | | Core Course – V Theory | 4 | 6 | 50 | 50 | 100 |
| 4 | 3 | 3 | Core | | Core Course – VI Theory / Practical | 4 | 4 | 50 | 50 | 100 |
| 5 | 3 | 3 | Allied | | Allied-III | 4 | 5 | 50 | 50 | 100 |
| 6 | 3 | 4 | SEC | | Skill Enhancement Courses – II Practical / Training | 4 | 5 | 50 | 50 | 100 |
| 7 | 3 | 4 | AEC | | Ability Enhancement Course III Soft Skill-1 | 2 | 2 | 50 | 0 | 50 |

| | | | | | | | | | | |
|---|---|---|----------|--|---|------------|------------|-------------|-------------|-------------|
| 8 | 3 | 3 | ITR | | Internship / Industrial Training (Summer vacation at the end of II semester activity) | 2 | 0 | 50 | 0 | 50 |
| 9 | 3 | 5 | Ext | | Extension Activity - II (NASA) | 1 | 0 | 25 | 0 | 25 |
| | | | | | | 27 | 30 | 425 | 300 | 725 |
| 1 | 4 | 1 | L1 | | Language - IV | 3 | 4 | 50 | 50 | 100 |
| 2 | 4 | 2 | L2 | | English - IV | 3 | 4 | 50 | 50 | 100 |
| 3 | 4 | 3 | Core | | Core Course – VII Theory | 4 | 6 | 50 | 50 | 100 |
| 4 | 4 | 3 | Core | | Core Course – VIII Theory / Practical | 4 | 4 | 50 | 50 | 100 |
| 5 | 4 | 3 | Allied | | Allied-IV | 4 | 5 | 50 | 50 | 100 |
| 8 | 4 | 3 | Elective | | Elective - II | 4 | 5 | 50 | 50 | 100 |
| 7 | 4 | 4 | AEC | | Ability Enhancement Course IV Soft Skill-2 | 2 | 2 | 50 | 0 | 50 |
| 8 | 4 | 5 | Ext | | Extension Activity - III (NASA) | 1 | 0 | 25 | 0 | 25 |
| | | | | | | 25 | 30 | 375 | 300 | 675 |
| 1 | 5 | 3 | Core | | Core Course – IX Theory | 4 | 6 | 50 | 50 | 100 |
| 2 | 5 | 3 | Core | | Core Course – X Theory / Practical | 4 | 6 | 50 | 50 | 100 |
| 3 | 5 | 3 | Elective | | Elective - III | 4 | 6 | 50 | 50 | 100 |
| | 5 | 3 | PRJ | | Project | 0 | 6 | 0 | 0 | 0 |
| 4 | 5 | 4 | SEC | | Skill Enhancement Courses – III Practical / Training | 4 | 6 | 50 | 50 | 100 |
| 5 | 5 | 3 | ITR | | Internship / Industrial Training (Summer vacation at the end of IV semester activity) | 2 | 0 | 50 | 0 | 50 |
| 6 | 5 | 5 | Ext | | Extension Activity - IV (NASA) | 1 | 0 | 25 | 0 | 25 |
| | | | | | | 19 | 30 | 275 | 200 | 475 |
| 1 | 6 | 3 | Core | | Core Course – XI Theory | 4 | 6 | 50 | 50 | 100 |
| 2 | 6 | 3 | Core | | Core Course – XII Theory / Practical | 4 | 4 | 50 | 50 | 100 |
| 3 | 6 | 3 | Elective | | Elective – IV | 4 | 6 | 50 | 50 | 100 |
| 4 | 6 | 3 | PRJ | | Core Project | 8 | 8 | 100 | 100 | 200 |
| 5 | 6 | 4 | SEC | | Skill Enhancement Courses – IV Practical / Training | 4 | 6 | 50 | 50 | 100 |
| | | | | | | 24 | 30 | 300 | 300 | 600 |
| | | | | | Total credit | 144 | 180 | 2100 | 1700 | 3800 |

Core – Theory

| S.No. | Sem | Pre-requisite | Course Code | Course Name | Offering Department | Type Theory / Practical |
|-------|-----|---------------|-------------|---------------------------|---------------------|-------------------------|
| 1 | I | HSC | | Principles Of Management | Management | Theory |
| 2 | II | POM | | Organizational Behaviour | Management | Theory |
| 3 | III | HSC | | Financial Accounting | Management | Theory |
| 4 | IV | POM | | Supply Chain Management | Management | Theory |
| 5 | V | OB | | Human Resource Management | Management | Theory |
| 6 | VI | POM | | Strategic Management | Management | Theory |

Core - Theory / Practical

| S.No. | Sem | Pre-requisite | Course Code | Course Name | Offering Department | Type Theory / Practical |
|-------|-----|---------------|-------------|---------------------------------|---------------------|-------------------------|
| 1 | I | HSC | | Business Economics | Management | Theory |
| 2 | II | HSC | | Marketing Management | Management | Theory |
| 3 | III | HSC | | Financial Services | Management | Theory |
| 4 | IV | HSC | | Digital Marketing | Management | Theory |
| 5 | V | POM | | Research Methods For Management | Management | Theory |
| 6 | VI | POM | | Management information system | Management | Theory |

Allied

| S.No. | Sem | Pre-requisite | Course Code | Course Name | Offering Department | Type Theory / Practical |
|-------|-----|---------------|-------------|-------------------------|---------------------|-------------------------|
| 1 | I | HSC | | Business Mathematics | Management | Theory |
| 2 | II | HSC | | Quantitative Techniques | Management | Theory |
| 3 | III | HSC | | Business Communication | Management | Theory |
| 4 | IV | HSC | | Marketing research | Management | Theory |

Skill Enhancement Course

| S.No. | Sem | Pre-requisite | Course Code | Course Name | Offering Department | Type Practical / Training |
|-------|-----|---------------|-------------|--|---------------------|---------------------------|
| 1 | I | HSC | | Modern Office Management | Management | Theory |
| 2 | III | HSC | | Internet and web designing | Management | Theory |
| 3 | V | HSC | | Introduction to python with Data science | Management | Theory |
| 4 | VI | HSC | | Fundamentals of business analytics | Management | Theory |

Elective

| S.No. | Sem | Pre-requisite | Course Code | Course Name | Offering Department | Type Practical / Training |
|-------|-----|---------------|-------------|---------------------------------------|---------------------|---------------------------|
| 1 | II | HSC | | Entrepreneurship Development | Management | Theory |
| 2 | IV | HSC | | Block chain fundamentals | Management | Theory |
| 3 | V | HSC | | Fundamentals of AI | Management | Theory |
| 4 | VI | HSC | | Information system and Cyber security | Management | Theory |

Additional Credits

| S.No. | Sem | Part | Sub Type | Course Code | Course Name | Credit | Hours | INT | EXT | Total |
|-------|-----|------|----------|-------------|------------------------------------|--------|-------|-----|-----|-------|
| 1 | 2 | 6 | VAC | | VAC - Microsoft CoE Course / NPTEL | 2 | 2 | 50 | 0 | 50 |
| 3 | 4 | 6 | IDC | | VAC - Microsoft CoE Course / NPTEL | 2 | 2 | 50 | 0 | 50 |
| 4 | 5 | 6 | VAC | | VAC - Microsoft CoE Course / NPTEL | 2 | 2 | 50 | 0 | 50 |

| Parts | Sem I | Sem II | Sem III | Sem IV | Sem V | Sem VI | Total Credits |
|--------------|-----------|-----------|-----------|-----------|-----------|-----------|---------------|
| Part I | 3 | 3 | 3 | 3 | | | 12 |
| Part II | 3 | 3 | 3 | 3 | | | 12 |
| Part III | 12 | 16 | 14 | 16 | 14 | 20 | 92 |
| Part IV | 6 | 2 | 6 | 2 | 4 | 4 | 24 |
| Part V | | 1 | 1 | 1 | 1 | | 4 |
| Total | 24 | 25 | 27 | 25 | 19 | 24 | 144 |

CORE COURSES**Semester 1**

| Course Code | Couse Title | Credit | Lecture | Tutorial | Practical | Type |
|-------------|---------------------------------|----------|----------|----------|-----------|---------------|
| | Principles of Management | 4 | 5 | 5 | 0 | Theory |

Course Introduction:

This course enables the students to learn principles, concepts and functions of Management. Identify the key competencies needed to be an effective manager. Provide the students with the capability to apply theoretical knowledge in simulated and real-life settings. Develop the students' ability to work in teams

Course Focus on: Skill Development / Entrepreneurship / Employability / Research

| Course Outcomes | On completion of this course, students will |
|-----------------|---|
| CO 1: | Understand the Management concepts and Functional areas of Management in Business Arena. |
| CO 2: | Evaluate the conceptual framework of planning and decision-making in day today life. |
| CO 3: | Understand the managerial functions of organizing and staffing to achieve the target of the organization. |
| CO 4: | Analyse the theories of motivation, leadership and communication in a variety of Circumstances and management practices in organizations. |
| CO 5: | Evaluate the control process, to apply theoretical knowledge in simulated and real-life Settings. |

Unit I:**[12 Periods]**

Overview of Management: Definition –Nature and scope of management-Importance - skills of managers–Levels of Management-Functional areas of management- Evolution of Management thought: Contribution of F.W.Taylor, Henri Fayol, Elton Mayo, Peter F. Drucker's thought Management: a science or an art?

Unit II:**[12 Periods]**

Planning: Definition -Nature and purpose – Planning process – Importance of planning –types of plan-Decision making - Definition -steps and types..

Unit III:**[12 Periods]**

Organizing: Definition -Types of organization – Organizational structure –Span of control – use of staff units and committees. Delegation: Delegation and Centralization. Centralization and Decentralization – **Staffing** :Definition- Sources of recruitment – Selection-Definition - process Training-Definition-Types.

Unit IV:**[12 Periods]**

Directing: Definition -Nature and purpose of Directing.- Principles – Motivation - Definition -Theories of Motivation (Maslow's, McGregor, ERG Theory, Herzberg two factor theory)–Leadership: Definition-Styles – Communication: Definition - Importance of Communication –Methods of Communication – Types – Barriers.

Unit V:**[12 Periods]**

Controlling: Meaning and importance of controls – control process – Budgetary and non-Budgetary Control Techniques – Requisites of an effective control system – Relationship between planning and controlling – Need for co-ordination..

Text Books:

1. P.C. Tripathy, "Principles of Management," Tata McGraw hill publishing Company ltd, 5th Edition, 2012, New Delhi.
2. T. Ramasamy, "Principles of Management," Himalaya Publishing House, First Edition, 2014.

Reference Books:

1. R.K.Sharma&ShashiK.Gupta, Principles of Management
2. Bhushan Y.K, "Business Organization," Sultan Chand & Sons, Nineteenth Edition -2013
3. L.M. Prasad, Principles of Management, 5th Edition, Himalaya publication, Mumbai – 2006
4. Hellriegel, Slocum & Jackson, ' Management - A Competency Based Approach', Thomson South Western, 10th edition, 2007
5. S.Bagad, 'Principles of Management', Technical Publications, 4th edition, 2013

Web Resources: chrome

extension://efaidnbmnnnibpcajpcglclefindmkaj/https://d3bxy9euw4e147.cloudfront.net/oscms-prodcms/media/documents/PrinciplesofManagement-OP.pdf

Mapping of Course Outcome with Programme Outcome and Programme Specific Outcome:

| Course Outcome | Programme Outcomes | | | | | | | | | | | | Programme Specific Outcome | | |
|----------------|--------------------|-----|-----|-----|-----|-----|-----|-----|-----|------|------|------|----------------------------|------|------|
| | PO1 | PO2 | PO3 | PO4 | PO5 | PO6 | PO7 | PO8 | PO9 | PO10 | PO11 | PO12 | PSO1 | PSO2 | PSO3 |
| CO1 | 3 | 3 | 3 | 2 | 2 | 1 | 1 | 1 | 2 | 1 | 1 | 1 | 2 | 3 | 1 |
| CO2 | 3 | 2 | 3 | 1 | 1 | 3 | 2 | 1 | 2 | 1 | 1 | 1 | 3 | 2 | 2 |
| CO3 | 3 | 3 | 2 | 1 | 2 | 2 | 1 | 3 | 2 | 1 | 2 | 1 | 2 | 3 | 3 |
| CO4 | 1 | 1 | 3 | 3 | 1 | 3 | 2 | 3 | 1 | 2 | 2 | 2 | 3 | 2 | 2 |
| CO5 | 3 | 1 | 3 | 1 | 3 | 2 | 2 | 3 | 1 | 2 | 2 | 1 | 1 | 2 | 3 |

Semester 1

| Course Code | Couse Title | Credit | Lecture | Tutorial | Practical | Type |
|-------------|---------------------------|--------|---------|----------|-----------|--------|
| | Business Economics | 4 | 4 | 4 | 0 | Theory |

Course Introduction:

To make the student to know the fundamentals of micro and macro-economic theory and practice as they are applied to business in a managerial.

Course Focus on: Skill Development / Entrepreneurship / Employability / Research

| Course Outcomes | |
|-----------------|---|
| | On completion of this course, students will |
| CO 1: | To understand the internal and external decisions of the business |
| CO 2: | To analyse the demand and supply conditions and assess the position of a Business |
| CO 3: | To Design competition strategies, including costing, pricing, product differentiation, and market environment according to the natures of products and the structures of the Business |
| CO 4: | To Identify the role of demand in a market economy |
| CO 5: | To grasp an in-depth, examine about Law of supply |

Unit I: [12 Periods]

Business Economics: Meaning-definitions-characteristics -distinction between businesses economics and economics -scope of business economics -uses/objectives of business Economics–Role and responsibilities of business economist.

