



**DAYANANDA SAGAR
UNIVERSITY**

PROGRAMME PROJECT REPORT (PPR)

FOR

BACHELOR OF COMMERCE (B. Com)

Mode: ONLINE

CENTRE FOR DISTANCE AND ONLINE EDUCATION (CDOE)

DAYANANADA SAGAR UNIVERSITY

BENGALURU




Registrar 28/8/25

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PROGRAMME PROJECT REPORT

Introduction

The Online Bachelor of Commerce Programme offered from the Centre of Distance and Online Education (CDOE), Dayananda Sagar University is for a duration of three years and has industry-based curricula of high standards. The curriculum is designed and developed to train the students in the area of Commerce. The programme is designed to provide strong foundation skills required in administering the corporate Core functions such as Accounting, Auditing, Finance, Taxation, Marketing along with electives such as Fintech, Business analytics and Supply Chain Management. The programme is thus a mix of traditional and new-age subjects designed in a way that students can develop business and digital skills, financial literacy and managerial skills.

The programme has a well-crafted curriculum comprising of comprehensive courses which aim to equip the student with major aspects of business and accounting along with electives. The online B.Com programme from CDOE, DSU will impart the best training to budding managers with a modern blend of teaching, research and industry interactions. The programme provides a competent, innovation-oriented, ethical and intellectual environment with a sharp focus on leadership in the ever-changing technological set-up across the industry.

This programme shapes the students' careers in real-time business situations and the latest technological trends and development. Besides, critical thinking skills are developed among the students to Analyse the complex issues faced by them.

With a comprehensive programme structure and curriculum, the students of this programme have extensive job opportunities in the field of Accounting, Finance, Governance, Insurance, Taxation, Risk Management, and Wealth Management. They can take up roles in Finance and Accounting, Budgeting, Investment, Costing etc. Students aspiring for higher education after B. Com have vast avenues for pursuing their Masters's in the field of Accounting, Auditing, Finance, Taxation and Investment Management.

1. Programme's Mission and Objectives

The mission of the online B. Com Programme from CDOE, DSU is to build foundational skills in commerce and business and impart digital and technological expertise. It aims to shape responsible citizens with ethical awareness, develop character, and create an industry-oriented curriculum that enhances cognitive abilities and prepares students for dynamic business environments.

Objectives

- To build strong foundation skills in various functional areas of commerce & business.
- To impart varied competencies that will be helpful in managing business and taking managerial decisions.
- To impart required digital and technology skills to keep pace with the adaptation of technology in business.
- To develop character and personality and make them students Responsible Citizens with awareness about Business, Society and Ethics.
- To develop a curriculum that is industry oriented while developing a student's cognitive faculties.

The online B.Com programme is designed to build a strong foundation in various functional areas of commerce and business, equipping students with essential competencies for effective business management. The programme integrates digital and technological skills to align with the increasing role of technology in business processes. Alongside academic growth, it fosters character development, instilling ethical values and social awareness to prepare responsible citizens. By emphasizing an industry-oriented curriculum, the course will develop the cognitive abilities of students to become well-prepared for professional challenges and capable of contributing meaningfully to both businesses and the society.

2. Relevance of Programme with Dayananda Sagar University Mission and Goals

The Vision of Dayananda Sagar University emphasizes on becoming a leading institution excelling in education, research, innovation, and entrepreneurship. It aims to nurture individuals with exceptional leadership skills, empowering them to address national and global challenges, driving positive change,

and contributing to societal development. The focus is on excellence and holistic development to shape future leaders.

Vision

To be a centre of excellence in education, research & training, innovation & entrepreneurship and to produce citizens with exceptional leadership qualities to serve national and global needs.

Mission

To achieve our objectives in an environment that enhances creativity, innovation and scholarly pursuits while adhering to our vision.

The mission statement of Dayananda Sagar University highlights fostering a supportive environment that encourages creativity, innovation, and academic excellence. By aligning all efforts with the institution's vision, it aims to achieve its goals while nurturing intellectual growth, inspiring new ideas, and maintaining a commitment to excellence in every pursuit.

DSU's online Programme supports the vision of the University by providing a dynamic learning environment for commerce students that encourages professional development along with creativity and innovation. It integrates cutting-edge research, scholarly activities, and practical training to develop leaders and entrepreneurs who excel in addressing national and global challenges. The programme fosters excellence and aligns with the broader institutional aspirations. The programme also reflects the mission of the University by promoting an ecosystem of intellectual growth and innovation. It enables students to achieve their goals through a curriculum that emphasizes creativity and problem-solving while cultivating leadership and expertise required to meet the evolving societal and industry needs.

3. Nature of Prospective Target Group of Learners

This Online programme from CDOE has been designed for students who wish to pursue higher education in commerce with flexible learning schedules. The programme is also meant for aspiring entrepreneurs or existing business owners aiming to gain formal knowledge in business and commerce and individuals looking to transition into commerce or business-related fields. The programme will offer flexibility, accessibility and affordability for students to balance their studies along with professional and personal commitments.

The programme is designed such that students can get the opportunity to access high value learning anytime from anywhere and pursue the programme at their own pace. The programme also fosters professional networking and eliminates the need for relocation or commuting thus making it ideal for diverse student groups. Delivery of the programme through the online mode also contributes towards the aim of India's National Education Policy to achieve a Gross Enrolment Ratio (GER) of 50% by the year 2035.

4. Appropriateness of programme to be conducted in Online mode to acquire specific skills and competence

To enable the students of the online B.Com programme to learn, the courses in the programme are delivered through Self-Learning e-Modules, offering a structured and engaging approach to e-learning. These modules are designed to be self-explanatory, providing clear instructions and content to facilitate independent learning. They are self-contained, encompassing all necessary resources within a single unit, and self-directed, allowing students to progress at their own pace. The modules include self-evaluation components to enable students to assess their understanding and progress. This approach ensures students can effectively acquire the prescribed knowledge and skills while enjoying flexibility, accessibility, and a personalized learning experience tailored to their needs. The course study material for the online programme include are made available through the four-quadrant approach which will be uploaded on the University's Learning Management System (LMS).

The components of the four quadrants are:

- (i) E-Tutorial: in the form of recorded faculty lecture videos.
- (ii) E-Content: Text Materials – e-SLM and access to online library for additional reading materials.
- (iii) Discussion forum: For raising of doubts and clarifying the same by the Course Coordinators/Course Mentors assigned to students
- (iv) Assessments: Self-Assessments in the form of quizzes, fill in the blanks, matching questions, short answer questions, internal assessments in the form of assignments to reinforce learning.

The dynamic and student-centric learning platform enables online students to access high quality educational content, get timely guidance and assess their progress effectively. Thus, the online programme from CDOE, DSU will be suitable for delivery through the online mode of learning.

5. Instructional Design

5.1 Programme Curriculum

The online curriculum has been designed by experts in the area of commerce and care has been taken to include contemporary topics contemporary finance and accounts alongside courses fostering contemporary business awareness. The balanced approach in the curriculum design has been done to ensure that students gain modern insights while developing a sense of responsibility toward sustainable business practices while equipping them with the knowledge and values essential for navigating the contemporary dynamic business landscape. The curriculum and syllabus are approved by the Board of Studies as per University norms. This ensures the programme meets high-quality standards and aligns with current academic and professional requirements.

SEM	SN.	COURSE CODE	TITLE OF THE COURSE	CREDITS
1	1	BCMOL101	ENGLISH	2
1	2	BCMOL102	FINANCIAL EDUCATION AND INVESTMENT AWARENESS	2
1	3	BCMOL103	PRINCIPLES OF FINANCIAL ACCOUNTING	4
1	4	BCMOL104	BUSINESS ORGANIZATION AND MANAGEMENT	4
1	5	BCMOL105	CORPORATE LAW	4
1	6	BCMOL106	QUANTITATIVE TECHNIQUES	4
1	7	BCMOL107	MICROSOFT OFFICE FOR BUSINESS	2
1	8	BCMOL108	INDIAN CONSTITUTION	1
				23

SEM	SN.	COURSE CODE	TITLE OF THE COURSE	CREDITS
2	9	BCMOL201	BUSINESS & CORPORATE COMMUNICATION	2
2	10	BCMOL202	DIGITAL FLUENCY	2
2	11	BCMOL203	CORPORATE FINANCE	4
2	12	BCMOL204	ADVANCED FINANCIAL ACCOUNTING	4
2	13	BCMOL205	MARKETING MANAGEMENT	4
2	14	BCMOL206	INDIAN FINANCIAL SYSTEM	4
2	15	BCMOL207	ENTREPRENEURIAL SKILLS	2
2	16	BCMOL208	ENVIRONMENTAL STUDIES	1
				23

SEM	SN.	COURSE CODE	TITLE OF THE COURSE	CREDITS
3	17	BCMOL301	CORPORATE ACCOUNTING	4
3	18	BCMOL302	STOCK & COMMODITY MARKET	4
3	19	BCMOL3X31	ELECTIVE - 1	4
3	20	BCMOL3X41	ELECTIVE - 2	4
3	21	BCMOL305	MANAGERIAL ECONOMICS	4
3	22	BCMOL306	INDIAN ETHOS AND LEADERSHIP	2
3	23	BCMOL307	UNIVERSAL HUMAN VALUE	1
3	24	BCMOL308	CORPORATE SOCIAL RESPONSIBILITY	2
				25

AREA	COURSE CODE	ELECTIVE - 1	CREDITS
FINTECH (F)	BCMOL3F31	INTRODUCTION TO FINTECH	4
SUPPLY CHAIN MANAGEMENT (S)	BCMOL3S31	INTRODUCTION TO SUPPLY CHAIN MANAGEMENT	4
BUSINESS ANALYTICS (A)	BCMOL3A31	FUNDAMENTALS OF BUSINESS ANALYTICS	4

AREA	COURSE CODE	ELECTIVE - 2	CREDITS
FINTECH	BCMOL3F41	FUNDAMENTALS OF BLOCK CHAIN & CRYPTOCURRENCY	4
SUPPLY CHAIN MANAGEMENT	BCMOL3S41	INVENTORY MANAGEMENT & MATERIAL REQUIREMENT PLANNING	4
BUSINESS ANALYTICS	BCMOL3A41	BUSINESS ANALYTICS FOR DECISION MAKING	4

SEM	SN.	COURSE CODE	TITLE OF THE COURSE	CREDITS
4	25	BCMOL401	COST & MANAGEMENT ACCOUNTING	4
4	26	BCMOL402	PRINCIPLES & PRACTICES OF AUDITING	4
4	27	BCMOL4X32	ELECTIVE - 3	4
4	28	BCMOL4X42	ELECTIVE - 4	4
4	29	BCMOL405	OPERATIONS RESEARCH	4
4	30	BCMOL406	GENERAL PSYCHOLOGY	3
4	31	BCMOL407	CERTIFICATION COURSE (Minimum 3 weeks course)	1
				24

AREA	COURSE CODE	ELECTIVE - 3	CREDITS
FINTECH (F)	BCMOL4F32	FINTECH REGULATIONS & SECURITY	4
SUPPLY CHAIN MANAGEMENT (S)	BCMOL4S32	SUPPLY CHAIN RISK MANAGEMENT	4
BUSINESS ANALYTICS (A)	BCMOL4A32	PREDICTIVE ANALYTICS USING-R	4

AREA	COURSE CODE	ELECTIVE - 4	CREDITS
FINTECH (F)	BCMOL4F42	ENTREPRENEURSHIP IN FINTECH	4
SUPPLY CHAIN MANAGEMENT (S)	BCMOL4S42	SUPPLY CHAIN MODELING & MANAGEMENT	4
BUSINESS ANALYTICS (A)	BCMOL4A42	FUNDAMENTALS OF ARTIFICIAL INTELLIGENCE -PYTHON	4

SEM	SN.	COURSE CODE	TITLE OF THE COURSE	CREDITS
5	32	BCMOL501	DIRECT TAXATION	4
5	33	BCMOL502	DIGITAL ACCOUNTING	3
5	34	BCMOL5X33	ELECTIVE - 5	4
5	35	BCMOL5X43	ELECTIVE - 6	4
5	36	BCMOL505	RESEARCH METHODOLOGY	4
5	37	BCMOL506	START-UP MANAGEMENT	1
5	38	BCMOL507	MINI PROJECT - ORGANIZATIONAL STUDY	2
				22

AREA	COURSE CODE	ELECTIVE - 5	CREDITS
FINTECH (F)	BCMOL5F33	TRENDS IN FINANCIAL TECHNOLOGIES	4
SUPPLY CHAIN MANAGEMENT (S)	BCMOL5S33	SUSTAINABILITY & GREEN SUPPLY CHAIN MANAGEMENT	4
BUSINESS ANALYTICS (A)	BCMOL5A33	BASICS OF ECONOMETRICS	4

AREA	COURSE CODE	ELECTIVE - 6	CREDITS
FINTECH (F)	BCMOL5F43	BUSINESS INTELLIGENCE & DATA VISUALIZATION	4
SUPPLY CHAIN MANAGEMENT (S)	BCMOL5S43	INTERNATIONAL SUPPLY CHAIN MANAGEMENT	4
BUSINESS ANALYTICS (A)	BCMOL5A43	DATA VISUALIZATION TECHNIQUES	4

SEM	SN.	COURSE CODE	TITLE OF THE COURSE	CREDITS
6	39	BCMOL601	GST & CUSTOMS LAW	4
6	40	BCMOL602	PERSONAL BRANDING & NETWORKING	1
6	41	BCMOL603	IT & GST RETURNS	3
6	42	BCMOL604	RESEARCH PROJECT	4
				12
			Total Program Credits	129

5.2 Programme Detailed syllabus

Semester:1

Course Name: ENGLISH

Credits: 02

Course Description:

This course in English language enhancement emphasizes on the practices of different methods/ways of using language as a means of communication. For Commerce students, it is important to be empowered in communication skills as it is the life blood in Commerce & Business day-to-day activities. The course connects well to the contemporary challenges in the real world. This course provides opportunities and options to enhance listening, speaking, reading and writing abilities.

Course Objectives

- Analyse articles and texts from multiple perspectives to derive a comprehensive understanding.
- Develop effective communication skills for articulating ideas clearly in various contexts.
- Create systematic recording and organization of ideas with precision and structure.

Course Outcomes

- Demonstrate the ability to critically Analyse articles and texts from different perspectives, deriving a comprehensive understanding of the content.
- Apply effective communication skills, articulating ideas clearly and confidently in various contexts.
- Systematically record and organize ideas with precision, ensuring logical structure and clarity in communication.

Units	Syllabus
Unit 01	Grammar Essentials: Introduction to Grammar Essentials, Types of Tenses in English: Present, Past, Future (Simple, Continuous, Perfect, Perfect Continuous), Concord (subject-

	verb agreement): Definition & Types, Word Formation: Definition & Concept, Types of Word Formation (Derivation, Compounding, Blending, Acronym, Borrowing, Coinage, Back-formation, Re-duplication, Clipping), Kinds of Word formation (prefixes, suffixes, roots, compounds), Sentences: Structure, Types & Application
Unit 02	Homonyms and Homophones: Introduction to Homonyms and Homophones Concept & Understanding, Homonyms: Definition, Functions & Examples, Homophones: Definition, Functions & Examples, Common Word Choice Confusions: Avoiding Errors in Context, Spelling, and Writing, Synonyms and Antonyms: Expanding vocabulary through meaning-based word study
Unit 03	Listening Skills: Introduction to Listening Skills, Active Listening Techniques: Focused Listening, Paraphrasing, and Summarising, Identifying Sounds: Differentiating Between Vowel and Consonant Sounds, Note-Taking During Listening: Methods for Capturing Key Points Effectively, Listening for Specific Information: Focus on Key Details, Instructions, and Tone in Conversation
Unit 04	Speaking Skills: Introduction to Speaking Skills, Common Pronunciation Errors: Individual Sounds, Intonation Patterns, Accent Reduction: Tips for Neutralising Regional Accents, Speaking Practice: Role-plays, Everyday Conversations, Peer Feedback, Public Speaking Techniques: Using Body Language, Voice Modulation, and Audience Engagement
Unit 05	Process Description in Speaking: Introduction to Process Description in Speaking, Describing the Working of Machines: Vocabulary for Technical Descriptions. Explaining Manufacturing Processes: Step-by-step Explanations, Sequence Markers, Process Presentation Techniques: Clarity in Delivery, Use of Visual Aids, Describing Everyday Processes: Cooking Recipes, Task Instructions, and Simple Processes in Daily Life
Unit 06	Group Discussion Techniques: Introduction to Group Discussion Techniques, Role of Moderators: Facilitating Discussion and Managing Group Dynamics. Structured Discussions: Introducing Topics and Summarising Viewpoints. Argument Formation: Supporting Opinions with Facts and Handling Counterarguments. Team Dynamics and Cooperation: Understanding Roles in Teamwork and Encouraging Collaboration.
Unit 07	Data Interpretation in Writing: Introduction to Data Interpretation in Writing, Interpreting Flow Charts and Diagrams: Understanding Processes and Relationships. Bar Charts and Pie

	Charts: Analysing Data Distribution and Trends. Drawing Conclusions from Data: Summarising and Presenting Findings, Writing Analytical Reports: Presenting Data-supported Conclusions with Clarity
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Textbooks:

- Dhanavel, S.P. “English and Communication Skills for Students of Science and Engineering”. Orient Blackswan Pvt. Ltd., 2009. Print.
- Meenakshi Raman and Sangeetha Sharma. “Technical Communication- Principles and Practice”. 3rd Edition, Oxford University Press, 2009. Print.
- Murphy R. “English Grammar in Use”, Cambridge University Press ,2012. Print.

Reference book:

Smt. Sudha Murthy, R.K.Narayan, Vikram Seth, Girish Karnad, Ruskin Bond, Swami Vivekananda, Kushwant Singh, Aravinda Adiga, Kiran Desai, Devdutt Pattanaik.

Course Name: Financial Education and Investment Awareness

Credit: 02

Course Description:

This course on Financial Literacy provides an in-depth understanding of essential financial concepts, tools, and services. It covers topics such as the importance and scope of financial literacy, financial institutions (banks, insurance companies, post offices), financial planning, budgeting, and various banking services. The course also explores loans and advances, post office financial services, and investment options like equity, debt instruments, and insurance products. Through practical knowledge on financial products, services, and investment strategies, students will gain the skills needed to manage personal, family, and business finances effectively.

Course Objectives

- Develop a comprehensive understanding of essential financial concepts, including financial institutions, services, and products, and Analyse their roles in personal and business finance.
- Apply financial planning and budgeting techniques to real-life scenarios, evaluating various investment options and financial products such as loans, insurance, and equity.
- Create effective financial strategies for managing personal, family, and business finances, synthesizing knowledge from financial services, planning, and investment strategies.

Course Outcomes

- Analyse and understand financial concepts, institutions, and services, assessing their impact on personal and business finances.
- Interpret financial planning and budgeting strategies to manage real-world financial situations, making informed decisions regarding investments and loans.
- Design and implement effective financial strategies for personal, family, and business finances, integrating knowledge of financial products, services, and investment options.

Units	Syllabus
Unit 01	Introduction to Financial Literacy: Introduction to Financial Literacy, Meaning, importance, and scope of financial literacy, Prerequisites of Financial Literacy — level of education, numerical and communication ability.
Unit 02	Financial institutions: Introduction to Financial Institutions, Banks, Insurance companies, Post Offices; Mobile App based services. Need for availing financial services from banks, insurance companies, and postal services.
Unit 03	Financial Planning and Budgeting: Introduction to Financial Planning and Budgeting, Meaning, importance, and need for financial planning. Personal Budget, Family Budget, Business Budget; Procedure for financial planning and preparing budget; avenues for savings from surplus.
Unit 04	Banking Services: Introduction to Banking Services, Types of banks; Banking products and services —, Types of bank deposit accounts — Savings Bank Account, Term Deposit, Current Account, Recurring Deposit, PPF, NSC, etc. Formalities to open various types of bank accounts, PAN Card, Address proof, KYC norms.
Unit 05	Loans and Advances: Introduction to Loans and Advances, Various types of loans: short-term, medium-term, long-term, microfinance, and related interest rates offered by nationalized banks and post offices. Cashless banking, e-banking, Check Counterfeit Currency; CIBIL, ATM, Debit and Credit Card, and APP-based Payment system; Banking complaints and Ombudsman. Unified Payment Interface (UPI).
Unit 06	Post Office Financial Services: Introduction to Post Office Financial Services, Post office Savings Schemes: Savings Bank, Recurring Deposit, Term Deposit, Monthly Income Scheme, Kisan Vikas Patra, Senior Citizen Savings Scheme (SCSS), Sukanya Samriddhi Yojana Account (SSY/SSA). India Post Payments Bank (IPPB): Money Transfer: Money Order, E-Money order, Instant Money Order, collaboration with the Western Union Financial Services; MO Videsh, International Money Transfer Service, Electronic Clearance Services (ECS), MoneyGram International Money Transfer, Indian Postal Order (IPO).

Unit 07	<p>Investments: Introduction to Investments, Protection and Investment related Financial Services: -Insurance Services: Life Insurance Policies — Life Insurance, Term Life Insurance, Endowment Policies, Pension Policies, ULIP, Health Insurance and its Plans, Property Insurance; Policies offered by various general insurance companies. Post office Life Insurance Schemes: Postal Life Insurance and Rural Postal Life Insurance (PLI/RPLI). Housing Loans: Institutions providing housing loans, Loans under Pradhan Mantri Awas Yojana — Rural and Urban. Investment avenues in Equity and Debt Instruments: Portfolio Management: Meaning and importance; Share Market and Debt Market, Sensex and its significance; Investment in Shares — Mutual Fund — SIP.</p>
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Textbook:

- Babu V, Financial Education and investment Awareness, Himalaya Publishing House
- Financial Literacy: A Complete Guide to Managing Your Money” by Dawn J. Bennett,.
- “Personal Finance: A Practical Guide for Busy People” by Sidney J. Cowell
- “Financial Institutions and Markets” by L.M. Bhole

Reference books

- Bhatia, L. (2014). Financial literacy and investment awareness: A study on the urban population in India. Journal of Management Research, 14(3), 193-202.
- Ghosh, S. (2018). Investment in the stock market: A practical guide for Indian investors. New Delhi: Penguin Random House India.
- Nassir, A. R. (2017). Basics of personal finance and investments. New Delhi: Notion Press.
- Padhy, P. (2015). Understanding mutual funds: A practical guide for investors. New Delhi: Cengage Learning India.
- Raghunandan, A., & Raghavan, P. (2016). Financial literacy in India: The way forward. New Delhi: Sage Publications.

- Sahu, A. K. (2019). Investment awareness among individuals: A study on factors influencing investment decisions in India. *Journal of Indian Business Research*, 11(2), 163-179.
- Sengupta, A. (2015). *The investment guide to stock market trading in India*. New Delhi: Tata McGraw-Hill Education.
- Sharma, R. (2017). *Personal finance and investments: A guide for young investors in India*. New Delhi: Bloomsbury India.
- Vasudevan, H. (2018). *Understanding financial statements for better investment decisions*. New Delhi: Sage Publications.

Course Name: Principles of Financial Accounting**Credit: 04****Course Description:**

The course provides an insight into accounting concepts, preparation and analysis of financial statements. The course is designed in a way so as to familiarize the students with various accounting concepts, financial tools and techniques that will facilitate in enhancing their analytical power to make rational decisions.

Course Objectives:

- Describe the concepts, principles, and processes in the field of accounting.
- Explain the ways to create an impact in the business organization with proper accounting techniques.
- Develop decision-facilitating and decision-enhancing roles for business leaders.
- Calculate alternative solutions to business problems and arrive at the right decisions.
- Familiarize contemporary issues in accounting.

Course Outcomes:

- Explain the fundamentals of financial accounting, the principles, and concepts underlying them.
- Classify the functioning of business through financial accounting
- Prioritise decision-facilitating roles of accounting information
- Evaluate contemporary developments in the area of accounting
- Apply the fundamentals and arrive at alternative solutions for a given financial problem.

Units	Syllabus
Unit 01	Meaning & Scope of Accounting: Introduction, Meaning & Scope of Financial Accounting, Meaning and Nature of Business Transaction, Introduction to Basic Elements of Financial

	Accounting, Accounting Principles: Accounting Concepts, Principles and Conventions and Assumptions, Generally Accepted Accounting Principle (GAAP)
Unit 02	Accounting Mechanics: Accounting Process: Principles of Double Entry, Accounting Equation
Unit 03	Accounting Process: Formats and Preparation of Journal Entries, Formats and Preparation of Ledger Accounts, Formats and Preparation of Subsidiary Books, Formats and Preparation of Triple Column Cash Book and Trial Balance
Unit 04	Depreciation: Methods for Calculating Depreciation (SLM & WDV)
Unit 05	Financial Statements: Formats and preparation of Income Statement & Balance Sheet of a Sole Trader with Adjustments
Unit 06	Adjustment Entries: Outstanding and Prepaid expenses, Bad Debts, Depreciation, Treatment of closing stock, Provision of Doubtful debts and taxation, Proposed Dividend and reserves
Unit 07	Introduction to Bank Reconciliation Statement: Meaning, Scope and Objectives of Bank Reconciliation Statement
Unit 08	Passbook and Cash book: Meaning and Format of Passbook and Cash Book
Unit 09	Bank Balances and Problem Questions: Concept & Formats of Bank Balances: Ordinary & Overdraft, Simple Problems on Cash Book and Passbook
Unit 10	Consignment Accounts: Introduction to Consignment accounts: Concept & Journal entries in the books of consignor and consignee, Types of commission in consignment,
Unit 11	Bills of Exchange and Promissory Notes, Introduction and Parties to Bills of Exchange, Journal Entries and Promissory Notes
Unit 12	Sale of goods on approval or return basis: Introduction, Features, Books maintained by business entity, Problems on Sale of goods on approval or return basis
Unit 13	Financial Reporting & Inflation Accounting: Meaning, Types, Importance and Purpose of Financial Reporting, Meaning, Advantages and Disadvantages of Inflation Accounting
Unit 14	Forensic Accounting & Fraud Detection: Meaning and Types of Forensic Accounting, Meaning, Types and AI-based techniques, Application and Best Practices of Fraud Detection.

Textbook:

- Fundamentals of accounting T S Grewal S C Publishers.

Reference books

- Narayanaswamy R., Financial Accounting – A Managerial Perspective, PHI Learning
- Charles T. Horngren Cost Accounting- A Managerial Emphasis, Pearson
- Bhattacharya, A.B. Financial Accounting for Business Managers. New Delhi: Prentice Hall of India

Course Name: Business Organization and Management**Credit: 04****Course Description:**

This course introduces the concepts of Management to the students. It gives learners the overall activities of business organization right from planning to Controlling. It also gives a brief understanding of different forms of business ownership which helps the learners to recognize the kinds of businesses and their operations.

Course Objectives:

- Classify the functions of management, organisational structure, and hierarchy.
- Identify the nature and importance of planning.
- Synthesize staffing and directing to lead to efficient management of a business firm.
- Evaluate the concepts, importance, and principles of motivation.
- Execute the concept of coordination and control.

Course Outcomes:

- Explain managerial functions like planning and have some basic knowledge on international aspects of management.
- Describe the planning process in the organisation.
- Highlight the concept of organisation.
- Demonstrate the ability to direct, lead, and communicate effectively.
- Evaluate and isolate issues to formulate the best control methods.

Units	Syllabus
Unit 01	Introduction to Management: Introduction, Concept and Nature of Management, Scope of Management in Business Organisations, Differences between Management and Administration, Levels of Management: Top, Middle & Operational Levels, Overview of the Management Process/Functions: Planning, Organising, Staffing, Directing, and Controlling, Pre-scientific management period, Scientific management: F.W. Taylor's

	contributions, Classical theory: Henri Fayol's administrative principles, Behavioural approach: Human relations and social factors, Quantitative, systems, and contingency/situational approaches to management
Unit 02	Evolution of Management Thought: Introduction to Evolution of Management Thought, Pre-scientific management period, Scientific management: F.W. Taylor's contributions, Classical theory: Henri Fayol's administrative principles, Behavioural approach: Human relations and social factors, Quantitative, systems, and contingency/situational approaches to management
Unit 03	Modern Management Approaches: Introduction to Modern Management Approaches, Quantitative Approach (Operations Research), System Approach, Contingency / Situational Approach, Limitations of modern management theories
Unit 04	Planning and Decision-Making: Introduction to Planning and Decision-Making in management, Definition, nature, and importance of planning, Characteristics of planning, Components of planning, Types of Planning, Steps of planning, Barriers to effective planning and ways to overcome them
Unit 05	Strategic Planning and Forecasting: Strategic Planning - Definition & Conceptual Understanding, Steps of Strategic Planning, Strategic Planning Techniques (Balanced Scorecard, SWOT, PESTLE, Porter's Five-Forces), Forecasting - Definition & Conceptual Understanding, Steps in the process of Forecasting, Techniques of Forecasting
Unit 06	Organising & Span of Management: Introduction to Organising: Definition and Conceptual Understanding, Importance of Organising, Characteristics of Organising, Principles of Organising, Types of Organization and their Structures (Formal & Informal), Span of Management in Organisational Structure - Definition & Significance, Types of Spans of Management, Factors affecting Span of Management
Unit 07	Staffing: Introduction to Staffing: Definition, Concept, Nature & Characteristics, Importance of Staffing, Functions of Staffing, Sources of Staffing (Internal & External)
Unit 08	Directing: Introduction to Directing: Definition, Concept, Meaning & Significance, Importance of Directing in organization, Characteristics of Directing, Elements /

	Components of Directing - Communication, Leadership, Motivation, and Supervision, Principles of Achieving Effective Direction
Unit 09	Leadership in Management: Leadership in Management: Concept, Need & Importance, Styles of Leadership: Authoritarian, Democratic, Laissez-faire & Coaching, Leadership Traits: Need & Importance in Management, Essential Qualities for Effective Leadership
Unit 10	Motivation: Definition, Need & Importance of Motivation in organisations, Factors affecting motivation in workplace, McClelland's Three Needs Theory, Process of Motivation (Steps of Motivation Process), Maslow's Need Hierarchy Theory of Motivation, Elton Mayo's Hawthorne Studies, Herzberg's Motivation Hygiene Theory, McGregor's Participation Theory
Unit 11	Controlling: Introduction to Controlling: Definition & Nature, Importance of Controlling, Process of Controlling, Elements & Steps of Control Process
Unit 12	Coordination: Introduction to Coordination: Definition, Concept & Features, Importance of Coordination in achieving organisational goals, Principles of Coordination, Techniques of Coordination for Effective Management
Unit 13	Trends in Management: Recent Trends in Management, Total Quality management (TQM): Definition, Importance & Features, Workforce Diversity Management: Definition, Goals, Importance, Types & Challenges, Enterprise Mobility Management (EMM): Definition, Concept & Types, Best Management Practices for Managing Virtual Teams Effectively, Strategies for Building an Ethical Culture at Work
Unit 14	Emerging issues in Management: Introduction to Emerging issues in Management, Innovation management and organizational change, Role of technology in management: Digital transformation, AI, and automation, Crisis management and managing risk in uncertain environments, Sustainable business practices and green management

Textbooks:

- L M Prasad (2019), "Principles and Practice of Management", Sultan Chand & Sons, New Delhi.
- "Principles of Management" by Harold Koontz and Heinz Weihrich
- "Fundamentals of Management" by Stephen Robbins, David DeCenzo, and Mary Coulter

Reference books

- Hitt, M. A., Black, J. S., & Porter, L. W. (2013). Management (3rd ed). Boston: Prentice Hall.
- Drucker, P. F. (1999). Management (Rev. ed.). New York: Harper Collins.
- Mintzberg, H. (2009). Managing. San Francisco: Berrett-Koehler Publishers, Inc.
- Stoner: Principles of management, Pearson Publications, New Delhi.
- Terry: Principles of management & Administration, PHI New Delhi
- Chandra Bose: Principles of management & Administration, PHI New Delhi
- Manmohan Prasad: Principles of management, PHI Mumbai • Robbins: Management, Pearson's publications, New Delhi.

Course Name: Corporate Law

Credit: 04

Course Description:

This course provides understanding on issues related to formation of a company and the corporate laws. A brief understanding on the laws of insolvency is also provided.

Course Objectives

- Introduce the students to various Business Regulations and familiarize them with common issues of business in the day today business scenario.
- Explain the regulation related share capital and financing of companies.
- Describe legal aspects of administration of corporates
- Discuss law related to insolvency of corporates.
- Explain the laws related to frauds and fraudulent activities in corporates

Course Outcomes

- Describe the formation and constitution of a company.
- Comprehend the regulations related to financing of corporates
- Evaluate the legal provisions related to administration of companies
- Explain the legal aspects related to insolvency and liquidation of companies
- Apply legal controls over market abuse and criminal activity.

Units	Syllabus
Unit 01	The formation and Constitution of a company: Introduction to the Formation of a Company, the rules relating to pre-incorporation contracts, the procedure for registering companies (both public and private), including the system of streamlined company registration.
Unit 02	Constitution of a company: Introduction to the Constitution of a Company, Explain the meaning and effect of limited liability. Analyse different types of companies, especially

	private and public companies. Illustrate the effect of separate personality and the veil of incorporation. Discuss the role and duties of company promoters, as well as breaches of those duties and the remedies available to the company.
Unit 03	Constitutional Documents: Introduction to Constitutional Documents, Analyse the effect of a company's constitutional documents, including the contents of model articles of association. Explain how articles of association can be changed and the controls over the names that companies may or may not use.
Unit 04	Introduction to Share Capital: Introduction to Capital and Revenue and different types of capital, Illustrate the difference between various classes of shares, including treasury shares, and the procedure for altering class rights.
Unit 05	Allotment of Shares: Explain the Allotment of Shares, distinguish between right issue and bonus issues, Examine the effect of issuing shares at either a discount, or at a premium.
Unit 06	Loan Capital: Define companies borrowing powers and explain the meaning of loan capital and debentures. Distinguish loan capital from share capital, and explain the different rights held by shareholders and debenture holders,
Unit 07	Company charge: Explain the concept of a company charge and distinguish between fixed and floating charges. Describe the need and the procedure for registering company charges
Unit 08	Capital maintenance and Dividend law: Introduction to Capital Maintenance and Dividend Law, Explain the doctrine of capital maintenance and capital reduction. Explain the rules governing the distribution of dividends.
Unit 09	Company directors: Meaning of Company Directors, Explain the role of directors in the operation of a company, Different Types of Director-executive, Non-executive or de jure and de facto directors and Shadow directors , Discuss the ways in which directors are appointed, can lose their office and the disqualification of directors, Distinguish between the powers of the board of directors, the managing director/chief executive and individual directors to bind their company, Explain the duties that directors owe to their

	companies controls imposed by statute over dealings between directors and their companies, including loans.
Unit 10	Company Auditors: Discuss the appointment procedure relating to, and the duties and rights of a company auditor, Procedure of removal or resignation of a company auditor
Unit 11	Company meeting and resolution: Distinguish between types of meetings: general meetings and annual general meetings, distinguish between types of resolutions: ordinary, special, and written, Explain the procedure for calling and conducting company meetings.
Unit 12	Insolvency and administration: Introduction to Insolvency and Administration, Explain the meaning of and procedure involved in voluntary liquidation, Including members and Creditors voluntary Liquidation. Explain the meaning of the grounds for, and the procedure involved in compulsory liquidation, Explain the order in which company debts will be paid off on liquidation, Explain administration as a general alternative to liquidation. Explain the way in which of an administrator may be appointed, the effects of such appointment, and the powers and duties an administrator.
Unit 13	Legal Controls: Recognise the nature and legal controls over market abuse, Insider Dealing, money laundering, Bribery
Unit 14	Criminal Activity: Discuss potential criminal activity in the operation, management and liquidation of companies, Recognise the nature and legal control over fraudulent and wrongful trading.

Textbooks:

- M C Kuchhal & Vivek Kuchhal (2003) Business Law, S Chand Publishing

Reference books

- N D Kapoor (1998) Mercantile Law, Sultan Chand & Sons publishers
- P C Tulsian (1987) Business Law, Tata McGraw Hill publisher.
- A James Barnes, Terry M Dworkin & Eric Richards, (2001) Law for Business, McGraw Hill publications.

Course Name: Quantitative Techniques

Credit: 04

Course Description:

The course on Quantitative Techniques provides students with a foundation in statistical methods used to conduct research and solve complex problems for decision-making in the fields of business economics, engineering social and natural sciences. It equips students with the necessary skills to Analyse and solve complex problems using quantitative data.

Course Objective:

- Identify the applications of statistical tools and techniques in decision making.
- Explain the role of statistics and decision models in solving business problems.
- Apply descriptive and inferential statistics in data analysis.
- Analyse data sets using statistical methods to support decision making.
- Use MS Excel for data analysis, incorporating both descriptive and inferential statistics.

Course outcomes:

- Analyse business decision-making scenarios to facilitate objective solutions under subjective conditions.
- Demonstrate the use of various statistical techniques to address business and real-life situations.
- Discover the role of probability in making informed decisions in business contexts.
- Explain the need for and applications of analytics in solving business problems.
- Apply various data analysis functions to address and solve business-related challenges.

Units	Syllabus
Unit 01	Meaning & Scope of Statistics and Data collection: Introduction to the Meaning and Scope of Statistics and Data Collection, Definition of Statistics, Functions, Scope, and Limitations.

	Importance and Applications of Statistics. Collection and Presentation of Data and Tabulation, Types of Frequency Distribution.
Unit 02	Measures of Central Tendency: Mean, Median, Mode: Introduction to Measures of Central Tendency: Mean, Median, Mode, Basic Concepts and Problems on Mean, Median, and Mode. Comparative Analysis and Relationship of Mean, Median, and Mode.
Unit 03	Geometric Mean & Harmonic Mean: Introduction to Geometric Mean and Harmonic Mean, Geometric Mean: Basic Concepts and Problems, Harmonic Mean: Basic Concepts and Problems.
Unit 04	Measures of Dispersion: Range and Quartile Deviation: Introduction to Measures of Dispersion: Range and Quartile Deviation, Meaning and Objectives of Range and Quartile Deviation (Problems).
Unit 05	Mean Deviation & Standard Deviation: Introduction to Mean Deviation and Standard Deviation, Meaning and Objectives of Mean Deviation and Standard Deviation (Problems).
Unit 06	Variance & Coefficient of Variation: Introduction to Variance and Coefficient of Variation, Meaning and Objectives of Variance and Coefficient of Variation (Problems).
Unit 07	Correlation: Types and Applications in Real-World Data: Introduction to Correlation: Types and Applications in Real-World Data
Unit 08	Measurement Techniques: Introduction to Karl Pearson Correlation and Spearman's Rank Correlation, Basic concepts of Karl Pearson Correlation and Spearman's Rank Correlation (Problems).
Unit 09	Regression Analysis: Simple Regression: Introduction to Regression Analysis: Simple Regression, Meaning and Definition of Regression Analysis and Problems on Simple Regression Analysis only.
Unit 10	Price Index Numbers: Introduction to Price Index Numbers, Meaning and Definition of Price Index Numbers (Basic Problems).
Unit 11	Quantity Index Numbers: Introduction to Quantity Index Numbers, Meaning and Definition of Quantity Index Numbers (Basic Problems). Application of Index Numbers
Unit 12	Time series analysis: Introduction to Time Series Analysis, Meaning, Definition, and Objectives of Time Series Analysis; Variations in Time Series.

Unit 13	Methods of estimating trend: Introduction to Methods of Estimating Trend, Methods of Estimating Trend: Freehand Method, Moving Average Method, Semi-Average Method, Least Squares Method.
Unit 14	Methods of estimating seasonal index: Introduction to Methods of Estimating Seasonal Index, Methods of Simple Averages, Ratio to Trend Method, Ratio to Moving Average Method.

Textbook:

- Fundamentals of statistics (2012), S C Gupta- Himalaya publications

Reference book:

- Quantitative techniques in Management, ND Vohra, 5th Edition, McGraw Hill Publishers.

Course Name: Microsoft Office for Business

Credit: 02

Course Description:

This course aims to develop student's ability to formulate, Analyse, and solve business problems using Microsoft Office tools. Knowledge of Computer skills for commerce students enhances to understand the usefulness of information technology tools for business operations. Microsoft office is a powerful tool for business analysis.

Course Objectives

- Describe the fundamentals of MS Word and its applications.
- Learn presentation skills and create professional business presentations.
- Use spreadsheet models and charts to solve business problems and support decision-making.

Course Outcomes

- Exhibit proficiency in using MS Office tools for business applications.
- Create and interpret data analysis using Excel functions, formulas, and charts.
- Develop effective presentations and reports using data-driven insights.

Units	Syllabus
Unit 01	INTRODUCTION TO MS OFFICE: Introduction to office and features – Elements – Uses of MS Office – Application of MS Office in various fields –, MS Word – Formatting and alignment – Inserting Table, Picture, Smart Art, Header, Footer, Page number – Print settings – Table of Contents and other tools – Setting a default font style in MS Office.
Unit 02	BASICS OF MS WORD: MS Word – Formatting and alignment – Inserting Table, Picture, Smart Art, Header, Footer. Page number – Print settings – Table of Contents and other tools.

Unit 03	PREPARING PRESENTATIONS: Basics of presentations: Slides, Fonts, Drawing, Editing – Inserting: Tables, Images, Texts, Symbols, Media – Design – Transition – Animations and Slideshow.
Unit 04	BASICS OF MS-EXCEL: Create Worksheets and Workbooks – Import data from a delimited text file – Add a worksheet to an existing workbook, Copy and move a worksheet – Navigate to a named cell, range, or workbook element – Insert and remove hyperlinks.
Unit 05	FORMULAS AND FUNCTIONS IN MS-EXCEL: Perform operations with Formulas and Functions – Insert references – Perform calculations by using the SUM function, perform calculations by using MIN and MAX functions – Perform calculations by using the COUNT function – Perform calculations by using the AVERAGE function.
Unit 06	CHARTS & COMPONENTS OF CHARTS AND: Create a new chart and its types – Switch between rows and columns in source data – Analyse data by using Quick Analysis Format Charts, resize charts – Add and modify chart elements – Apply chart layouts and styles – Move charts to a chart sheet. Insert and Format Objects – Insert text boxes and shapes – Insert images – Modify object properties
Unit 07	ADVANCED MS-EXCEL FEATURES: Add alternative text to objects for accessibility – Printing a Worksheet – Cell Reference to another Worksheet – Types of Cell Referencing.

Textbook:

- Microsoft Excel Latest Version Inside Out – Mark Doge and Craig Stinson – PHI
- Learning Private Limited, New Delhi – 110001.

Reference books:

- Excel 2013 Bible; John Walkenbach, Wiley
- Financial Analysis and Modeling using Excel and VAB: Chandan Sengupta, Wiley
- Excel Data Analysis – Modeling and Simulation: Hector Guerreor, Springer
- Microsoft Excel 2013: Data Analysis and Business Modeling: Winston, PHI

Course Name: Indian Constitution

Credit: 01

Course Description:

The Constitution of India aims to imbue students with the constitutional making process and its formulations. Further, it is done with the objective to acquaint students to have the basic understanding of the Constitution of India.

Course Objectives

- Familiarize the key elements of the Indian Constitution, Fundamental Rights and Directive Principles
- Describe the judiciary system and the state-centre relationship in promoting equality and social justice.

Course Outcomes

- Explain the structure, philosophy, and significance of the Indian Constitution.
- Express the powers, functions, and role of constitutional offices and the judiciary in ensuring democracy and social justice.

Units	Syllabus
Unit 01	Constitution – Structure and Principles: Introduction to Constitution – Structure and Principles, Meaning and importance of the constitution; making of the Indian constitution – sources; preamble and salient features of the Indian constitution. Fundamental rights; fundamental duties; directive principles.
Unit 02	Government of the Union and States: Introduction to Government of the Union and States, Government of the Union: President of India – election and powers; Prime Minister and Council of Ministers; Lok Sabha – composition and powers; Rajya Sabha – composition and powers. Government of the States: Governor – powers; Chief Minister and Council of Ministers; Legislative Assembly – composition and powers; Legislative Council – composition and powers.

Unit 03	The Judiciary: Introduction to The Judiciary, Features of the judicial system in India; Supreme Court – structure and jurisdiction; High Court – structure and jurisdiction.
Unit 04	Administrative Organization and Constitution: Introduction to Administrative Organisation and Constitution, Federalism in India – features, Local Government - Panchayats – powers and functions; 73rd and 74th amendments, Election Commission organisation and functions; Citizen-oriented measures – RTI and PIL – provisions and significance.

Textbooks:

- Constitution of India (Full Text), India.gov.in. National Portal of India, https://www.india.gov.in/sites/upload_files/npi/files/coi_part_full.pdf
- Durga Das Basu, Introduction to the Constitution of India, Gurgaon; LexisNexis, 2018 (23rd edn.)

Reference Books:

- M.V.Pylee, India's Constitution, New Delhi; S. Chand Pub., 2017 (16th edn.)
- J.N. Pandey, The Constitutional Law of India, Allahabad; Central Law Agency, 2018 (55th edn.)
- Durga Das Basu, Bharatada Samvidhana Parichaya, Gurgaon; LexisNexis Butterworths Wadhwa, 2015
- K B Merunandan, Bharatada Samvidhana Ondu Parichaya, Bangalore, Meragu Publications, 2015

Semester:2

Course Name: Business & Corporate Communication

Credit: 02

Course Description:

The course encompasses various business communication activities that help shape the organization's image, reputation, and relationships with internal and external audiences. The course will help students in better understanding of Business and corporate communication and application of the same in successfully managing the organization.

Course Objectives:

- Explain speaking and writing skills, focusing on effective expression and organization of ideas.
- Develop competencies in managing communication tools, strengthening interpersonal and intrapersonal communication abilities.
- Describe the relevance of corporate communication and the impact of emerging technologies on communication practices.

Course Outcomes:

- Apply formal business language effectively, incorporating verbal and non-verbal communication in business contexts.
- Articulate professional communication documents.
- Design corporate communication and utilize technology for improved communication practices.

Units	Syllabus
Unit 01	BUSINESS COMMUNICATION: Introduction to Communication: Meaning, definition, and process of communication, Channels of Communication: Various types of communication channels. Nature and Importance: Understanding the nature, need, and

	significance of communication in business. 7Cs of Communication: Key principles for effective communication.
Unit 02	VERBAL AND NON-VERBAL COMMUNICATION IN BUSINESS: Types of Communication: Interpersonal and intrapersonal communication; definitions of verbal and non-verbal communication. Role in Personality Development: Importance of verbal and non-verbal communication in personality building. Cultural Awareness: Understanding cultural similarities and differences in the workplace. Effective Communication Letters: Writing impactful business communication letters.
Unit 03	BUSINESS LETTER WRITING: Scope and Types: Business letters, professional writings, and their scope. Formats and Styles: Difference between formal and informal letters. Routine Communication: Job applications (cover letter, resume, CV), inter-office/intra-office memos, orders, notices, circulars, reports, proposals, and emails. Technical Writing: Basics of technical and business writing
Unit 04	DEPARTMENTAL COMMUNICATION: Meetings: Agenda, barriers to effective meetings. Introduction to Managerial Skills, Types of Managerial Skills, Communication Skills for Managers. Problem-Solving and Decision-Making Skills
Unit 05	CORPORATE COMMUNICATION: SCOPE AND RELEVANCE: Overview: Introduction, meaning, and scope of corporate communication. Corporate Communication in India: Need and relevance in the contemporary scenario. Corporate Identity: Meaning and features. Corporate Image: Definition and factors influencing it. Corporate Reputation: Meaning and benefits of a good corporate reputation.
Unit 06	EMERGING TECHNOLOGY IN CORPORATE COMMUNICATION: Communication Technology: Introduction to modern communication technologies. Role and functions of technology in corporate communication Types of Communication Technology: Digital tools for business communication. Emerging trends in communication: AI, social media, automation. The role of technology in crisis communication
Unit 07	Management, Administration, and Corporate Attributes: Managerial and Administrative Roles: Key attributes of a manager. Differences between administration and management. Role of managers in effective communication Corporate Communication

	<p>Strategies: Importance of internal and external corporate communication.</p> <p>Communication channels for effective management. Relationship between leadership and corporate communication</p>
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Textbook:

- Pragyanshu Rath, K Shalini & Debankita Ray, Corporate Communication, 2018, Cengage India Private Limited

Reference books:

- Richard R. Dolphin, The Fundamentals of Corporate Communication, Latest edition
- Joep Cornelissen, Corporate Communications: Theory and Practice, Sage Publishing, 5th edition.
- Corporate Communication and Public Relations, Dr. Rinkesh Chheda, Himalaya Publishing House, Edition 2023.

Course Name: Digital Fluency

Credit: 02

Course Description:

This course on Digital Fluency equips students with essential skills to thrive in the digital age, focusing on both technological proficiency and soft skills for effective communication and collaboration. It covers computer basics, operating systems, internet browsing, email, and social media management, while also introducing emerging technologies like AI, IoT, cloud computing, and cybersecurity. The course emphasizes the practical application of these technologies in business operations and decision-making. Additionally, students will develop critical thinking, problem-solving, and communication skills to excel in digital workspaces and foster innovation in their careers.

Course Objectives

- Develop an understanding of digital fluency, computer basics, and safe online practices.
- Explore emerging technologies like AI, IoT, cloud computing, and cybersecurity and their real-world applications.
- Construct skills in digital communication, collaboration, and innovative problem-solving for modern business challenges.

Course Outcomes

- Demonstrate proficiency in using computer systems, the internet, and digital tools securely for personal and professional purposes.
- Apply technologies like AI, IoT, and cloud computing to enhance business operations and decision-making.
- Express digital communication tools, creativity, and design thinking to address challenges and collaborate effectively.

Units	Syllabus
Unit 01	Introduction to Digital Fluency: Understanding Digital Fluency, Importance of Digital Fluency in Business and Career, Skills Required for Digital Fluency: Digital literacy vs. digital fluency
Unit 02	Computer Basics and Digital Devices: Introduction to Computer Basics and Digital Devices, Introduction to Computer Hardware and Software: Key computer components (CPU, memory, storage, peripherals); understanding various software types (system, application, utility). Basics of Operating System and File Management: Overview of popular operating systems (Windows, macOS, Linux); file organisation, naming conventions, and backup techniques. Internet and Web Browsing: Overview of browsers and their functionalities; safe browsing practices.
Unit 03	Internet, Email, and social media Essentials: Introduction to Internet, Email, and social media Essentials, Using the Web Effectively: Search engines and search strategies; evaluating the reliability of online information. Email Management and Etiquette: Creating, organising, and managing email accounts; composing, sending, and archiving emails; email etiquette and best practices. Social Media Basics: Privacy and security settings on social media platforms; responsible posting and sharing of content, Introduction to social media marketing and trends.
Unit 04	Overview of Emerging Technologies-I: Introduction to Emerging Technologies, Artificial intelligence, machine learning, deep learning, Database management for data science and big data analytics
Unit 05	Overview of Emerging Technologies-II: Internet of Things (IoT) and Industrial Internet of Things (IIOT), Cloud computing and service models (SaaS, PaaS, IaaS), Cyber security: types of cyber-attacks (phishing, ransomware, hacking).
Unit 06	Applications of Emerging Technologies: Real-world applications of artificial intelligence (AI) in business operations, Real-world applications of big data analytics for decision-making, Real-world applications of Internet of Things (IoT) in supply chain and manufacturing, Real-world applications of cloud computing in cost-saving and scalability, Real-world applications of cyber security solutions for business protection

Unit 07	Building Essential Skills Beyond Technology: Introduction to Building Essential Skills Beyond Technology, Effective Communication in Digital Environments: Professional email communication, Virtual presentations, Digital collaboration tools (Slack, Microsoft Teams), Creative Problem Solving & Critical Thinking: Approaching business challenges with innovation. Data-driven decision-making, Collaboration and Teamwork in Digital Workspaces: Tools and platforms for virtual teamwork, Innovation & Design Thinking: Fostering innovation in the digital age Introduction to design thinking methodologies
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Text Books:

- "Digital Literacy: A Primer on Digital Fluency" by Paul Gilster
- "The Digital Mindset: What It Really Takes to Thrive in the Age of Data, Algorithms, and AI" by Paul Leonardi and Tsedal Neeley
- "Net Smart: How to Thrive Online" by Howard Rheingold

Reference Books:

- P. N. Thomas and A. Raghuramaraju, "Digital India: Understanding Information, Communication and Social Change," New Delhi, India: Sage Publications India Pvt Ltd, 2017.
- R. Thareja, "Computer Fundamentals and Programming in C," New Delhi, India: Oxford University Press, 2021.
- R. P. Jain and S. K. Jain, "Introduction to Information Technology," New Delhi, India: Firewall Media, 2015.
- K. D. Tripathi, "Social Media: Concepts, Practices and Trends," New Delhi, India: PHI Learning Pvt. Ltd., 2020.

Course Name: Corporate Finance

Credit: 04

Course Description:

This course aims at equipping the participants with the basic tools, techniques, and theories necessary for corporate financial analysis especially while investing, raising funds, and rewarding the shareholders of a business organization.

Course objectives

- Define the basic concepts of financial management, time value of money and its computation.
- Explain investment management decision making techniques.
- Learn various capital structure theories
- Examine the Cost of capital.
- Describe dividend policy decision for real life situations.

Course outcomes

- Demonstrate the concept of financial management function and time value of money.
- Discuss investment appraisal techniques and evaluation of project
- Analyse the techniques and theories of capital structure.
- Demonstrate the concept of cost of capital.
- Apply theories of dividend policy for real life scenarios.

Units	Syllabus
Unit 01	Introduction to Finance and Business Finance: Definition and Significance of Finance in Business. Understanding the Role and Importance of Finance in Business Operations. Overview of the finance function and its responsibilities. Objectives and Goals Associated with Managing Business Finances Effectively.

Unit 02	Organization Structure and Financial Management: Organization Structure of Finance Department: Exploring the Structure and Roles within a Finance Department. Financial Management: Introduction to Financial Management, Goals of Financial Management: Key objectives, including profit maximization and wealth maximization.
Unit 03	Time Value of Money and Techniques: Time Value of Money: Understanding the concept and significance of the time value of money in finance. Techniques of Time Value of Money: Compounding and Discounting Techniques.3.4 -
Unit 04	Introduction to Investment Appraisal Techniques: Overview of Investment Appraisal Techniques, Importance and Role in Decision Making
Unit 05	Non-Discounted Cash Flow Techniques: Payback Period Method, Accounting Rate of Return (ARR) Method
Unit 06	Discounted Cash Flow Techniques: Net Present Value (NPV) Method, Internal Rate of Return (IRR) Method, Profitability Index (PI) Method, Discounted Payback Period Method
Unit 07	Fundamentals of Capital Structure: Optimum Capital Structure, Factors Determining Capital Structure and Theories in Determination of Capital Structure
Unit 08	Leverages and EBIT-EPS Analysis: EBIT-EPS Analysis and Types of Leverages with Basic Problems
Unit 09	Problems and Practical Applications: Problems Related to Capital Structure
Unit 10	Cost of Individual Sources of Finance: Introduction to Sources of Finance and Overview of different types of finance (Equity, Debt, Preferred Capital, Retained Earnings)
Unit 11	Weighted Average Cost of Capital (WACC): Introduction to WACC, Application of WACC and Calculating WACC-Problems
Unit 12	Dividends and Dividend Policy: Types of Dividends and Dividend Policy, Determinants of Dividend Policy
Unit 13	Dividend Theories: Gordon Growth Model, Walter's Model and MM Dividend Irrelevancy Theory
Unit 14	Problems and Practical Applications: Problems Related to Dividend Policy

Textbooks:

- Khan & Jain, Financial Management, Tata McGraw Hill Education, Seventh Edition, 2017.
- I.M. Pandey, Financial Management, Vikas publishing House, Eleventh Edition, 2015.

Reference books:

- Schall & Haley, Introduction to Financial Management, McGraw-Hill College, Subsequent Edition.
- Brealey & Myres, Principles of Corporate Finance, McGraw-Hill Education / Europe, Eleventh Edition, 2013.

Course Name: Advanced Financial Accounting**Credit: 04****Course Description:**

The objective of this course is to help the students acquire knowledge, skills, and acumen of accounting treatment in respect of different categories of business undertakings and special types of business activities namely branches accounting, joint venture accounting, royalty accounts, hire purchase accounting, and insurance claims.

Course objectives

- Explain the ways to manage branches and their impact on the profitability business organization.
- Define accounting of joint venture transactions from each co-venture perspective.
- Gain the knowledge of royalty accounts for intellectual properties.
- Evaluation of alternate asset procurement models such as Hire purchase and Instalment purchase transactions.
- Ability to calculate insurance claims when risk arises.

Course Outcomes

- Describe features, types, and procedures of branches accounting.
- Examine the accounting for Joint Ventures.
- Comprehend the procedure of Royalty Accounts and its estimation.
- Compute hire purchase and instalment purchase accounting.
- Review the insurance claim settlement procedures.