Unit II: [12 Periods]

Consumer Behaviour: Consumer sovereignty-limitations. Approaches to the study of consumer behaviour -cardinal approach-the law of equip-marginal utility, ordinal approach –indifference curve analysis-properties –Consumer surplus -meaning-analysis limitations

Unit III: [12 Periods]

Demand: Theory of Demand Analysis-demand determinants -law of demand: characteristics exceptions -Elasticity of demand -price elasticity -types -determining factors-change in demand and elasticity of demand –business applications of price elasticity-Concepts of income and cross elasticity of demand. Price elasticity of demand measurement by total outlay method

Unit IV: [12 Periods]

Demand Forecasting: methods-survey of buyer's intention -collective opinion -trend Projection -economic indicator. Demand forecasting methods for a new product

Unit V: [12 Periods]

Law of Supply -meaning-determinants of supply and its influence on cost of production. Production Function: Equilibrium through Isoquants and ISO costs -managerial uses of production Function-law of variable proportions -economies of large scale of production-diseconomies of Large-scale production

Text Books:

1. Business Economics, Sankaran, Margham Publications

Reference Books:

1. Managerial Economics, Joel Dean, Prentice-Hall of India, New Delhi, 2013
2. Managerial Economics, Gupta, Tata McGraw Hill, 2006
3. Business Economics, Mukund Mahajan

Web Resources:

[https://www.icsi.edu/media/website/Business%20Economics%20\(FndProg\).pdf](https://www.icsi.edu/media/website/Business%20Economics%20(FndProg).pdf)

Mapping of Course Outcome with Programme Outcome and Programme Specific Outcome:

| Course Outcome | Programme Outcomes | | | | | | | | | | | | Programme Specific Outcome | | |
|----------------|--------------------|-----|-----|-----|-----|-----|-----|-----|-----|------|------|------|----------------------------|------|------|
| | PO1 | PO2 | PO3 | PO4 | PO5 | PO6 | PO7 | PO8 | PO9 | PO10 | PO11 | PO12 | PSO1 | PSO2 | PSO3 |
| CO1 | 3 | 3 | 3 | 2 | 2 | 1 | 1 | 1 | 2 | 1 | 1 | 1 | 2 | 3 | 1 |
| CO2 | 3 | 2 | 3 | 1 | 1 | 3 | 2 | 1 | 2 | 1 | 1 | 1 | 3 | 2 | 2 |
| CO3 | 3 | 3 | 2 | 1 | 2 | 2 | 1 | 3 | 2 | 1 | 2 | 1 | 2 | 3 | 3 |
| CO4 | 1 | 1 | 3 | 3 | 1 | 3 | 2 | 3 | 1 | 2 | 2 | 2 | 3 | 2 | 2 |
| CO5 | 3 | 1 | 3 | 1 | 3 | 2 | 2 | 3 | 1 | 2 | 2 | 1 | 1 | 2 | 3 |

Semester 2

| Course Code | Couse Title | Credit | Lecture | Tutorial | Practical | Type |
|---|--|----------|----------|----------|-----------|---------------------|
| | Organizational Behaviour | 4 | 5 | 5 | 0 | Theory |
| Course Introduction: To enable the students to acquire knowledge about organizational behavior in industry, to familiarize the students with the basic concepts of the organizational behavior and to enhance their understanding of the interaction between the individuals and the organizations. | | | | | | |
| Course Focus on: Skill Development / Entrepreneurship / Employability / Research | | | | | | |
| Course Outcomes | On completion of this course, students will | | | | | |
| CO 1: | Students came to know the need, scope and theories of organization | | | | | |
| CO 2: | Students achieve knowledge on various motivational techniques of employees | | | | | |
| CO 3: | Students learned knowledge on work environment and leadership styles | | | | | |
| CO 4: | Students acquired knowledge on group dynamics in an organization | | | | | |
| CO 5: | Students understood the climate and culture in an organization | | | | | |
| Unit I: | | | | | | [12 Periods] |
| Importance and scope of organisational psychology – Individual differences - Intelligence tests Measurement of intelligence - Personality tests - nature, types and uses. | | | | | | |
| Unit II: | | | | | | [12 Periods] |
| Perception - Factors affecting perception - Motivation - theories - financial and non-financial motivation - techniques of motivation - Transactional Analysis - Brain storming | | | | | | |
| Unit III: | | | | | | [12 Periods] |
| Job satisfaction - meaning – factors, Morale - importance - Employee attitude and behaviour and their significance to employee productivity - Job enrichment - job enlargement | | | | | | |
| Unit IV: | | | | | | [12 Periods] |
| Conflict - Types of Conflict – Resolution of conflict - Sociometry - Group norms – supervision - style - Training for supervisor Leadership - types - theories – Trait, Managerial Grid, Fiddler’s - contingency | | | | | | |
| Unit V: | | | | | | [12 Periods] |
| Stress management—meaning, types of stress- consequences of work stress. Counseling -meaning - Importance of counselor - types of counseling - merits of counseling. Team building and it importance | | | | | | |
| Text Books: | | | | | | |
| 1. K. Ashwathappa, “Organizational Behaviour”, Himalaya Publishing House – 6th Edition (Unit I to V) | | | | | | |
| Reference Books: | | | | | | |
| 1. L.M. Prasad, “Organizational Behaviour”, Sultan Chand & Sons, Fifth Edition 2014 2. Keith Davis, “Human Behaviour at Work”, McGraw-Hill HigHer Education – 11th Edition, 2015 3. Keith Davis, “Human Behaviour at Work, McGraw Hill, Higher Education, 7th Edition 4. Ghos, “Industrial Psychology”, Himalaya Publishing House, First Edition, 2015 | | | | | | |
| Web Resources: | | | | | | |
| https://www.slideshare.net/slideshow/organisational-behaviour-eresource/250145878 | | | | | | |

| Mapping of Course Outcome with Programme Outcome and Programme Specific Outcome: | | | | | | | | | | | | | | | |
|--|--------------------|-----|-----|-----|-----|-----|-----|-----|-----|------|------|------|----------------------------|------|------|
| Course Outcome | Programme Outcomes | | | | | | | | | | | | Programme Specific Outcome | | |
| | PO1 | PO2 | PO3 | PO4 | PO5 | PO6 | PO7 | PO8 | PO9 | PO10 | PO11 | PO12 | PSO1 | PSO2 | PSO3 |
| CO1 | 3 | 3 | 3 | 2 | 2 | 1 | 1 | 1 | 2 | 1 | 1 | 1 | 2 | 3 | 1 |
| CO2 | 3 | 2 | 3 | 1 | 1 | 3 | 2 | 1 | 2 | 1 | 1 | 1 | 3 | 2 | 2 |
| CO3 | 3 | 3 | 2 | 1 | 2 | 2 | 1 | 3 | 2 | 1 | 2 | 1 | 2 | 3 | 3 |
| CO4 | 1 | 1 | 3 | 3 | 1 | 3 | 2 | 3 | 1 | 2 | 2 | 2 | 3 | 2 | 2 |
| CO5 | 3 | 1 | 3 | 1 | 3 | 2 | 2 | 3 | 1 | 2 | 2 | 1 | 1 | 2 | 3 |

Semester 2

| Course Code | Course Title | Credit | Lecture | Tutorial | Practical | Type |
|--|---|----------|----------|----------|-----------|---------------------|
| | Marketing Management | 4 | 4 | 4 | 0 | Theory |
| Course Introduction: | | | | | | |
| To provide the students with a basic understanding of marketing issues related to the external Environment and acquire knowledge of the Principle of marketing management. On Successful completion of this course, the students should have understood principles of Marketing Management, Market Segmentation, Product Life Cycle, Pricing, Branding, Service Marketing etc. | | | | | | |
| Course Focus on: Skill Development / Entrepreneurship / Employability / Research | | | | | | |
| Course Outcomes | On completion of this course, students will | | | | | |
| CO 1: | Students implicit about the marketing and its various environmental factors | | | | | |
| CO 2: | Gained familiarity on buyer behavior and market segmentation promotion | | | | | |
| CO 3: | Students learn about various stage in Product Life Cycle | | | | | |
| CO 4: | Gained acquaintance in the marketing channels and sales management | | | | | |
| CO 5: | Students gained knowledge on advertising and sales | | | | | |
| Unit I: | | | | | | [12 Periods] |
| Marketing – Definition- Marketing Management- Various Concepts in Marketing- Classification of Marketing –Functions of Marketing-Marketing Environment: Various Environmental Factors Effecting Marketing Functions-Market Structure- Importance of Marketing in Developing Countries- Marketing Information System. | | | | | | |
| Unit II: | | | | | | [12 Periods] |
| Buyer Behaviour: Buying Motives-Variou Factors Influencing Buyer Behaviour-Stages In Buying Decision Marketing Funnel Process-Market Segmentation: Bases For Segmentation-Market Targeting-Differentiating And Positioning the Marketing Offer-Variou Positioning Strategies- Channels of Distribution. | | | | | | |
| Unit III: | | | | | | [12 Periods] |
| Marketing Mix- The Product-Marketing characteristics-consumer Good S-Industrial Goods-Production Policy- Product Life Cycle (PLC)-Strategies in Various Stages-Product Mix-Product Line-Modification and Elimination-New Product Development: Various Stages in New Product Development-Consumer Adoption Process-Reasons for Failures of New Products. | | | | | | |
| Unit IV: | | | | | | [12 Periods] |
| Pricing: Definition-Objectives-Pricing Policies-Factors Influencing Pricing Decisions-Multiproduct Pricing-Adapting the Price- Competitors Action to Price Changes-Marketing Channels-Definitions-Types-Channel Selection-Problems in Selection Of Channel- Management Of Physical Distribution-Marketing Risks | | | | | | |
| Unit V: | | | | | | [12 Periods] |
| Branding Decisions: Brand – Brand Image – Brand Identity – Brand Personality – Brand Loyalty –Brand Equity. Marketing Control –Tools and Techniques – Modern Concept in Marketing- Service Marketing- Definition-Features –Importance. Introduction to CRM and Sales force | | | | | | |
| Text Books: | | | | | | |
| 1.Marketing Management marketing cases in the Indian context Fifteenth Edition By Pearson 2. Philip Kotler- Kevin Lane Kella, “Marketing Management”, Pearson Education India, Fifteenth Edition 2015. | | | | | | |
| Reference Books: | | | | | | |

1. R. S. N. Pillai & Bagavathi, "Marketing Management", S.Chand & Company Pvt.Ltd, Reprint 2012.
2. V. S Ramaswamy & S. Namakumari, "Marketing Management", McMillan India Limited – 3rd Editions, 2002.
3. Gupta .C.B & Nair N.Rajan, "Marketing Management", Sultan Chand & Sons, 2nd Edition, 1995.
4. V.S. Ramaswamy & Namakumari, "Marketing Management", McGraw Hill Education; 5 edition.

Web Resources:

<https://coschedule.com/marketing/marketing-management/marketing-resource-management>

Mapping of Course Outcome with Programme Outcome and Programme Specific Outcome:

| Course Outcome | Programme Outcomes | | | | | | | | | | | | Programme Specific Outcome | | |
|----------------|--------------------|-----|-----|-----|-----|-----|-----|-----|-----|------|------|------|----------------------------|------|------|
| | PO1 | PO2 | PO3 | PO4 | PO5 | PO6 | PO7 | PO8 | PO9 | PO10 | PO11 | PO12 | PSO1 | PSO2 | PSO3 |
| CO1 | 3 | 3 | 3 | 2 | 2 | 1 | 1 | 1 | 2 | 1 | 1 | 1 | 2 | 3 | 1 |
| CO2 | 3 | 2 | 3 | 1 | 1 | 3 | 2 | 1 | 2 | 1 | 1 | 1 | 3 | 2 | 2 |
| CO3 | 3 | 3 | 2 | 1 | 2 | 2 | 1 | 3 | 2 | 1 | 2 | 1 | 2 | 3 | 3 |
| CO4 | 1 | 1 | 3 | 3 | 1 | 3 | 2 | 3 | 1 | 2 | 2 | 2 | 3 | 2 | 2 |
| CO5 | 3 | 1 | 3 | 1 | 3 | 2 | 2 | 3 | 1 | 2 | 2 | 1 | 1 | 2 | 3 |

Semester 3

| Course Code | Course Title | Credit | Lecture | Tutorial | Practical | Type |
|-------------|----------------------|--------|---------|----------|-----------|--------|
| | Financial Accounting | 4 | 6 | 6 | 0 | Theory |

Course Introduction:

To enable the students to acquire knowledge of Accounting principles and practice. On successful completion of this course, the students should Have understood the basic accounting concepts, double entry book keeping system and various books of accounts.

Course Focus on: Skill Development / Entrepreneurship / Employability / Research

| Course Outcomes | |
|-----------------|---|
| | On completion of this course, students will |
| CO 1: | Recognize and understand ethical issues related to the accounting profession. |
| CO 2: | Prepare financial statements in accordance with Generally Accepted Accounting Principles |
| CO 3: | Employ critical thinking skills to analyze financial data as well as the effects of differing financial accounting methods on the financial statements |
| CO 4: | Effectively define the needs of the various users of accounting data and demonstrate the ability to communicate such data effectively, as well as the ability to provide knowledgeable recommendations. |
| CO 5: | Recognize circumstances providing for increased exposure to fraud and define preventative internal control measures. |

| | | |
|----------------|--|---------------------|
| Unit I: | | [12 Periods] |
|----------------|--|---------------------|

| | | |
|---|--|---------------------|
| Basic Accounting concepts - Kinds of Accounts -Double Entry Book Keeping – Rules of Double Entry System – Preparation of Journal and Ledger Accounts- problems - Subsidiary books - cash book – types of cash book - problems - purchase book - sales book - sales return and purchase return books | | |
| Unit II: | | [12 Periods] |
| Trial balance - Errors – types of errors - Rectification of errors – problems – Bank reconciliation statement – problems | | |
| Unit III: | | [12 Periods] |
| Manufacturing - Trading - Profit & Loss Account - Balance sheet. – Problems with simple adjustments | | |
| Unit IV: | | [12 Periods] |
| Accounting for non-trading institutions-Income & Expenditure Account- Receipts and Payment Accounts and Balance sheet - Accounting for depreciation – methods of depreciation – problems (straight line method and written down value method only), Introduction to functions; Excel chart features | | |
| Unit V: | | [12 Periods] |
| Preparation of accounts from incomplete records | | |
| Text Books: | | |
| 1. Mohamed Hanif, Amitabha Mukherjee, financial accounting, 2nd edition, 2015 | | |
| Reference Books: | | |
| 1. Goyal, v.k. , goyal, ruchu, financial accounting, PHI Learnings , 4th edition, Latest edition | | |
| 2. Dr. P.C. Tulsian, “Financial Accounting, 4th Edition”, Tata MC Graw Hill, 2011, Delhi. | | |
| 3. V. K. Gupta, Financial Accounting, 5thEdition- Sultan Chand and Sons, 2010, New Delhi. | | |
| 4. Guru Prasad Murthy, Analysis and Interpretation of Financial Statements, Himalaya Publishing House, 2017 | | |
| Web Resources: | | |
| https://www.blackhallpublishing.com/financialaccounting.htm | | |

Mapping of Course Outcome with Programme Outcome and Programme Specific Outcome:

| Course Outcome | Programme Outcomes | | | | | | | | | | | | Programme Specific Outcome | | |
|----------------|--------------------|-----|-----|-----|-----|-----|-----|-----|-----|------|------|------|----------------------------|------|------|
| | PO1 | PO2 | PO3 | PO4 | PO5 | PO6 | PO7 | PO8 | PO9 | PO10 | PO11 | PO12 | PSO1 | PSO2 | PSO3 |
| CO1 | 3 | 3 | 3 | 2 | 2 | 1 | 1 | 1 | 2 | 1 | 1 | 1 | 2 | 3 | 1 |
| CO2 | 3 | 2 | 3 | 1 | 1 | 3 | 2 | 1 | 2 | 1 | 1 | 1 | 3 | 2 | 2 |
| CO3 | 3 | 3 | 2 | 1 | 2 | 2 | 1 | 3 | 2 | 1 | 2 | 1 | 2 | 3 | 3 |
| CO4 | 1 | 1 | 3 | 3 | 1 | 3 | 2 | 3 | 1 | 2 | 2 | 2 | 3 | 2 | 2 |
| CO5 | 3 | 1 | 3 | 1 | 3 | 2 | 2 | 3 | 1 | 2 | 2 | 1 | 1 | 2 | 3 |

Semester 3

| Course Code | Couse Title | Credit | Lecture | Tutorial | Practical | Type |
|-------------|---------------------------|----------|----------|----------|-----------|---------------|
| | FINANCIAL SERVICES | 4 | 4 | 4 | 0 | Theory |

Course Introduction:

This course provides fundamental knowledge on the structure, function and the evolution of financial services. To cover financial intermediaries, financial instruments and the different markets with analytical skills. To understand the importance, structure and operation of the financial system

Course Focus on: Skill Development / Entrepreneurship / Employability / Research

| | |
|---|--|
| Course Outcomes | On completion of this course, students will |
| CO 1: | Keep students updated on the latest discourse on practical issues and policies in the new international financial environment. |
| CO 2: | Aims to help students to appreciate and understand how financial markets and institutions operate |
| CO 3: | To prepare students with a good understanding of the theoretical foundation of SEBI and Credit Rating |
| CO 4: | To gain knowledge on Mutual Funds and Merchant Banking |
| CO 5: | To understand the Factoring and Venture Capital in India |
| Unit I: | [12 Periods] |
| Financial Services – Meaning – Scope – Causes for Financial Innovation – New Financial Products and Services – Players in Financial Service Sector – Challenges facing the Financial Service Sector | |
| Unit II: | [12 Periods] |

| | |
|---|---------------------|
| Capital Market – Primary Market – Functions – Secondary Market – Functions – Listing of Securities – Advantages of Listing | |
| Unit III: | [12 Periods] |
| SEBI – Functions – Powers – Guidelines – Foreign Institutional Investors (FIIs) – Bonus Issue – Rights Issues – Debentures – Underwriters – Book Building - Credit Rating – Meaning – Functions – Benefits | |
| Unit IV: | [12 Periods] |
| Mutual Funds – Introduction – Meaning and Definitions – Types – Selection of a Fund – Mutual Funds in India – Reasons for Slow Growth. Merchant Banking – Definition – Origin – Meaning – Function – Services of Merchant Banks | |
| Unit V: | [12 Periods] |
| Factoring – Introduction – Meaning – Definition – Functions – Types – Benefits – Factoring in India. Venture Capital – Introduction – Meaning – Features – Importance – Venture Capital in India | |
| Text Books: | |
| M.Y.Khan, Financial Services, Edition, Tata McGraw Hill | |
| Reference Books: | |
| Nalini Prava Tripathy, Financial Services, Prentice Hall of India | |
| Web Resources: | |
| https://www.phindia.com/Books/BookDetail/9788196378974/financial-markets-financial-institutions-and-financial-services | |

| Mapping of Course Outcome with Programme Outcome and Programme Specific Outcome: | | | | | | | | | | | | | | | | |
|--|--------------------|-----|-----|-----|-----|-----|-----|-----|-----|------|------|------|----------------------------|------|------|--|
| Course Outcome | Programme Outcomes | | | | | | | | | | | | Programme Specific Outcome | | | |
| | PO1 | PO2 | PO3 | PO4 | PO5 | PO6 | PO7 | PO8 | PO9 | PO10 | PO11 | PO12 | PSO1 | PSO2 | PSO3 | |
| CO1 | 3 | 3 | 3 | 2 | 2 | 1 | 1 | 1 | 2 | 1 | 1 | 1 | 2 | 3 | 1 | |
| CO2 | 3 | 2 | 3 | 1 | 1 | 3 | 2 | 1 | 2 | 1 | 1 | 1 | 3 | 2 | 2 | |
| CO3 | 3 | 3 | 2 | 1 | 2 | 2 | 1 | 3 | 2 | 1 | 2 | 1 | 2 | 3 | 3 | |
| CO4 | 1 | 1 | 3 | 3 | 1 | 3 | 2 | 3 | 1 | 2 | 2 | 2 | 3 | 2 | 2 | |
| CO5 | 3 | 1 | 3 | 1 | 3 | 2 | 2 | 3 | 1 | 2 | 2 | 1 | 1 | 2 | 3 | |

Semester 4

| Course Code | Couse Title | Credit | Lecture | Tutorial | Practical | Type |
|--|---|--------|---------|----------|-----------|---------------------|
| | Supply Chain Management | 4 | 6 | 6 | 0 | Theory |
| <p>Course Introduction: To enable the students to acquire knowledge of production processes and Materials Management. On successful completion of this course, the students should have understood the principles, functions and process of Production Management and effective Management of Materials</p> <p>Course Focus on: Skill Development / Entrepreneurship / Employability / Research</p> | | | | | | |
| Course Outcomes | On completion of this course, students will | | | | | |
| CO 1: | Acquired knowledge on production process and design for plant location and understanding the over view of Supply Chain Management and Logistics | | | | | |
| CO 2: | Gained knowledge of using the Material Handling equipment, Plant Maintenance and Work study | | | | | |
| CO 3: | To understand the in depth knowledge of functions of materials Management | | | | | |
| CO 4: | Students learnt the techniques of production and inventory control techniques | | | | | |
| CO 5: | Acquired knowledge on the Quality Management | | | | | |
| Unit I: | | | | | | [12 Periods] |

| | | |
|---|--|---------------------|
| Production Management - Functions - Scope - Plant location - Factors - Site location – Plant layout - Principles - Process - Product layout. Production plans and controls - Principles - Meaning - Routing - Scheduling - Dispatching – Control - . Over view of Supply Chain Management and Logistics | | |
| Unit II: | | [12 Periods] |
| Materials Handling - Importance - Principles - Criteria for selection of material Handling equipment. Maintenance - Types - Breakdown - Preventive - Routine - Methods study – Time study - Motion study | | |
| Unit III: | | [12 Periods] |
| Organization of Materials Management - Fundamental Principles – Structure. Purchasing procedure - principles - import substitution and import purchase procedure. Vendor rating - Vendor development | | |
| Unit IV: | | [12 Periods] |
| Function of Inventory - Importance - Tools - ABC, VED, FSN Analysis - EOQ - Reorder point-Safety Stock - Lead time Analysis. Store keeping - Objectives - Functions - Store keeper – Duties – Responsibilities, Location of store - Stores Ledger - Bin card | | |
| Unit V: | | [12 Periods] |
| Quality Management – Fundamentals – Planning for Quantity – Quality Process – Statistical Process Control (SPC) – Quality Assurance – Total Quality management. Bench Marking: Meaning - objectives – advantages. ISO: Features - Advantages - Procedure for obtaining ISO | | |
| Text Books: | | |
| K. ASWATHAPPA and K. Shridhara Bhat, Production And Operations Management, Himalaya Publishing House Pvt. Ltd. 2015 | | |
| Reference Books: | | |
| <ol style="list-style-type: none"> 1. S N Chary, Production and Operations Management, 6th edition, McGraw-Hill, , 2019 2. B. Mahadevan, Operations Management, Pearson, 3rd edition, Education India, , 2015 3. R. Panneerselvam, Production and Operations Management, 3rd edition, Prentice Hall, 2003 4. E.S. Buffa; Modern Production Management, John Wiley Edition. 2002 5. D.D. Sharma; Total Quality Management, Sultan Chand & Sons, Edition. 2002 | | |
| Web Resources: | | |
| https://mu.ac.in/wp-content/uploads/2021/02/Logistics-and-Supply-Chain-Management-Sunil-Chopra-1.pdf | | |

Mapping of Course Outcome with Programme Outcome and Programme Specific Outcome:

| Course Outcome | Programme Outcomes | | | | | | | | | | | | Programme Specific Outcome | | |
|----------------|--------------------|-----|-----|-----|-----|-----|-----|-----|-----|------|------|------|----------------------------|------|------|
| | PO1 | PO2 | PO3 | PO4 | PO5 | PO6 | PO7 | PO8 | PO9 | PO10 | PO11 | PO12 | PSO1 | PSO2 | PSO3 |
| CO1 | 3 | 3 | 3 | 2 | 2 | 1 | 1 | 1 | 2 | 1 | 1 | 1 | 2 | 3 | 1 |
| CO2 | 3 | 2 | 3 | 1 | 1 | 3 | 2 | 1 | 2 | 1 | 1 | 1 | 3 | 2 | 2 |
| CO3 | 3 | 3 | 2 | 1 | 2 | 2 | 1 | 3 | 2 | 1 | 2 | 1 | 2 | 3 | 3 |
| CO4 | 1 | 1 | 3 | 3 | 1 | 3 | 2 | 3 | 1 | 2 | 2 | 2 | 3 | 2 | 2 |
| CO5 | 3 | 1 | 3 | 1 | 3 | 2 | 2 | 3 | 1 | 2 | 2 | 1 | 1 | 2 | 3 |

Semester 4

| Course Code | C r e d i t T i t l e | Lecture | Tutorial | Practical | Type |
|-------------|--|---------|----------|-----------|--------|
| | D i g i t a l M a r k e t i n g | 4 | 4 | 0 | Theory |

| | | | | | |
|--|--|--|--|---------------------|--|
| | n | | | | |
| Course Introduction: | | | | | |
| Digital marketing course syllabus can be broadly bifurcated under two heads, Executive Skills which includes all the topics required to begin your journey towards digital marketing, and Managerial Skills which states and prescribes on how to use your talent in the best way possible. | | | | | |
| Course Focus on: Skill Development / Entrepreneurship / Employability / Research | | | | | |
| Course Outcomes | On completion of this course, students will | | | | |
| CO 1: | To understand about the Digital Marketing | | | | |
| CO 2: | To understand Planning and Creating a Website and Search Engine Optimization (SEO) | | | | |
| CO 3: | To understand Search Engine Marketing (SEM) and Social Media Marketing | | | | |
| CO 4: | To understand Content Strategy, Web Analytics and Email Marketing | | | | |
| CO 5: | To understand E-Commerce Management | | | | |
| Unit I: | Introduction to Digital Marketing | | | [12 Periods] | |
| Digital Marketing Meaning and Definition - Difference between traditional marketing and digital marketing - Importance of digital marketing - Trends and scenario of the industry - Analyse Digital marketing be the ultimate tool for success for businesses – Support of Digital Marketing to increase sales – Competitive analyses of Digital marketing | | | | | |
| Unit II: | Search Engine Optimization (SEO) | | | [12 Periods] | |
| Search Engine Optimization (SEO): On page Optimization Techniques, Off Page Optimization Techniques, Preparing Reports, Creating Search Campaigns, Creating Display Campaigns. Social Media Optimization (SMO): Introduction to Social Media Marketing, Advanced Facebook Marketing, | | | | | |
| Unit III: | Search Engine Marketing (SEM) and Social Media Marketing | | | [12 Periods] | |
| Search Engine Marketing (SEM) Introduction to SEM - Campaign Creation - Google AdWords - Ad Creation, Approval & Extensions - Site Targeting - Keyword Targeting - CPC, CPA & CPM Based Accounts - Demographic Targeting/ Bidding. Concept of Pay per click Social Media Marketing : Definition of Social Media Marketing & Social Media - Blogging - Social Networking - Video Creation & Sharing - Use of Different Social Media Platforms - Content Creation | | | | | |
| Unit IV: | Web Analytics and Email Marketing | | | [12 Periods] | |
| Website Traffic Analysis, Affiliate Marketing and Ad Designing: Google Analytics, Online Reputation Management, EMail Marketing, Affiliate Marketing, Understanding Ad Words Algorithm, Advertisement Designing. | | | | | |
| Unit V: | E-Commerce Management | | | [12 Periods] | |
| Management of E-Commerce Store - Ensuring Positive Customer Experience - E-Commerce Marketing - Inventory Management - Product Keyword Research - Supply Chain Management - Uploading Products to Website - Selling, Packaging & Shipping | | | | | |
| Text Books: | | | | | |