Units	Syllabus
Unit 01	Introduction to Branch Accounts: Meaning of Head Office, Branch, Branch Accounts and Branch Accounting- Objectives and Advantages of Branch Accounting
Unit 02	Types of Branches: Meaning and Features of Dependent Branches, Independent Branches and Foreign Branches

Unit 03	Methods of Maintaining books of Account by the Head Office: Meaning and Features of debtor's system, stock & debtors' system, wholesale branch system and final account system-method, Methods of ascertainment of profit or loss of branch under debtors' system –cost price method and invoice price method.
Unit 04	Practical Problems: Problems on Preparation of Branch A/c in the Books of Head Office Under Cost Price Method and Invoice Price Method
Unit 05	Introduction to Joint Venture Accounts: Meaning, Definitions, and Features of Joint Venture - Differences Between Joint Venture and Partnership
Unit 06	Accounting for Joint Ventures: Preparation of Joint Venture Accounts, Joint Bank Accounts, and Co-venturer's Accounts
Unit 07	Introduction to Royalty Accounts: Meaning and Definition of Royalty - Special Terminologies in Royalty Accounts – Landlord, Tenant, Output, Minimum Rent/Dead Rent, Short Workings, Recoupment of Short Workings
Unit 08	Calculation of Short workings and Royalty Payable: Methods of Recoupment of Short Workings – Fixed Method and Floating Method - Problems on Ascertainment of Royalty Payable--Preparation of Analytical Table Including Adjustment for Strike Period.
Unit 09	Introduction to Hire Purchase Accounts: 9:1 - Meaning and Definition of Hire Purchase System, Instalment Purchase System - Differences Between Hire Purchase and Instalment Purchase System, Special Terminologies in Hire Purchase Accounts – Hire Vendor, Hire Purchaser, Cash Price, Down Payment, Hire Purchase Price, Principal Component, Interest Component
Unit 10	Hire Purchase Interest Calculation: Need for Segregation of Instalment Amount into Principal Component and Interest Component, Analytical Table for Calculating Interest - Problems on Accrual Method Only
Unit 11	Accounting Treatment for Hire Purchase: Accounting Treatment for Hire Purchase with Interest When (i) Interest Component Is Not Included in the Instalment Amount, (ii) Interest Component Is Included in the Instalment Amount, (iii) Rate of Interest Is Not Given, and (iv) Cash Price Is Not Given.
Unit 12	Introduction to Insurance Claims: Meaning of Insurance Claim

Unit 13	Claim for insurance: A Claim for Loss of Stock, Total Loss, Partial Loss, With Average Clause, Without the Average Clause, a Claim for Loss of Profit, Loss of Net Profit, Standing Charges, Rate of Gross Profit, Annual Turnover, Standard Turnover, and Indemnity Period.
Unit 14	Accounting for Insurance claim: Introduction to Accounting for Insurance Claims, Simple Problems of Calculating Insurance Claims.

Textbooks:

- Dr. S.N. Maheswari: Financial Accounting, Vikas publications New Delhi
- S P Jain and K. L. Narang: Financial Accounting- I Kalyani publishers

Reference books:

- R. Srinivasa Putty and H.R. Appannaiah, Fundamentals of Accounting, HPH
- Fundamentals of Financial accounting, Seventh Edition, Mc Graw Hill, 2021

Course Name: Marketing Management

Credit: 04

Course Description:

The course aims to introduce basic concepts of marketing and promotion models. The course deals with introductory topics such as segmenting, targeting, positioning, and pricing strategies. Application of basic concepts in management situations is done with the help of topics like AIDA Model, personal selling, direct marketing and network marketing.

Course Objectives:

- Explain key marketing concepts and skills.
- Describe the dynamic nature of the environment in which marketing decisions are taken and appreciate the implications for marketing strategy .
- Discuss the analytic perspectives, decision tools, and concepts of marketing to decisions involving segmentation, targeting, and positioning.
- Examine the product mix, pricing strategy, branding, and packaging tools in marketing.
- Evaluate marketing channels, supply chain, and multi-level marketing.

Course Outcome:

- Summarise the importance of STP in marketing.
- Categorise the various product and pricing strategies.
- Apply the analytic perspectives, decision tools, and concepts of marketing to decisions involving segmentation, targeting, and positioning.
- Prepare marketing plans using product mix, pricing strategy, branding, and packaging tools.
- Analyse and manage marketing channels and supply chain decisions effectively.

Units	Syllabus
Unit 01	Foundations of Marketing: Introduction to Marketing : Definition & Core Concept, Nature, Importance and Scope of Marketing, The Evolution of Marketing Orientation,

	Customer Orientation : Definition, Concept & Four Basic Stages of Customer Orientation (Develop, Manufacture, Market, Deliver), Core Concepts of Marketing (Needs, Wants, Demand, Product, Value, Cost, Satisfaction, Exchange, Transaction, Market), Philosophies of Marketing Management (Production, Product, Selling, Marketing, and Societal Marketing), The Marketing Mix (4Ps and 7Ps)
Unit 02	Segmentation and Targeting: Introduction to Segmentation, Targeting and Positioning, Bases for Market Segmentation of Consumer Goods, Effective Segmentation Criteria, Evaluating & Selecting Target Markets, Concept of Target Market - Definition & Importance, Types of Target Market
Unit 03	Positioning & International Marketing: Concept of Positioning: Positioning Statement & Differentiation, Approaches, Strategies and Methods of Positioning, Positioning Error and Repositioning, International Marketing - Entry Strategies (Choice of Target Market, Entry Mode, Marketing Plan and Control System)
Unit 04	Product Concepts & Development: Introduction to Product Concept: Core Product, Actual product, Augmented Product, Product Hierarchy: Definition & Levels of Hierarchy, New Product Development: Understanding, Importance & Benefits, Stages of New Product Development, Diffusion of New Products, Product Life Cycle (PLC) : Concept & Stages of PLC, Product Mix : Concept & Strategies
Unit 05	Strategic Marketing Tools: Ansoff's Matrix, BCG Matrix
Unit 06	Services Marketing: Meaning of Services and Unique Characteristics of Services, 7Ps of Service Marketing, Service Delivery Process
Unit 07	Pricing Strategy: Pricing Strategy: Introduction & Concepts for Establishing Value, Pricing Strategies-Value based, Cost based, Market based, Competitor based, new product pricing – Price Skimming & Penetration pricing.
Unit 08	Branding: Introduction to Branding: Definition, Concept & Importance, Brands: Meaning, Types, Examples, Brand equity: Definition & Concept
Unit 09	Branding Strategies: Branding Strategies: Concept & Types, Factors Affecting Branding Strategies

Unit 10	Packaging and Labelling: Introduction to Packing and Labelling, Packaging as a Marketing Tool and Its Challenges, Requirement of Good Packaging, Role of Labelling in Packaging
Unit 11	Marketing Communications: Introduction to Marketing Communications, Difference between Marketing Mix and Marketing Communications Mix, Components of Communications Mix, Communication Objectives, Steps in Developing Effective Communication, Stages in Designing Message
Unit 12	Advertising: Introduction to Advertising: Concept & Understanding, Advertising Objectives, Advertising Budget, Advertising Copy, AIDA model, Advertising Agency Decisions
Unit 13	Promotion Decisions: Introduction to Promotion Decisions: Concept, Need, Types & Importance, Tools and Techniques of Sales Promotion, Push-Pull Strategies of Promotion, Personal Selling - Concept, Features & Functions, Steps of Personal Selling Process, Types of Selling, Publicity / Public Relation - Meaning, Objectives, Types, Functions of Public Relations, Direct Marketing - Meaning, Features, Functions, social media and Social Networks Marketing: Concept & Understanding
Unit 14	Marketing Channels: Introduction to Marketing Channels: Concept, Types & Importance, Alternative Channels, Factors Affecting Channel Choice, Channel Design and Channel Management Decision, Channel Conflict, Distribution Channels in Marketing, Supply Chain Management: Concept & Understanding, Multi-Level Marketing (Pyramid Selling/Network Marketing/Referral Marketing): Concept & Understanding

Textbooks:

- Marketing Management: A South Asian Perspective - Kotler, Keller, Koshy & Jha, 15/e, Pearson Education, 2017.
- Marketing Management - Ramaswamy V. S. & Namakumar S, 4/e, Macmillan Publishers, 2018.

Reference books:

- Marketing: An Introduction - Rosalind Masterson & David Pickton, 2/e, Sage Publications, 2014.
- Marketing Management- Karunakaran, HPH.
- Marketing in India: Neelamegham, 4/e, Vikas publications.

Course Name: Indian Financial System

Credit: 04

Course Description:

This course introduces students to the structure and functioning of financial markets and institutions, focusing on their roles in the economy. It provides insights into the operations of stock and commodity markets, including trading, clearing, and settlement processes. The course also examines the role of regulatory bodies like SEBI in maintaining market stability and investor protection. By understanding financial systems and instruments, students gain the skills to navigate capital and commodity markets effectively.

Course objective

- Identify basic concepts in the area of Indian financial system
- Describe the financial institutions
- List of roles of commercial banks in economic development
- Analyse the various regulators of Indian Financial System
- Evaluate the features of Financial Services

Course Outcomes

- Describe the various functions and significance of the financial markets
- Illustrate the classification of financial institutions
- Explain the role of commercial banks and their functions
- Express the role of RBI and SEBI
- Articulate the different types of financial services and their importance.

Units	Syllabus
Unit 01	Introduction to Indian Financial System: Evolution of the Indian Financial System, Financial System – Meaning & Features

Unit 02	Constituents of Indian financial system: Constituents of the Financial System – Financial Services, Financial Markets, Financial Instruments, Financial System & Economic Development
Unit 03	Introduction to financial Markets: Meaning and Definition, Role and Functions of Financial Markets, Constituents of Financial Markets
Unit 04	Money Markets: Introduction to Money Markets, Money market – Features, Functions, and Instruments
Unit 05	Capital Market: Introduction to Capital Markets, Capital Markets – Features, Functions, and Instruments
Unit 06	Stock Exchange: Introduction to Stock Exchanges, Meaning and Definition, Role and Functions
Unit 07	Development Banks: Introduction to Development Banks, Features and functions, Regional Rural Banks – Objectives, Features, and Role
Unit 08	NBFCs and RRBs: Introduction to Non-Banking Financial Companies and Regional Rural Banks, Objectives, Features and Role of RRBs, Non-Banking Financial Companies – Features and Functions
Unit 09	Insurance: Introduction to Insurance, Insurance organisations – Features, Role, and Functions
Unit 10	Financial Instruments: Introduction to Financial Instruments, Shares, Debentures, Bond
Unit 11	Financial Services: Introduction to Financial Services, Hire Purchasing, Leasing, Factoring, Pension Funds, Private Equity
Unit 12	Regulatory Framework: Introduction to Regulatory Framework, Overview of Regulatory Framework in India
Unit 13	Regulatory Bodies in India- I: Introduction to the Reserve Bank of India (RBI), Organisation, Objectives, Role and Functions, Monetary Policy of RBI
Unit 14	Regulatory Bodies in India- II: Securities Exchange Board of India (SEBI)- Organisation and Objectives, Regulatory and Development Authority of India (IRDAI), Pension Fund Regulatory and Development Authority (PFRDA)

Textbooks:

- Khan M.Y., Indian Financial System, Tata Mcgraw Hill, Latest Edition.
- Bhole L.M., Financial Institutions and Markets: Structure, Growth and Innovations, Tata Mcgraw Hill, Latest Edition.

Reference Book:

- Das, S. C. (2015). The Financial System in India: Markets, Instruments, Institutions, Services and Regulations, Phi Learning Pvt Ltd, New Delhi

Course Name: Entrepreneurial Skills

Credit: 02

Course Description:

Entrepreneurship is not just about start-ups: it is a topic that is rapidly growing in importance in government policy and in the behaviour of established firms. The course provides students with an understanding of the role and personality of the entrepreneur, and a range of skills aimed at successful planning of entrepreneurial ventures. Material covered includes fostering creativity and open-mindedness, knowledge acquisition and management, innovation systems, screening and evaluating new venture concepts, market evaluation and developing a marketing plan, legal Issues Including intellectual property, preparation of venture budgets, and raising finance. The major piece of assessment is the writing of a comprehensive business plan for a new venture.

Course Objectives

- Describe the fundamental concepts of entrepreneurship and emerging trends for effective decision-making.
- Explain the entrepreneurial process and various thinking styles.
- Discuss creativity and innovation through problem-solving techniques and the development of business models.

Course Outcomes

- Demonstrate an understanding of entrepreneurship and its role in decision-making.
- Apply the entrepreneurial process and various thinking styles
- Analyse and create innovative solutions using problem-solving techniques and business models.

Units	Syllabus
Unit 01	INTRODUCTION TO ENTREPRENEURSHIP: Evolution, Characteristics, Nature, Types, Functions of Entrepreneur, Distinction between an Entrepreneur and a Manager, Growth of Entrepreneurship in India, Role of Entrepreneurship in Economic Development. Emerging trends of contemporary entrepreneurship.

Unit 02	THE ENTREPRENEURIAL PROCESS: Steps in the Entrepreneurial Process: Generating Ideas, Opportunity Identification, Implementing and managing the Venture, Design Thinking, Systems Thinking, Agile thinking and Lean thinking.
Unit 03	CREATIVITY: Creativity, Principles of creativity, Source of New Idea, Ideas into Opportunities. Creative Problem Solving: Heuristics, Brainstorming, Synectic's, Value Analysis
Unit 04	INNOVATION: Innovation and Entrepreneurship: Concept and Models of Innovation Principles of Innovation, Methods of protecting Innovation and creativity.
Unit 05	ENTREPRENEURSHIP PRACTICE: Essentials of Business Ownership, Types of ventures, Risk and Benefits, Market Research (venture opportunity screening), Feasibility Analysis
Unit 06	BUSINESS PLAN: Introduction to the Business Plan, Developing the Business Model for starting a new venture, The nature of international entrepreneurship and their importance.
Unit 07	SOURCES OF RAISING CAPITAL: Different sources of financing for start-ups, stages of financing involve in start-ups, advantages and disadvantages of the different sources of financing, Specific financial assistance from government and financial institutions to promote entrepreneurship.

Textbooks:

- Allen, K. R. (2011), "Launching New Ventures: An Entrepreneurial Approach", 6th Edition. Mason, Ohio: South-Western Cengage Learning.
- Kuratko, Donald F. Entrepreneurship: (2010) Theory, Process, Practice 9th Edition. Mason, Ohio: South-Western Cengage Learning.

Reference Books:

- Scarborough, N. M. (2011), "Essentials of Entrepreneurship and Small Business Management", 6th Edition. New Jersey: Prentice Hall.
- Verstraete, T. and Jouioson-Laffitte, E. (2012), "A Business Model for Entrepreneurship", Cheltenham: Edward Elgar Publishing Ltd.

- Poornima Charantimath, (2007) “Entrepreneurship Development-Small Business Enterprise”, Pearson Education.
- Robert D Hisrich, Michael P Peters, Dean A Shepherd, (2007), Entrepreneurship, (6 ed.), The McGraw-Hill companies.
- Rajiv Roy, (2011), Entrepreneurship, (2 ed.) Oxford University Press

Course Name: ENVIRONMENTAL STUDIES**Credit: 01****Course Description:**

This course aims to provide a comprehensive understanding of ecosystems, including the flow of energy within various ecosystems. It delves into the study of natural resources, both renewable and non-renewable, highlighting their importance and sustainability. The course also focuses on a detailed analysis of biodiversity and its conservation, examining the different types of conservation efforts and identifying key biodiversity hotspots in India. Additionally, it covers environmental pollution by exploring its types, causes, effects, and mechanisms for controlling pollution.

Course Objectives:

- Explain the importance of ecosystems, biodiversity, and human interventions in nature for sustainable existence.
- Describe national policies, Environmental Acts for effective waste management and ecosystem conservation.

Course Outcomes:

- Discuss the significance of environmental studies, natural resources, biodiversity conservation, and sustainability practices.
- Assess pollution control measures, environmental laws to address and mitigate environmental challenges effectively.

Units	Syllabus
Unit 01	Introduction to environmental studies & ecosystems: Multidisciplinary Nature of the Environment, what is an Ecosystem? Structure and Function of Ecosystems; Energy Flow in an Ecosystem: Food Chains, Food Webs, and Ecological Succession.
Unit 02	Natural resources: Introduction to Natural Resources, Renewable and Non-Renewable Resources, Land Resources and Land Use Change, Land Degradation, Soil Erosion, and Desertification. Deforestation: Causes and Impacts Due to Mining and Dam Building on the Environment and Forests.

Unit 03	Biodiversity and conservation: Introduction to Biodiversity and Conservation, Levels of Biological Diversity: Genetic, Species, and Ecosystem Diversity, Biogeographic Zones of India - Biodiversity Patterns and Global Biodiversity Hotspots. India as a Mega-Biodiversity Nation; Endangered and Endemic Species of India, Threats to Biodiversity: Habitat Loss, Poaching of Wildlife, and Man-Wildlife Conflicts
Unit 04	Environmental pollution: Introduction to Environmental Pollution, Types, Causes, Effects, and Controls: Air, Water, Soil, and Noise Pollution. Nuclear Hazards and Human Health Risks, Solid Waste Management: Control Measures for Urban and Industrial Waste. Climate Change, Global Warming, Ozone Layer Depletion, Acid Rain, and Impacts on Human Communities

Textbooks

- Main Readings: 1. Carson, R. 2002. Silent Spring. Houghton Mifflin Harcourt.
- Gadgil, M., & Guha, R. 1993. This Fissured Land: An Ecological History of India. Univ. of California Press.
- Gleeson, B. and Low, N. (eds.) 1999. Global Ethics and Environment, London, Routledge.

Reference books

- Gleick, P. H. 1993. Water in Crisis. Pacific Institute for Studies in Dev., Environment & Security. Stockholm Env. Institute, Oxford Univ. Press.
- Groom, Martha J., Gary K. Meffe, and Carl Ronald Carroll. Principles of Conservation Biology. Sunderland: Sinauer Associates, 2006.
- Grumbine, R. Edward, and Pandit, M.K. 2013.

Semester:3

Course Name: Corporate Accounting

Credit: 04

Course Description:

Corporate accounting involves the process of recording, analysing, and reporting the financial transactions of a company. It provides a clear picture of the financial health of a corporation and helps in making informed business decisions. Corporate accounting is integral to the smooth functioning and sustainability of any corporation, ensuring financial integrity and helping in achieving business objectives.

Course Objectives

- Describe the basic principles and concepts of accounting, including the principles governing the recording and reporting of financial transactions.
- Summarize the processes involved in corporate restructuring, in amalgamation, understand their accounting implications.
- Evaluate the processes involved in corporate restructuring, absorption, and liquidation, and understand their accounting implications.
- Prepare Journal entries and final accounts using concepts of absorption.
- Analyse financial statements, assess the financial health of companies, and make informed decisions based on financial information.

Course Outcomes

- Interpret financial data within the framework of accounting principles to facilitate decision-making.
- Determine the evaluating processes involved in corporate restructuring in amalgamation,
- Demonstrate the process of corporate restructuring, such as absorption, and liquidation.
- Apply relevant accounting standards, principles, and practices to prepare accurate and informative financial statements, consolidation reports, and liquidation accounts.

- Interpret financial statements, assess the financial health of companies, and make informed decisions based on financial information.

Units	Syllabus
Unit 01	Introduction to Share Capital: Meaning and Types of Share Capital, At Par, At Premium, and At Discount. - Accounting Treatment for Issue of Shares. Share Forfeiture and Reissue.
Unit 02	Redemption of Preference Shares: Methods and Accounting Treatment.
Unit 03	Buyback of Shares & Bonus Share Capital: Accounting Treatment of Buyback of Shares, Accounting for Bonus Shares.
Unit 04	Debentures: Debentures: Meaning and Types of Debentures. Issue of Debentures: At Par, At Premium, and At Discount. Redemption of Debentures: Methods and Accounting Treatment. - Buyback of Debentures: Accounting Treatment.
Unit 05	Introduction to Amalgamation Accounting: Introduction to Amalgamation Accounting, Meaning and Types of Amalgamation, Methods of Accounting for Amalgamation: Pooling of Interests Method and Purchase Method.
Unit 06	Problems on Amalgamation Accounting: Preparation of Amalgamation and Revaluation Accounts.
Unit 07	Introduction to Absorption Accounting: Meaning and Process of Absorption. Accounting Treatment for Absorption.
Unit 08	Problems on Absorption Accounting: Preparation of Necessary Journal Entries and Final Accounts
Unit 09	Holding Companies: Concept of Holding Company: Meaning and Types of Holding Companies. - Subsidiary Companies: Meaning and Types.
Unit 10	Subsidiary Company: Meaning and Types of Subsidiary Company
Unit 11	Preparation of Consolidated Financial Statements: Consolidation of Balance Sheet. Consolidation of Profit and Loss Account. Treatment of Goodwill and Minority Interest.
Unit 12	Introduction to Liquidation of Companies: Modes of Liquidation: Voluntary Liquidation. Compulsory Liquidation.

Unit 13	Accounting Treatment during Liquidation: Preparation of Statement of Affairs. Realisation and Settlement of Assets. Payment of Liabilities. Distribution of Surplus to Shareholders.
Unit 14	Liquidator's Accounts: Finalisation of Liquidator's Accounts- Problems,

Textbook:

- N. Maheshwari, Suneel K Maheshwari, Sharad K Maheshwari, Corporate Accounting, Vikas Publishing House Pvt Ltd, Sixth Edition, ISBN: 9789352718580

Reference books:

- R.L. Gupta & Radhaswamy.. Advanced Accountancy. New Delhi, India: Sultan Chand & Sons.
- Dr. Arun Gaikwad, Dr. Govind M. Dumbre, Corporate Accounting – II, Success Publications

Course Name: Stock and Commodity Market**Credit: 04****Course Description:**

This course introduces capital markets, their instruments, and the Indian financial system. Topics include money vs capital markets, IPOs, stock markets, trading systems, depositories, SEBI guidelines, commodity markets, futures and options trading, clearing and settlement mechanisms, risk management, and option strategies. It emphasises practical insights for market participants.

Course Objective

- Explain the structure and functions of capital and commodity markets.
- Analyse the role of SEBI and depositories in financial systems.
- Apply trading, clearing, and risk management strategies in financial markets.

Course Outcomes:

- Describe the concepts of capital, money, and commodity markets.
- Differentiate between primary, secondary, physical, and future markets.
- Demonstrate the process of IPOs, trading systems, and settlements.

Units	Syllabus
Unit 01	Introduction to Capital Market: Meaning of Capital Markets, Types of Capital Market - Instruments, Components of Indian Financial System
Unit 02	Capital Market vs Money Market: Money Market vs Capital Market, Primary market vs Secondary market, Initial Public Offering (IPO), Process of IPO
Unit 03	Stock Market: Stock market- Meaning, Objectives and Functions, Stock Market vs Stock Exchanges
Unit 04	Trading System: Meaning of DEMAT Account - Purpose, Trading Pattern & Settlement Procedure (Buy and Sell)

Unit 05	Depositories in India: Meaning of Depositories, Role - National Securities Depository Ltd (NSDL) , Central Depository Securities Ltd. (CDSL)
Unit 06	Depository Participants: Meaning of Depository Participants, History and its role
Unit 07	Introduction of SEBI: History of Securities and Exchange Board of India (SEBI), Objectives and Roles of SEBI, Guidelines for Investors, Issuers, Intermediaries, Development Functions of SEBI
Unit 08	Guidelines of SEBI: Guidelines for Investors, Issuers, Intermediaries - Listing Procedure of the Company, National Institute of Securities Market (NISM)
Unit 09	Introduction to Commodities Market: History, Objectives, Functions of Commodities Market, Organisation and Role of Commodity Market, Governing Bodies in Commodity Market
Unit 10	Physical & Future Market: Types of Transactions in Commodity Market - Physical and Future, Differences Between Physical and Future Market
Unit 11	Introduction to future and option trading: Future and Options Trading System, Specification for Stock, and Index Eligibility for Trading Charges
Unit 12	Clearing and Settlement: Clearing Entities and their Role, Clearing Mechanism - Managing and Settlement Mechanism
Unit 13	Risk Management & Portfolio Margin Requirement: Risk Management - SPAN - Mechanics of SPAN, Overall portfolio Margin Requirements
Unit 14	Introduction of Option Strategies: Options: Introduction - Option Terminology, Types of Option - Options Trading Strategy, Types of Participants in Options Trading

Textbook:

- K. Venkataramana, Stock and Commodity Markets, SHBP.

Reference books:

- Bhole, L.M. (2000), Indian Financial Institutions, Markets and Management, McGraw Hill, New York.
- Srivastava R.M; Management of Indian Financial Institutions

- Pallavi Modi: Equity– The Next Investment Destination
- Priswami– Indian Financial System.
- Ghowria Khatoon– Stock &Commodity Markets, VBH

Course Name: Managerial Economics

Credit: 04

Course Description:

The ability to make informed decisions is essential for managers, individuals, and households. Success relies on understanding factors like resource limitations, opportunity costs, and trade-offs. A strong grasp of economic principles ensures efficient resource allocation, rational choices, and effective solutions across businesses, organizations, governments, and daily life.

Course Objectives

- Explain fundamental concepts of Economics in decision-making processes.
- Describe the concepts of demand and supply to market dynamics and consumer behaviour.
- Analyse production function for business optimization.
- Relate market structures and the application of game theory for competitive strategies.
- Review National Income and their implications on the economy.

Course Outcomes

- Apply the concepts and principles of Managerial Economics
- Discuss and relate to the market concepts of Demand and Supply
- Correlate the Production Function and Cost Analysis
- Demonstrate the Market structures and Game theory.
- Describe National Income concept and types of Business Cycles.

Units	Syllabus
Unit 01	Introduction to Managerial Economics: Introduction, Meaning, Nature and Scope, Fundamental Economic Concepts: Opportunity Cost, Discounting Principle, Time Perspective, Incremental Reasoning, Equi-Marginal Concept, Marginal Concept in Economics.
Unit 02	Economic Information: Introduction to Economic Information, Economies of Information: Risk, Uncertainty, Theory of the Firm.

Unit 03	Introduction to Demand and supply analysis: Introduction, Market demand and supply functions and curves. Law of Demand, Determinants of demand, Elasticity of Demand & Elasticity of Supply, Market Equilibrium.
Unit 04	Consumer Behaviour: Introduction to Consumer Behaviour, Consumer Behaviour and Rational Choice: Cardinal and Ordinal Approaches to Consumer Utility. Maximisation of Consumer Utility by the Technique of Indifference Curves and Budget Lines.
Unit 05	Demand Forecasting: Introduction to Demand Forecasting, Benefits of Demand Forecasting, Demand Forecasting, its Methods and Uses
Unit 06	Law of Diminishing Returns: Introduction to Diminishing Marginal Utility, Introduction to the Law of Diminishing Returns, Introduction: Laws of Diminishing Returns to a Factor.
Unit 07	Return to scale: Introduction to Returns to Scale, Returns to Scale, Economies and Diseconomies of Scale.
Unit 08	Production function and cost Analysis: Introduction to Production Function and Cost Analysis, Production Function: Estimation of Production Function; Cobb-Douglas Production Functions. Concepts of Cost: Cost Analysis
Unit 09	Perfect Market: Introduction to Perfect Market and its features, Price Determination under Perfect Competition.
Unit 10	Imperfect Market: Introduction to Imperfect Market, Monopoly, Oligopoly, Duopoly, and Monopolistic Competition and their features
Unit 11	Game Theory and pricing Practice: Introduction to Game Theory and Pricing Practice, Game Theory and Competitive Strategy: Dominant Strategy, Nash Equilibrium. Types of Pricing Practice: Competitive Pricing and Non-Pricing Strategies.
Unit 12	Introduction to National Income: Definition, Measurement of National Income in India, Importance of National Income in India

Unit 13	National Income Analysis: Introduction to National Income Analysis, Importance of National Income Analysis; Balance of Payments (BOP). Types / Components of BOP
Unit 14	Business Cycles: Business Cycles, Business Cycles: Meaning, Types of Business Cycles. Characteristics of Business Cycles. Causes and Phases of Business Cycles.

Textbook:

- Yogesh Maheswari, Managerial Economics, PHL Learning, New Delhi, 2005

Reference books:

- Mark Hirschey, “Managerial Economics – An Integrative Approach”, 2008, 1st Ed. Cengage Learning.
- Craig H. Peterson, W. Cris Lewis & Sudhir K. Jain, Managerial Economics, 2008, 4th Ed., Pearson Education
- D. N. Dwivedi, “Managerial Economics”, 2009, 7th Ed. Vikas Publishing House Pvt. Ltd
- Dominik Salvatore, “Managerial Economics”, 2008, 6th Ed. Oxford University Press.

Course Name: Indian Ethos and Leadership**Credit: 02****Course Description:**

This course introduces Indian Ethos and leadership as the modern managerial approach to ethical questions in business environment. It gives not only understanding of main theoretical concepts, but also developing skills of identification, analysis and permission of ethical dilemmas on a workplace and managing ethics through leadership in organizations. This course is an important contribution to increasing standards of business as the students are future executives of organisations.