1. Ryan Deiss & Russ Henneberry, Digital Marketing for Dummies
2. Jay Baer , Youtility

Reference Books:

1. Joe Pulizzi - Epic Content Marketing
2. David Meerman Scott New Rules of Marketing and PR
3. Derek Thompson Hit Makers: The Science of Popularity in an Age of Digital Distraction
4. Seth Godin Permission Marketing
5. Jan Zimmerman, Deborah Ng Social Media Marketing All-in-one Dummies
6. Eric Enge, Stephan Spencer, Jessie Stricchiol The Art of SEO

Web Resources:

<https://www.digitalmarketer.com/digital-marketing/assets/pdf/ultimate-guide-to-digital-marketing.pdf>

Mapping of Course Outcome with Programme Outcome and Programme Specific Outcome:

| Course Outcome | Programme Outcomes | | | | | | | | | | | | Programme Specific Outcome | | |
|----------------|--------------------|-----|-----|-----|-----|-----|-----|-----|-----|------|------|------|----------------------------|------|------|
| | PO1 | PO2 | PO3 | PO4 | PO5 | PO6 | PO7 | PO8 | PO9 | PO10 | PO11 | PO12 | PSO1 | PSO2 | PSO3 |
| CO1 | 3 | 3 | 3 | 2 | 2 | 1 | 1 | 1 | 2 | 1 | 1 | 1 | 2 | 3 | 1 |
| CO2 | 3 | 2 | 3 | 1 | 1 | 3 | 2 | 1 | 2 | 1 | 1 | 1 | 3 | 2 | 2 |
| CO3 | 3 | 3 | 2 | 1 | 2 | 2 | 1 | 3 | 2 | 1 | 2 | 1 | 2 | 3 | 3 |
| CO4 | 1 | 1 | 3 | 3 | 1 | 3 | 2 | 3 | 1 | 2 | 2 | 2 | 3 | 2 | 2 |
| CO5 | 3 | 1 | 3 | 1 | 3 | 2 | 2 | 3 | 1 | 2 | 2 | 1 | 1 | 2 | 3 |

Semester 5

| Course Code | Couse Title | Credit | Lecture | Tutorial | Practical | Type |
|-------------|---------------------------|--------|---------|----------|-----------|--------|
| | Human Resource Management | 4 | 6 | 6 | 0 | Theory |

Course Introduction:

To enable the students to acquire knowledge of Human Resource Management. On successful completion of this course, the students should Have understood functions of HRM, Human Resource Planning, Recruitment and Selection, Performance Appraisal, Training and Development etc.,

Course Focus on: Skill Development / Entrepreneurship / Employability / Research

| Course Outcomes | On completion of this course, students will |
|-----------------|---|
| CO 1: | Acquired knowledge on HRM, its environment, methods of selection, and Interview techniques. |
| CO 2: | Gained knowledge on training and career development |
| CO 3: | Students learnt about remuneration and welfare measures. |
| CO 4: | Gained facts about labour relation and Industrial disputes |
| CO 5: | Students learnt about Human resource audit, nature and approaches |

Unit I: [12 Periods]

Human Resource Management - meaning, nature, scope and objective – Functions of HR Department - The Role of Human Resource Manager - Organisation of HR department – Human Resource Policies and Procedures – Principles of HRM – HRM activities

Unit II: [12 Periods]

Manpower planning - Job description - Job analysis - Role analysis - Job specification - Recruitment and Selection - Training and Development

Unit III: [12 Periods]

Performance appraisal - Job evaluation and merit rating - Promotion - Transfer and demotion - Human relations - approaches to good Human relations – Punishment

Unit IV: [12 Periods]

Wages and Salary Administration - Incentive System - Labour Welfare And Social Security - Safety, Health And Security - Retirement Benefits To Employees

Unit V: [12 Periods]

Industrial Relations - Trade Unionism - Grievance Handling – Collective Bargaining and Worker's Participation In Management

Text Books:

V.S.P .Rao, "Human Resources of Management", Sultan Chand Publishing, Revised Edition, 2016. (Unit I to V)

Reference Books:

1. Tripathy, "Personnel Management and Industrial Relations", 21st Edition, 2013
2. R.Wayne Mondy, "Human Resource Management", Pearson Publications, 10th Edition 2011
3. Gary Dessler, "Human Resource Management", Pearson Publications, 12th Edition 2012
4. C. B. Gupta, "Human Resource Management", Sultan Chand & Sons, 14th revised Edition 2012

5. L. M. Prasad, "Human Resources Management" Sultan Chand & Sons, 3rd Edition, 2014

Web Resources:

<https://ecampusontario.pressbooks.pub/humanresourcesmgmt/>

Mapping of Course Outcome with Programme Outcome and Programme Specific Outcome:

| Course Outcome | Programme Outcomes | | | | | | | | | | | | Programme Specific Outcome | | |
|----------------|--------------------|-----|-----|-----|-----|-----|-----|-----|-----|------|------|------|----------------------------|------|------|
| | PO1 | PO2 | PO3 | PO4 | PO5 | PO6 | PO7 | PO8 | PO9 | PO10 | PO11 | PO12 | PSO1 | PSO2 | PSO3 |
| CO1 | 3 | 3 | 3 | 2 | 2 | 1 | 1 | 1 | 2 | 1 | 1 | 1 | 2 | 3 | 1 |
| CO2 | 3 | 2 | 3 | 1 | 1 | 3 | 2 | 1 | 2 | 1 | 1 | 1 | 3 | 2 | 2 |
| CO3 | 3 | 3 | 2 | 1 | 2 | 2 | 1 | 3 | 2 | 1 | 2 | 1 | 2 | 3 | 3 |
| CO4 | 1 | 1 | 3 | 3 | 1 | 3 | 2 | 3 | 1 | 2 | 2 | 2 | 3 | 2 | 2 |
| CO5 | 3 | 1 | 3 | 1 | 3 | 2 | 2 | 3 | 1 | 2 | 2 | 1 | 1 | 2 | 3 |

Semester 5

| Course Code | Course Title | Credit | Lecture | Tutorial | Practical | Type |
|-------------|--|----------|----------|----------|-----------|---------------|
| | Research Methods for Management | 4 | 6 | 6 | 0 | Theory |

Course Introduction:

To enable the students to acquire knowledge of Research. On successful completion of this course, the students should have understood Research methods and sampling techniques, Analysis and interpretation of data, Application of research

Course Focus on: Skill Development / Entrepreneurship / Employability / Research

| Course Outcomes | On completion of this course, students will |
|-----------------|--|
| CO 1: | To understand the different types of research and the needs of educational research |
| CO 2: | To knowledge concept of variables and hypotheses, their nature, importance and types |
| CO 3: | To Identify the important conditions conducive to the formulation of hypotheses |
| CO 4: | To define the term population, sample and describe the steps involved in the process of sampling |
| CO 5: | Ability to writing of report for a research reports project |

| | | |
|----------------|--|---------------------|
| Unit I: | | [12 Periods] |
|----------------|--|---------------------|

Introduction – Meaning of Research ; Objectives of Research; Types of Research; Research Process; Research Problem formulation

| | | |
|-----------------|--|---------------------|
| Unit II: | | [12 Periods] |
|-----------------|--|---------------------|

The Design of Research-Research Design; Features of a Good design; Different Research Designs ; Measurement in Research; Data types; Methods of Data collection- Sources of Error-Test of sound instrument

| | | |
|------------------|--|---------------------|
| Unit III: | | [12 Periods] |
|------------------|--|---------------------|

Sampling Design- Census & Sample Surveys; Steps in Sampling Design; Types of Sample designs-Probability & Non Probability sampling

| | | |
|-----------------|--|---------------------|
| Unit IV: | | [12 Periods] |
|-----------------|--|---------------------|

Processing & Analysis of Data- Processing operations; problems in processing; types of analysis Hypothesis Testing- Chi-square test, Z test, t-test, f-test

| | | |
|----------------|--|---------------------|
| Unit V: | | [12 Periods] |
|----------------|--|---------------------|

Presentation- Diagrams; graphs; charts. Report writing; Layout of Research report; Types of Reports; Mechanism of writing a Research report; Precaution for writing report. An Introduction to SPSS

Text Books:

Research Methodology – Methods & Techniques – C.R. Kothari and Gaurav Garg – New Age International. 2009

Reference Books:

1. Research Methodology – Dr. Pawankumaroeroi – Global Academic Publishers 2015
2. Business Research Methods – T. Raju and R.Prabhu – MJP Publishers 2010
3. Research Methodology - Dipak Kumar Bhattacharyya – Excel Books 2013
4. Dr. S.M. Venkatachalam & M.Murali, "Basics of Business Research", Mithila Publications

Web Resources:

[https://www.cambridge.org/core title/gb/289640](https://www.cambridge.org/core/title/gb/289640)

Mapping of Course Outcome with Programme Outcome and Programme Specific Outcome:

| Course Outcome | Programme Outcomes | | | | | | | | | | | | Programme Specific Outcome | | |
|----------------|--------------------|-----|-----|-----|-----|-----|-----|-----|-----|------|------|------|----------------------------|------|------|
| | PO1 | PO2 | PO3 | PO4 | PO5 | PO6 | PO7 | PO8 | PO9 | PO10 | PO11 | PO12 | PSO1 | PSO2 | PSO3 |
| CO1 | 3 | 3 | 3 | 2 | 2 | 1 | 1 | 1 | 2 | 1 | 1 | 1 | 2 | 3 | 1 |
| CO2 | 3 | 2 | 3 | 1 | 1 | 3 | 2 | 1 | 2 | 1 | 1 | 1 | 3 | 2 | 2 |
| CO3 | 3 | 3 | 2 | 1 | 2 | 2 | 1 | 3 | 2 | 1 | 2 | 1 | 2 | 3 | 3 |
| CO4 | 1 | 1 | 3 | 3 | 1 | 3 | 2 | 3 | 1 | 2 | 2 | 2 | 3 | 2 | 2 |
| CO5 | 3 | 1 | 3 | 1 | 3 | 2 | 2 | 3 | 1 | 2 | 2 | 1 | 1 | 2 | 3 |

Semester 6

| Course Code | Course Title | Credit | Lecture | Tutorial | Practical | Type |
|-------------|----------------------|--------|---------|----------|-----------|--------|
| | Strategic Management | 4 | 6 | 6 | 0 | Theory |

Course Introduction:

To enable the students to acquire knowledge on concepts of strategic management. On successful Completion of the course the students will be able to understand the environment, strategic decision making etc.

Course Focus on: Skill Development / Entrepreneurship / Employability / Research

| | |
|------------------------|--|
| Course Outcomes | On completion of this course, students will |
| CO 1: | Analyze industry factors, and identify their impact on profitability and strategic positioning |
| CO 2: | Gain knowledge about the SWOT analysis and its need in the day to day life for the evaluation. |
| CO 3: | Identify strategic capabilities and gaps |
| CO 4: | Analyze strategic macro environmental issues |
| CO 5: | Analyze and implement strategy at the single business unit level |

Unit I: [12 Periods]

Introduction- concept of Strategy – Need – Dimensions - Strategic Planning - Process- Benefits — Strategic vision – Corporate Mission – Objectives – Goals – Social Responsibility – Business ethics – Linking Strategies with ethics

Unit II: [12 Periods]

Environmental analysis – Need – Scanning – Approaches – Forecasting – Techniques. Internal Analysis – Need – SWOT analysis – Value Chain – Functional Analysis – Grid approach – Criteria for evaluating internal capabilities

Unit III: [12 Periods]

| | | |
|--|--|---------------------|
| Strategic Decision framework – Developing alternatives – Strategy Options – Porter’s five force Model Diversification strategies – Retrenchment Strategy – Factors Influencing Strategy – Generic Strategy – Cultural Context Of Strategy -- McKinsey’s 7S Model-9 Cell Matrix | | |
| Unit IV: | | [12 Periods] |
| Core Competencies – Building Core Competencies — Managing Strategic Change – Strategic Change Process - International Strategic Management And Domestic Strategic Management | | |
| Unit V: | | [12 Periods] |
| Implementation – Role of top management – Process – Matching Structure of strategy – Resource allocation – Planning and Controlling system. Building Strategic Supportive Corporate Culture Strategic Advantage – Feedback | | |
| Text Books: | | |
| Y. S. Abu - Mostafa, M. Magdon-Ismail, and H.-T. Lin, “Learning from Data”, AMLBook Publishers, 2012 | | |
| Reference Books: | | |
| <ol style="list-style-type: none"> 1. VS Ramaswamy & S.Namakumari, Strategic Planning – Formulation of Corporate Strategy, Macmillan Business Books, 2008 2. John A Pearce, Richard B Robinson, Strategic Management, McGraw Hill Higher Education; 12th Revised Edition, 2003 3. Strategic Management: The Indian Context, R. Srinivasan, 5th Edition, PHI Learning, 2014 4. Strategic Management: Concepts and Cases: Competitiveness and Globalization, by Hitt -12th edition, Cengage Learning, 2017 | | |
| Web Resources: | | |
| https://vtechworks.lib.vt.edu/bitstream/handle/10919/99282/Strategic-Management.pdf | | |

Mapping of Course Outcome with Programme Outcome and Programme Specific Outcome:

| Course Outcome | Programme Outcomes | | | | | | | | | | | | Programme Specific Outcome | | |
|----------------|--------------------|-----|-----|-----|-----|-----|-----|-----|-----|------|------|------|----------------------------|------|------|
| | PO1 | PO2 | PO3 | PO4 | PO5 | PO6 | PO7 | PO8 | PO9 | PO10 | PO11 | PO12 | PSO1 | PSO2 | PSO3 |
| CO1 | 3 | 3 | 3 | 2 | 2 | 1 | 1 | 1 | 2 | 1 | 1 | 1 | 2 | 3 | 1 |
| CO2 | 3 | 2 | 3 | 1 | 1 | 3 | 2 | 1 | 2 | 1 | 1 | 1 | 3 | 2 | 2 |
| CO3 | 3 | 3 | 2 | 1 | 2 | 2 | 1 | 3 | 2 | 1 | 2 | 1 | 2 | 3 | 3 |
| CO4 | 1 | 1 | 3 | 3 | 1 | 3 | 2 | 3 | 1 | 2 | 2 | 2 | 3 | 2 | 2 |
| CO5 | 3 | 1 | 3 | 1 | 3 | 2 | 2 | 3 | 1 | 2 | 2 | 1 | 1 | 2 | 3 |

Semester 6

| Course Code | Couse Title | Credit | Lecture | Tutorial | Practical | Type |
|-------------|--------------------------------------|----------|----------|----------|-----------|---------------|
| | Management information system | 4 | 4 | 4 | 0 | Theory |

Course Introduction:

This course Provide students with comprehensive knowledge and technical skills needed to successfully participate in and support the increasingly applied role of information technology in corporate decision making and enable students to conceptualize and manage the specification, design and implementation of applied information systems. Develop technical knowledge and skills required to work effectively in a profession.

Course Focus on: Skill Development / Entrepreneurship / Employability / Research

| | |
|------------------------|--|
| Course Outcomes | On successful completion of this course, students will be able to: |
| CO 1: | Apply modern tools, techniques and technology in a functional and productive manner in Professional Activities. |
| CO 2: | Analyze, Design, Construct, Implement and Maintain, Usable, Reliable and Cost-Effective Information Systems (IS) that support Operational, Managerial and Strategic activities of Organizations. |
| CO 3: | Study and evaluate existing manual and automated business processes and identify opportunities for re-engineering and/or automation. |
| CO 4: | Coordinate confidently and competently with the user community in IS requirements analysis/design activities, provide guidance and technical support to end user computing activities. |
| CO 5: | Analyze the impact of computing on individuals, organizations and society, including ethical, religious, legal, security and global policy issues. |

| | | |
|---|--|-------------------------|
| Unit I: | INTRODUCTION TO INFORMATION SYSTEMS | [12 Periods] |
| Introduction to Information Systems - Definition - Features - Steps in Implementing MIS - Need for Information - Information System for Decision Making - MIS as Competitive Advantages – MIS structures. | | |
| Unit II: | MIS FUNCTION | [12 Periods] |
| MIS - Strategic information system - MIS support for Planning - Organizing – Controlling - MIS for specific functions - Personnel, Finance, Marketing, Inventory and Production. Data Base Management System Models - Hierarchical - Network – Relational. | | |
| Unit III: | HARDWARE AND SOFTWARE | [12 Periods] |
| Computer Hardware - Description of Electronic Computers – CPU operations - Classification of Computers - Main - Mini - Workstations - Micro Computers – Super Computers - Personal Computers. Computer Software - Types of Software – Data Representation in Computers. Introduction to Client - Server. | | |
| Unit IV: | INPUT AND OUTPUT DEVICES | [12 Periods] |
| Input devices - mouse - touch screens - MICR - OCR - keyboard - pen based Input - digital scanners - voice input devices - sensors. Output devices - impact printers - nonimpact printers - video display terminals - plotters - voice output devices. Secondary storage devices - magnetic disk, floppy, magnetic tape, optical disk storage – CD-ROM. | | |
| Unit V: | TELECOMMUNICATION REVOLUTION | [12 Periods] |
| Telecommunication revolution - Introduction to Email, internet, intranet and teleconferencing, www architecture, Introduction to E-Commerce - models B_B and B_C. EDI - EDI applications in business. Electronic payment of cash: smart cards - credit cards. | | |

Text Books:

Y. S. Abu - Mostafa, M. Magdon-Ismael, and H.-T. Lin, “Learning from Data”, AMLBook Publishers, 2012

Reference Books:

- VS Ramaswamy & S.Namakumari, Strategic Planning – Formulation of Corporate Strategy, Macmillan Business Books, 2008
- John A Pearce, Richard B Robinson, Strategic Management, McGraw Hill Higher Education; 12th Revised Edition, 2003
- Strategic Management: The Indian Context, R. Srinivasan, 5th Edition, PHI Learning, 2014
- Strategic Management: Concepts and Cases: Competitiveness and Globalization, by Hitt -12th edition, Cengage Learning, 2017

Web Resources:

https://repository.dinus.ac.id/docs/ajar/Kenneth_C.Laudon,Jane_P_.Laudon_-_Management_Information_System_13th_Edition_.pdf

Mapping of Course Outcome with Programme Outcome and Programme Specific Outcome:

| Course Outcome | Programme Outcomes | | | | | | | | | | | | Programme Specific Outcome | | |
|----------------|--------------------|-----|-----|-----|-----|-----|-----|-----|-----|------|------|------|----------------------------|------|------|
| | PO1 | PO2 | PO3 | PO4 | PO5 | PO6 | PO7 | PO8 | PO9 | PO10 | PO11 | PO12 | PSO1 | PSO2 | PSO3 |
| CO1 | 3 | 3 | 3 | 2 | 2 | 1 | 1 | 1 | 2 | 1 | 1 | 1 | 2 | 3 | 1 |
| CO2 | 3 | 2 | 3 | 1 | 1 | 3 | 2 | 1 | 2 | 1 | 1 | 1 | 3 | 2 | 2 |
| CO3 | 3 | 3 | 2 | 1 | 2 | 2 | 1 | 3 | 2 | 1 | 2 | 1 | 2 | 3 | 3 |

| | | | | | | | | | | | | | | | |
|------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| CO4 | 1 | 1 | 3 | 3 | 1 | 3 | 2 | 3 | 1 | 2 | 2 | 2 | 3 | 2 | 2 |
| CO5 | 3 | 1 | 3 | 1 | 3 | 2 | 2 | 3 | 1 | 2 | 2 | 1 | 1 | 2 | 3 |

SKILL ENHANCEMENT COURSES

Semester 1

| Course Code | Couse Title | Credit | Lecture | Tutorial | Practical | Type |
|-------------|---------------------------------|----------|----------|----------|-----------|---------------|
| | Modern office Management | 4 | 4 | 4 | 0 | Theory |

Course Introduction:

To enable the students to acquire knowledge on basic office communication and familiar with tools for office management.

Course Focus on: Skill Development / Entrepreneurship / Employability / Research

| | |
|------------------------|--|
| Course Outcomes | On successful completion of this course, students will be able to: |
| CO 1: | Able to gain knowledge about basic office. |
| CO 2: | Identify the characteristics of office environment |
| CO 3: | Apply the techniques of filing and maintain the records |
| CO 4: | Comprehend the basic of word formatting |
| CO 5: | Equip with the skills of creating presentations |

Unit I: [12 Periods]

Office Management and organization Basic concepts of office – Importance – Functions – size of the office – office management – relations with other departments – scientific office management – office manager

| | |
|--|---------------------|
| - principles of office organization – types / systems of organization – charts – centralization Vs. decentralization. | |
| Unit II: | [12 Periods] |
| Office Environment & Communication Office location – characteristics / Qualities of office building – Environment – Physical – hazards in office safety – security – secrecy – communication – meaning – essential features – classification – barriers to communication. | |
| Unit III: | [12 Periods] |
| Office correspondence & Record management Centralized Vs Departmental correspondence – departmental typing and typing pools – classification of records – principles of record keeping – filling – methods. | |
| Unit IV: | [12 Periods] |
| MS Word:- Word basics, formatting text and documents, working with headers, footers and footnotes, tabs, tables and sorting, Working with graphics, templates, and introduction to mail merge. MS Excel:- Excel basics, rearranging worksheets, excel formatting tips and techniques, Introduction to functions; Excel chart features, working with graphics, Using worksheet as a Database. | |
| Unit V: | [12 Periods] |
| MS Power Point:- Power Point basics, creating presentation the easy way, working with graphics, Inserting various objects (Picture, Organizational Chart, Audio, Video etc) in slide, Adding Animation effects in slide. | |
| Text Books: | |
| 1. R S N Pillai & Bagavathi, Modern Office Management, S Chang publishing, 2018 | |
| Reference Books: | |
| 1. Melton, Beth et al. , Microsoft Office Professional 2013 Step by Step, PHI learnings, 2013 2. Sudhir Andrews, Front Office Management & Operations, McGraw hill, Latest edition | |
| Web Resources: | |
| https://www.slideshare.net/slideshow/office-management-141454070/141454070 | |

Mapping of Course Outcome with Programme Outcome and Programme Specific Outcome:

| Course Outcome | Programme Outcomes | | | | | | | | | | | | Programme Specific Outcome | | |
|----------------|--------------------|-----|-----|-----|-----|-----|-----|-----|-----|------|------|------|----------------------------|------|------|
| | PO1 | PO2 | PO3 | PO4 | PO5 | PO6 | PO7 | PO8 | PO9 | PO10 | PO11 | PO12 | PSO1 | PSO2 | PSO3 |
| CO1 | 3 | 3 | 3 | 2 | 2 | 1 | 1 | 1 | 2 | 1 | 1 | 1 | 2 | 3 | 1 |
| CO2 | 3 | 2 | 3 | 1 | 1 | 3 | 2 | 1 | 2 | 1 | 1 | 1 | 3 | 2 | 2 |
| CO3 | 3 | 3 | 2 | 1 | 2 | 2 | 1 | 3 | 2 | 1 | 2 | 1 | 2 | 3 | 3 |
| CO4 | 1 | 1 | 3 | 3 | 1 | 3 | 2 | 3 | 1 | 2 | 2 | 2 | 3 | 2 | 2 |
| CO5 | 3 | 1 | 3 | 1 | 3 | 2 | 2 | 3 | 1 | 2 | 2 | 1 | 1 | 2 | 3 |

Semester 3

| Course Code | Couse Title | Credit | Lecture | Tutorial | Practical | Type |
|-------------|----------------------------|--------|---------|----------|-----------|--------|
| | Internet and web designing | 4 | 5 | 5 | 0 | Theory |

Course Introduction:

To know the fundamentals of Internet and Web based Language and its features

Course Focus on: Skill Development / Entrepreneurship / Employability / Research

| | |
|------------------------|--|
| Course Outcomes | On successful completion of this course, students will be able to: |
| CO 1: | Understand the basics of Internet and Its Protocol |
| CO 2: | To Learn about E mail and its features |
| CO 3: | To Learn about HTML Language and its features |
| CO 4: | To understand the HTML and application |
| CO 5: | To Understand the DHTML and application |

| | | |
|--|--|---------------------|
| Unit I: | | [12 Periods] |
| Internet basics – Internet Address – Domain names – Browsers – search Engine – Connecting to the internet – installing and configuring a modem – creating a connection profile – changing the default connection | | |
| Unit II: | | [12 Periods] |

Working with E-Mail – running an email program – sending , reading , replying deleting and exiting mail – sending files via email - attaching a signature – managing an address book

Unit III: [12 Periods]

Introduction to HTML - information file creation – web server – web client / browser - HTML – commands – title – footer – paragraph breaks – line breaks – heading style – spacing – centering – Font size and color

Unit IV: [12 Periods]

List – Types of list – Adding graphics to HTML document – Using width, height , alignment and alternative attributes – tables – header rows – data rows – caption tags – cell spacing - BG color – rows span – cplspan attributes – Links – internal and external document reference – Images as hyper links

Unit V: [12 Periods]

Introduction to DHTML - cascading style sheets – color and background attributes – text attributes – border attributes – marginal related attributes – list attributes – class – external style sheet

Text Books:

Web Technology –A Developers Perspective –N P Gopalan, J Akilandeswari, Prentice Hall of India Pvt. Ltd., New Delhi, 2008

Reference Books:

- (Unit 1,2) - Internet compete
 - Maureen Adams, Sherry Bonelli
 - BPB Publications – 1998.
- (Unit 3,4,5) - Web enabled commercial application development using HTML,DHTML , Java Script , PerlCGI.
 - Ivan Bayross
 - BPB Publications – 2000.
- Mastering Javascript, J Jaworski, BPB Publications, 1999.
- Core SERVLETS AND JAVA SERVER PAGES VOLUME 1: CORE TECHNOLOGIES By Marty Halland Larry Brown Pearson, Pearson Education India

Web Resources:

<https://bcomcasnmv.files.wordpress.com/2020/01/internet-and-web-designing-study-material-unit-i-v-2015.pdf>

Mapping of Course Outcome with Programme Outcome and Programme Specific Outcome:

| Course Outcome | Programme Outcomes | | | | | | | | | | | | Programme Specific Outcome | | |
|----------------|--------------------|-----|-----|-----|-----|-----|-----|-----|-----|------|------|------|----------------------------|------|------|
| | PO1 | PO2 | PO3 | PO4 | PO5 | PO6 | PO7 | PO8 | PO9 | PO10 | PO11 | PO12 | PSO1 | PSO2 | PSO3 |
| CO1 | 3 | 3 | 3 | 2 | 2 | 1 | 1 | 1 | 2 | 1 | 1 | 1 | 2 | 3 | 1 |
| CO2 | 3 | 2 | 3 | 1 | 1 | 3 | 2 | 1 | 2 | 1 | 1 | 1 | 3 | 2 | 2 |
| CO3 | 3 | 3 | 2 | 1 | 2 | 2 | 1 | 3 | 2 | 1 | 2 | 1 | 2 | 3 | 3 |
| CO4 | 1 | 1 | 3 | 3 | 1 | 3 | 2 | 3 | 1 | 2 | 2 | 2 | 3 | 2 | 2 |
| CO5 | 3 | 1 | 3 | 1 | 3 | 2 | 2 | 3 | 1 | 2 | 2 | 1 | 1 | 2 | 3 |

Semester 5

| Course Code | Couse Title | Credit | Lecture | Tutorial | Practical | Type |
|-------------|---|----------|----------|----------|-----------|---------------|
| | Introduction to python with data science | 4 | 6 | 6 | 0 | Theory |

Course Introduction:

This course enables the students to Develop a solid understanding of Python programming, from basic syntax to advanced concepts. Learn to manage, manipulate, and analyse data using powerful Python libraries. Gain the ability to perform thorough exploratory data analysis, uncovering patterns and insights.