Course Objectives:

- Describe concepts of ethics, types, importance of various approaches including Indian ethos.
- Explain nature of strategic leadership in organisation.
- Discuss about leadership in different culture, inclusion, diversity and trends in leadership.

Course Outcomes:

- Explain the basic concepts in ethics, types, the need & importance of various approaches with reference to best practices.
- Define nature of strategic leadership in organisation
- Demonstrate leadership in different culture, inclusion, diversity and its trends.

Units	Syllabus
Unit 01	Introduction: Ethics vs Ethos, Theories of Ethics, Absolutism versus Relativism, Teleological approach; the Deontological approach, Kohlberg's six stages of moral development, Ethical Principles in Business
Unit 02	Indian Ethos: Introduction to Indian Ethos, Values and Ethics, "A Holistic Management System: Management in Indian Perspective.", Trusteeship model of management (Gandhi's influence), Servant Leadership in the Indian Context

Unit 03	Strategic Leadership in Organisation: Introduction to Strategic Leadership in Organisations, Definition; the nature of leadership, Manager vs Leaders, Traits of Good Leaders and Followers, Effective Leadership Behaviours, Leadership Training Programs, Ethical Leadership
Unit 04	Leadership, Inclusive & Diversity: Introduction to Leadership, Inclusion & Diversity, Gender and Leadership, Leadership in Different Cultures, Managing Diversity: Women in Leadership.
Unit 05	Trends in leadership: Introduction to Trends in Leadership, Blue Ocean Leadership, Well-being Focused Leadership, AI-Powered Leadership, Emotionally Intelligent Leadership
Unit 06	Integrating Indian Wisdom with Modern Leadership Theories: Introduction to Integrating Indian Wisdom with Modern Leadership Theories, Comparing Indian Leadership Concepts with Western Theories, Emotional Intelligence and Indian Psychology, Mindfulness and Leadership Effectiveness
Unit 07	Indian Values in Modern Context: Introduction to Indian Values in a Modern Context, Ahimsa (Non-violence) and Conflict Resolution, Satya (Truthfulness) and Organisational Transparency, Aparigraha (Non-possessiveness) and Corporate Social Responsibility

Textbooks:

- Indian Ethos and Values: For Leadership Excellence, Nagarajan, K., New Age International Publisher, 1st Edition.

Reference books:

- Indian Ethos and Leadership, Bhavani M.R., Dr. Sindhu A. N, Nikitha Alur, 2nd edition.
- Indian Ethos in Management, Tushar Agarwal & Nidhi Chandorkar, Himalaya Publications Ltd, 2nd edition.

Course Name: Universal Human Value

Credit: 01

Course Description:

This course on Value Education and Harmony provides a comprehensive exploration of human values, their role in personal growth, and their application in society. It covers the importance of values in education, the process of achieving continuous happiness and prosperity, and the understanding of harmony within oneself, the family, society, and nature. The course emphasizes the holistic perception of existence and the implications of these values on professional ethics. It also provides strategies for transitioning towards a more harmonious and ethical human order at both individual and societal Values

Course objectives:

- Describe the importance of value education for happiness and harmony.
- Explain ethical behaviour and holistic values in professional conduct.

Course Outcomes :

- Demonstrate the importance of value education for happiness and harmony.
- Analyse ethical behaviour and holistic values in professional conduct.

Units	Syllabus
Unit 01	Introduction to Value Education: Introduction to Value, Need for Value Education, Basic Guidelines and Content of Value Education, Process of Value Education, Natural Acceptance and Experiential Validation, Continuous Happiness, and Prosperity: Human's Basic Aspirations fulfilment of Aspirations, Correct Priority of Basic Requirements, Role of Education and Summary
Unit 02	Harmony in the Human Being: Introduction to Harmony in the Human Being, Understanding Happiness, and Prosperity correctly: Meaning of Happiness and Method to Continue Happiness, Meaning of Prosperity, and Current Notion of Happiness _Part I, Meaning of Prosperity and Current Notion of Happiness Part 2,

	Method for Happiness, Understanding Harmony: What Makes a Human Being? Understanding Human Being as Co-Existence of the Body and, the Self Understanding Needs of the Self and the Body Understanding the Body as an Instrument of 'I'
Unit 03	Harmony in the Family and Society: Introduction to Harmony in the Family and Society, Understanding Harmony in the Family and Society: Family-The Fundamental Unit of Human Interaction, Justice-Meaning, Nine Important Values in Relationships, Other Values in Relationship, Understanding the Harmony in the Society, Comprehensive Human Goals, Visualising Undivided Society, Universal Order and Summary
Unit 04	Harmony in the Nature and Existence: Introduction to Harmony in the Nature and Existence, Understanding Harmony in the Nature, and Existence: Understanding Harmony in Nature, Four Orders in Nature, Recyclability and Self-Regulation in Nature, Space: Meaning, Holistic perception of Harmony: Characteristics and Importance of Holistic Perception of Harmony at All Levels of Existence Part 2, Human Beings Causing Imbalance in Nature Part 1, Role of Human Beings in Pollution Part 2 and Summary
Unit 05	Implications of the above Holistic Understanding of Harmony on Professional Ethics: Introduction to Harmony on Professional Ethics, Implications of the above Holistic Understanding: Values in Human Living's Different Dimensions, Definitiveness of Ethical Human Conduct, preparing for the Humanistic Tradition – Part 1, Preparing for Humanistic Tradition – Part II and Summary

Textbook:

- The Textbook A Foundation Course in Human Values and Professional Ethics, R R Gaur, R Asthana, G P Bagaria, 2nd Revised Edition, Excel Books, New Delhi, 2019. ISBN 978- 93-87034- 47-1
- The Teacher's Manual for A Foundation Course in Human Values and Professional Ethics, R R Gaur, R Asthana, G

Reference Books:

- Jeevan Vidya: Ek Parichaya, A Nagaraj, Jeevan Vidya Prakashan, Amar kantik, 1999.
- Human Values, A.N. Tripathi, New Age Intl. Publishers, New Delhi, 2004.
- The Story of Stuff (Book).
- The Story of My Experiments with Truth - by Mohandas Karamchand Gandhi
- Small is Beautiful - E. F Schumacher.
- Slow is Beautiful - Cecile Andrews

Course Name: Corporate Social Responsibility**Credit: 02****Course Description:**

This course on Corporate Social Responsibility (CSR) and Environmental, Social, and Governance (ESG) principles explores the evolving role of businesses in fostering social and environmental responsibility. It delves into the historical development, frameworks, and legislation governing CSR, with a focus on India's regulatory landscape. The course examines key drivers of CSR, stakeholder roles, and global sustainability initiatives like the Sustainable Development Goals (SDGs). Additionally, it highlights ESG concepts, environmental policies, energy management strategies, and sustainability reporting frameworks, preparing participants to align business practices with ethical, sustainable, and socially responsible objectives.

Course Objectives:

- Explain the concepts and models of Corporate Social Responsibility (CSR) and the role of business in sustainable development
- Describe various provisions of Companies Act 2013 related to CSR in India and highlight the significance of CSR
- Examine the development of corporate social responsibility and understanding international framework of CSR

Course Outcomes:

- Demonstrate an understanding of CSR concepts, models, and the significance of sustainable development in business practices.
- Analyse CSR provisions in the Companies Act 2013 and evaluate their application in the Indian business context.
- Enumerate international CSR frameworks and design strategies for effective CSR implementation in global and local scenarios.

Units	Syllabus
Unit 01	Introduction to CSR: Introduction to CSR, Meaning and Definition- History of CSR- Concepts of Charity Corporate philanthropy- Corporate Citizenship, Sustainability and Stakeholder Management CSR through triple bottom line and Sustainable Business- relation between CSR and Corporate governance, Environmental aspect of CSR Chronological evolution and Models of CSR in India Carroll's model Major codes on CSR Initiatives in India.
Unit 02	International Framework for Corporate Social Responsibility: Introduction to International Framework for Corporate Social Responsibility, Millennium Development Goals, Sustainable Development Goals- Relationship between CSR and MDGs. , United Nations (UN) Global Compact 2011 - UN guiding principles on business and human rights - OECD CSR policy tool , ILO tri-partite declaration of principles on multinational enterprises and social policy.
Unit 03	CSR-Legislation in India: Introduction to CSR-Legislation in India, Section 135 of Companies Act 2013.Scope for CSR Activities under Schedule VII, Appointment of Independent Directors on the Board, Computation of Net Profit's Implementing Process in India
Unit 04	The Drivers of CSR in India: Introduction to The Drivers of CSR in India, Market based pressure and incentives, civil society pressure, the regulatory environment in India Counter trends, Review of current trends and opportunities in CSR, Review of successful corporate initiatives and challenges of CS
Unit 05	Identifying key Stakeholders of CSR: Introduction to Stakeholders of CSR, Role of Public Sector in Corporate, Government programs- Non-profit and Local Self Governance in implementing CSR, Global Compact Self-Assessment Tool- National Voluntary Guidelines by Govt. of India, Roles and responsibilities of corporate foundations.

Unit 06	ESG: Introduction to ESG, the concept of environment and its significance, Policy related aspects of environment, Environmental policies, Environmental impacts, the scenario of energy consumption in India, the approaches embraced by various companies for fostering energy conservation, Creating awareness for effective energy management, Bureau of Energy Efficiency, Environmental improvement scenario in India.
Unit 07	Environment & Sustainability Reporting: Introduction to Environment and Sustainability Reporting, Sustainability Audit; ESG Rating; Emerging Mandates from Government and Regulators, Integrated Reporting Framework; Global Reporting Initiative Framework, Business Responsibility & Sustainability Reporting.

Textbooks

- Corporate Social Responsibility: Concepts and Cases – The Indian Experience, Author: C.V. Baxi & Ajit Prasad, Publisher: Excel Books.

Reference Books:

- Institutional Investors - By E. Philip Davis and Benn Steil
- Corporate Governance: Principles, Policies and Practices, Third Edition by A.C. Fernando, K.P. Muraleedharan and E.K. Satheesh, Publisher: Pearson
- Governance: Issues and Challenges by Abhay Prasad Singh and Krishna Murari, Publisher: Pearson India
- ESG Matters: How to Save the Planet, Empower People, and Outperform the Competition by Debra Brown and David Brown
- Rethinking Good Governance: Holding to Account India's Public Institutions by Vinod Rai.

Course Name: Introduction to Fintech

Credit: 04

Course Description:

This course provides a comprehensive overview of the rapidly evolving FinTech industry, focusing on its concepts, applications, and impact on traditional financial systems. Students will explore key topics, including digital payments, blockchain technology, cryptocurrencies, smart contracts, decentralized finance (DeFi), and alternative lending models. The course delves into the ethical, regulatory, and cybersecurity challenges in FinTech, alongside emerging trends and innovations. learners will gain insights into financial inclusion, disruptive technologies, and opportunities in global and emerging markets.

Course Objectives

- Explain FinTech concepts, applications, and impact on financial systems.
- Explore digital payments, blockchain, and cryptocurrency fundamentals.
- Describe ethical and regulatory issues in FinTech ecosystems.
- Demonstrate alternative lending and crowdfunding platforms.
- Summarize emerging trends and opportunities in global FinTech markets.

Course Outcomes

- Define FinTech concepts and explain their industry applications.
- Apply knowledge of blockchain and cryptocurrency for financial solutions.
- Analyse ethical, regulatory, and cybersecurity challenges in FinTech.
- Enumerate alternative lending and crowdfunding models.
- Examine emerging FinTech innovations and case studies effectively.

Units	Syllabus
Unit 01	Introduction to FinTech: Definition and Scope of Fintech: Define FinTech concept. Explore its applications. Understand industry impact. Historical Evolution and key Milestones in Fintech, FinTech Ecosystems and Stakeholders.
Unit 02	Digital Payments: Overview of digital payment systems, Mobile wallets, contactless payments, and QR codes,
Unit 03	Challenges and opportunities in digital payments: Identify key challenges. Explore security concerns. Discuss regulatory hurdles. Explore innovation opportunities.
Unit 04	Introduction to block chain technology: Introduction to block chain technology, Define blockchain fundamentals. Explore its characteristics. Understand its applications.
Unit 05	Bitcoin, Ethereum, and other cryptocurrencies: Introduction to Bitcoin, Ethereum, and other cryptocurrencies, Analyse Bitcoin's creation. Understand mining processes. Define Ethereum platform. Explore alternative cryptocurrencies.
Unit 06	Smart contracts and decentralized finance (DeFi): Introduction to Smart contracts and decentralized finance (DeFi), Define smart contracts and explore their functionalities, Real-World Applications of Smart Contracts and Define DeFi concepts
Unit 07	Alternative Lending and Crowdfunding: Introduction to Peer-to-peer lending platforms, Equity crowdfunding vs. rewards-based crowdfunding, Risks and Benefits for a lenders and Borrowers
Unit 08	Introduction to Insure Tech and Reg Tech: Introduction to the concept of Insurance technology (Insure Tech) and Regulatory Technology (Reg Tech,), Innovations in Insurance technology (Insure Tech) and Regulatory Technology (Reg Tech), Discuss Compliance Challenges and Regulatory Landscape.
Unit 09	FinTech in Emerging Markets: Financial inclusion and Access to Finance, Mobile banking and Microfinance, Case Studies from Emerging Economies

Unit 10	Ethical and Regulatory Issues: Introduction to Ethical and Regulatory Issues, Data privacy and cybersecurity in FinTech, Regulatory Challenges and compliance Requirements,
Unit 11	Ethical considerations: Introduction to Ethical considerations in algorithmic decision-making, Define algorithmic ethics. Explore bias and fairness. Discuss transparency and accountability.
Unit 12	Emerging trends in FinTech innovation: Introduction to Emerging trends in FinTech innovation, the future of banking, payments, and financial services, Explore recent advancements. Analyse technology integrations. Identify market disruptions.
Unit 13	Opportunities and challenges: Introduction to Opportunities and challenges for FinTech start-ups and incumbents, Identify growth potential. Explore niche markets. Discuss technological advancements.
Unit 14	Case Studies: Analysis of real-world FinTech applications

Textbooks:

- "Fintech Innovation: From Robo-Advisors to Goal-Based Investing and Gamification" by Paolo Sironi, Wiley Publication, First edition, 2016.
- Selected academic articles, industry reports, and case studies .

Reference books:

- "The Fintech Book: The Financial Technology Handbook for Investors, Entrepreneurs and Visionaries" edited by Susanne Chishti and Janos Barberis, Wiley Publication, First edition, 2016.

Course Name: Introduction to Supply Chain Management**Credit: 04****Course Description:**

This course provides an overview of the principles, concepts, and practices of supply chain management (SCM). It covers the fundamental components of SCM including sourcing, procurement, production, distribution, and logistics. Students will gain an understanding of how effective supply chain management contributes to organizational success, sustainability & competitiveness in today's global business environment.

Course Objectives:

- State the concept and importance of supply chain management.
- Identify the key components and processes involved in supply chain management.
- Summarize the role of supply chain management in achieving organizational goals and objectives.
- Explore various strategies and techniques for optimizing supply chain performance.
- Develop critical thinking and problem-solving skills in supply chain management contexts.

Course Outcomes:

- Describe the Concept and Importance of Supply Chain Management
- Apply Key Components and Processes of Supply Chain Management
- Analyse the Role of Supply Chain Management in Organizational Success
- Illustrate Strategies and Techniques for Supply Chain Optimization
- Focus the future trends in supply chain management.

Units	Syllabus
Unit 01	Introduction to Supply Chain Management: Definition and scope of supply chain management. Evolution and historical perspective. Importance in modern business. Key stakeholders in supply chains.

Unit 02	Supply Chain Components: Introduction to Supply Chain Components, Overview of suppliers and sourcing strategies. Procurement and purchasing processes. Manufacturing and production operations. Role of intermediaries.
Unit 03	Inventory Management: Introduction to Inventory Management, Inventory types and functions. Techniques for managing inventory (e.g., EOQ, JIT). Importance of demand forecasting in inventory management.
Unit 04	Distribution Channels: Introduction to Distribution Channels, Transportation and logistics management. Warehouse management principles. Role of third-party logistics (3PL).
Unit 05	Supply Chain Integration: Introduction to Supply Chain Integration, Role of information technology in supply chain management. Collaboration and coordination among supply chain partners. Strategies for enhancing supply chain visibility.
Unit 06	Supply Chain Planning and Scheduling: Introduction to Supply Chain Planning and Scheduling, Aggregate planning. Master production scheduling (MPS). Material Requirements Planning (MRP) systems
Unit 07	Supply Chain Performance Measurement: Introduction to Supply Chain Performance Measurement, Key performance indicators (KPIs) for supply chain management. Metrics for assessing supply chain efficiency. Continuous improvement in supply chain operations.
Unit 08	Supply Chain Risk Management: Introduction to Supply Chain Risk Management, Identifying and assessing supply chain risks. Risk mitigation strategies. Building resilience and flexibility into supply chains.
Unit 09	Global Supply Chain Management: Introduction to Global Supply Chain Management, Challenges of managing global supply chains. Global sourcing and offshoring. Cross-border logistics and international trade regulations.
Unit 10	Sustainability in Supply Chains: Introduction to Sustainability in Supply Chains, Environmental responsibility in supply chains. Green procurement practices. Social responsibility and ethical considerations in global supply chains.

Unit 11	Supply Chain Financials: Introduction to Supply Chain Financials, Cost structures in supply chains. Working capital management. Financial performance measurement.
Unit 12	Supply Chain Technologies: Introduction to Supply Chain Technologies, Role of emerging technologies (e.g., blockchain, IoT). Artificial intelligence and predictive analytics in supply chains. Automation and its impact on supply chain processes.
Unit 13	Supply Chain Strategy and Design: Introduction to Supply Chain Strategy and Design, Strategic importance of supply chains. Designing supply chains for competitive advantage. Lean supply chains and agility.
Unit 14	Future Trends in Supply Chain Management: Introduction to Future Trends in Supply Chain Management, Impact of globalisation on supply chains. Future of digital supply chains. Technological advancements and their implications for supply chain practices.

Textbook:

- "Introduction to Operations and Supply Chain Management" by Cecil C. Bozarth and Robert B. Handfield.

Reference books:

- "Supply Chain Management: Strategy, Planning, and Operation" by Sunil Chopra and Peter Meindl
- Harvard Business Review articles on supply chain management
- Industry reports and case studies on supply chain best practices.

Course Name: Fundamentals of Business Analytics**Credit: 04****Course Description:**

This course provides the fundamental concepts and methods needed to understand the emerging role of business analytics in organizations. The subject helps to learn how to apply basic business analytics methods using Microsoft Excel and interpret analytic models and results for making better business decisions

Course Objectives:

- State the requisite knowledge and skills essential for making data-informed business decisions and showcase proficiency in utilizing MS Excel.
- Show the necessary steps to efficiently arrange data within MS Excel.
- Explain fundamental calculations and aggregations using MS Excel proficiently.
- Prepare the financial computations and aggregations through MS Excel.
- Locate the basic data analytics and visualization techniques by utilizing Pivot Tables and Pivot Charts within MS Excel.

Course Outcomes:

- Explain knowledge and demonstrate proficiency in using MS Excel for data-informed business decisions.
- Execute efficient data organization and management techniques within MS Excel.
- Conduct fundamental calculations and aggregations proficiently using MS Excel.
- Illustrate financial computations and aggregations using MS Excel.
- Summarize data Analytics and visualization techniques through Pivot Tables and Pivot Charts in MS Excel.

Units	Syllabus
Unit 01	Solving the business problem using Analytics - Overview of Analytical cycle and Hierarchy of information user: Introduction to Business Analyst, Apply analytical

	methods. Identify business challenges. Develop data-driven solutions. Understand analytical phases. Explore data collection processes.
Unit 02	Understand Business Analyst roles and Responsibilities -Identify the Popular Business Analytics Tools: Introduction to Business Analyst roles and Responsibilities, define business analyst tasks. Explore skill requirements. Understand stakeholder collaboration. Identify key tools. Explore software applications.
Unit 03	Using select options and status bar and getting familiar with the backstage view of Excel - Selecting cells and entering data, Naming conventions in Excel.: Introduction, familiarize with Excel interface. Use status bar features. Explore options menu. Learn cell selection techniques. Enter data efficiently. Navigate worksheet effectively.
Unit 04	Formatting cells-Using the Ribbon to Format Numbers-Using the Format Cells, Dialog Box- Add a Border, background Colour: Introduction to Formatting cells, apply cell formatting. Enhance data presentation. Utilize formatting options. Navigate the Ribbon. Format numerical data.
Unit 05	Understanding Dates and Times - Format Percentages, Fractions, In Scientific Notations - Formatting worksheet- Align Data, Rotate Data: Introduction of Understanding Dates and Times, Format date entries. Manage time values. Use date functions effectively. Apply percentage formatting. Format fractions appropriately. Use scientific notation.
Unit 06	Hide Columns or Rows, hide a Worksheet - Move or Copy a Worksheet – Freeze Worksheet Titles: Introduction to Freeze Worksheet Titles, conceal unnecessary data. Use hide functions. Manage worksheet visibility. Conceal entire worksheets.
Unit 07	Understanding formulas - Calculate with an Operator: Introduction of Understanding Formulas, Define Excel formulas. Recognize formula structure. Analyse formula components. Utilize arithmetic operators. Perform basic calculations.
Unit 08	Introduction to functions in Excel - Function Wizard - Round a Number - Conditional Formula - Conditional Sum - Conditional Count: Introduction to functions in Excel - Function Wizard, Define Excel functions. Understand function syntax. Explore built-in functions. Use ROUND, ROUNDUP, and ROUNDDOWN. Use SUMIF function. Use COUNTIF function.

Unit 09	Using VLOOKUP and index- Retrieve Column or Row Numbers: Introduction to VLOOKUP, Define VLOOKUP function. Retrieve data efficiently. Understand table structure. Use COLUMN function. Apply ROW function.
Unit 10	Using VLOOKUP - Determine the Location of a Value Using INDEX: Introduction to VLOOKUP, Define INDEX function. Retrieve data by position. Combine with MATCH function.
Unit 11	Calculate the Median or the Mode- Calculate Rank – Macros and Automation: Introduction to Median or Mode Calculate Rank, Use MEDIAN function. Apply MODE function. Analyse data distributions. Use RANK function. Define macros in Excel.
Unit 12	Formatting data in table- Create and format table: Introduction to Create and Format table, Apply table formatting. Use design options. Enhance readability effectively.
Unit 13	Working with Pivot Tables - Create a Pivot Table calculated Field - Group the Rows or Columns in a Pivot Table: Introduction to Pivot Tables, Define Pivot Tables. Analyse data efficiently. Summarize large datasets.
Unit 14	Working with types of Charts, Trend line, Histograms, Bar and Pie Charts - Creating Pivot chart.: Introduction to Charts, Densify chart types. Understand appropriate uses. Analyse data visually. Link Pivot Tables to charts. Visualize summarized data.

Textbook:

- Microsoft Office: Excel 2007, John Walkenbach., Reprint 2010, Wiley Publications

Reference book:

- Succeeding in Business with Microsoft® Excel® 2013: Problem-solving
- Approach – Cengage Publisher
- VBA for Modelers: Developing Decision Support Systems with Microsoft® Office
- Excel®, Fifth Edition

Course Name: Fundamentals of Block Chain and Cryptocurrency**Credit: 04****Course Description:**

This course provides a comprehensive introduction to blockchain technology, its architecture, and applications beyond cryptocurrency. Students will explore blockchain fundamentals, including decentralization, consensus mechanisms, and types of blockchains, along with the mechanics of Bitcoin and Ethereum. The course delves into the use of blockchain in finance, supply chain, and healthcare, emphasizing regulatory challenges, security risks, and privacy concerns. Emerging trends, integration with AI, and the transformative impact of blockchain on industries are also discussed, offering insights into its future potential and adoption challenges.

Course Objectives

- State the basic concepts and principles of blockchain technology.
- Explore the mechanics of popular cryptocurrencies such as Bitcoin and Ethereum.
- Examine the applications of blockchain beyond cryptocurrency.
- Classify the regulatory and security challenges of blockchain and cryptocurrency.
- Evaluate the potential impact of blockchain and cryptocurrency on various industries.

Course Outcomes

- Summarize the basic concepts and principles of blockchain technology.
- Describe the mechanics of popular cryptocurrencies, including mining and transactions.
- Identify and Analyse real-world applications of blockchain technology.
- Evaluate the regulatory and security challenges of blockchain and cryptocurrency.
- Discuss the potential impact of blockchain and cryptocurrency on industries such as finance, healthcare, and supply chain.

Units	Syllabus
Unit 01	Understanding blockchain fundamentals.: Introduction to blockchains: Definition and Basic Concepts, Decentralization, and consensus mechanisms
Unit 02	Types of Blockchains: Public, Private and Hybrid
Unit 03	Blockchain architecture: blocks, chains, and nodes.: Introduction to Blockchain architecture, Analyse block structure. Understand chaining process. Learn node functions.
Unit 04	Introduction to cryptocurrencies: Understand cryptocurrency basics. Learn digital currency benefits.
Unit 05	Mechanics of Bitcoin: mining, transactions, and wallets: Introduction to Mechanics of Bitcoin, Analyse Bitcoin mining. Understand transaction processes. Explore wallet types.
Unit 06	Blockchain Beyond Bitcoin: Ethereum, Smart Contracts, and Altcoins: Define Ethereum platform. Understand smart contract functionality.
Unit 07	Blockchain in finance: Blockchain beyond cryptocurrency: use cases and applications, Introduction to Blockchain in finance: digital payments, remittances, and smart contracts,
Unit 08	Blockchain for Supply Chain and Healthcare Solutions: Blockchain in supply chain management, Blockchain in healthcare: Health records and Drug Traceability
Unit 09	Regulatory landscape: Introduction to Regulatory landscape, Understand global perspective on Blockchain and Cryptocurrency Regulations
Unit 10	Security challenges in blockchain: Introduction to Security challenges in blockchain, identify security threats. Understand cryptographic vulnerabilities. Explore attack vectors.
Unit 11	Privacy, Risks, and Vulnerabilities in Blockchain: Introduction to Privacy and Data Protection Issues, Risks and vulnerabilities in blockchain networks
Unit 12	Emerging trends in blockchain technology: Explore innovative developments. Analyse evolving applications. Identify integration with AI.

Unit 13	Impact of blockchain and cryptocurrency on industries: Introduction to Impact of blockchain and Cryptocurrency on industries: Finance, Healthcare and Supply Chain, Assess finance transformations. Evaluate healthcare improvements. Understand supply chain enhancements.
Unit 14	Challenges, Opportunities and Future Outlook for blockchain adoption: Introduction to Challenges and opportunities for Blockchain, Outlook for Blockchain and Cryptocurrency.

Textbook:

- "Mastering Blockchain: Unlocking the Power of Cryptocurrencies, Smart Contracts, and Decentralized Applications" by Imran Bashir.

Reference books:

- "Blockchain Basics: A Non-Technical Introduction in 25 Steps" by Daniel Drescher.
- "The Age of Cryptocurrency: How Bitcoin and Digital Money are Challenging the Global Economic Order" by Paul Vigna and Michael J. Casey.

Course Name: Inventory Management & Material Requirement Planning**Credit: 04****Course Description:**

This course provides an in-depth understanding of inventory management and material requirement planning (MRP) concepts, techniques, and applications. It aims to equip students with the skills necessary to manage inventory efficiently and to design and implement effective MRP systems in manufacturing and service organizations.

Course Objectives:

- Define the fundamental principles of inventory management.
- Indicate various inventory control techniques.
- Discuss inventory levels of optimization and methods of material requirement planning.
- Examine JIT, lean manufacturing, and techniques for integrating inventory management with supply chain.
- Explain Contemporary Issues in Inventory Management and MRP

Course Outcomes

- Explain fundamental principles of inventory management.
- Apply various inventory control techniques.
- Design inventory levels of optimization and methods of material requirement planning
- Analyse the principles of JIT, lean manufacturing, and inventory management techniques for supply chain integration.
- Explain Contemporary Issues in Inventory Management and MRP
- Assess the impact of contemporary issues on inventory management and MRP in modern supply chains.