Course Focus on: Skill Development / Entrepreneurship / Employability / Research

| | |
|------------------------|--|
| Course Outcomes | On successful completion of this course, students will be able to: |
| CO 1: | Understand the basics of Python programming and its environment |
| CO 2: | Understand and implement iterators and generators for optimized performance. |
| CO 3: | To Understand a variety of plots using Matplotlib and Seaborn. |

| CO 4: | To understand data transformations and analyze feature correlations. | | | | | | | | | | | | | | | |
|---|---|-----|-----|-----|-----|-----|-----|-----|-----|------|------|---------------------|----------------------------|------|------|--|
| CO 5: | Understanding the unsupervised learning algorithms for clustering and dimensionality reduction. | | | | | | | | | | | | | | | |
| Unit I: | Introduction to Python | | | | | | | | | | | [12 Periods] | | | | |
| History of Python, Need of Python Programming, Applications Basics of Python Programming Using the REPL(Shell), Running Python Scripts, Variables, Assignment, Keywords, Input-Output, Indentation | | | | | | | | | | | | | | | | |
| Unit II: | Types, Operators and Expressions | | | | | | | | | | | [12 Periods] | | | | |
| Types - Integers, Strings, Booleans; Operators- Arithmetic Operators, Comparison (Relational) Operators, Assignment Operators, Logical Operators, Bitwise Operators, Membership Operators, Identity Operators, Expressions. | | | | | | | | | | | | | | | | |
| Unit III: | Data Structures and Control Flow | | | | | | | | | | | [12 Periods] | | | | |
| Lists, Operations, Slicing, Methods, Tuples, Sets, Dictionaries, Sequences, Comprehensions, Conditional blocks using If, Else and El-if, For Loop, For loop using Ranges, String, list and Dictionaries, While Loop, Loop Manipulation using Pass, Continue, Break and Else | | | | | | | | | | | | | | | | |
| Unit IV: | Functions Modules and Packages | | | | | | | | | | | [12 Periods] | | | | |
| Defining Functions, Calling Functions, Passing Arguments, Keyword Arguments, Default Arguments, Variable-length arguments, Anonymous Functions, Function Returning Values, Scope of the Variables in a Function - Global and Local Variables. Creating modules, Name Spacing, Introduction to PIP, Installing Packages via PIP, Using Python Packages. | | | | | | | | | | | | | | | | |
| Unit V: | Object Oriented Programming & Exception Handling | | | | | | | | | | | [12 Periods] | | | | |
| Classes, Self-Variable, Methods, Constructor Method, Inheritance, Overriding Methods, Data Hiding, Difference between an Error and Exception, Handling Exception, Try Except Block, Raising Exceptions, and User Defined Exceptions. | | | | | | | | | | | | | | | | |
| Text Books: | | | | | | | | | | | | | | | | |
| R.Nageswara Rao, 2018, Core Python Programming, Dreamtech. | | | | | | | | | | | | | | | | |
| Reference Books: | | | | | | | | | | | | | | | | |
| <ol style="list-style-type: none"> 1. John Hearty, 2016, Advanced Machine Learning with Python, Packt. 2. Jake VanderPlas, 2016, Python Data Science Handbook: Essential Tools for Working with Data, O'Reilly. 3. Mark Lutz, 2010, Programming Python, O'Reilly. 4. Tim Hall and J-P Stacey, 2009, Python 3 for Absolute Beginners, Apress | | | | | | | | | | | | | | | | |
| Web Resources: | | | | | | | | | | | | | | | | |
| https://nibmehub.com/opac-service/pdf/read/Introduction%20to%20Data%20Science-%202017.pdf | | | | | | | | | | | | | | | | |
| Mapping of Course Outcome with Programme Outcome and Programme Specific Outcome: | | | | | | | | | | | | | | | | |
| Course Outcome | Programme Outcomes | | | | | | | | | | | | Programme Specific Outcome | | | |
| | PO1 | PO2 | PO3 | PO4 | PO5 | PO6 | PO7 | PO8 | PO9 | PO10 | PO11 | PO12 | PSO1 | PSO2 | PSO3 | |
| CO1 | 3 | 3 | 3 | 2 | 2 | 1 | 1 | 1 | 2 | 1 | 1 | 1 | 2 | 3 | 1 | |
| CO2 | 3 | 2 | 3 | 1 | 1 | 3 | 2 | 1 | 2 | 1 | 1 | 1 | 3 | 2 | 2 | |
| CO3 | 3 | 3 | 2 | 1 | 2 | 2 | 1 | 3 | 2 | 1 | 2 | 1 | 2 | 3 | 3 | |
| CO4 | 1 | 1 | 3 | 3 | 1 | 3 | 2 | 3 | 1 | 2 | 2 | 2 | 3 | 2 | 2 | |
| CO5 | 3 | 1 | 3 | 1 | 3 | 2 | 2 | 3 | 1 | 2 | 2 | 1 | 1 | 2 | 3 | |

Semester 6

| Course Code | Credit | Lecture | Tutorial | Practical | Type |
|--------------------|---------------|----------------|-----------------|------------------|-------------|
| | 4 | 6 | 6 | 0 | Theory |

| | | | | | | |
|--|--|--|--|--|--|--|
| | d a n e n t a l s o f B u s i n e s s A n a l y t i c s | | | | | |
|--|--|--|--|--|--|--|

Course Introduction:

The role of Business analytics in the business can be understood by the students after completing this course. Students can gain the knowledge about the Machine learning and Advanced excel and R programming also.

Course Focus on: Skill Development / Entrepreneurship / Employability / Research

| | |
|------------------------|---|
| Course Outcomes | On successful completion of this course, students will be able to: |
| CO 1: | Understanding the Role of Business Analyst and Data Science in business |
| CO 2: | Understanding the basic concept of data management and data mining techniques |
| CO 3: | To understand the basic concept of machine learning |
| CO 4: | To understand the application of business analysis |
| CO 5: | Understanding the basic concept of Data Science Project Life Cycle. |

| | |
|----------------|---------------------|
| Unit I: | [12 Periods] |
|----------------|---------------------|

Introduction: Business analytics meaning and definition - Historical Overview of data analysis, Data Scientist vs. Data Engineer vs. Business Analyst, Career in Business Analytics. Data science meaning and definition, Importance and objectives of Data Science, Applications for data science, Data Scientists Roles and Responsibility

| | | |
|--|--|---------------------|
| Unit II: | | [12 Periods] |
| Data: Data Collection, Data Management, Big Data Management, Organization/sources of data, Importance of data quality, Dealing with missing or incomplete data, Data Visualization, Data Classification | | |
| Data Science Project Life Cycle: Business Requirement, Data Acquisition, Data Preparation, Hypothesis and Modeling, Evaluation and Interpretation, Deployment, Operations, Optimization | | |
| Unit III: | | [12 Periods] |
| Introduction to Data Mining, The origins of Data Mining, Data Mining Tasks, OLAP and Multidimensional data analysis, Basic concept of Association Analysis and Cluster Analysis | | |
| Unit IV: | | [12 Periods] |
| Introduction to Machine Learning: History and Evolution, AI Evolution, Statistics Vs Data Mining Vs, Data Analytics Vs, Data Science, Supervised Learning, Unsupervised Learning, Reinforcement Learning, Frameworks for building Machine Learning Systems | | |
| Unit V: | | [12 Periods] |
| Application of Business Analysis: Retail Analytics, Marketing Analytics, Financial Analytics, Healthcare Analytics, Supply Chain Analytics. Roles of Business Analyst to convert the customer requirement into Product and Agile and scrum in Product Management | | |
| Text Books: | | |
| Introduction to Business Data Analytics, International Institute of Business Analytics | | |
| Reference Books: | | |
| 5. Acharya Seema, Fundamentals of Business Analytics, Wiley India Pvt. Ltd 6. Evans, J.R. (2013), Business Analytics: Methods, Models, and Decisions, 3rd ed. Pearson India 7. Davenport, T.H. and Harris, J.G. (2007) Competing on Analytics: The New Science of Winning, 1st ed. Harvard Business Review Press | | |
| Web Resources: | | |
| https://www.gerkoole.com/IBA/downloads/IBA_Koole_first_chapters.pdf | | |

Mapping of Course Outcome with Programme Outcome and Programme Specific Outcome:

| Course Outcome | Programme Outcomes | | | | | | | | | | | | Programme Specific Outcome | | |
|----------------|--------------------|-----|-----|-----|-----|-----|-----|-----|-----|------|------|------|----------------------------|------|------|
| | PO1 | PO2 | PO3 | PO4 | PO5 | PO6 | PO7 | PO8 | PO9 | PO10 | PO11 | PO12 | PSO1 | PSO2 | PSO3 |
| CO1 | 3 | 3 | 3 | 2 | 2 | 1 | 1 | 1 | 2 | 1 | 1 | 1 | 2 | 3 | 1 |
| CO2 | 3 | 2 | 3 | 1 | 1 | 3 | 2 | 1 | 2 | 1 | 1 | 1 | 3 | 2 | 2 |
| CO3 | 3 | 3 | 2 | 1 | 2 | 2 | 1 | 3 | 2 | 1 | 2 | 1 | 2 | 3 | 3 |
| CO4 | 1 | 1 | 3 | 3 | 1 | 3 | 2 | 3 | 1 | 2 | 2 | 2 | 3 | 2 | 2 |
| CO5 | 3 | 1 | 3 | 1 | 3 | 2 | 2 | 3 | 1 | 2 | 2 | 1 | 1 | 2 | 3 |

ABILITY ENHANCEMENT COURSES

Semester 2

| Course Code | C C U S E T I T L E | Credi t | Lecture | Tutorial | Practical | Type |
|-------------|--|------------|---------|----------|-----------|--------|
| | D E S I G N T H I N K I N G | 2 | 2 | 2 | 0 | Theory |

| | | |
|--|--|-----------------------------------|
| Course Introduction: | | |
| To impart knowledge on adopting principles of design thinking and to mainly understand the core concepts of design thinking which includes (a) Empathy (b) Brainstorming (c) Prototyping (d) Storytelling | | |
| Course Focus on: Skill Development / Entrepreneurship / Employability / Research | | |
| Course Outcomes | On completion of this course, students will | |
| CO 1: | Gain Knowledge on the principles of design thinking | |
| CO 2: | Frame design and design thinking strategies | |
| CO 3: | Solve problems by exploring tools | |
| CO 4: | Generate ideas and develop concepts | |
| CO 5: | Understand design thinking integration in organizations | |
| Unit I: | DEFINITION AND THE PERSPECTIVE ON DESIGN THINKING PROCESS | [12 Periods] |
| Introduction: Definition - The role of design thinking and designers - The modes of thinking - Design process (Double Diamond) -Design principles and other methods. | | |
| Unit II: | FORMATION OF BUILDING ORGANIZATIONS COMPLEXITIESAND STRATEGY FOR | [12 Periods] |
| A powerful way to use data (data collection) - Frame design and generate design Thinking strategy to reframe the complexities with capability: Formation of the problem for the organizations - creation of design thinking strategy and capability (structure, culture, skills, process) - to reduce risk and enable performance. | | |
| Unit III: | PROBLEM SOLVING BY EXPLORING TOOLS | [12 Periods] |
| Explore: Discover challenges - interpret through empathy study- Empathy study tools - perform risk assessment. | | |
| Unit IV: | IDEA GENERATION AND DEVELOPMENT OF CONCEPTS | [12 Periods] |
| Ideate: Generate ideas - shortlist a workable solution - perform risk assessment. Create: Develop prototypes of a big idea - get feedback - perform financial analysis of the solution and risk assessment. | | |
| Unit V: | DESIGN THINKING SETUP WITHIN FIRM AND DEVELOPMENT SERVICE | [12 Periods] |
| Evolve: Design thinking integration in organizations - Success factor and measure the solution. Design for effective services: Developed Product vs. Development services - service development – experience lifecycle. | | |
| Text Books: | | |
| Vienna, M., Vienna, Y., K. Adler, I., Lucian, B. and Russo, B., 2012. Design Thinking Business Innovation. 1st ed. Rio de Janeiro: MJV Press, pp. 1-85. 2. Ling, D., 2015 | | |
| Reference Books: | | |
| Complete Design Thinking Guide For Successful Professionals. 1st ed. Singapore: Create Space Independent Publishing Platform, pp.1-183 | | |
| Web Resources: | | |
| https://www.rcsc.gov.bt/wp-content/uploads/2017/07/dt-guide-book-master-copy.pdf | | |
| Mapping of Course Outcome with Programme Outcome and Programme Specific Outcome: | | |
| Course Outcome | Programme Outcomes | Programme Specific Outcome |

| | PO1 | PO2 | PO3 | PO4 | PO5 | PO6 | PO7 | PO8 | PO9 | PO10 | PO11 | PO12 | PSO1 | PSO2 | PSO3 |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|------|------|------|------|------|
| CO1 | 3 | 3 | 3 | 2 | 2 | 1 | 1 | 1 | 2 | 1 | 1 | 1 | 2 | 3 | 1 |
| CO2 | 3 | 2 | 3 | 1 | 1 | 3 | 2 | 1 | 2 | 1 | 1 | 1 | 3 | 2 | 2 |
| CO3 | 3 | 3 | 2 | 1 | 2 | 2 | 1 | 3 | 2 | 1 | 2 | 1 | 2 | 3 | 3 |
| CO4 | 1 | 1 | 3 | 3 | 1 | 3 | 2 | 3 | 1 | 2 | 2 | 2 | 3 | 2 | 2 |
| CO5 | 3 | 1 | 3 | 1 | 3 | 2 | 2 | 3 | 1 | 2 | 2 | 1 | 1 | 2 | 3 |