Units	Syllabus
Unit 01	Introduction to Inventory Management: Definition, scope, and importance in business. Objectives and Functions of Inventory Management: Ensuring smooth

	operations, meeting demand, minimising costs. Types of Inventories: Raw materials, work-in-progress, finished goods, MRO (Maintenance, Repair, and Operations).
Unit 02	Inventory Costs and Performance Metrics: Introduction to Inventory Costs and Performance Metrics. Types of Inventory Costs: Holding costs, ordering costs, and stock-out costs. Performance Measures: Inventory turnover ratio, service level metrics, and days of inventory on hand. Significance of Effective Inventory Management: Cost optimisation, and impact on cash flow and profitability.
Unit 03	Inventory Control Systems: Introduction to Inventory Control Systems. Continuous Review (Q) System: Fixed order quantity systems. Periodic Review (P) System: Inventory review intervals and fixed time systems. ABC Analysis: Importance of categorising inventory by value.
Unit 04	Economic Order Quantity (EOQ) Model: Introduction to Advanced Inventory Models. Concept of EOQ: Optimal order quantity to minimise costs. Application of EOQ in Different Scenarios: Impact of demand variability and lead times. EOQ Extensions: Quantity discounts and backordering costs.
Unit 05	Advanced Inventory Models: Introduction to Reorder Point (ROP) Models: Determining the reorder point based on demand and lead time. Safety Stock Calculations: Buffer stocks to avoid stock-outs. Single and Multi-Period Inventory Models: Inventory decisions for short- and long-term horizons.
Unit 06	Demand Forecasting Techniques: Introduction to Demand Forecasting Techniques. Qualitative Techniques: Expert judgement, Delphi method, and market research. Quantitative Techniques: Time series analysis, moving averages, and exponential smoothing. Inventory Management in Different Industries Manufacturing Industry, Retail Industry, Service Industry, Case Studies
Unit 07	Material Requirement Planning (MRP) Concepts: Introduction to MRP. MRP Concepts, Objectives and Benefits, MRP vs. ERP, Components of MRP System.
Unit 08	MRP Inputs and Outputs: Introduction to MRP Inputs and Outputs. Master Production Schedule (MPS), Bill of Materials (BOM), Inventory Status Records, MRP Output Reports.

Unit 09	<p>Just-In-Time (JIT) and Lean Manufacturing: Introduction to Just-In-Time (JIT) and Lean Manufacturing. JIT Concepts and Principles, JIT vs. MRP, Lean Manufacturing Principles. Kanban Systems: Visual signals to trigger production and movement.</p>
Unit 10	<p>Inventory Management in Different Industries: Introduction to Inventory Management in Different Industries. Manufacturing Industry: Role of inventory in production planning. Retail Industry: Inventory turnover and managing stock levels in retail. Service Industry: Challenges of inventory management in services.</p>
Unit 11	<p>Supply Chain Integration with Inventory Management: Introduction to Supply Chain Integration with Inventory Management. Supply Chain Coordination: Role of inventory in supply chain optimisation. Vendor Managed Inventory (VMI): Supplier-driven inventory management. Collaborative Planning, Forecasting, and Replenishment (CPFR): Enhancing demand visibility across the supply chain. Case Study</p>
Unit 12	<p>Contemporary Issues in Inventory Management: Introduction to Contemporary Issues in Inventory Management. Global Supply Chain Challenges: Managing inventory in a global context and disruptions. Technological Advancements: AI, IoT, and blockchain in inventory management. Sustainable Inventory Management, Future Trends.</p>
Unit 13	<p>Case Studies in Inventory Management: Introduction to Case Studies in Inventory Management. Case Study 1: Manufacturing Sector: Success stories and challenges. Case Study 2: Retail Sector: Inventory control challenges in retail giants. Case Study 3: Service Industry: Managing inventories in non-tangible sectors.</p>
Unit 14	<p>Future Trends in Inventory and Supply Chain Management: Introduction to Future Trends in Inventory and Supply Chain Management. Impact of Technology on Inventory Management: Predictive analytics and automation. Emerging Trends: Circular economy, 3D printing, and real-time tracking. Future of Global Supply Chains: Sustainable practices and decentralised networks.</p>

Textbook:

- "Inventory Management and Production Planning and Scheduling" by Edward A. Silver, David F. Pyke, and Rein Peterson.
- "Manufacturing Planning and Control for Supply Chain Management" by F. Robert Jacobs, William L. Berry, D. Clay Whybark, and Thomas E. Vollmann.

Reference books:

- "Principles of Inventory and Materials Management" by Richard J. Tersine.
- APICS Certified in Production and Inventory Management (CPIM) Learning System.

Course Name: BUSINESS ANALYTICS FOR DECISION MAKING**Credit: 04****Course Description:**

This course on Business Analytics covers key concepts and tools for data-driven decision-making. This include business analytics processes, types of analytics (descriptive, diagnostic, predictive, prescriptive), data quality, and types of digital data. It also explores data warehousing, mining, SQL, database structures, and analytics software. The course emphasizes business performance management, KPI development, and dashboard analytics, with applications in sales, marketing, HR, and finance.

Course Objectives:

- Identify business analytics concepts and their significance in decision-making.
- State different types of analytics and their practical applications.
- Recognise the importance of data quality for business purposes.
- Enumerate data warehousing, mining, and SQL techniques for analysis.
- Estimate business performance using KPIs and dashboard analytics tools.

Course Outcomes:

- Demonstrate understanding of business analytics
- Classify various types of analytics and their practical business applications.
- Interpret the impact of data quality for business purposes.
- Outline data warehousing, mining, and SQL techniques for effective analysis.
- Analyse business performance using KPIs and dashboard analytics tools.

Units	Syllabus
Unit 01	Business Analytics, Terminologies used in Analytics: Business Analytics, Business Intelligence: Introduction to Business Analytics, define business analytics.

	Understand analytical processes. Explore data-driven decisions along with real-time examples
Unit 02	Meaning, Importance, Scope, Uses of Business Analytics, Architecture of Business Analytics: Understand analytics significance. Explore analytical applications. Architecture of Business Analytics. Assess industry relevance.
Unit 03	Types of Analytics: Descriptive, Diagnostics, Predictive, Prescriptive: Introduction to Types of Analytics, Study descriptive analytics. Explore diagnostic techniques. Understand predictive and prescriptive. Examples for different types of analytics.
Unit 04	Decision making, Importance of data quality: Introduction to Decision making, Importance of data quality, understand decision processes. Analyse data-driven decisions. Evaluate impact on outcomes.
Unit 05	Types of Digital Data, Structured, Semi Structured, Unstructured Data: Introduction to Types of Digital Data, define structured data. Explore semi-structured data. Understand unstructured data. Examples for different types of digital data.
Unit 06	Data warehouse, Data mining, Data Integration: Introduction to Data warehouse, Data mining, Data Integration, define data warehouses. Understand data storage. Explore analytical functions. Real-time examples.
Unit 07	Introduction to data analytics software: Introduction to data analytics software Different types of data analytics software, define data analytics software. Explore its purpose. Understand its significance. Case studies with demonstrations of different analytics software.
Unit 08	Types of data analytics software – open source and proprietary software.: Identify key software types. Differentiate based on functionality. Explore user applications. Realtime case studies/ examples. Ethical uses of data analytics software.
Unit 09	Database definition, Types of structures: Introduction to Database General Database Architecture, Purpose and significance of database. Explore data organization. Differentiate hierarchical, network, and relational. Realtime applications of different types of structures.

Unit 10	Introduction to SQL, Features of SQL: Introduction to SQL, Features of SQL, SQL history. Explore basic SQL commands along with syntax and examples. Simple case study.
Unit 11	SQL Languages, DDL commands: Identify types of SQL. Differentiate between DDL, DML, and DCL Understand procedural extensions. Simple case study examples.
Unit 12	Business performance management cycle, KPI: Introduction to Business performance management cycle, KPI, define performance management. Understand key phases. General structure of KPI Explore continuous improvement processes. Basic Process to Identify essential KPIs. Understand KPI significance.
Unit 13	Dashboard Analytics in Business Support Functions: Introduction to Dashboard Analytics in Business Support Functions, Types of dashboard analytics. Understand data visualization. Explore real-time monitoring. Simple case study.
Unit 14	Sales & Marketing Analytics, HR Analytics, Financial Analytics.: Introduction to Sales & Marketing Analytics, HR Analytics, Financial Analytics, Analyse sales data. Explore marketing effectiveness. Understand customer insights. Assess employee performance. Understand recruitment analytics. Analyse financial performance. Explore budgeting and forecasting.

Textbooks:

- "Business Analytics: Data Analysis and Decision Making" by S. Christian Albright, Wayne L. Winston, and Christopher J. Zappe
- "Data Science for Business: What You Need to Know About Data Mining and Data-Analytic Thinking" by Foster Provost and Tom Fawcett
- "Business Analytics: The Science of Data-Driven Decision Making" by U Dinesh Kumar

Reference books:

- Business Analytics: Text and Cases, Tanushri Banerjee, Arvindram Banerjee, Publisher: Sage Publication
- Business Analytics, U Dinesh Kumar, Publication: Wiley

- Business Analytics, R. Evans James, Publisher: Pearson
- Fundamental of Business Analytics, Seema Acharya R N Prasad, Publisher: Wiley
- Business Analytics: Data Analysis and Decision Making, Albright and Winston published by Cengage Learning. Swain Scheps, Business Intelligence for Dummies.
- Rick Sherman, Business Intelligence Guidebook: From Data Integration to Analytics
- Cindi Howson, Successful Business Intelligence, Second Edition: Unlock the Value of BI & Big Data
- Seema Acharya R N Prasad, Fundamentals of Business Analytics, 2ed, Wiley

Semester: 4

Course Name: COST AND MANAGEMENT ACCOUNTING

Credits:4

Course Description:

The concepts in Cost and Management Accounting, including strategic cost management, costing systems, and decision-making tools. Topics include activity-based costing, variance analysis, and performance measurement. It emphasizes the strategic role of cost information in decision making and competitive advantage.

Course Objectives:

- Discuss types of costs (fixed, variable, direct, indirect) and cost behaviour.
- Describe skills in preparing budgets, forecasting, and planning to align with organizational goals.
- Illustrate methods for measuring and evaluating performance using financial and non-financial indicators.
- Integrate cost management with strategic planning to improve competitiveness and value creation.
- Emphasize the importance of ethical behaviour and professional standards in cost and management accounting practices.

Course Outcomes:

- Explain various costing methods to business scenarios.
- Analyse budgets for financial planning and control.
- Evaluate organizational performance using diverse metrics.
- Implement cost control measures to enhance efficiency and reduce waste.
- Apply cost management practices with business strategies for long-term success.

<u>Units</u>	<u>Syllabus</u>
Unit 1	Introduction to Cost Accounting Meaning& Definition of Cost, Costing and Cost Accounting, Objectives of Costing, Comparison between Financial Accounting and Cost Accounting, Designing and Installing a Cost Accounting System, Cost Concepts - Classification of Costs – Cost Unit – Cost Centre – Elements of Cost, practical problem on Preparation of Cost Sheet.
Unit 2	Cost Accounting System Designing and Installing a Cost Accounting System, Cost Concepts - Classification of Costs – Cost Unit – Cost Centre – Elements of Cost, practical problem on Preparation of Cost Sheet."
Unit 3	Introduction and Types of Material Meaning of Material Cost Control, Types: Direct Material, Indirect Material.
Unit 4	Material Control System Material Control –Purchasing Procedure, Store Keeping, Techniques of Inventory Control, Levels settings- EOQ, ABC Analysis, VED Analysis, Just In-Time, Perpetual, Inventory System, Documents used in Material Accounting
Unit 5	Pricing Methods in Material Issues Introduction to FIFO and LIFO, Simple problems on FIFO and LIFO
Unit 6	Introduction and Types of Labour Meaning of Labour Cost Control, Types: Direct Labour, Indirect Labour
Unit 7	Techniques of Labour Costing Timekeeping, Time booking, Idle Time – Overtime – Labour Turn Over
Unit 8	Methods of Labour Remuneration Time Rate System, Piece Rate System, Incentive Systems (Halsey plan & Rowan Plan)
Unit 9	Practical Problems on labour remuneration
Unit 10	Ratio Analysis Introduction-Meaning and Definition of Ratio, Meaning of Accounting ratio, and Ratio Analysis, Uses and Limitations
Unit 11	Classification of ratios Liquidity ratios, Profitability ratios and Solvency ratios.

Unit 12	Problems on conversion of financial statements into ratios and ratios into financial statements.
Unit 13	Concept of Budgetary Control Meaning and Definition of Budget and Budgetary Control, objectives of budgetary control, advantages and limitations of budgetary control, essentials of effective budgeting,
Unit 14	Types of Budgets Functional budgets, Master Budget, Fixed and Flexible Budget, Problems on Flexible budget and Cash Budget

Textbook

- T. Horngren, Srikant M. Datar, Madhav V. Rajan, Cost Accounting: A Managerial
- Emphasis. Pearson
- Anthony A. Atkinson, Robert S. Kaplan, Ella Mae Matsumura, S. Mark Young,
- Management Accounting: Information for Decision-Making and Strategy Execution" Pearson

Reference books

- Adolph Matz, Milton F. Usry Planning and Control", South-Western College Pub Edition: Latest Edition
- Shank Govindarajan "Strategic Cost Management: The New Tool for Competitive

Course Name: PRINCIPLES AND PRACTICES OF AUDITING**Credits:4****Course Description:**

Auditing typically refers to financial statement audits or an objective examination and evaluation of a company's financial statements – usually performed by an external third party. Audits can be performed by internal parties and a government entity, such as the Internal Revenue Service (IRS). This helps us understand the complexities of auditing in various industries and situations.

Course Objectives:

- Explore the principles and practices of contemporary auditing.
- Examine various auditing techniques and their relevance in practice.
- Highlight the role and significance of auditing in financial and regulatory contexts.
- Familiarize students with auditing standards and regulations.
- Emphasize professional ethics and the importance of auditor independence.

Course Outcomes:

- Demonstrate knowledge of auditing principles, concepts, and objectives.
- Identify and adhere to relevant auditing standards and regulations.
- Perform audit procedures to gather sufficient and appropriate evidence.
- Report audit findings, conclusions, and recommendations effectively.
- Prepare for professional certifications and careers in auditing.

<u>Units</u>	<u>Syllabus</u>
Unit 1	Introduction to Auditing Introduction Meaning - Definition – Objectives, Differences between Accountancy and Auditing – Types of Audit - Advantages of Auditing
Unit 2	New Audit Preparation before commencement of new Audit Audit Notebook – Audit Working Papers – Audit Program. Recent Trends in Auditing: Nature & Significance of Tax Audit – Cost Audit - Management Audit.

Unit 3	Internal Control Introduction - Internal Control, Meaning and objectives.
Unit 4	Internal Check Introduction Internal Check, Meaning, objectives and fundamental principles, Internal Check as regards: Wage Payments, Cash Sales, Cash Purchases, Internal Audit: Meaning - Advantages and Disadvantages of Internal Audit, Differences between Internal Check and Internal Audit
Unit 5	Vouching Introduction Vouching, Meaning - Definition – Importance, Routine Checking and Vouching
Unit 6	Voucher Types of Vouchers – Vouching of Receipts, Cash Sales, Receipts from debtors, Proceeds of the sale of Investments
Unit 7	Vouching of Payments Steps and considerations in vouching payments, Cash Purchases, Payment to Creditors, Deferred Revenue Expenditure.
Unit 8	Verification Introduction verification, Meaning and Objectives of verification, Key Aspects of Verification and Importance of Verification
Unit 9	Valuation Position of an Auditor as regards the Valuation of Assets, Verification and Valuation of different Items Assets: Land & Building, Plant & Machinery, Goodwill, Investments - Stock in Trade
Unit 10	Liabilities Bills Payable - Sundry Creditors, Contingent Liabilities.
Unit 11	Auditor Company Auditor, Appointment – Qualification, Powers - Duties and Liabilities Professional Ethics of an Auditor
Unit 12	Audit of Educational Institutions Key Areas Examined in an Educational Institution Audi, Benefits of Auditing Educational Institutions
Unit 13	Audit of Insurance Companies Audit of Insurance Companies, Objectives of Auditing Insurance Companies
Unit 14	Audit of Cooperative societies Objectives of Auditing Insurance Companies

Textbook:

- Dinkar Pagare - Principles and Practice of Auditing, Sultan Chand & Sons

Reference books:

- P N Reddy & Appannaiah, Auditing, Himalaya Publishing House
- R.G Sexena - Principles and Practice of Auditing, Himalaya Publishing House

Course Name: OPERATIONS RESEARCH

Credits:4

Course Description:

Operational Research (OR)/ Statistics for Business is a discipline to aid decision making and improving efficiency of the system by applying advanced analytical methods. As a formal discipline it originated in the efforts of military planners during World War II. The tools of Operational Research are not from any one discipline; rather Mathematics, Statistics, Information Technology, Economics, Engineering, etc. have contributed to this discipline of knowledge. Today, it has become a professional discipline that deals with the application of scientific methods for decision-making, and especially to the allocation of scarce resources. The courses in Operational Research offer a unique blend of traditional coursework, practical skills, and real-world problem-solving experience designed to position students for success in today's competitive world.

Course Objectives:

- Explore the basic concepts and scope of operations research and its interdisciplinary aspects.
- Formulate and solve optimization problems using linear programming techniques.
- Investigate assignment and transportation problems for efficient resource allocation.
- Utilize PERT and CPM techniques to optimize project scheduling and management.
- Develop models and solutions for decision-making problems using operations research methodologies.

Course Outcomes:

- Demonstrate knowledge of operations research concepts and its interdisciplinary nature.
- Solve optimization problems in business and industrial contexts using linear programming.
- Address assignment and transportation problems to allocate resources efficiently.

- Apply PERT and CPM techniques to manage and optimize project schedules.
- Design models and solutions for decision-making problems using operations research tools and techniques.

<u>Units</u>	<u>Syllabus</u>
Unit 1	Introduction to Operation Research Evolution of OR, Definitions of OR, Scope of OR, Applications of OR, Phases in OR study
Unit 2	Concept of OR Characteristics and limitations of OR, Modelling in OR
Unit 3	Introduction to Linear Programming History of OR, Meaning and Definition of LPP
Unit 4	Linear Programming Problem Advantages of LLP, Limitations of LPP, Application areas of LPP, Formulation of Linear Programming Problem
Unit 5	Methods of solving LPP Understanding the Format and Formulas of LPP, Solving LPP graphical method
Unit 6	Practical Problem Solving Solving LPP by Simplex method, Duality problems in Simplex
Unit 7	Introduction to Transportation Problem Understanding the Format and Formulas of LPP, Solving LPP graphical method
Unit 8	Basics of Transportation Problem Basic feasible solution using Northwest Corner Rule method, Matrix Minima method
Unit 9	Methods for Transportation Vogel's approximation method. Unbalanced transportation problem MODI method for finding Optimum solution for Transportation
Unit 10	Basics of Assignment Problem Meaning, Assumptions made in assignment problem, Steps in formulation of Assignment problem
Unit 11	Methods of Assignment Problem Hungarian method, Maximization problems, Restricted Assignment problem
Unit 12	Components of Network Analysis Phases of Project Management, Network Components, Project Evaluation and Review Technique (PERT)

Unit 13	Critical Path Method Critical Path 10 Method (CPM), Drawing the network activity times
Unit 14	Time Trade Off Event times, Critical path total and free slack-cost time trade off and Crashing

Textbook:

- Operations Research - Hamdy A. Taha, Pearsons Publication, 2017

Reference books

- Srivastava V. K et al Quantitative Techniques for Managerial Decision Making. Wiley

Eastern Ltd, 2011

- Richard, I Levin and Charles A. Kirkpatrick - Quantitative Approaches to Management, 2nd edition, 2018, McGraw Hill, Kogakusha Ltd
- Budnik. Frank S Dennis Mcleaaavey, Richard Mojena - Principles of Operation Research

subsequent edition, 1988, AIT BS New Delhi.

- Sharma JK - Operation Research- theory and applications-Mc Millan, 2012, New Delhi
- Kalavathy S Operation Research – 2020, Vikas Pub Co
- Naray J K. Operation Research, theory and applications – 2008, Mc Millan, New Dehi.
- Taha Hamdy, Operations Research, 2017, Prentice Hall of India
- Tulasian. Quantitative Techniques, 2002, Pearson Ed.
- Vohr.N.D. Quantitative Techniques in Management, 5th edition, 2017, TMH.
- Stevenson W.D, Introduction to Management Science, 2006, TMH.

Course Name: GENERAL PSYCHOLOGY

Credits:3

Course Description:

General Psychology is an introductory course that provides an overview of the scientific study of behaviour and mental processes. Students will explore key topics in psychology, including biological bases of behaviour, perception, learning, memory, motivation, emotion, development, personality, social psychology, and psychological disorders. Through lectures, readings, discussions, and interactive activities, students will gain an understanding of the principles, theories, and methodologies used in psychological research and their applications to everyday life.

Course Objectives:

- Explore fundamental concepts and theories of psychology.
- Describe the biological foundations of behaviour, including genetics, the brain, and the nervous system.
- Examine cognitive processes such as learning, memory, and thinking.
- Investigate human development across the lifespan, including physical and socioemotional aspects.

Course Outcomes:

- Demonstrate critical thinking skills in analysing psychological concepts and theories.
- Develop self-awareness and personal growth through the study of human behaviour.
- Cultivate an understanding of cultural diversity and its impact on psychological processes.
- Utilize psychological principles to explain behaviour and development across the lifespan.

<u>Units</u>	<u>Syllabus</u>
Unit 1	Introduction to Psychology, Overview & Historical Perspectives of Psychology, Levels of Explanation in Psychology, Research methods in psychology, The Challenges of Studying Psychology, Nervous system structure, Brain Structure Neurons and neurotransmitters Brain plasticity, Neuroplasticity

Unit 2	Sensation, & Perception Sensory processes, Vision, hearing, taste, smell, touch, Gestalt principles, Classical conditioning, Operant conditioning, Cognitive processes, Memory systems, Memory strategies
Unit 3	Developmental Psychology Introduction, Prenatal development, Infancy, Childhood, Adolescence, Adulthood Aging and cognitive changes
Unit 4	Personality Theories Psychodynamic theory (psychoanalytic theory), The Humanistic Theory of Personality, Trait Theory, Social Cognitive Theory of Personality, Assessment of Personality
Unit 5	Social cognition What is Social Cognition, Development of Social Cognition, Disorders That Impact Social Cognition
Unit 6	Social influence and persuasion Introduction & Understanding, Social Influence Determinants, Three Social Influence Areas Three Stages of Persuasion, Persuasion Theory, Persuasion Style
Unit 7	Group Dynamics Concept & Understanding, Types of Group Dynamics, Elements of Group Dynamics, Theory of Group Dynamics
Unit 8	Interpersonal relationships Definition, Concept & Understanding, Types of Interpersonal relationships, Phases of Interpersonal relationships, Challenges of Interpersonal relationships
Unit 9	Psychological disorders Definition, Concept & Understanding, Psychological disorders and classifications, Causes of psychological disorders, Treatments of psychological disorders
Unit 10	Mental health Concept & understanding, Mental health stigma, Risk factors for mental health Conditions, Types of Mental Health Disorders, Concept of mental health advocacy, Roles of different groups in advocacy Importance of mental health advocacy

Text book:

- "Psychology: Themes and Variations" by Wayne Weiten.

- "Psychology" by Sandra K. Ciccarelli and J. Noland White
- "Psychology: From Inquiry to Understanding" by Scott O. Lilienfeld, Steven J. Lynn,

Laura L. Namy, and Nancy J. Woolf

Reference books

- "APA Dictionary of Psychology"
- "Handbook of Psychology" (Volumes 1-12) edited by Irving B. Weiner
- "The Corsini Encyclopedia of Psychology and Behavioral Science" edited by W. Edward

Craighead and Charles B. Nemeroff

Course Name: FINTECH REGULATIONS AND SECURITY**Credits:4****Course Description:**

This course provides an in-depth analysis of the regulatory environment surrounding financial technologies (FinTech). Students will explore key regulatory frameworks, compliance challenges, and the impact of regulations on FinTech innovation. The course will also cover security measures taken to make it secure.

Course Objectives:

- Contextualize the regulatory environment governing FinTech operations.
- Examine the relationship between regulations and FinTech innovation.
- Explore strategies to address regulatory challenges and ensure compliance.
- Investigate emerging technologies driving advancements in FinTech.
- Assess principles and challenges in securing FinTech applications in commerce.

Course Outcomes:

- Explain key regulatory concepts within the FinTech industry.
- Evaluate the influence of regulations on FinTech innovation.
- Formulate strategies to navigate regulatory challenges effectively.
- Assess the role and implications of emerging technologies in FinTech.
- Identify security threats and evaluate solutions for FinTech applications in commerce.

<u>Units</u>	<u>Syllabus Details</u>
Unit 1	Definition and Meaning of FinTech Regulations What are FinTech regulations? Importance and role in the FinTech ecosystem.
Unit 2	Key Regulatory Bodies and Frameworks National and international regulatory bodies, Overview of key regulatory frameworks

Unit 3	Compliance Challenges and Opportunities Challenges faced by FinTech companies in compliance, Opportunities created by regulations for innovation.
Unit 4	Regulatory Approaches to Innovation Different regulatory approaches to fostering innovation, Examples of innovation-friendly regulations, How regulations shape competition in the FinTech market.
Unit 5	Regulatory Sandboxes Purpose and goals of regulatory sandbox programs in the financial sector, Scope and limitations of sandbox programs
Unit 6	Balancing Innovation with Compliance Tools and technologies to integrate compliance, The role of regulators in enabling innovation while maintaining oversight, Examples of effective partnerships between regulators and FinTech companies
Unit 7	Regulatory Implications of Open Banking and Cross-Border FinTech Benefits and challenges of open banking for consumers and FinTech providers, Regulatory fragmentation and its impact on cross-border services
Unit 8	Anti-Money Laundering (AML) Regulations Overview of AML laws and their impact on FinTech.
Unit 9	Know Your Customer (KYC) Requirements KYC regulations in FinTech, How KYC helps prevent fraud and enhance security.
Unit 10	Consumer Protection Regulations Consumer protection laws in financial technology, Cybersecurity requirements for FinTech companies, Regulatory issues specific to digital payments.
Unit 11	RegTech Solutions for Compliance Automation "Blockchain and distributed ledger technology, Artificial intelligence and machine learning applications, RegTech solutions for compliance automation," "Quantum computing implications for FinTech, Tokenization of assets and its impact on financial markets, Use of chatbots and virtual assistants in financial services."
Unit 12	FinTech security The Role and importance of security in FinTech, Common security threats in FinTech (e.g., cyberattacks, data breaches, fraud, insider threats), Security concerns specific to online banking, peer-to-peer lending, and digital currencies, Threats related to cloud computing, data storage, and mobile access.

Unit 13	Cybersecurity Principles Threat prevention and mitigation strategies in FinTech platforms, The role of data privacy in securing customer information.
Unit 14	Security Measures Key technologies used to secure financial transactions (e.g., encryption, tokenization, multi-factor authentication), The benefits and risks of AI in enhancing security in real-time transactions, The role of blockchain technology in securing financial transactions.

Textbook:

- "FinTech Regulation: A Guide to Navigating the Regulatory Landscape in the Digital Age" by Thomas Grant

Reference books:

- "RegTech and SupTech in Financial Markets: Regulatory Responses to FinTech" by Barbara Casu and Alessandro Roselli.
- "Regulating Blockchain: Technological Innovation and the Regulatory Environment" by Philipp Hacker and Ioannis Lianos

Course Name: SUPPLY CHAIN RISK MANAGEMENT

Credits:4

Course Description:

Understanding the vulnerabilities within supply chains is paramount in today's globalized and interconnected world. With the rise of globalization, consolidation, and the adoption of just-in time inventory practices, supply chains have become more complex and interconnected than ever before. This complexity introduces various risks such as disruptions in transportation, geopolitical issues, natural disasters, and even cybersecurity threats.

Course Objectives:

- Discuss the Fundamentals of Risk and Risk Management
- Develop Risk Identification and Analysis Skills
- Explore Risk Management Strategies
- Examine Stakeholder Impacts on Risk
- Build Resilient Supply Chains and Business Continuity Plans

Course Outcomes:

- Describe and Differentiate Key Concepts in Risk Management
- Apply Decision-Making Frameworks to Risk Scenarios
- Identify and Analyse Risks Using Advanced Tools
- Develop and Implement Effective Risk Responses
- Formulate Resilient Supply Chains and Business Continuity Plans.

<u>Units</u>	<u>Syllabus Details</u>
Unit 1	Introduction to Risk and Risk Management Definition of Risk and Management and Risk in Supply Chains, Growth of Risk Management, Features of Risk in Supply Chains

Unit 2	Decision-Making in Risk Types of Decisions in Risk (Certainty, Uncertainty, Ignorance), Structure of Decision-Making
Unit 3	Basics of Managing Risk Steps in Managing Risk, Development of Risk Management
Unit 4	Supply Chain Risk Management (SCRM) Aims of SCRM, Principles of SCRM
Unit 5	Inside Stakeholders and Risk Understanding Business Stakeholders, Inside Stakeholders and Risks
Unit 6	Outside Stakeholders and Risk How Outside Stakeholders Impact Risk
Unit 7	Risk Perspectives and Attitudes Objective vs. Subjective Elements of Risk, Individual Attitudes to Risk, Risk Aversion and Uncertainty
Unit 8	Types and Sources of Risks Overview of Different Types of Risks, Global Risks (World Economic Forum insights)
Unit 9	Identifying Risks Tools for Risk Identification, Problems with Risk Identification
Unit 10	Analysing Risks Tools for Analysing Past Events, Tools to Collect Opinions and Analyse Operations
Unit 11	Measuring and Evaluating Risks Likelihood and Consequences of Risks, Tools for Risk Analysis
Unit 12	Response to risks Responses to Risks and Alternative Responses, Mnemonics and Options for Risk Management
Unit 13	Integrating Risk Management Achieving an Integrated Approach in SCRM, Challenges in Integration and Levels of SCRM Integration
Unit 14	Creating resilient supply chains and BCM Principles and Features of Resilient Supply Chains, Business Continuity Management (BCM), Steps and Deliverables in BCM

Textbooks:

- Donald Waters, Supply Chain Risk Management – Vulnerability and resilience in logistics, Kogan Page,

Reference books

- Gregory L. Schlegel and Robert J. Trent, Supply Chain Risk Management – An Emerging Discipline, CRC Press, Latest Edition
- Omera Khan, George A Zsidisin, Handbook for Supply Chain Risk Management – Case Studies, Effective Practices and Emerging Trends, J.Ross Publishing, Latest Edition
- George A Zsidisin, Bob Ritchie Supply Chain Risk – A Handbook of Assessment, Management and Performance, Springer, Latest Edition

Course Name: PREDICTIVE ANALYTICS USING R

Credits:4

Course Description

This course introduces students to predictive analytics techniques using the R programming language. It focuses on leveraging statistical models, machine learning algorithms, and data visualization tools to make data-driven predictions and decisions. Students will gain hands-on experience in data preprocessing, exploratory data analysis, model building, and evaluation. The course emphasizes practical applications in various domains, empowering students to solve real-world problems and extract actionable insights from complex datasets using R.

Course Objectives:

- Explain R programming fundamentals, including setup and installation of R and R-Studio
- Describe proficiency in handling various data types and structures and performing data preparation tasks in R.
- Illustrate to install and use R libraries for enhanced data manipulation and analysis.
- Develop skills in data visualization using basic R graphing techniques and charts.
- Demonstrate exploratory data analysis and prediction modelling techniques, including inferential statistics and regression models.

Course Outcomes:

- Discuss the process for setting up R and R-Studio, including downloading and installing the software.
- Prepare the different data types and structures in R and how to perform data preparation tasks such as merging and sorting datasets.
- Analyse R libraries to extend R's functionality for data manipulation and analysis tasks.
- Differentiate between various R graphing techniques and choose appropriate charts for effective data visualization.
- Administer the effectiveness of exploratory data analysis techniques and prediction models, including regression models, in uncovering insights and making predictions from data.

<u>Units</u>	<u>Syllabus</u>
Unit 1	Introduction to R and Installing R Downloading the R software and the step-by-step installation process for R.
Unit 2	R Environment and R-Studio Setup Overview of the R environment and the installation process of R-Studio.
Unit 3	Understanding R-Studio Environment and Data Types Introduction to the R-Studio environment, along with an explanation of data types and structures in R.
Unit 4	Data Preparation in R Merging, sorting, splitting, and aggregating data in R.
Unit 5	Introduction to R Libraries and Graphing Installing and invoking R libraries, creating basic graphs, and using different types of charts.
Unit 6	Working with Lists Creating and modifying lists in R and concatenating lists.
Unit 7	Data Frames in R Introduction to data frames and how to create and manage them.
Unit 8	Data Frame Operations Using functions such as attach () and detach() with data frames, working with arbitrary lists, and managing the search path.
Unit 9	Basic File Reading Functions Using functions like read. Table() and scan() to read files and accessing built-in datasets in R.
Unit 10	Importing External Data Loading data from other R packages and importing data from CSV and Excel files.
Unit 11	Editing Data in R Methods for editing data once it is imported into R.
Unit 12	Exploratory Data Analysis (EDA) Using summary and descriptive tables for data exploration, along with generating and interpreting various charts.
Unit 13	Inferential Statistics in R Performing inferential statistical Analyses in R, including T-tests, ANOVA, and Chi-Square tests.
Unit 14	Prediction and Classification Modelling Using R Introduction to prediction and classification modelling, data splitting for training and testing, and prediction

	modelling using the Moving Average Model and regression models, including simple and multiple regression.
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Textbook:

- R for Data Science, Hadley Wickham, 1st edition, 2017 , O'Reilly publication.
- The Book of R, Tilman M. Davies, 1st edition, 2016, No Starch Press
- R For Dummies, Andrie de Vries, 2nd edition, 2016, John Wiley & Sons
- Discovering Statistics Using R, Andy Field, 1st edition, 2012, SAGE Publications Lt
- The Art of R Programming, Norman Matloff, 1st edition, 2011, No Starch

Reference books:

- "Machine Learning with R: Expert Techniques for Predictive Modeling" by Brett Lantz
- "R for Data Science" by Hadley Wickham and Garrett Golemund
- "Applied Predictive Modeling" by Max Kuhn and Kjell Johnson

Course Name: ENTREPRENEURSHIP IN FINTECH

Credits:4

Course Description:

This course explores the intersection of entrepreneurship and financial technology (FinTech), focusing on innovation, business models, and strategies within the FinTech ecosystem. Students will learn how to identify opportunities, develop scalable solutions, and navigate challenges unique to the FinTech industry. The course covers emerging technologies, regulatory considerations, and strategies for funding and growth in FinTech startups. Through case studies and hands-on projects, students will gain insights into launching and managing successful FinTech ventures.

Course Objectives:

- Cite the concept of FinTech and its evolution.
- Identify opportunities in the FinTech sector and develop innovative business models.
- Relate the regulatory environment and compliance requirements for FinTech startups.
- Explore marketing, funding, and scaling strategies specific to FinTech ventures.
- Analyse ethical considerations and exit strategies in the FinTech industry.

Course Outcomes:

- Define FinTech and explain its historical context and evolution.
- Identify market opportunities in the FinTech sector and develop a viable business model.
- Apply agile development methodologies and compliance best practices in FinTech product development.
- Develop marketing, funding, and scaling strategies for FinTech startups.
- Evaluate ethical considerations and exit options in the FinTech industry.

Units	<u>Syllabus</u>
Unit 1	Introduction to FinTech Definition of FinTech, its scope, and how it differs from traditional financial services. Overview of the FinTech ecosystem, including its participants and technological underpinnings.
Unit 2	Historical Evolution of the FinTech Industry Examination of the historical context of FinTech, tracing its roots, key developments, and the transformation of financial services through technology.
Unit 3	Key Drivers and Trends in the FinTech Landscape Identification of the technological, regulatory, and consumer behaviour trends shaping FinTech. Analysis of factors like mobile banking, blockchain, AI, and open banking driving the industry forward.
Unit 4	Case Studies of Successful FinTech Startups Analysis of notable FinTech startups, their business models, market impact, and the challenges they overcame to achieve success.
Unit 5	Opportunities and Challenges in FinTech Entrepreneurship Exploration of the opportunities in FinTech, such as underserved markets and technological advancements, along with challenges like competition, regulation, and consumer trust.
Unit 6	Market Segmentation in Financial Services Detailed analysis of market segmentation, identifying customer pain points, unmet needs, and key opportunities in different financial service sectors.
Unit 7	Developing Customer Personas and User Stories Creation of customer personas and user stories to understand target audiences, their needs, and their behaviours in financial services.
Unit 8	Business Model and Value Proposition Development Application of the business model canvas and value proposition canvas to structure and refine FinTech business models.

Unit 9	Experimentation and Validation Techniques Focus on experimentation techniques such as customer interviews, MVP testing, and feedback loops to validate business ideas and market fit.
Unit 10	Agile Development and Iterative Design Processes Introduction to agile methodologies for FinTech product development, including prototyping, iterative design, and rapid deployment strategies.
Unit 11	Regulatory Frameworks and Compliance Understanding the regulatory environment for FinTech, including banking, payments, and securities regulations, and exploring compliance best practices and sandbox programs.
Unit 12	Marketing Strategies for FinTech Startups Strategies for brand positioning, differentiation, and content marketing. Exploration of thought leadership and building credibility in the FinTech industry.
Unit 13	Fundraising and Financial Management Discussion of fundraising strategies and sources of capital such as angel investors, venture capital, and crowdfunding. Basics of financial forecasting and budgeting for startup growth.
Unit 14	Growth, Ethics, and Exit Strategies Managing hypergrowth, maintaining company culture, international expansion, ethical considerations in FinTech, and exploring exit options such as acquisitions and IPOs.

Textbook:

- FinTech Innovation: From Robo-Advisors to Goal-Based Investing and Gamification & quote; by Paolo Sironi (Edition: 1st Edition)

Reference books:

- The FinTech Book: The Financial Technology Handbook for Investors, Entrepreneurs, and Visionaries & quote; by Susanne Chishti and Janos Barberis (Edition: 1st Edition)
- FinTech For Dummies & quote; by Antti Ilmanen and Jyri Helenius (Edition: 1st Edition)

- The Age of Cryptocurrency: How Bitcoin and the Blockchain Are Challenging the
- Global Economic Order & quot; by Paul Vigna and Michael J. Casey (Edition: Reprint)

Course Name: SUPPLY CHAIN MODELING AND MANAGEMENT

Credits:4

Course Description:

This course provides an in-depth exploration of supply chain modelling techniques and their application in managing complex supply chain systems. Students will learn various modelling approaches, optimization techniques, and decision-making frameworks to design, Analyse, and improve supply chain operations.

Course Objectives:

- Explore the fundamental concepts of supply chain management and its significance in contemporary business environments.
- Learn different modelling techniques used in supply chain analysis and optimization.
- Develop skills in applying optimization tools to solve supply chain problems.
- Analyse real-world supply chain case studies and apply modelling techniques to improve efficiency and effectiveness.
- Explore emerging trends and technologies in supply chain management.

Course Outcomes:

- Demonstrate an understanding of supply chain management concepts and their role in modern business environments.
- Utilize modelling techniques to optimize supply chain performance and resource allocation.
- Solve supply chain problems effectively using appropriate optimization tools and strategies.
- Evaluate real-world supply chain scenarios to recommend efficiency and effectiveness improvements.
- Assess the impact of emerging trends and technologies on supply chain operations and decision-making.

<u>Units</u>	<u>Syllabus</u>
Unit 1	Introduction to Supply Chain Management Definition and scope of supply chain management, key components and flows in a supply chain, challenges and opportunities in supply chain management.
Unit 2	Supply Chain Modelling Fundamentals Role of modelling in supply chain management, types of supply chain models such as deterministic and stochastic, and data requirements and collection techniques.
Unit 3	Facility Location and Capacity Allocation Facility location and capacity allocation, network design models including transportation and distribution, and multi-echelon inventory optimization.
Unit 4	Network Design Models Network design models such as transportation and distribution, and multi-echelon inventory optimization.
Unit 5	Forecasting Methods and Techniques Forecasting methods and techniques, inventory control policies such as EOQ and JIT, and the bullwhip effect along with its mitigation strategies.
Unit 6	Inventory Control Policies Inventory control policies such as EOQ and JIT, and the bullwhip effect along with its mitigation strategies
Unit 7	Identification and Assessment of Supply Chain Risks Identification and assessment of supply chain risks, strategies for managing supply chain disruptions, resilience planning, and risk mitigation techniques.
Unit 8	Strategies for Managing Supply Chain Disruptions Strategies for managing supply chain disruptions, resilience planning, and risk mitigation techniques.
Unit 9	Triple Bottom Line Approach to Sustainability The triple bottom line approach to sustainability, green supply chain practices and initiatives, and life cycle assessment and eco-design principles.
Unit 10	Green Supply Chain Practices Green supply chain practices and initiatives, and life cycle assessment and eco-design principles.

Unit 11	Simulation Modelling for Supply Chain Analysis Simulation modelling for supply chain analysis, game theory applications in supply chain management, and the use of blockchain and IoT in supply chain optimization.
Unit 12	Game Theory Applications in Supply Chain Management Game theory applications in supply chain management, and the use of blockchain and IoT in supply chain optimization.
Unit 13	Blockchain in Supply Chain Optimization The use of blockchain in supply chain optimization.
Unit 14	IoT in Supply Chain Optimization The use of IoT in supply chain optimization.

Textbook:

- "Supply Chain Management: Strategy, Planning, and Operation" by Sunil Chopra and Peter Meindl.
- "Operations and Supply Chain Management" by F. Robert Jacobs and Richard B. Chase
- "Supply Chain Logistics Management" by Donald J. Bowersox, David J. Closs, and M. Bixby Cooper

Reference Books:

- "Designing and Managing the Supply Chain" by David Simchi-Levi, Philip Kaminsky, and Edith Simchi-Levi
- "Supply Chain Management: Strategy, Planning, and Operation" by Sunil Chopra and Peter Meindl
- "Introduction to Operations and Supply Chain Management" by Cecil C. Bozarth and Robert B. Handfield

Course Name: FUNDAMENTALS OF ARTIFICIAL INTELLIGENCE PYTHON

Credits:4

Course Description:

This course gives students the opportunity to develop their skills and knowledge in the application of appropriate statistical analytical tools in accordance with the structure of data, including quantitative data (cross-sectional, time series, and panel data), as well as qualitative data in social science research. In addition, the students can learn about the various statistical models that are available in each software, and they are able to have the ability to apply relevant tools in order to accomplish the goals of the study.

Course Objectives

- Explain Python programming, including setting up the environment and writing basic Python programs.
- Familiarize Python data types, data structures, and basic operations, including arithmetic and string manipulations.
- Discuss control structures, object-oriented programming (OOP) concepts, and functions in Python for effective code management and problem-solving.
- Explore essential libraries such as NumPy and Pandas for data manipulation, analysis, and visualization.
- Summarize foundational knowledge of machine learning, with a focus on linear regression and its application in data analysis.

Course Outcomes

- Discuss basic Python programs and use essential Python data types and operations.
- Analyse data structures such as lists, tuples, sets, and dictionaries, performing necessary operations in Python.
- Implement control structures, functions, and object-oriented programming principles to design efficient solutions.
- Use NumPy and Pandas to manipulate, Analyse, and visualize data, including importing

datasets and performing exploratory data analysis.

- Apply machine learning techniques, particularly linear regression, to real-world data and interpret regression results.

<u>Units</u>	<u>Syllabus Details</u>
Unit 1	Introduction to Python Programming Python overview and features, setting up the Python environment, and writing your first Python program.
Unit 2	Data Types and Operations Understanding data types in Python and performing arithmetic and string operations
Unit 3	Introduction to Data Structures Working with tuples, lists, sets, and dictionaries, along with operations on these data structures
Unit 4	Control Structures and OOP in Python Decision-making structures such as if and if-else statements, looping using for and while loops, and control flow statements like break, continue, and pass.
Unit 5	Functions in Python Defining, calling, and using functions, understanding function parameters and return values, and exploring recursion.
Unit 6	Functions in Python Defining, calling, and using functions, understanding function parameters and return values, and exploring recursion.
Unit 7	NumPy Operations Creating NumPy arrays, converting lists and tuples to NumPy arrays, inspecting the structure and content of arrays, and performing sub setting, slicing, indexing, and iterating through arrays.
Unit 8	NumPy and Pandas Creating data frames, importing CSV data files as Pandas data frames, reading and summarizing data frames, sorting data frames, labelling, indexing, and slicing data, merging data frames using joins, and performing pivoting and grouping.
Unit 9	Data Visualization and Exploratory Data Analysis Introduction to data visualization libraries such as Matplotlib and Seaborn.
Unit 10	Creating and Plotting Graphs Creating graphs, plotting graphs, and working with different chart types.

Unit 11	Modification of Charts Modifying charts for better understanding and presenting charts effectively.
Unit 12	Exploratory Data Analysis Data sourcing, data cleaning, univariate analysis, and bivariate and multivariate analysis.
Unit 13	Introduction to Machine Learning Foundations of machine learning, an introduction to supervised learning methods, and unsupervised learning methods.
Unit 14	Linear Regression and Analysis The linear regression model with one independent and one dependent variable, understanding residuals, residual sum of squares (RSS), and R^2 (R-squared), and working with multiple independent variables and one dependent variable.

Textbook:

- Downey, A. (2015). Think Python: How to Think Like a Computer Scientist (2nd ed.). O'Reilly Media.
- Lutz, M. (2013). Learning Python (5th ed.). O'Reilly Media.
- Official Python Documentation: <https://docs.python.org/>
- Kenneth A. Lambert, (2011), “The Fundamentals of Python: First Programs”

Reference books:

- Gowri shanker and Veena, “Introduction to Python Programming”, CRC Press, 2019.
- Python Crash Course, 2nd Edition, By Eric Matthes, May 2019
- NumPy Essentials, By Leo Chin and Tanmay Dutta, April 2016
- Joel Grus, “Data Science from scratch”, O'Reilly, 2015
- Wes Mc Kinney, “Python for Data Analysis”, O'Reilly Media, 2012.
- Jake Vanderplas. Python Data Science Handbook: Essential Tools for Working

Semester: 5

Course Name: DIRECT TAXATION

Credits:4

Course Description:

This course provides a comprehensive understanding of the principles and practices of direct taxation as per the provisions of the Income Tax Act, 1961. It covers various aspects including residential status determination, computation of taxable income under different heads, allowances, perquisites, deductions, and tax compliance procedures. Practical examples and case studies are utilized to facilitate better comprehension of the concepts.

Course Objectives:

- Discuss the provisions of the Income Tax Act, 1961 with regards to the concept of Income, assesses, person, residential status, and incidence of tax.
- Examine the provisions and procedures relating to the computation of income from salary
- Evaluate the process to compute the Income from House property.
- Examine the admissible and inadmissible items in determining profit and gains from business or profession
- Analyse provisions for computing capital gains, income from other sources

Course Outcomes:

- Exemplify the concepts of Assessment year, previous year, Income, assesses, and person, and determine the Residential status and incidence of tax.
- Calculate the taxable income from salary.
- Compute the taxable income under the House property.
- Analyse the taxable profits and gains from Business or Profession.
- Appraise capital gains, Income from other sources and procedure for setting of losses

<u>Units</u>	<u>Syllabus Details</u>
Unit 1	<p>Introduction to Direct Tax Direct tax refers to the tax that is directly levied on the income or wealth of individuals or organizations. It contrasts with indirect tax, which is collected from the buyer of goods and services. Direct tax includes taxes like income tax and corporate tax, where the burden of tax falls directly on the individual or entity that earns the income.</p>
Unit 2	<p>Direct Tax vs. Indirect Tax Direct taxes are paid directly to the government by the individual or entity on whom it is imposed. In contrast, indirect taxes are collected by an intermediary (like a retailer) from the person who bears the ultimate economic burden of the tax (like the consumer). Examples of indirect taxes include Goods and Services Tax (GST), sales tax, and VAT.</p>
Unit 3	<p>Definitions under IT Act 1961</p> <p>The Income Tax Act of 1961 defines various terms critical to understanding tax legislation. Important definitions include:</p> <ul style="list-style-type: none"> • Assessment Year: The period of 12 months starting from April 1st to March 31st of the following year, during which income earned in the previous year is assessed. • Previous Year: The financial year immediately preceding the assessment year. • Person: Defined to include individuals, Hindu undivided families (HUF), companies, firms, associations of persons (AOP), and any artificial juridical person.
Unit 4	<p>Assessment Year and Previous Year</p> <p>The assessment year is the year in which the income earned in the previous year is assessed for tax purposes. The previous year refers to the financial year in which the income was actually earned. Exemptions to this general rule include special cases such as newly established businesses or entities under liquidation.</p>

Unit 5	<p>Person and Assessee The term 'person' in the context of the Income Tax Act includes individuals, HUF, companies, firms, and other entities. An assessee is any person who is liable to pay any tax or any other sum of money under the Act. This definition also includes every person in respect of whom any proceeding under the Act has been initiated.</p>
Unit 6	<p>Income and Heads of Income</p> <p>Income includes earnings from various sources such as salaries, house property, business or profession, capital gains, and other sources. The heads of income classify income under these five broad categories to simplify assessment and taxation.</p>
Unit 7	<p>Gross Total Income and Taxable Income</p> <p>Gross total income is the aggregate income computed under various heads before applying any deductions. Taxable income is the income on which tax is calculated after considering permissible deductions under sections like 80C, 80D, etc.</p>
Unit 8	<p>Tax Rates (Old and New Regimes)</p> <p>Taxpayers can choose between the old tax regime with deductions and exemptions, or the new tax regime with lower tax rates but no deductions or exemptions. Each regime has its own tax slabs and rates, and the choice depends on the taxpayer's financial situation.</p>
Unit 9	<p>Permanent Account Number (PAN)</p> <p>PAN is a unique 10-character alphanumeric identifier issued to taxpayers in India. It is essential for all financial transactions and for tracking taxable income. PAN helps in preventing tax evasion and ensures compliance with tax laws.</p>
Unit 10	<p>Residential Status for Individuals</p> <p>The residential status of an individual is crucial in determining their tax liability. It is based on the duration of stay in India and includes categories like Resident, Resident but Not Ordinarily Resident (RNOR), and Non-Resident. The status affects the scope of taxable income in India.</p>

Unit 11	<p>Problems on Incidence of Tax</p> <p>Understanding the incidence of tax involves identifying who ultimately bears the economic burden of a tax. This unit covers various scenarios and problems to illustrate how tax incidence impacts different entities.</p>
Unit 12	<p>Income Exempt from Tax</p> <p>Certain types of income are exempt from tax under the Income Tax Act. These include agricultural income, certain allowances for government employees, and income from specific savings instruments like the Public Provident Fund (PPF).</p>
Unit 13	<p>Common Exemptions and Deductions</p> <p>This unit covers common exemptions and deductions available to taxpayers, such as those under sections 80C (investments in specified instruments), 80D (medical insurance premiums), and 24(b) (interest on home loans).</p>
Unit 14	<p>Case Studies and Practical Examples</p> <p>Practical examples and case studies help illustrate the application of tax laws. This unit provides real-world scenarios to show how various tax provisions are implemented and how taxpayers can optimize their tax liabilities.</p>

Textbooks:

- Income Tax 7 Lectures: Assessment Year 2023-24, by Rg Saha, Usha Devi N, Bg Bhaskara(Author),Vision Book House (Publisher).
- Concept Building Approach to Income Tax Law and Practice Assessment Year 2022-23, 4th Edition ISBN: 9789355730992

Reference books :

- Taxmann's Direct Taxes Law & Practice -With special reference to Tax Planning (As amended by Finance Act 2022) by Dr. Kapil Singhania, Dr. Vinod K Singhania, 68th

Edition, published April 2023.

- Taxmann's Students' Guide to Income Tax-University Edition- Nov 2022
by Dr. Vinod K. Singhania, Dr. Monica Singhan

Course Name: DIGITAL ACCOUNTING

Credits:3

Course Description:

This course explores the integration of digital tools and technologies into the accounting process. Students will learn how to use accounting software and digital platforms to automate routine tasks, manage financial data, and enhance decision-making. The course covers topics such as cloud accounting, digital invoicing, e-payments, data security, and the role of artificial intelligence in modern accounting practices. Through practical applications and case studies, students will gain the skills necessary to adapt to the evolving digital landscape of accounting, improving efficiency and accuracy in financial reporting and analysis.

Course Objectives:

- Equip participants with advanced Excel skills for financial modelling and analysis.
- Develop expertise in analysing and forecasting financial statements.
- Discuss practical problem-solving using tax, dividend, and statistical models.

Course Outcome:

- Illustrate Excel tools for financial modelling and decision-making.
- Analyse and forecast financial data to support strategic planning.
- Apply advanced financial models to solve real-world business challenges.

Unit	Content
1	Excel Commands – Basic & Advanced: Introduction to Excel; essential formulas and functions; advanced tools like VLOOKUP, HLOOKUP, INDEX, MATCH; conditional formatting; pivot tables; macros and VBA introduction.
2	Time Value of Money: Understanding present value, future value, annuities, perpetuities; discounting and compounding techniques; applications in loan amortization, bond valuation, and investments.

3	Analysis of Financial Statements Using Excel: Ratio analysis; trend analysis; horizontal and vertical analysis; benchmarking financial performance using Excel tools.
4	Forecasting Financial Statements Based on Assumptions: Building projections; revenue growth modelling; linking Income Statement, Balance Sheet, and Cash Flow; scenario analysis.
5	Forecasting of Cash Flow Statement: Cash flow preparation (direct and indirect methods); forecasting operational, investing, and financing activities; linking cash flows to other statements.
6	Preparation of Master Budgets: Functional budgets (sales, production, materials, overheads); integration and consolidation of budgets into master budgets for financial planning.
7	Valuation of Firms and Equity Using Excel: DCF method; FCFF and FCFE calculations; terminal value and sensitivity analysis; valuation using relative multiples (P/E, EV/EBITDA).
8	Tax Models Using Excel: Creating models for individual and corporate tax computations; automating tax calculations with exemptions, deductions, and dynamic updates.
9	Dividend Models, Aging Analysis, and Statistical Models: Dividend Discount Models (DDM); accounts receivable and payable aging schedules; trend analysis and regression techniques for forecasting.
10	Advanced Financial Modelling Applications: Integrated financial models; scenario and sensitivity analysis; dynamic dashboards for reporting; error-checking and audit techniques in Excel.

Text Books:

- Simon Benning. Financial Modelling.

Reference Books:

- Michael Kleen. Financial Modeling
- Michael Rees. Financial Modelling
- Chandan. Financial Modeling using EXCEL and VBA

Course Name: RESEARCH METHODOLOGY

Credits:4

Course Description:

This course introduces the principles and processes of research, equipping students with the skills to design, conduct, and evaluate research studies effectively. It covers key concepts such as research design, data collection methods, sampling techniques, hypothesis formulation, and data analysis. Emphasis is placed on both qualitative and quantitative research approaches, ensuring a balanced understanding of methodologies. Through practical examples and case studies, students will learn to apply research tools and techniques to solve real-world problems. This course is essential for developing critical thinking and analytical skills for academic and professional research.

Course Objectives:

- Explain the concepts, tools and terminologies used in research world
- Demonstrate methods best suited for investigating different types of problems and questions;
- Develop research design and analysis the results to provide suggestions based on research findings.
- Discover hands on experience on different tools used in research;
- Outline interpretations for tools used and write reports.

Course Outcomes:

- Apply different methods of research
- Identify research gap and to formulate based on selected research problem.
- Design a research design and Analyse the results to provide suggestions based on research findings.
- Explain statistical data to support fact-based decision making.
- Predict independent thinking for critically analysing research reports.

<u>Units</u>	<u>Syllabus</u>
Unit 1	Understanding Research Meaning of research, objectives of research, criteria for a good research, types of research.
Unit 2	Research Methodology Fundamentals Research methods vs. research methodology, steps in the research process, business research: nature and scope, significance of research in decision-making.
Unit 3	Defining the Research Problem Meaning of research problem, identification of research problem, sources of research problem, importance of a well-defined research problem.
Unit 4	Literature Review and Objectives Review of literature: concept, statement of the problem: concept, objectives of the study: concept, research questions: definition and understanding, types of research questions.
Unit 5	Overview of Research Design Meaning and need for research design, features of a good research design, concept relating to research design, importance of effective research design, types of research design.
Unit 6	Sampling Techniques Meaning of sampling, steps in sampling, probability sampling methods, non-probability sampling methods.
Unit 7	Introduction to Data & Data Collection Data collection: understanding and concept, significance of data collection, types of data: primary vs. secondary.
Unit 8	Primary & Secondary Data Primary data: definition and concept, sources of primary data, secondary data: definition and concept, sources of secondary data.
Unit 9	Data Collection Methods Collection of primary data: methods, collection of secondary data: methods.
Unit 10	Data Tabulation Tabulation of data: concept and understanding, approaches to data tabulation, types of data tabulation, importance of data tabulation in analysis.

Unit 11	Data Analysis in Research Data analysis in research: concept and understanding, importance and significance of data analysis, statistical methods for data analysis (theory).
Unit 12	Data Interpretation Understanding data interpretation, techniques of interpretation in research, role of statistical tools in research analysis.
Unit 13	Research Report Writing Significance of report writing, steps in writing a research report, layout of a research report, types of research reports and their uses.
Unit 14	Precautions and Best Practices Precautions while writing research reports, ethical considerations in research reporting, common pitfalls in research reporting, tips for effective communication in research.