ELECTIVE PAPERS

| Course Code | Course Title | Credit | Lecture | Tutorial | Practical | Type |
|--|---|----------|----------|----------|-----------|---------------------|
| | ENTREPRENEURSHIP DEVELOPMENT | 4 | 4 | 4 | 0 | Theory |
| Course Introduction: To make the students aware of the importance of entrepreneurship opportunities available in the society and to acquaint them with the challenges faced by the entrepreneur | | | | | | |
| Course Focus on: Skill Development / Entrepreneurship / Employability / Research | | | | | | |
| Course Outcomes | On completion of this course, students will | | | | | |
| CO 1: | Define who is an Entrepreneur and what his or her characteristic features are, what skills make them successful and what qualities are required to become an Entrepreneur | | | | | |
| CO 2: | Foster the students in the areas of entrepreneurial growth and equip with different Entrepreneurial development programmes | | | | | |
| CO 3: | Project management is a powerful discipline in the core areas of project life cycle and to know about the roles and responsibilities of a project manager | | | | | |
| CO 4: | Project identification and selecting the successful project with the various guidelines issued by the authorities | | | | | |
| CO 5: | Classify the various sources of business finance and identify the different institutions that supporting entrepreneurs | | | | | |
| Unit I: | CONCEPT OF ENTREPRENEURSHIP | | | | | [12 Periods] |
| Meaning of Entrepreneurship – characteristics, functions and types of entrepreneurship – Green Entrepreneurs – Digital Entrepreneurs –Entrepreneurial Motivation – Need for Achievement Theory–Risk taking Behaviour–Innovation and Entrepreneur–Role of entrepreneurship in economic development. | | | | | | |
| Unit II: | POLICY & INSTITUTIONAL ECOSYSTEM FOR ENTREPRENEURSHIP | | | | | [12 Periods] |
| Factors affecting entrepreneur growth -Economic–Non-economic. Entrepreneurship Development Programmes- Need - Objectives -Course contents – Phases - Evaluation. – Institutional support to entrepreneurs. | | | | | | |
| Unit III: | BUSINESSPLAN | | | | | [12 Periods] |
| Introduction to Small Business: Evolution & Development–Meaning– Concepts –Categories –Characteristics of small business– Role, importance and responsibilities of small business. Business Ideas – Sources and incubating; Technical Assistance for small business –Preparation of Feasibility Reports, Legal Formalities and Documentation | | | | | | |
| Unit IV: | PROJECT IMPLEMENTATION | | | | | [12 Periods] |
| Business Plan – Outline – Components – Marketing strategy for small business – Market Survey–Market Demands–Sales forecast – Competitive Analysis–The marketing plan –Marketing Assistance through government channels–Risk Analysis–Break even analysis | | | | | | |
| Unit V: | ENTREPRENEURIAL FINANCE | | | | | [12 Periods] |
| Start-up costs – The financial Plan – Source of finance for new ventures – small business Institutional finance supporting SSIs –Bounties to SSIs –Venture Capital –basic start-up Problems – Need for Angel investors. | | | | | | |
| Text Books: | | | | | | |
| 1. Khan M.A- Entrepreneurship Development Programmes in India, Delhi, Kanishka Publishing House. | | | | | | |
| 2. Mead, D.C.& Liedholm, C. The dynamics of micro and small enterprises in developing countries (1998) | | | | | | |
| Reference Books: | | | | | | |

Web Resources:

<http://repository.stikesrspadgs.ac.id/56/1/Enterpreneurship%20for%20everyone-257hlm.pdf>

Mapping of Course Outcome with Programme Outcome and Programme Specific Outcome:

| Course Outcome | Programme Outcomes | | | | | | | | | | | | Programme Specific Outcome | | |
|----------------|--------------------|-----|-----|-----|-----|-----|-----|-----|-----|------|------|------|----------------------------|------|------|
| | PO1 | PO2 | PO3 | PO4 | PO5 | PO6 | PO7 | PO8 | PO9 | PO10 | PO11 | PO12 | PSO1 | PSO2 | PSO3 |
| CO1 | 3 | 3 | 3 | 2 | 2 | 1 | 1 | 1 | 2 | 1 | 1 | 1 | 2 | 3 | 1 |
| CO2 | 3 | 2 | 3 | 1 | 1 | 3 | 2 | 1 | 2 | 1 | 1 | 1 | 3 | 2 | 2 |
| CO3 | 3 | 3 | 2 | 1 | 2 | 2 | 1 | 3 | 2 | 1 | 2 | 1 | 2 | 3 | 3 |
| CO4 | 1 | 1 | 3 | 3 | 1 | 3 | 2 | 3 | 1 | 2 | 2 | 2 | 3 | 2 | 2 |
| CO5 | 3 | 1 | 3 | 1 | 3 | 2 | 2 | 3 | 1 | 2 | 2 | 1 | 1 | 2 | 3 |

Semester 4

| Course Code | Couse Title | Credit | Lecture | Tutorial | Practical | Type |
|-------------|-------------|--------|---------|----------|-----------|------|
|-------------|-------------|--------|---------|----------|-----------|------|

| | | | | | | | | | | | | | | | |
|------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| CO1 | 3 | 3 | 3 | 2 | 2 | 1 | 1 | 1 | 2 | 1 | 1 | 1 | 2 | 3 | 1 |
| CO2 | 3 | 2 | 3 | 1 | 1 | 3 | 2 | 1 | 2 | 1 | 1 | 1 | 3 | 2 | 2 |
| CO3 | 3 | 3 | 2 | 1 | 2 | 2 | 1 | 3 | 2 | 1 | 2 | 1 | 2 | 3 | 3 |
| CO4 | 1 | 1 | 3 | 3 | 1 | 3 | 2 | 3 | 1 | 2 | 2 | 2 | 3 | 2 | 2 |
| CO5 | 3 | 1 | 3 | 1 | 3 | 2 | 2 | 3 | 1 | 2 | 2 | 1 | 1 | 2 | 3 |

Semester 5

| Course Code | Course Title | Credit | Lecture | Tutorial | Practical | Type |
|-------------|---|--------|---------|----------|-----------|--------|
| | Fundamentals of Artificial Intelligence | 4 | 6 | 6 | 0 | Theory |

Course Introduction:

This course presents the problem solving and AI, search methods and expert systems. Enable the student to be familiar with theorems and algorithms

Course Focus on: Skill Development / Entrepreneurship / Employability / Research

| Course Outcomes | On completion of this course, students will |
|-----------------|--|
| CO 1: | To discover global market opportunities and their influence on strategic marketing decisions |
| CO 2: | Exhibit critical thinking skills in understanding managerial issues and problems related to the global economy and international business |
| CO 3: | Disseminate a sense of social responsibility that managers must address, including business ethics, cultural diversity, and environmental concerns |
| CO 4: | Demonstrate entrepreneurial traits to start and manage their own innovative business successfully |
| CO 5: | To discover global market opportunities and their influence on strategic marketing decisions |

| Unit I: | [12 Periods] |
|---|--------------|
| Problem solving and AI – Puzzles and Games – Problem States and operators – Heuristic programming – state space representations | |

| Unit II: | [12 Periods] |
|--|--------------|
| State space search methods – breadth first and depth first search – heuristic – admissibility – optimality of algorithms | |

| Unit III: | [12 Periods] |
|---|--------------|
| Problem reduction search methods – cost of solution trees – ordered search – alpha beta and minimum procedure | |

| Unit IV: | [12 Periods] |
|--|--------------|
| Predicate calculus in problem solving – answer extraction process – resolution – Automatic program writing – predicate calculus – proof finding method | |

| Unit V: | [12 Periods] |
|---|--------------|
| Expert systems: Expert systems and conventional programs – expert system organization – Knowledge engineering: knowledge representation techniques – knowledge acquisition – acquiring knowledge from experts | |

| Text Books: |
|--|
| E Charnail, CK Reiesbeck and D V Medermett, “Artificial Intelligence Programming”, Lawrence Erlbaum Associates, N J, 198 |

| Reference Books: |
|---|
| 1. N J Nilson, “Principles of Artificial Intelligence”, Tiega Press, Polo Alto, . |
| 2. Elain Rich and Kevin Knight, “Artificial Intelligence”, McGraw Hill, |

| Web Resources: |
|---|
| https://people.engr.tamu.edu/guni/csce421/files/AI_Russell_Norvig.pdf |

| Mapping of Course Outcome with Programme Outcome and Programme Specific Outcome: | | | | | | | | | | | | | | | |
|--|--------------------|-----|-----|-----|-----|-----|-----|-----|-----|------|------|------|----------------------------|------|------|
| Course Outcome | Programme Outcomes | | | | | | | | | | | | Programme Specific Outcome | | |
| | PO1 | PO2 | PO3 | PO4 | PO5 | PO6 | PO7 | PO8 | PO9 | PO10 | PO11 | PO12 | PSO1 | PSO2 | PSC3 |
| CO1 | 3 | 3 | 3 | 2 | 2 | 1 | 1 | 1 | 2 | 1 | 1 | 1 | 2 | 3 | 1 |
| CO2 | 3 | 2 | 3 | 1 | 1 | 3 | 2 | 1 | 2 | 1 | 1 | 1 | 3 | 2 | 2 |
| CO3 | 3 | 3 | 2 | 1 | 2 | 2 | 1 | 3 | 2 | 1 | 2 | 1 | 2 | 3 | 3 |
| CO4 | 1 | 1 | 3 | 3 | 1 | 3 | 2 | 3 | 1 | 2 | 2 | 2 | 3 | 2 | 2 |
| CO5 | 3 | 1 | 3 | 1 | 3 | 2 | 2 | 3 | 1 | 2 | 2 | 1 | 1 | 2 | 3 |

Semester 6

| Course Code | Couse Title | Credit | Lecture | Tutorial | Practical | Type |
|-------------|-------------|--------|---------|----------|-----------|------|
|-------------|-------------|--------|---------|----------|-----------|------|

| | | | | | | |
|--|--|----------|----------|----------|----------|---------------------|
| | Information system and Cyber Security | 4 | 6 | 6 | 0 | Theory |
| <p>Course Introduction: To give students knowledge about information Vulnerability in the modern cyber environment and need of cyber Security preparations are essential</p> <p>Course Focus on: Skill Development / Entrepreneurship / Employability / Research</p> | | | | | | |
| Course Outcomes | On completion of this course, students will | | | | | |
| CO 1: | The objective of this course is to provide students with a basic understanding of Information and Cyber Security issues and make them aware of the Challenges. | | | | | |
| CO 2: | To provide components of the Information and Cyber Security Organization | | | | | |
| CO 3: | To achieve a basic understanding of information and Cyber Security | | | | | |
| CO 4: | To master information security governance, and related legal and regulatory Issues | | | | | |
| CO 5: | To be familiarity with information security awareness and a clear understanding of its importance | | | | | |
| Unit I: | | | | | | [12 Periods] |
| <p>Information Security Overview -The Importance of Information Protection-The Evolution of Information Security -Justifying Security Investment -Security Methodology -How to Build a Security Program -The Impossible Job-The Weakest Link-Strategy and Tactics-Business Processes vs. Technical Controls</p> | | | | | | |
| Unit II: | | | | | | [12 Periods] |
| <p>Risk Analysis - Threat Definition -Types of Attacks - Malicious Mobile Code -Advanced Persistent Threats (APTs) -Manual Attacks -Risk Analysis</p> | | | | | | |
| Unit III: | | | | | | [12 Periods] |
| <p>Cyber Security Fundamentals - Network and Security Concepts - Information Assurance Fundamentals - Authentication – Authorization – Nonrepudiation – Confidentiality – Integrity – Availability - Basic Cryptography - Symmetric Encryption - Example of Simple Symmetric Encryption with Exclusive OR(XOR) - Improving upon Stream Ciphers with Block Ciphers - Public Key Encryption -The Domain Name System (DNS) - Security and the DNS – Firewalls -History Lesson - What’s in a Name? – Packet - Filtering Firewalls - Stateful Firewalls- Application Gateway Firewalls.</p> | | | | | | |
| Unit IV: | | | | | | [12 Periods] |
| <p>Virtualization- In the Beginning, There Was Blue - The Virtualization Menu - Full Virtualization-Getting a Helping Hand from the Processor - If All Else Fails, Break It to Fix It - Use What You Have-Doing It the Hard Way-Biting the Hand That Feeds-Radio-Frequency Identification -Identify What?-Security and Privacy Concerns</p> | | | | | | |
| Unit V: | | | | | | [12 Periods] |
| <p>Microsoft Windows Security Principles-Windows Tokens-Introduction-Concepts behind Windows Tokens-Access Control Lists-Conclusions-Window Messaging - Malicious Uses of Window Messages - Solving Problems with Window Messages-Windows Program Execution- Validation of Parameters - Load Image, Make Decisions-Creating the Process Object-Context Initialization - Windows Subsystem Post Initialization - Initial Thread-Down to the Final Steps- Exploiting Windows Execution for Fun and Profit - The Windows Firewall</p> | | | | | | |
| Text Books: | | | | | | |

1. "Information Security - The Complete Reference", by Mark Rhodes-Ousley, 2nd Edition.
2. "Cyber Security Essentials", by James Graham, Richard Howard & Ryan Olson , Published by CRC Press.