Textbooks:

- Cooper, D., & Schindler, P. (2009). Business research methods (4th ed.). New Delhi: Tata McGraw Hill Publications
- Krishna Swamy, O.R. (1993). Research Methodology. New Delhi: Himalaya Publishing House.
- Kothari, C.R. (2004). Research Methodology (2nd Ed). New Age.
- Michael V.P. (2004). Research Methodology in Management. New Delhi: Himalaya Publishing House

Reference books :

- Sadhu & Singh Amarjit. (1983). Research Methodology in Social Science. New Delhi: Himalaya Publishing House
- Wilkinson and Bhandarkar. (2003). Methodology and Techniques of Social Research. New Delhi: Himalaya Publishing House
- William Trochim.(2003). Research Methods. Biztantra

- Priti R Majhi & Prafull K Khatua (2015). Research Methodology. New Delhi: Himalaya Publishing House
- Bell, E., Bryman, A., & Harley, B. (2018). Business research methods. Oxford university press.
- Zikmund, W. G., Babin, B. J., Carr, J. C., & Griffin, M. (2003). Business research methods 7th ed. Thomson/South-Western: Appendices. Field, A. (2016). Discovering statistics using IBM SPSS statistics. Sage

Course Name: START-UP MANAGEMENT**Credits:1****Course Description:**

This course provides a comprehensive understanding of the key concepts, strategies, and challenges involved in managing a start-up. Students will explore topics such as identifying business opportunities, developing business plans, securing funding, and scaling operations. The course also covers aspects of innovation, entrepreneurship, marketing, and financial management tailored to the needs of start-up ventures. Through case studies and practical examples, students will learn how to navigate the dynamic start-up environment and build sustainable businesses. By the end of the course, learners will have the skills to launch and manage a successful start-up in a competitive market.

Course Objectives:

- Infer the resources, requirements, and financial issues involved in starting and scaling a business.
- Examine the stages of a start-up and learn the techniques required for business survival and growth.

Course Outcomes

- Develop a start-up enterprise by generating innovative ideas and analyzing capital requirements.
- Assess the growth stages of a new venture and evaluate its financial stability for expansion.

<u>Units</u>	<u>Syllabus</u>
Unit 1	Startup Opportunities and the Entrepreneurial Ecosystem The New Industrial Revolution and the Rise of the Startup Economy. The Six Forces of Change and the Startup Equation. Understanding the Entrepreneurial Ecosystem. Entrepreneurship in India and Government Initiatives.

Unit 2	Startup Capital and Resource Requirements Identifying and Estimating Startup Capital and Cash Requirements. Developing Financial Assumptions. Constructing a Process Map for Startup Development. Positioning the Venture in the Value Chain.
Unit 3	Support Institutions and Financing for Entrepreneurs Entrepreneurship Development Programmes (EDPs): Phases and Evaluation. Institutional Finance: Role of Commercial Banks and Other Major Financial Institutions. Funding Strategies for Startups: Bootstrapping, Crowdfunding, and Strategic Alliances.
Unit 4	Growth and Financial Management in New Ventures Stages of Growth in a New Venture: Growing with the Market and within the Industry. Venture Life Patterns and Reasons for New Venture Failures. The Cost and Process of Raising Capital for High-Tech Ventures. Scaling Ventures and Managing Unique Funding Issues.

Textbook :

- “Startup Management”, K. Swapna, J.S. Moses, Y.Sarada, Himalaya Publishing House, First Edition, 2019
- Kathleen R Allen, Launching New Ventures, An Entrepreneurial Approach, Cengage Learning, 2016.

Reference books :

- S. R. Bhowmik & M. Bhowmik, Entrepreneurship, New Age International, 2007.
- Steven Fisher, Ja-nae’ Duane, The Startup Equation -A Visual Guidebook for Building Your Startup, Indian Edition, Mc Graw Hill Education India Pvt. Ltd, 2016.

Course Name: TRENDS IN FINANCIAL TECHNOLOGIES

Credits:4

Course Description:

This course explores the latest trends and developments in financial technologies (FinTech) and their impact on the financial industry. Students will learn about cutting-edge technologies such as blockchain, artificial intelligence (AI), big data analytics, and their applications in banking, investment, insurance, and other financial services.

Course Objectives:

- Explore the key concepts and technologies driving innovation in FinTech.
- Analyse the impact of FinTech on traditional financial services and business models.
- Explore emerging trends and future directions in FinTech.
- Evaluate the opportunities and challenges of implementing FinTech solutions.
- Develop critical thinking and problem-solving skills through case studies and projects.

Course Outcomes:

- Identify and explain key trends and technologies in FinTech.
- Analyse the impact of FinTech on financial services and markets.
- Evaluate the potential of FinTech to disrupt traditional business models.
- Develop innovative solutions using FinTech concepts and technologies.
- Communicate effectively about FinTech concepts and their implications.

<u>Units</u>	<u>Syllabus Details</u>
Unit 1	Introduction to FinTech Definition and scope of FinTech Evolution of FinTech Key drivers of FinTech innovation FinTech ecosystems and stakeholders Impact of FinTech on traditional banking models.
Unit 2	Technologies Driving FinTech Blockchain and distributed ledger technology Artificial intelligence and machine learning Big data analytics and predictive modelling Internet of Things (IoT) in FinTech Cloud computing in financial services
Unit 3	Applications of FinTech Digital payments and mobile wallets Peer-to-peer lending and crowdfunding Robo-advisors and algorithmic trading Insurtech innovations RegTech solutions for compliance
Unit 4	Regulatory Environment Regulatory challenges and opportunities in FinTech Regulatory sandboxes and innovation hubs Compliance and risk management in FinTech Data privacy and cybersecurity regulations Cross-border regulatory issues in FinTech
Unit 5	Future Trends in FinTech Emerging trends in FinTech Impact of quantum computing and 5G Ethical and societal implications of FinTech Decentralized finance (DeFi) trends Green FinTech and sustainable finance initiatives
Unit 6	Digital Banking Evolution History and evolution of digital banking Types of digital banks and services offered The role of digital banking in financial inclusion The impact of digital banking on customer experiences The future of digital banking
Unit 7	Payments and Settlement Systems Overview of payment systems in the digital age Real-time payments and instant settlement Cross-border payments and remittance services The role of FinTech in reducing payment friction Innovations in payment systems (e.g., cryptocurrencies, stablecoins)
Unit 8	Financial Inclusion and FinTech The concept of financial inclusion and its importance How FinTech contributes to financial inclusion The role of mobile

	banking in developing markets Case studies on financial inclusion using FinTech Challenges and opportunities in achieving financial inclusion
Unit 9	Cryptocurrencies and Blockchain Introduction to cryptocurrencies (Bitcoin, Ethereum, etc.) Blockchain technology and its implications for finance The role of smart contracts in decentralized applications Regulatory landscape for cryptocurrencies The future of cryptocurrency in mainstream finance
Unit 10	InsurTech Innovations The emergence of InsurTech and its impact on traditional insurance models Digital insurance platforms and their advantages Use of AI and big data in insurance The role of blockchain in insurance claims and fraud prevention Challenges faced by InsurTech companies
Unit 11	FinTech and Artificial Intelligence AI applications in financial services Machine learning for predictive analytics in finance Robo-advisory and AI in portfolio management AI-driven fraud detection and risk assessment Future possibilities of AI in FinTech
Unit 12	FinTech in Emerging Markets The role of FinTech in emerging economies Mobile money and its impact on financial inclusion Case studies of FinTech success in Africa, Asia, and Latin America Challenges and risks of FinTech in emerging markets Regulatory considerations for FinTech in these markets
Unit 13	Risk Management in FinTech Identifying risks in FinTech operations Risk mitigation strategies in financial technology Regulatory compliance and risk management frameworks Cybersecurity risks and their impact on FinTech Operational risk management in FinTech companies
Unit 14	The Future of Financial Technology Predicting the next innovations in FinTech The role of 5G, AI, and blockchain in reshaping finance The rise of decentralized finance (DeFi) and its potential Ethical and regulatory concerns around FinTech Preparing for the FinTech revolution: career opportunities and skills

Textbook:

- "FinTech Innovation: From Robo-Advisors to Goal-Based Investing and Gamification" by Paolo Sironi

Reference books:

- "Blockchain Basics: A Non-Technical Introduction in 25 Steps" by Daniel Drescher".
- The AI Advantage: How to Put the Artificial Intelligence Revolution Work" by Thomas H. Davenport

Course Name: SUSTAINABILITY AND GREEN SUPPLY CHAIN MANAGEMENT**Credits:4****Course Description:**

This course provides an in-depth examination of sustainability principles and practices within the context of supply chain management. Students will explore the environmental, social, and economic dimensions of sustainability and learn how to integrate sustainable practices into supply chain strategies and operations. Topics include sustainable sourcing, green procurement, carbon footprint reduction, waste minimization, and ethical considerations in supply chain decision-making.

Course Objectives:

- Explain the concept of sustainability and its relevance to supply chain management.
- Explore the environmental, social, and economic dimensions of sustainable supply chain management.
- Analyse the benefits and challenges of implementing green supply chain practices.
- Identify strategies for integrating sustainability into supply chain strategies and operations.
- Develop critical thinking and problem-solving skills in the context of sustainable supply chain management.

Course Outcomes:

- Describe the Concept and Significance of Sustainability
- Develop the Environmental, Social, and Economic Dimensions of Sustainability
- Evaluate Benefits and Challenges of Implementing Green Supply Chain Practices
- Identify Strategies for Integrating Sustainability into Supply Chain Operations
- Design Critical Thinking and Problem-Solving Skills in Sustainable Supply Chain Contexts

<u>Units</u>	<u>Syllabus</u>
Unit 1	Definition and Significance of Sustainability Concept of sustainability, importance of sustainability in business, key concepts of sustainability and triple bottom line (people, planet, profit), global sustainability challenges.
Unit 2	Overview of Green Supply Chain Management Key principles of green supply chains, environmental impact of supply chains, role of technology in green supply chains.
Unit 3	Business Case for Sustainability in Supply Chains Financial benefits of sustainability, competitive advantage through sustainability, risk management and sustainability.
Unit 4	Life Cycle Assessment (LCA) and Environmental Impact Analysis Introduction to life cycle assessment (LCA), methodology for environmental impact analysis, applications of LCA in supply chains.
Unit 5	Strategies for Reducing Carbon Emissions and Energy Consumption Carbon footprint and energy use in supply chains, techniques for emission reduction, energy-efficient supply chain strategies.
Unit 6	Sustainable Packaging and Materials Management Sustainable packaging design, recycling and waste reduction strategies, green materials sourcing and innovation.
Unit 7	Stakeholder Engagement and Community Relations Identifying key stakeholders, engagement strategies and communication, building long-term relationships with communities.
Unit 8	Labour Rights and Working Conditions in Supply Chains Fair labour practices and compliance, improving working conditions in global supply chains, addressing child labour and human rights issues.
Unit 9	Ethical Sourcing and Fair Trade Practices Overview of ethical sourcing principles, meaning and objectives of verification, managing supplier compliance to ethical standards.

Unit 10	Sustainable Sourcing Strategies and Supplier Selection Criteria Sustainable procurement policies, supplier selection for sustainability, evaluating supplier sustainability performance.
Unit 11	Green Procurement Practices and Supplier Partnerships Green procurement principles, building sustainable supplier relationships, challenges in green procurement.
Unit 12	Certification Schemes and Standards for Sustainable Sourcing Common certification schemes (e.g., ISO 14001, Fair Trade), role of standards in sustainable sourcing, implementing and managing certification.
Unit 13	Sustainable Transportation Modes and Route Optimization - Green transportation alternatives, route optimization techniques, reducing fuel consumption in logistics.
Unit 14	Green Warehouse Design and Operations, Reverse Logistics, and Product End-of-Life Management- Sustainable warehouse operations, change management and stakeholder buy-in, metrics and case studies and best practices in sustainable supply chain management, managing product end-of-life in a circular economy.

Text book:

- "Sustainable Supply Chain Management: Practical Ideas for Moving Towards Best Practice" by Wendy Tate, Valérie Botta-Genoulaz, and Yann Bouchery

Reference books:

- "Green Logistics: Improving the Environmental Sustainability of Logistics" by Alan McKinnon
- Industry reports and case studies on sustainable supply chain practices.
- Journal articles from sustainability and supply chain management jo

Course Name: BASICS OF ECONOMETRICS

Credits:4

Course Description:

This course provides a comprehensive introduction to basic econometric concepts and techniques. It covers statistical concepts of hypothesis testing, estimation and diagnostic testing of simple and multiple regression models. The course also covers the consequences of and tests for misspecification of regression models.

Course Objectives:

- Examine the scope and methodology of econometrics and its role in analysing economic data.
- Explore key statistical concepts, distributions, and hypothesis testing relevant to econometric analysis.
- Develop skills to estimate and interpret simple linear regression models, including hypothesis testing and prediction.
- Analyse multiple linear regression models, assess goodness of fit, and evaluate the impact of qualitative variables.
- Examine violations of classical assumptions, such as multicollinearity, autocorrelation, and heteroskedasticity, and implement remedial measures.

Course Outcomes

- Apply econometric methods to Analyse economic theories, forecast trends, and evaluate policy impacts.
- Solve statistical software to estimate regression models and interpret results with accuracy.
- Identify and address issues such as multicollinearity, heteroskedasticity, and autocorrelation in regression analysis.
- Outline robust analysis using advanced econometric techniques, including panel data and time series models, for complex datasets.

- Demonstrate the ability to critically evaluate empirical studies and contribute to evidence-based decision-making in economics and related fields.

<u>Units</u>	<u>Syllabus Details</u>
Unit 1	Introduction to Econometrics Nature and scope of Econometrics Economic theory and mathematical economics Methodology of econometrics Uses of econometrics
Unit 2	Statistical Concepts Normal distribution Chi-square, t- and F-distributions Estimation of parameters Properties of estimators Testing of hypotheses: defining statistical hypotheses Distributions of test statistics Testing hypotheses related to population parameters Type I and Type II errors Power of a test Tests for comparing parameters from two samples
Unit 3	Simple Linear Regression Model (Two-Variable Case) Estimation of model by method of ordinary least squares Properties of estimators Goodness of fit Tests of hypotheses Scaling and units of measurement Confidence intervals Gauss-Markov theorem Coefficient of determination, r^2 Normality assumption Hypothesis testing: t and F tests P-value Practical versus statistical significance Prediction
Unit 4	Multiple Linear Regression Model Estimation of parameters Properties of OLS estimators Goodness of fit: R-squared and adjusted R-squared Partial regression coefficients Testing hypotheses: individual and joint Functional forms of regression models Qualitative (dummy) independent variables
Unit 5	Violations of Classical Assumptions Multicollinearity: Nature, consequences, detection, and remedial measures Autocorrelation: Nature, consequences, detection, and remedial measures Heteroskedasticity: Nature, consequences, detection, and remedial measures
Unit 6	Advanced Econometric Methods Instrumental variables and two-stage least squares (2SLS) Simultaneous equations models Endogeneity and exogeneity Identification problem in simultaneous equations Two-stage least squares estimation

Unit 7	Time Series Analysis Components of time series: trend, seasonality, cyclicity, and irregularity Stationarity in time series data Autoregressive (AR), moving average (MA), and ARMA models Unit roots and cointegration Forecasting with time series models
Unit 8	Model Diagnostics and Specification Testing Assumptions of the classical linear regression model Multicollinearity diagnostics Test for heteroskedasticity Autocorrelation tests Model specification tests Durbin-Watson statistic
Unit 9	Panel Data Econometrics Introduction to panel data Fixed effects and random effects models Benefits of using panel data Estimating models with panel data Hausman test for model selection
Unit 10	Limited Dependent Variable Models Introduction to limited dependent variables Logit and Probit models Censored and truncated data models Tobit model Sample selection bias
Unit 11	Structural Equation Modeling (SEM) Introduction to SEM Measurement models and structural models Path analysis Confirmatory factor analysis Estimation and identification in SEM
Unit 12	Bayesian Econometrics Bayesian inference and estimation Prior and posterior distributions Markov Chain Monte Carlo (MCMC) methods Bayesian model comparison Applications in econometrics
Unit 13	Econometrics and Policy Analysis Application of econometrics in policy making Causal inference and policy evaluation Counterfactual analysis Impact of econometrics in real-world policy scenarios Econometrics in labour economics, health economics, and public finance
Unit 14	Advanced Topics in Econometrics Non-parametric and semi-parametric methods Generalized method of moments (GMM) Vector autoregressive models (VAR) Quantile regression Modelling high-dimensional data

Textbook:

- Damodar N. Gujarathi: Basic Econometrics, New Delhi: Tata McGraw Hill.

Reference books:

- Jeffery Wooldridge: Introductory Econometrics, Cengage Publisher
- Christopher Dougherty, Introduction to Econometrics, Oxford University Press

Course Name: BUSINESS INTELLIGENCE AND DATA VISUALIZATION

Credits:4

Course Description:

This course provides an introduction to the concepts and techniques of business intelligence (BI) and data visualization. Students will learn how to Analyse and interpret data to make informed business decisions. Topics include data warehousing, data mining, data visualization tools, and best practices for creating effective visualizations.

Course Objectives

- Explore the fundamental concepts of business intelligence and its role in modern business decision-making.
- Examine the principles of data warehousing, including data modelling for efficient storage and retrieval.
- Investigate data mining techniques and predictive analytics to derive actionable insights from datasets.
- Analyse the principles of data visualization for presenting complex information effectively.
- Develop strategies for integrating business intelligence tools to enhance organizational performance.

Course Outcomes

- Evaluate the importance of business intelligence in optimizing organizational decision-making.
- Design and implement data warehouse schemas to support business intelligence initiatives.
- Utilize data mining algorithms and predictive modelling to solve practical business problems.
- Create compelling data visualizations using advanced tools and techniques.
- Apply business intelligence solutions to improve operational efficiency and achieve strategic goals.

<u>Units</u>	<u>Syllabus</u>
Unit 1	Fundamentals of Business Intelligence Definition and importance of business intelligence (BI), historical background and evolution of BI, role of BI in modern business decision-making.
Unit 2	BI Implementation and Architecture Benefits and challenges of implementing BI systems, overview of BI architecture and components.
Unit 3	Introduction to Data Warehousing Introduction to data warehousing concepts and principles, types of data warehouses (e.g., enterprise data warehouse, data marts).
Unit 4	Data Warehouse Design and ETL Processes Dimensional modeling techniques for designing data warehouses, extract, transform, load (ETL) processes for populating data warehouses.
Unit 5	Data Quality, Governance, and Maintenance Data quality and governance in data warehousing environments, best practices for data warehouse implementation and maintenance.
Unit 6	Introduction to Data Mining Overview of data mining concepts, techniques of data mining, types of data mining algorithms (e.g., classification, clustering, association).
Unit 7	Data Preprocessing for Data Mining Data preprocessing: concept and understanding, data preprocessing steps (e.g., data cleaning, feature selection).
Unit 8	Predictive Analytics Introduction to predictive analytics, applications of predictive analytics.
Unit 9	Model Evaluation and Ethics Evaluation metrics for assessing the performance of predictive models, ethical considerations and challenges in data mining and predictive analytics, ethical considerations in data mining, challenges in predictive analytics.
Unit 10	Foundations of Data Visualization Design Principles of effective data visualization design (e.g., Tufte's principles), types of data visualizations (e.g., ba

	r charts, scatter plots, heatmaps), color theory and best practices for choosing colors in visualizations.
Unit 11	Storytelling with Data Techniques for storytelling with data, creating narrative-driven visualizations.
Unit 12	Interactive Data Visualization Design Concept and understanding, interaction design principles for designing interactive visualizations.
Unit 13	Overview and Comparison of Data Visualization Tools Overview of popular data visualization tools (e.g., Tableau, Power BI, D3.js), comparison of different data visualization tools based on features, comparison of different data visualization tools based on capabilities.
Unit 14	Data Visualization Integration and Design Techniques for integrating data visualizations into web applications and presentations, best practices for designing dashboard layouts and user interfaces, introduction to data storytelling platforms and techniques.

Textbook:

- "Interactive Data Visualization for the Web" by Scott Murray

Reference books:

- "Storytelling with Data: A Data Visualization Guide for Business Professionals" by Cole Nussbaumer Knafl
- "Information Dashboard Design: Displaying Data for At-a-Glance Monitoring" by Stephen Few
- "Data Science for Business: What You Need to Know about Data Mining and Data-Analytic Thinking" by Foster Provost and Tom Fawcett.

Course Name: INTERNATIONAL SUPPLY CHAIN MANAGEMENT

Credits:4

Course Description:

The course explores in the area of International supply chain management (SCM) to underline their strategic importance to firms. The course focuses on core concepts of supply chain strategies and operational aspects of SCM. The course highlights the roles of supply chain, Purchasing, inventory management, international payment, and information systems in a firm's international operation. In addition, the course focus on designing of global supply chain to counter risks, enhances efficiency, and promotes sustainability.

Course Objectives:

- Explore the concept of supply chains as networks of interconnected nodes, each adding value to products through coordinated logistics and IT systems.
- Describe transition from single-owner vertically integrated networks to globally dispersed, multi-owner supply chain networks.
- Analyse the roles and responsibilities of individual stakeholders in managing nodes and links within a collaborative supply chain framework.
- Learn the mechanisms of value creation, product flow, and information exchange across geographically dispersed supply chain networks.
- Examine the significance of coordination and collaboration in ensuring seamless operations and effective delivery of finished products for consumption.

Course Outcomes:

- Illustrate the key operational issues involved in international SCM
- Analyse the supply chain management in international business;
- Illustrate the composition of global supply chain;
- Apply the knowledge of managing SCM in international trade operations;
- Analyse the supply chain strategies of firms

<u>Units</u>	<u>Syllabus</u>
Unit 1	Introduction to Supply Chain Management Introduction to supply chain management, evolution of supply chains, objectives of supply chain.
Unit 2	Decision Phases and Process Views in Supply Chain Decision phases in a supply chain, process views – cycle view, push/pull view, supply chain macro processes in a firm.
Unit 3	Key Issues in Supply Chain Management Key issues in supply chain management, challenges and opportunities, industry applications and examples
Unit 4	Global Trade and Supply Chains Insight into global trade, insight into global supply chains, challenges in global trade.
Unit 5	Emerging Markets and Global Supply Chains Expertise in emerging markets, global supply chains in emerging markets, strategic benefits of global supply chains.
Unit 6	Best Practices and Integration in Global Supply Chains Best practices for strategic global supply chain management, how to integrate global supply chain functions, strategic benefits of global supply chains.
Unit 7	Supply Chain Strategies and Strategic Fit Competitive and supply chain strategies, achieving strategic fit and its challenges, case studies in strategic fit.
Unit 8	Supply Chain Enablers Technology as a supply chain enabler, organizational infrastructure and alliances, role of human resources in supply chain.
Unit 9	Supply Chain Drivers Inventory and transportation as drivers, information and sourcing as drivers, facilities and pricing as supply chain drivers.
Unit 10	Supply Chain Performance Supply chain efficiency and responsiveness, responsiveness – efficiency trade-off, supply chain risks.
Unit 11	Global Purchasing Strategy Key elements of a global purchasing strategy, how to move from international to global purchasing, types of global purchasing strategies.

Unit 12	Outsourcing and Offshoring Strategies for outsourcing, strategies for offshoring, benefits and risks of outsourcing and offshoring.
Unit 13	Supplier Selection and Network Design Selecting suppliers, designing global supplier networks, supplier evaluation and relationship management
Unit 14	Inventory Management in Supply Chain and Inventory Problem Solving and Models Role of cycle inventory in supply chain, production lot sizing and lot sizing with capacity constraints, aggregating multiple products in a single order and economies of scale, numerical examples to illustrate inventory problems, solution using various models.

Textbook :

- Designing and managing the supply chain: Concepts, strategies, and cases (3e). McGrawHill Education India, New Delhi - Simchi-Levi, D., Kaminsky, P, Simchi-Levi, E., and Shankar, R. (2008).

Reference books

- Shah, J. (2016). Supply Chain Management: Text and Cases (2e). Pearson Education India
- Hult, T.; Closs, D.; Frayer, D. Global Supply Chain Management Leveraging processes, measurements and tools for strategic corporate advantage. McGraw Hill. 2013.

Course Name: DATA VISUALIZATION TECHNIQUES

Credits:4

Course Description:

To equip students with comprehensive knowledge on computer application software for data analysis. The course covers building interactive dashboards, enhancing visualizations with analytics, and applying advanced concepts such as data blending, joining, and understanding dynamic hierarchies. The course also emphasizes best practices in data visualization to ensure clarity and effectiveness in communicating insights. By the end of the course, students will be proficient in using Tableau for data analysis, able to create insightful, interactive visual reports that support decision-making in various business contexts.

Course Objectives

- Recognize and understand how to use visualization tools effectively.
- Evaluate different data representation methods and their advantages.
- Analyse visual data to develop insights and hypotheses.
- Discuss computational tools and software for data analysis tasks.
- Synthesize and present data insights to facilitate decision-making.

Course Outcomes

- Describe visualization tools, demonstrating their appropriate use.
- Assess various data representation methods, comparing their strengths and weaknesses.
- Interpret visual data to identify patterns and generate hypotheses.
- Explain the role and applications of computational tools in data analysis.
- Organize and communicate data insights effectively to support decisions.

<u>Units</u>	<u>Syllabus</u>
Unit 1	Introduction to Tableau What is Tableau, architecture and features of Tableau.
Unit 2	Getting Started with Tableau Installation of Tableau Desktop/Public, interface of Tableau (layout, toolbars, data pane, analytics pane, etc.).

Unit 3	Working of Tableau How to start with Tableau, top chart in Tableau, introduction to the various file types, quick introduction to the user interface in Tableau.
Unit 4	Basic Reporting Techniques Parameters, grouping, edit groups, set, combined sets.
Unit 5	Creating and Enhancing Reports Creating a first report, data labels, create folders and sorting data, add totals, sub totals, and grand totals to report, colouring, sorting, and measuring values.
Unit 6	Basic Data Visualization Techniques-I Pivot table and heat map, highlight table, bar chart, line chart, area chart, pie chart.
Unit 7	Basic Data Visualization Techniques-II Scatter plot, word cloud, tree map, blended axis, dual axis, Gantt chart, grouped bar or side by side bars chart.
Unit 8	Building Interactive Dashboards Building interactive dashboards, advanced chart techniques.
Unit 9	Specialized Visualization Techniques-I Waterfall charts, dual axis, computation.
Unit 10	Specialized Visualization Techniques-II Different date charts, split/custom split, profitability as a percent of total.
Unit 11	Advanced Data Visualization Concepts Level of detail (fixed, include, exclude), size (number of rows in partition), multiple views in a container, dynamic hierarchies.
Unit 12	Data Blending and Joining Data blending and joining.
Unit 13	Enhancing Visualizations with Analytics Pane Enhancing visualizations with analytics pane, trend lines, forecasts, and statistical summaries.
Unit 14	Best Practices in Data Visualization Best practices in data visualization.

Textbook:

- Visual Analytics with Tableau, Wiley

Reference books:

- Beautiful Visualization, Looking at Data through the Eyes of

Semester: 6

Course Name: GST & CUSTOMS LAW

Credits:4

Course Description:

This course provides a comprehensive understanding of Goods and Services Tax (GST) and Customs Law in India. It covers the principles, concepts, and framework of GST, including registration, filing, and compliance procedures. The course also delves into customs regulations, valuation of goods, import/export procedures, and duty calculation. Through case studies and practical applications, students will learn how to interpret and apply tax laws effectively. This course equips learners with the knowledge to handle indirect taxation matters and navigate the complexities of GST and customs law in business operations.

Course Objectives

- Describe GST, its objectives, features, and the dual model structure of CGST, SGST, and IGST.
- Identify GST administration, registration processes, and the legislative framework under the CGST Act, 2017.
- Discover proficiency in determining the time, place, and value of supply, including the handling of composite, mixed, and exempt supplies.
- Connect learners with Input Tax Credit (ITC), Reverse Charge Mechanism (RCM), and GST audit requirements.
- State customs duty valuation and its integration with GST for efficient tax compliance and management.

Course Outcomes:

- Analyse the structure, advantages, and administration of GST, including its dual model and applicable rates.
- Demonstrate the ability to register, amend, and manage GST provisions, including determining taxable events and supplies.
- Calculate the value of supply under various scenarios, including discounts, transaction values, and imported goods.
- Apply concepts of Input Tax Credit, Reverse Charge Mechanism, and prepare GST-

compliant tax invoices, credit, and debit notes.

- Analyse and solve problems related to customs duty valuation and its integration with GST for cross-border transactions.

<u>Units</u>	<u>Syllabus</u>
Unit 1	Introduction to GST Meaning and Definition of GST, Objectives and Features of GST, Advantages and Disadvantages of GST
Unit 2	Taxes under GST and Dual Mode Taxes subsumed under GST, Structure of GST (Dual Model), CGST, SGST and IGST
Unit 3	GST Administration GST Council, Composition, Powers and Functions, CGST Act, 2017.
Unit 4	GST Registration Registration under GST provision and process., Amendment and cancellation of registration
Unit 5	Levy of GST Taxable Event Under GST, Supply of Goods and Services
Unit 6	Supply Under GST Meaning and Scope of Supply, Types of Supply- Composite and Mixed Supply
Unit 7	Time of Supply Determination of time and place of supply of goods and services.
Unit 8	Exempted Good and GST Rates List of exempted goods and services, GST Rates on different goods and services.
Unit 9	Value of Supply- I Introduction to Valuation under GST, Meaning and Types of Consideration: a) Consideration received through money, b) Consideration not received in money c) Consideration received fully in money, Valuation rules for supply of goods and services: 1) General Valuation Rules; 2) Special Valuation Rules
Unit 10	Value of Supply -II Other cases for valuation of supply, Imported goods and Services, Valuation for discount.
Unit 11	Transactional Value Meaning and conditions for transaction value, Inclusive transaction value, Exclusive discount excluded from transaction value, Problems on GST.
Unit 12	ITC and Blocked credit Input Tax Credit - Eligible and Ineligible Input Tax Credit, Apportionments of Credit and Blocked Credits; Tax Credit in respect of Capital

	Goods and Recovery of Excess Tax Credit, Availability of Tax Credit in special circumstances; Transfer of Input Tax
Unit 13	RCM and Audit in GST Concept of Reverse Charge Mechanism, Tax invoice, Credit and Debit Notes, Returns, Audit in GST, Problems on ITC
Unit 14	Customs Duty Levy and collection of customs duty, goods included under customs duty ACT, Methods of valuation of customs duty- Problems

Textbook:

- Vinod K Singhania - "Direct Taxes Law and Practice",
- Indirect tax laws by SK Mishra(AY 2024) ,- edu creation

Reference books :

- Rajiva S. Mishra -Direct & Indirect Tax
- Santhil & Santhil Business taxation.
- S. Bhat Taxation Management

Course Name: PERSONAL BRANDING & NETWORKING**Credits:1****Course Description:**

This course focuses on building a strong personal brand and cultivating effective networking skills essential for professional success. Students will learn to identify their unique strengths, values, and expertise to create a compelling personal brand that resonates with their target audience. The course also covers strategies for building meaningful relationships, leveraging digital platforms like LinkedIn, and utilizing networking opportunities to expand professional connections. Through practical exercises and case studies, learners will develop the confidence and tools to effectively present themselves and foster valuable professional relationships in today's competitive environment.

Course Objectives

- Identify the concept and importance of personal branding in today's competitive environment.
- Learn strategies for networking and building professional relationships.

Course Outcomes:

- Explain the concept, significance, and benefits of personal branding in a competitive environment.
- Implement effective strategies for networking and developing meaningful professional relationships.

<u>Units</u>	<u>Syllabus</u>
Unit 1	Foundation of Personal Branding Definition and importance of personal branding, Building a personal brand strategy, Personal branding in the digital age
Unit 2	Building Your Online Presence Online platforms for personal branding, Developing a professional online profile, Managing and maintaining an online presence
Unit 3	Networking Essentials Understanding networking and its benefits, Strategies for effective networking, Building and nurturing professional relationships
Unit 4	Communication Skills for Networking & Leveraging Networking for Career Advancement Effective communication techniques, developing an elevator pitch, Networking etiquette and best practices, leveraging networking for career

	advancement, using networking for job search and career growth, Building a personal network of mentors and influencers, Networking in professional settings
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Textbook :

- "Personal Branding For Dummies" by Susan Chritton, 2nd Edition (2012).

Reference books:

- "Me 2.0: Build a Powerful Brand to Achieve Career Success" by Dan Schawbel, 1st edition (2010).
- "Brand You: Turn Your Unique Talents into a Winning Formula" by John Purkiss, 2 nd edition (2012).
- "Networking Like a Pro: Turning Contacts into Connections" by Ivan Misner,

Course Name: IT & GST RETURNS**Credits:3****Course Description:**

To equip students with the practical skills required for filing of returns under Income Tax and GST laws.

Course Objectives

- Describe awareness about the concept of GST.
- Express knowledge on the basics of GST skills and competencies to provide the participants with necessary inputs for filling GST returns.
- Classify students to know how assessment and return happens in taxation.
- Infer handling GST processes, including payments, electronic ledgers, and filing GST returns.

Course Outcomes

- Apply the basic process of computing taxable income and tax liability and know about various types of income tax return forms.
- Outline the concept of advance payment of tax and tax deduction at source and develop the ability of e-filing of TDS returns.
- Aware of the basic framework and structure of GST, including the meaning of input tax credit and the process of its utilization.
- Outline GST payments, utilize electronic ledgers, and file GST returns such as GSTR-1, GSTR-3B, and annual returns.

<u>Units</u>	<u>Syllabus Details</u>
Unit 1	E- Filing Meaning of e-filing; Difference between e-filing and regular filing of returns, Benefits and limitations of e-filing; types of e-filing
Unit 2	Income Tax Introduction to income tax – basic terminology, Types of Assessors, Income taxable under different heads; Basics of computation of total income and tax liability, Deductions available from gross total income, PAN card; due date of, filing of income tax return.
Unit 3	E-Filing of ITRs Instructions for filling out form ITR-1, ITR-2, ITR-3, ITR-4,

	ITR-4S, ITR-5, ITR-6., Introduction to Income Tax Portal; preparation of electronic return (practical workshops)
Unit 4	Tax Deducted from Source Introduction to the concept of TDS, Provisions in brief relating to advance payment of tax, Schedule for deposit of TDS, Schedule for submission of TDS returns
Unit 5	E-Filing of TDS Returns Prescribed forms for filing of TDS returns; exemption from TDS, Form 13, 15G, 15H;
Unit 6	Practical workshop on e-filing of TDS returns.
Unit 7	Basics Concept of GST Introduction to basic concepts of GST, Output tax liability of CGST, SGST, UTGST, IGST,
Unit 8	GST Network and Payment GST Network; input tax credit utilization, small supplies and composition scheme, schedule for payment of GST; interest/penalty for late/non-filing of return;
Unit 9	E- Payment of GST payment of GST by electronic ledger, electronic liability register, electronic credit ledger, electronic cash ledger, Credit ledger, electronic cash ledger.
Unit 10	Filing of GST Returns GST returns: GSTR-1, GSTR-2, GSTR-3, GSTR-4, GSTR-9, GSTR-3B

Textbook:

- Bansal, K. M., GST & Customs Law, Taxmann Publication. • Gupta, S.S., Vastu and Sevakar, Taxmann Publications, 2017 • Singhania V. K , GST & Customs Lax, Taxmann Publication.
- Singhania,Vinod K. and Singhania Monica. Students' guide to Income Tax. University Edition. Taxmann Publications Pvt Ltd., New Delhi.

Reference books:

- Ahuja, Girish, Gupta Ravi, GST & Customs Law.
- Ahuja. Girish. and Gupta. Ravi. Systematic Approach to Income Tax. Bharat Law House, Delhi.
- Babbar, Sonal, Kaur, Rasleen and Khurana, Kritika. Goods and Service Tax (GST) and Customs Law. Scholar Tech Press

5.3 Duration of the programme

Programme	Level	Duration	Maximum duration for completion	Credits
B.Com	Bachelor's Degree	3 years	(3+ 3) years (As per UGC Notification on Specification of Degree, 2014)	129 Credits

5.4 Faculty and support staff requirement

Academic Staff	Number available to meet the required delivery norms
Programme Coordinator	1 member
Course Coordinator	1 member
Course Mentor	1 member per batch of 250 students

5.5 Instructional delivery mechanisms

The instructional delivery mechanisms for the online programme from CDOE, DSU has been designed to ensure an engaging and effective learning experience for students. The CDOE has a team of qualified and experienced faculty and staff for the programme. The proficiency of the faculty team ensures that programs are thoughtfully designed and executed to meet high academic standards. This commitment to quality provides students with a seamless, engaging, and enriching learning experience, specifically tailored to the unique needs and challenges of online education. CDOE creates an environment that supports academic excellence and professional growth, empowering students to succeed in a flexible and accessible educational setting.

CDOE will be having an academic calendar outlining important dates for major events in the semester. This academic calendar will be shared with students at the start of each semester, ensuring clear communication and effective planning for all academic activities.

In addition to providing content through Self-Learning Materials (SLMs), students will have access to a wide range of e-learning resources, including audio and video content, to enhance their understanding of the course material. To ensure student engagement in the programme, various activities will be organized in the form of the following:

- **Webinars and Online Lectures:** Live sessions will be conducted to offer students the opportunity to learn directly from faculty members and engage in real-time discussions. These sessions will cover key topics and provide clarity on different concepts.
- **Discussion Forums:** Students will be encouraged to actively participate in discussion forums designed to stimulate critical thinking and foster open communication. These forums will provide a platform for students to share their perspectives and express their ideas without hesitation. Such forums encourage participation from all students and provide an opportunity for discussion and gaining insights while maintaining a professional decorum.

Thus, students remain actively involved in the learning process, fostering a collaborative and enriching educational experience that aligns with the objectives of online learning.

- **Assessments:** Continuous Internal Assessments are conducted to support ongoing learning and development. Self-Assessment Questions included in the e-SLMs and quizzes available on the LMS provide regular opportunities for students to conduct periodic evaluations. These quizzes can be taken multiple times, allowing students to refine their understanding and work toward achieving correct answers. This iterative process promotes a deeper understanding of key concepts and strengthens learning outcomes. The flexibility of this approach encourages active participation, helping students identify and address knowledge gaps while building confidence in applying their knowledge effectively. By regularly monitoring progress, students can engage more thoroughly with the course material, ensuring continuous improvement and mastery of the subject matter. Appropriate case studies in commerce will aim to enhance problem-solving skills among students.

Students will be provided access to national portals such as SWAYAM and NPTEL, along with the University's digital library, which will be integrated into the LMS for supplementary

reading material. This allows students to explore additional resources beyond the prescribed syllabus. Such access will encourage students to complement the core curriculum but also supports lifelong learning, empowering students to stay updated with the latest developments in their field of study.

5.6 Media Resources - Print, Audio or Video, Online, Computer aided:

Students will be getting access to a wide range of e-learning materials, including audio and video content, faculty-led video sessions, virtual classrooms and discussion boards through the LMS. This will enable students to track their progress in real-time through a personalized dashboard, allowing them to monitor their learning journey.

Students will also be informed about upcoming academic events. Regular notifications will be sent to remind students about upcoming webinars, virtual classes, assignments, and discussion forums. Such notifications will help students to manage their schedules and academic responsibilities.

Additionally, the LMS will facilitate direct communication between students and Course Coordinators/Mentors. Students will be able to raise queries, seek clarification, and receive responses from faculty members. This will foster a supportive learning environment and ensures that students have the necessary guidance and resources to succeed in their studies. The LMS will be a platform to maintain an interactive and engaging online learning experience, enabling students to actively participate in their education while receiving the support they need.

5.7 Student Support Services

Student Support services of the CDOE, DSU will be providing pre-admission student support services like counselling about the programme including curriculum design, mode of delivery, fee structure and evaluation methods. Post-admission student support services include guiding students towards accessing LMS portal, Academic Calendar and academic delivery. The support services team shall provide support/training in attending the online proctored semester end examination. The support team shall answer to the queries pertaining to conduct of end-semester examinations, evaluation and issue of certificates.

6. Procedure for Admission, Curriculum Transaction and Evaluation

The purpose of Online education by CDOE, DSU is to provide flexible learning opportunities to students aiming to attain qualification in commerce, when they are not able to attend the regular classroom teaching. Academic programmes offered for such candidates under online learning mode will be conducted by CDOE, DSU. The programme/courses is termed Online mode for award of Degree.

Eligibility criteria, programme/course structure, curriculum, evaluation criteria and duration of programme shall be approved by Board of Studies and Academic Council which are based on UGC guidelines.

Candidates seeking admissions in any programme offered by CDOE, DSU shall fill up online application form available informed on the website. Before applying, candidates must check eligibility criteria for the programme. Details about eligibility criteria, programme structure, curriculum, duration, and fee structure are available on the University website.

6.1 Procedure for Admission

6.1.1 Minimum Eligibility Criteria for admission

- Admission to First Year Bachelor of Commerce shall be open to candidates who have passed the second year Pre-University or XII standard or equivalent examination recognized by the University.
- The candidate shall have studied and passed English as one of the courses and secured not less than forty-five percent (45%) marks in aggregate and forty percent (40%) in case of candidates belonging to SC/ST and OBC.

Important Instructions:

- Admission granted by the University to the Programme shall be confirmed only for the candidates who fulfil the Admission Eligibility requirement by submitting all the requisite documents and has paid the semester fees.
- All other Admissions granted by the University to the Programme shall be Provisional until the candidate meet the eligibility criteria

- Provisional Admission shall stand cancelled if the candidate does not fulfil Programme eligible criteria within the stipulated time given by the CDOE, DSU.
- The University has the right to make necessary changes from time to time as deemed fit in Eligibility criteria, programme/course structure, curriculum, duration, fee structure and programme announcement dates. All changes will be notified on the website.
- Prior to applying for admissions, candidates are advised to go through the details provided on the University website & the Programme prospectus.

6.1.2. Fee Structure and Financial assistance policy

Suggested Fee for the online programme is INR 1,20,000/- (One Lakh Twenty Thousand only). Overseas students need to remit the programme fees equivalent in USD to the University.

A scholarship of up to 10% on tuition fees will be provided to Merit students and to students who belong different special categories as defined in the University Policy.

6.2 Curriculum Transactions

6.2.1 Programme Delivery

DSU utilizes modern technology to deliver online programs, ensuring students receive a high standard of education. The faculty at DSU is dedicated to providing expert guidance that promotes the overall development of students. They do more than facilitate learning—they serve as mentors, fostering an engaging environment that enhances student retention and academic growth. The programme is designed with the goal of equipping students with specialized expertise, helping them excel in their chosen fields. Some of the important features are:

- Online academic delivery, ensuring flexibility and accessibility for all students.
- Regular updates and reviews of the curriculum and study materials to keep content current and relevant.
- Live, interactive lectures conducted by CDOE, DSU faculty members and course coordinators, ensuring engagement with students to support them in their learning journey.
- Continuous academic and technical support to assist students throughout in their online

learning journey.

- Guidance and mentoring from Course coordinators to help students to navigate any academic challenges.
- Dedicated learning and delivery support from Course mentors.

This approach guarantees a comprehensive and supportive learning experience, where students can focus on their academic outcomes for better professional outcomes. Through these well-structured delivery methods, DSU ensures that each student receives the tools and guidance they need to succeed in their studies and future careers.

6.2.2 Norms for Delivery of Courses in Online Mode

Sl. No.	Credit value of the course	No. of Weeks	No. of Interactive Sessions		Hours of Study Material		Self-Study hours including Assessment etc.	Total Hours of Study (based on 30 hours per credit)
			Synchronous Online Counselling/ Webinars/ Interactive Live Lectures (1 hour per week)	Discussion Forum / asynchronous Mentoring (2 hours per week)	e-Tutorials hours	e-Content hours		
1.	1 Credit	3 weeks	3 hours	6 hours	5 hours	5 hours	11	30
2	2 Credits	6 weeks	6 hours	12 hours	10	10	22	60
3.	3 credits	9 weeks	9 hours	18 hours	15	15	33	90
4.	4 Credits	12 weeks	12 hours	24 hours	20	20	44	120

6.2.3 Learning Management System to support Online mode of Course delivery

The LMS platform for the online programme has been specifically designed to help students maximize their potential in their chosen field. It offers a secure and reliable learning environment, accessible on both web and mobile devices, ensuring a consistent and seamless experience. With a user-friendly interface, the platform makes it easy for instructors to design courses, create content, and grade assignments efficiently. Its responsive design delivers an excellent mobile experience, allowing students to access course materials anytime, anywhere.

The LMS platform prioritizes accessibility, ensuring all tools are standards-compliant and easy to navigate, including support for assistive technologies. This ensures an inclusive learning environment for all students at all times such that students have the flexibility to study at their own pace and on their own schedule. The availability of LMS for the online programme encourages students to develop a self-directed approach to learning in the programme.

6.2.4 Course Design

The course content has been carefully designed in accordance with the SWAYAM guidelines, employing the 4-quadrant approach to ensure a seamless and engaging learning experience. This structured approach includes four key components, each crafted to support various aspects of student learning and engagement:

- (a) Quadrant-I i.e. e-Tutorial, that contains – Faculty led Video and Audio Contents. These provide visual and auditory explanations of key concepts, offering clear and comprehensive coverage of course topics. The use of video content enhances understanding and helps students grasp complex subjects more easily. Simulations, video demonstrations, Virtual Labs etc.
- (b) Quadrant-II i.e. e-Content to contain illustrations, video demonstrations, documents as required. Curated reading resources, such as articles, case studies, and textbooks, allow students to explore topics in greater detail. These materials complement video lectures and encourage deeper exploration of the subject matter.
- (c) Quadrant-III i.e. Discussion forums to raise and clarify doubts on real time basis by the Course Coordinator(s) and their team. Interactive online discussion platforms enable students to engage with their peers and instructors. These forums foster collaboration, allowing students to share insights, ask questions, and discuss ideas, creating a rich, supportive learning environment.
- (d) Quadrant-IV i.e. Self-Assessment, that contains MCQs, Problems, Quizzes, Assignments with solutions and Discussion forum topics. Quizzes, assignments, and tests are integrated throughout the course to help students gauge their understanding and track their progress. These self-assessment tools encourage active learning and allow students to identify areas for improvement.

By utilizing the 4-quadrant approach, the course content ensures a balanced and holistic learning experience that promotes both theoretical knowledge and practical application.

6.2.5 Academic Calendar

The Academic Calendar indicates the timelines for the different academic activity for the Programme in the semester:

Sl. No.	Week	Event(s)
1	Week 1	Induction to the Programme.
2	Week 2-14	Commencement of live lecture sessions.
3	Week 3	Opening of Continuous Internal Assessments (CIA).
4	Week 4	Internal Assignment(s) submission.
5	Week 2-11	Discussion Forums.
6	Week 12	Closure of Internal Assignment(s) submissions.
7	Week 13	Semester End Examination (SEE) - Time Table.
8	Week 13-14	Semester End Examination (SEE) - Registration.
9	Week 15	Exam Admit Card download.
10	Week 16 onwards	Semester End Examination (SEE).
11	Week 17 onwards	Registration for next higher semester.

6.3 Evaluation

Every student shall be assessed for a course through Continuous Internal Assessment (CIA) and Semester End Examination (SEE) as prescribed. CIA and SEE shall respectively have 30:70 percent weightage.

Continuous Internal Assessment (CIA) for Theory Courses shall be conducted for 30 marks in the form of assignments. CIA for Mini-Project and Research Project shall also be conducted for 30 marks and the details shall be made available in the respective Project Guidelines Manual.

Semester End Examination Assessment (SEE) for Theory Courses shall be conducted for 70 marks. The SEE question paper shall comprise of objective and descriptive type questions. The SEE will be conducted with technology support as a remote proctored examination. For Mini-Project and Research Project the SEE shall be conducted for 70 marks and the details for the same shall be made available in the respective Project Guidelines Manual.

A student's performance in a course shall be judged by taking into account the results of CIA and SEE together. A student has to obtain and satisfy the following conditions to be declared as pass in each course:

- (i) minimum 40% of marks in CIA
 - (ii) minimum 40% of marks in SEE
 - (iii) minimum 40% of marks in aggregate considering both CIA & SEE.
- Students must score minimum 40% marks for project-based courses.
 - There shall be no improvement of Continuous Internal Assessment marks if they are above 40%.
 - If a student fails in any one component (failure to get 40% marks either in CIA or SEE), then the student will be required to re-appear for that component only (CIA or SEE as the case may be).
 - There shall be no improvement of Semester End Examination marks if they are above 40%.

DSU shall be complying as per the prevailing regulatory directions on the conduct of the examinations.

6.3.1 Question Paper Pattern

The Question Paper for the Semester End Examination Assessment (SEE) for Theory Courses shall be conducted for 70 marks. shall comprise of three sections:

- Section – A for 20 marks comprising TEN Multiple Choice Questions (MCQ) of 2 mark each.
- Section – B for 30 marks of Short Answer type Descriptive Questions of 6 marks each for which a student shall be need to write answers for 5 out of 6 questions.
- Section – C for 20 marks of Long Answer type Descriptive Questions of 10 marks each for which a student shall be need to write answers for 2 out of 3 questions.

Section A (Answer ALL)	Questions Marks	x	Marks
Ten Multiple Choice Questions	10 x 2		20
Section B – Answer Five out of Six questions			
Descriptive Questions (Short Answers)	5 x 6		30
Section C – Answer Two out of Three questions			
Descriptive Questions (Long Answers)	2 x 10		20
Total			70

6.3.2 Distribution of Marks in Continuous Internal Assessments

The following procedure shall be followed for awarding internal marks for courses. Student must submit two assignments each carrying 30 marks and average of both will be considered as internal assessment marks.

6.3.3 Passing Minimum

The students are considered as passed in a course if they score 40% marks in the Continuous Internal Evaluation (CIA) and Semester-End Examinations (SEE) individually. If a student fails in any one component (failure to get 40% marks either in CIA or SEE), then the student will be required to re- appear for that component only.

6.3.4 Marks and Grades

Marks shall be awarded for both CIA and SEE. The grading will normally be based on CIA and SEE. Relationships among Grades, Grade points and % of marks are listed as per the below mentioned criteria, where F is Fail and IC is ABSENT:

GRADE	GRADE POINTS	DESCRIPTION	% MARKS
O	10	Outstanding	90 to 100
A+	9	Excellent	80 to 89
A	8	Very Good	70 to 79
B+	7	Good	60 to 69
B	6	Above Average	55 to 59
C	5	Average	50 to 54
P	4	Pass	40 to 49
F	0	Fail	< 40
IC	-	In Complete	-

Table 1: Grade, Points, Grade Description and % of marks

Class Equivalence of Grade points

CGPA	Class/Division
$\geq 4.0 - < 5.75$	Pass Class
$\geq 5.75 - < 6.75$	Second Class
$\geq 6.75 - < 7.75$	First Class
$\geq 7.75 - 10$	First Class with Distinction

- A student will have to ensure a minimum CGPA of 4, to become eligible for the award of the degree.
- A student shall have to re-appear all courses in which they obtain 'F' and 'IC' Grade until a passing grade is obtained.
- 'F' grade denotes failure to obtain minimum passing marks in Continuous Internal Assessment or Semester End Examinations.
- 'IC' grade denotes incomplete performance in any Theory and/or Practical Assessment. It may be awarded in case of absence for CIA or SEE.
- The student can appear for the course/s with 'F' and 'IC' grade, when exams are conducted subsequently by the University for those Courses.

For a semester:

The SGPA is calculated on the basis of grades obtained in all courses, except audit courses and courses in which F grade or below, registered for in the particular semester.

$$\text{SGPA} = \frac{\text{Points secured in the semester (O – P Grades)}}{\text{Credits registered in the semester, excluding audit courses}}$$

For the entire programme:

The CGPA is calculated on the basis of all pass grades, except audit courses.

$$\text{CGPA} = \frac{\text{Cumulative points secured in all the passed courses (O – P Grades)}}{\text{Cumulative registered credits, excluding audit Courses}}$$

7. Requirement of the Laboratory Support and Library Resources**7.1 Laboratory Support**

No lab-based courses are offered in this program.

7.2 Library Resources

CDOE, DSU provides an exceptional library facility to support the academic needs of students enrolled in the B.Com Programme. The Central Library at DSU is well-stocked with a vast array of reference books, including key titles relevant to the online B.Com curriculum.

For students enrolled in the online mode of education, the University offers digital library access, which provides an extensive collection of e-books, journals, and academic databases. This digital resource ensures that online students have equal access to critical academic content, supporting them in their coursework and research. To further enhance the academic experience, DSU will provide access to educational platforms like SWAYAM, Scopus, and Knimbus, to the students. These memberships provide access to an extensive range of academic content, including journals, articles, and research papers, enhancing the research capabilities among students.

To ensure a holistic learning experience, DSU has integrated e-learning resources into the LMS for the online B.Com Programme. The LMS serves as a centralized hub for all course materials, including e-books, articles, and other resources. Additionally, e-tutorial lectures are made available, offering students the flexibility to study at their own pace while reinforcing key concepts covered in their courses. This seamless integration of resources ensures that students

have everything they need to succeed in their academic journey, regardless of their mode of study.

Beyond traditional academic resources, DSU will organize webinars and other virtual interactions by industry professionals for students. Such events will provide students with valuable insights into contemporary trends, challenges, and best practices in the business world.

Through a combination of comprehensive library resources, digital access, and expert industry engagement, the CDOE at DSU will provide online B.Com students to strive for academic excellence.

8. Cost Estimate of the Programme and the Provisions

The costs towards the programme study material development and academic delivery system depend on the total programme credits and the number of students. DSU, known for academic excellence, has always complied with the UGC regulations. The programme related expenses towards e-content and IT infrastructure setup cost 50% of the programme fee revenue and the balance for the academic delivery of the programme which depends on the student strength.

9. Quality assurance mechanism and expected programme outcomes

The quality of the online B.Com Programme is determined by the professionalism of the curriculum, which is designed to meet the demands of the business management profession. A well-structured syllabus, coupled with dedicated efforts and effective course execution, plays a critical role in ensuring the program's success. The primary goal of the online B.Com Programme is to equip students with comprehensive knowledge and practical skills in management. Additionally, expertise in information communication technology (ICT) gained through the programme opens up new career opportunities, allowing students to enhance their job prospects and elevate their positions, both in the workplace and in society at large.

The effectiveness of the programme will be assessed through various benchmarks, including the performance of students in their final semester examinations. These results will provide valuable insight into the programme's impact on student learning and skill acquisition. Moreover, continuous feedback from key stakeholders will play an important role in maintaining and enhancing the quality of the programme. By collecting and analysing such

feedback, the programme can be refined to better meet the evolving needs of business management students and the corporate sector.

CDOE, DSU has constituted Centre for Internal Quality Assurance (CIQA), which will assist Director, CDOE, DSU to conduct periodic review and assessments and assist CDOE to implement necessary quality measures and effectiveness in programme delivery. CIQA is constantly involved in reviewing all materials prepared by CDOE, including syllabus, SLMs and e-learning content. CIQA will be involved in conducting studies to measure effectiveness of methods adopted for learning. As we proceed further, CIQA will involve in benchmarking quality of academic delivery, and perform various Analyses, and guide all stakeholders towards upgrading quality constantly.

Centre for Internal Quality Assurance Committee (CIQAC) chaired by the Vice Chancellor consisting of internal and external experts oversees the functioning of Centre for Internal Quality Assurance and approve the reports generated by Centre for Internal Quality Assurance on the effectiveness of quality assurance systems and processes.

In addition to CIQA, as per the guidelines of National Assessment and Accreditation Council (NAAC), DSU has constituted Internal Quality Assurance Cell (IQAC), in which academicians, industry representatives and other stakeholders are nominated as members. The IQAC is a part of the institution's system and work towards realization of the goals of quality enhancement and sustenance, as quality enhancement is a continuous process. The prime task of the IQAC is to develop a system for conscious, consistent, and catalytic improvement in the overall performance of institutions. The work of the IQAC is the first step towards internalization and institutionalization of quality enhancement initiatives. IQAC's elementary motive is to promote measures for institutional functioning towards quality enhancement through internalization of quality culture and institutionalization of best practices.

The guidelines on quality monitoring mechanism prescribed by the UGC have been adopted by the Centre for Internal Quality Assurance for conducting institutional quality audits, to promote quality assurance and enhance as well as spread best-in-class practices of quality assurance. University has setup an effective system for collecting feedback from the stakeholders regularly to improve its programme. The University will conduct self-assessments regularly and use the results to improve its systems, processes etc. and finally quality of programme.

The outcomes from the online B.Com programme aim to provide students with a comprehensive understanding of commerce and equip them with the skills needed to thrive in a dynamic business environment. In addition to academic knowledge, the programme emphasizes holistic development.

The programme will provide students with a strong foundation in financial education, accounting, business management, and corporate law. It covers topics like financial accounting, corporate finance, marketing management, and entrepreneurial skills. Students will gain expertise in areas such as business analytics, supply chain management, taxation, auditing, and data visualization. The programme emphasizes practical learning through projects, certifications, and electives in emerging fields like fintech, blockchain, and artificial intelligence, preparing students for professional roles in accounting and finance.



A handwritten signature in green ink, appearing to read "Jutta Hoff", with the date "28/8/25" written below it.

Registrar