Reference Books:

1. John R. Vacca, "Computer and Information Security Handbook", Elsevier, Third Edition
2. Salvatore J. Stolfo, Steven M. Bellovin, Shlomo Hershkop, Angelos Keromytis, Sara Sinclair, Sean W. Smith, "Insider Attack and Cyber Security beyond the Hacker", Springer Science,

Web Resources:

<https://uou.ac.in/sites/default/files/slm/Introduction-cyber-security.pdf>

Mapping of Course Outcome with Programme Outcome and Programme Specific Outcome:

| Course Outcome | Programme Outcomes | | | | | | | | | | | | Programme Specific Outcome | | |
|----------------|--------------------|-----|-----|-----|-----|-----|-----|-----|-----|------|------|------|----------------------------|------|------|
| | PO1 | PO2 | PO3 | PO4 | PO5 | PO6 | PO7 | PO8 | PO9 | PO10 | PO11 | PO12 | PSO1 | PSO2 | PSO3 |
| CO1 | 3 | 3 | 3 | 2 | 2 | 1 | 1 | 1 | 2 | 1 | 1 | 1 | 2 | 3 | 1 |
| CO2 | 3 | 2 | 3 | 1 | 1 | 3 | 2 | 1 | 2 | 1 | 1 | 1 | 3 | 2 | 2 |
| CO3 | 3 | 3 | 2 | 1 | 2 | 2 | 1 | 3 | 2 | 1 | 2 | 1 | 2 | 3 | 3 |
| CO4 | 1 | 1 | 3 | 3 | 1 | 3 | 2 | 3 | 1 | 2 | 2 | 2 | 3 | 2 | 2 |
| CO5 | 3 | 1 | 3 | 1 | 3 | 2 | 2 | 3 | 1 | 2 | 2 | 1 | 1 | 2 | 3 |

Semester 3

| Course Code | Course Title | Credit | Lecture | Tutorial | Practical | Type |
|-------------|------------------------|--------|---------|----------|-----------|--------|
| | Business Communication | 4 | 5 | 5 | 0 | Theory |

Course Introduction:

The student will compose, produce, and present effective business documents appropriate to meet industry standards; apply critical evaluation techniques to business documents; and demonstrate the importance of coherent, ethical communication principles in business and industry.

Course Focus on: Skill Development / Entrepreneurship / Employability / Research

| | |
|------------------------|--|
| Course Outcomes | On completion of this course, students will |
| CO 1: | Students gained knowledge in the effective communication and to draft the layout for a business letter |
| CO 2: | Learnt to draft the various business letters |
| CO 3: | Gained knowledge in corresponding towards bank, insurance, agency, Shareholders and directors. |
| CO 4: | Learnt to prepare a report, minutes and memorandum of a meeting |
| CO 5: | Knowledge gained on the latest technology |
| Unit I: | [12 Periods] |

| Individual Communication: Resume preparation – general and job-specific; cover letter preparing; soft-copy forms with neat formatting; Scanning and placing of photo; Modern e-forms of Communication: Fax – E-mail – Video Conferencing – Websites and their uses in business – language for email letters – social media communications (blogs & twitter—posting tweets, face-book, LinkedIn Groups (platform specific best practices) | | | | | | | | | | | | | | | |
|--|--------------------|-----|-----|-----|-----|-----|-----|-----|-----|------|------|---------------------|----------------------------|------|------|
| Unit II: | | | | | | | | | | | | [12 Periods] | | | |
| Trade Letters: Letters of Inquiry – placement of orders – Delivery and its status – Letters of Complaints, Claims – Adjustments –Credit and Status Enquiry – Collection letter Inter-office correspondence – Memorandum – Office orders – circulars; Report writing for Business purposes | | | | | | | | | | | | | | | |
| Unit III: | | | | | | | | | | | | [12 Periods] | | | |
| Report writing: Meaning – Need –Formatting the report elements such as title, abstract, summary, introduction, body, conclusion, recommendations, references and appendices – Types of report – Features of a well-written report. | | | | | | | | | | | | | | | |
| Effective writing: Business Vocabulary -Bringing learners up to date with the language they need for business today, provides practice in using the new language, and also reflects recent developments in technology and business practice. Review basic grammar, punctuation, capitalization, number usage. | | | | | | | | | | | | | | | |
| Unit IV: | | | | | | | | | | | | [12 Periods] | | | |
| Correspondence of a Company Secretary: Secretary Notice, Agenda and Minutes— types—contents—guidelines—Minutes of statutory meeting—Board meeting—Annual General Meeting —Alteration of minutes—Minutes of Joint consultative meeting – Correspondence with Directors and Shareholders. Internal communications strategy: company newsletters – circulars – Appreciation memos – reprimanding strictures – Empowering employees – employee engagement. | | | | | | | | | | | | | | | |
| Unit V: | | | | | | | | | | | | [12 Periods] | | | |
| General Correspondence: Letters under Right to Information (RTI) Act – General complaints and petitions for public utilities – Letters to the editor of newspapers – Other general aspects related to practical letter writing | | | | | | | | | | | | | | | |
| Text Books: | | | | | | | | | | | | | | | |
| 1.Rajendra Pal, J.S.KorlaHailli, “Essentials of Business Communication” Sultan Chand & Sons, 13th Edition | | | | | | | | | | | | | | | |
| Reference Books: | | | | | | | | | | | | | | | |
| 1.Ashley, A , “A Handbook Of Commercial Correspondence”, Oxford University Press 2.Brian M. H. Robinson, Vidya S. Netrakanti& Dr. Hari V. Shintre Communicative 3.Competence in Business English. Orient Longman, 2007. K. K. Ramachandran, K. K. 4.Lakshmi, K. K. Karthick& M. Krishnakumar. Business Communication. Macmillan, 2007 | | | | | | | | | | | | | | | |
| Web Resources: | | | | | | | | | | | | | | | |
| https://dcomm.org/wp-content/uploads/2019/05/Business-Communication-PDFDrive.com-.pdf | | | | | | | | | | | | | | | |
| Mapping of Course Outcome with Programme Outcome and Programme Specific Outcome: | | | | | | | | | | | | | | | |
| Course Outcome | Programme Outcomes | | | | | | | | | | | | Programme Specific Outcome | | |
| | PO1 | PO2 | PO3 | PO4 | PO5 | PO6 | PO7 | PO8 | PO9 | PO10 | PO11 | PO12 | PSO1 | PSO2 | PSO3 |
| CO1 | 3 | 3 | 3 | 2 | 2 | 1 | 1 | 1 | 2 | 1 | 1 | 1 | 2 | 3 | 1 |
| CO2 | 3 | 2 | 3 | 1 | 1 | 3 | 2 | 1 | 2 | 1 | 1 | 1 | 3 | 2 | 2 |
| CO3 | 3 | 3 | 2 | 1 | 2 | 2 | 1 | 3 | 2 | 1 | 2 | 1 | 2 | 3 | 3 |
| CO4 | 1 | 1 | 3 | 3 | 1 | 3 | 2 | 3 | 1 | 2 | 2 | 2 | 3 | 2 | 2 |
| CO5 | 3 | 1 | 3 | 1 | 3 | 2 | 2 | 3 | 1 | 2 | 2 | 1 | 1 | 2 | 3 |

Semester 4

| Course Code | Couse Title | Credit | Lecture | Tutorial | Practical | Type |
|---|---|--------|---------|----------|-----------|---------------------|
| | Marketing Research | 4 | 5 | 5 | 0 | |
| <p>Course Introduction: To provide an exposure to the students pertaining to the nature and Scope of marketing research, which they are expected to possess when they enter the industry as practitioners. This will facilitate them in understanding about the basic techniques and tools of marketing research.</p> <p>Course Focus on: Skill Development / Entrepreneurship / Employability / Research</p> | | | | | | |
| Course Outcomes | On completion of this course, students will | | | | | |
| CO 1: | The student should be able to understand the process of marketing research and its different processes. | | | | | |
| CO 2: | The student should be able to understand different research methods. | | | | | |
| CO 3: | This will help them to analyze and interpret both qualitative and quantitative data. | | | | | |
| CO 4: | The student should be able to identify sources of information. | | | | | |
| CO 5: | The student should be able to build a simple questionnaire from a web-based survey administration site. | | | | | |
| Unit I: | | | | | | [12 Periods] |
| Marketing Research: Nature and Scope of Marketing Research – Role of Marketing Research in Decision Making. The Research process – Steps in the Research Process; Designing the Research Proposal | | | | | | |

| | | |
|--|--|---------------------|
| Unit II: | | [12 Periods] |
| Sources and methods of gathering Marketing Information: Primary Data Collection - Survey Vs. Observations - Comparison of self-administered – telephone – mail - emails techniques - Depth Interviews focus groups and projective techniques - Questionnaire - form & design | | |
| Unit III: | | [12 Periods] |
| Secondary Data Research: Advantages & Disadvantages of Secondary Data - Criteria for evaluating secondary sources - Secondary sources of data in Indian Context | | |
| Unit IV: | | [12 Periods] |
| Measurement and scaling - Concept of measurement and scaling – Types of Scales – Nominal, Ordinal, Interval and Ratio Scales - Attitude scales Thurstone's, Likert's, Semantic differential - Reliability and validity of a scales | | |
| Unit V: | | [12 Periods] |
| Sampling: Sampling techniques - determination of sample size - Data Analysis - Z test (mean, diff. of mean, diff. of proportion) t test (mean) - paired t-test - Chi square test. Introduction to theoretical concept of ANOVA - Factor Analysis and Regression analysis | | |

Text Books:

Kotler, P., (1988) Marketing Management: Analysis Planning and Control, Prentice-Hall

Reference Books:

1. Green E. Paul, Tull S.Donald & Albaum, Gerald: "Research for Marketing Decisions", 2006, 6th Ed, PHI.
2. Tull and Hawkins, "Marketing Research", 2000, 4th Ed. Tata McGraw Hill.
3. Cooper & Schindler: Business Research Methods McGraw-Hill Education.
4. Martin callingam, "Market intelligence", 2009, Kogan Page Publishers.
6. G.C. Beri, "Marketing Research", 2008, 8th Ed, Tata McGraw Hill.
7. Malhotra, K. Naresh, "Marketing Research- And applied orientation", 2014.

Web Resources:

<https://nibmehub.com/opac-service/pdf/read/Marketing%20Research%20An%20Applied%20Approach-%20Malhotra-%20N.K-%202ed.pdf>

Mapping of Course Outcome with Programme Outcome and Programme Specific Outcome:

| Course Outcome | Programme Outcomes | | | | | | | | | | | | Programme Specific Outcome | | |
|----------------|--------------------|-----|-----|-----|-----|-----|-----|-----|-----|------|------|------|----------------------------|------|------|
| | PO1 | PO2 | PO3 | PO4 | PO5 | PO6 | PO7 | PO8 | PO9 | PO10 | PO11 | PO12 | PSO1 | PSO2 | PSO3 |
| CO1 | 3 | 3 | 3 | 2 | 2 | 1 | 1 | 1 | 2 | 1 | 1 | 1 | 2 | 3 | 1 |
| CO2 | 3 | 2 | 3 | 1 | 1 | 3 | 2 | 1 | 2 | 1 | 1 | 1 | 3 | 2 | 2 |
| CO3 | 3 | 3 | 2 | 1 | 2 | 2 | 1 | 3 | 2 | 1 | 2 | 1 | 2 | 3 | 3 |
| CO4 | 1 | 1 | 3 | 3 | 1 | 3 | 2 | 3 | 1 | 2 | 2 | 2 | 3 | 2 | 2 |
| CO5 | 3 | 1 | 3 | 1 | 3 | 2 | 2 | 3 | 1 | 2 | 2 | 1 | 1 | 2 | 3 |

Core Project

Semester 6

| Course Code | Couse Title | Credit | Lecture | Tutorial | Practical | Type |
|---|---|----------|----------|----------|-----------|----------------|
| | CORE PROJECT | 8 | 8 | 8 | - | PROJECT |
| Course Outcomes | On completion of this course, students will | | | | | |
| CO 1: | To develop plans with relevant to achieve the project's goals. | | | | | |
| CO 2: | To break work down into tasks and determine handover procedures. | | | | | |
| CO 3: | To identify links and dependencies, and schedule to achieve deliverables. | | | | | |
| CO 4: | To estimate and cost the human and physical resources required, and make plans to obtain the necessary resources. | | | | | |
| PROJECT REPORT GUIDELINES | | | | | | |
| 1. A Guide has been allotted to each student by the department. Student can select any topic in | | | | | | |

discussion with the supervisor. Students should maintain a work diary where in weekly work carried out has to be written. Guide should review the work every week and put his/her signature. The work diary along with project report should be submitted at the time of viva voce.

2. Internal Marks Distribution: A minimum of two reviews have to be done, one at the time of finalizing the Questionnaire /identifying the primary data and the second review at the time of commencement of report writing. They should be asked to present the work done to the respective guide in the two reviews.

3. End Semester Examination: The evaluation for the end semester examination should be as per the norms given below:

External Examiner 25 Marks

Internal Examiner 75 Marks

(Jointly given by the external and internal examiner) 100 Marks and the same may be converted to 200 Maximum whenever required)