



VARDHAMAN
COLLEGE OF ENGINEERING

CURRICULUM
For
Master of Business Administration (MBA)

Under
Choice Based Credit System (CBCS)

MBA - Regular Two Year PG Degree Program

(For batches admitted from the Academic Year 2025 - 2026)

September 2025



VARDHAMAN COLLEGE OF ENGINEERING
(Autonomous)

Affiliated to JNTUH, Approved by AICTE, Accredited by NAAC with A++ Grade
Kacharam, Shamshabad, Hyderabad- 501 218, Telangana, India
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Department Vision

To become a leader in value based management education and contribute to global standards in business practices and research.

Department Mission

M1: Adopt Innovative learning and development methods.

M2: Enhance employability skills of learners.

M3: Encourage collaborative and contemporary research.

M4: Promote entrepreneurship with innovative ideas.

Program Educational Objectives (PEOs)

PEO1: Graduates will be able to apply emerging technologies to address the critical needs of the strategic business operations.

PEO2: Graduates will be able to demonstrate appropriate interpersonal skills and higher levels of proficiency in their respective domains.

PEO3: Graduates will be able to apply management theories and principles for continuous growth and development of the organization.

PEO4: Graduates will be able to evaluate and develop solutions to contemporary problems using management tools in creating newer opportunities.

Knowledge and Attitude Profile (WK)

WK1: A systematic, theory-based understanding of the natural sciences applicable to the discipline and awareness of relevant social sciences.

WK2: Conceptually-based mathematics, numerical analysis, data analysis, statistics and formal aspects of computer and information science to support detailed analysis and modelling applicable to the discipline.

WK3: A systematic, theory-based formulation of engineering fundamentals required in the engineering discipline.

WK4: Engineering specialist knowledge that provides theoretical frameworks and bodies of knowledge for the accepted practice areas in the engineering discipline; much is at the forefront of the discipline.

WK5: Knowledge, including efficient resource use, environmental impacts, whole-life cost, reuse of resources, net zero carbon, and similar concepts, that supports engineering design and operations in a practice area.

WK6: Knowledge of engineering practice (technology) in the practice areas in the engineering discipline.

WK7: Knowledge of the role of engineering in society and identified issues in engineering practice in the discipline, such as the professional responsibility of an engineer to public safety and sustainable development.

WK8: Engagement with selected knowledge in the current research literature of the discipline, awareness of the power of critical thinking and creative approaches to evaluate emerging issues.

WK9: Ethics, inclusive behavior and conduct. Knowledge of professional ethics, responsibilities, and norms of engineering practice. Awareness of the need for diversity by reason of ethnicity, gender, age, physical ability etc. with mutual understanding and respect, and of inclusive attitudes.

Program Outcomes (POs)

Engineering Graduates will be able to:

PO1: Apply knowledge of management theories and practices to solve business problems.

PO2: Foster Analytical and critical thinking abilities for data-based decision making.

PO3: Develop Value-based Leadership ability.

PO4: Understand, analyze and communicate global, economic, legal, and ethical aspects of a business.

PO5: Lead themselves and others in the achievement of organizational goals, contributing effectively to a team environment.

United Nations Sustainable Development Goals (SDGs)

SDG1: No Poverty – End poverty in all its forms everywhere.

SDG2: Zero Hunger – End hunger, achieve food security and improved nutrition and promote sustainable agriculture.

SDG3: Good Health and Well-Being – Ensure healthy lives and promote well-being for all at all ages.

SDG4: Quality Education – Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all.

SDG5: Gender Equality – Achieve gender equality and empower all women and girls.

SDG6: Clean Water and Sanitation – Ensure availability and sustainable management of water and sanitation for all.

SDG7: Affordable and Clean Energy – Ensure access to affordable, reliable, sustainable and modern energy for all.

SDG8: Decent Work and Economic Growth – Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all.

SDG9: Industry, Innovation and Infrastructure – Build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation.

SDG10: Reduced Inequalities – Reduce inequality within and among countries.

SDG11: Sustainable Cities and Communities – Make cities and human settlements inclusive, safe, resilient and sustainable.

SDG12: Responsible Consumption and Production – Ensure sustainable consumption and production patterns.

SDG13: Climate Action – Take urgent action to combat climate change and its impacts.

SDG14: Life Below Water – Conserve and sustainably use the oceans, seas and marine resources for sustainable development.

SDG15: Life on Land – Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss.

SDG16: Peace, Justice and Strong Institutions – Promote peaceful and inclusive societies for sustainable development, provide access to justice for all and build effective, accountable and inclusive institutions at all levels.

SDG17: Partnerships for the Goals – Strengthen the means of implementation and revitalize the global partnership for sustainable development.



SUSTAINABLE DEVELOPMENT GOALS





I MBA I Semester												
#	Course Code	Title of the Course	Category	Teaching and Learning Scheme				Hours	Credits	Assessment Marks		
				CI		LI	TW + SL			H	C	CIE
				L	T	P	SL					
Theory Courses												
1	C6001	Management and Organizational Behaviour	PC	60	-	-	60	120	4	40	60	100
2	C6002	Business Economics	PC	60	-	-	60	120	4	40	60	100
3	C6003	Financial Reporting and Analysis	PC	60	-	-	60	120	4	40	60	100
4	C6004	Research Methodology and Statistical Analysis	PC	60	-	-	60	120	4	40	60	100
5	C6005	Legal and Business Environment	PC	60	-	-	60	120	4	40	60	100
Open Elective – I												
6	C6006	ESG and Sustainability Management	OE	45	-	-	45	90	3	40	60	100
	C6007	Cyber Security										
	C6008	Cross Cultural Management										
	C6009	Banking and Insurance										
Practical Courses												
7	C6010	Business Communication Laboratory	PC	15	-	30	15	60	2	40	60	100
8	C6011	Statistical Data Analysis Laboratory	PC	15	-	30	15	60	2	40	60	100
Total				375	0	60	375	810	27	320	480	800

I MBA II Semester												
#	Course Code	Title of the Course	Category	Teaching and Learning Scheme				Hours	Credits	Assessment Marks		
				CI		LI	TW + SL			H	C	CIE
				L	T	P	SL					
Theory Courses												
1	C6012	Human Resource Management	PC	60	-	-	60	120	4	40	60	100
2	C6013	Marketing Management	PC	60	-	-	60	120	4	40	60	100
3	C6014	Financial Management	PC	60	-	-	60	120	4	40	60	100
4	C6015	Quantitative Analysis for Business Decisions	PC	60	-	-	60	120	4	40	60	100
5	C6016	Entrepreneurship and Design Thinking	PC	60	-	-	60	120	4	40	60	100
6	C6017	Production and Operations Management	PC	60	-	-	60	120	4	40	60	100
Open Elective – II												
7	C6018	Project Management	OE	45	-	-	45	90	3	40	60	100
	C6019	Business Ethics & Corporate Governance										
	C6020	International Business										
	C6021	E-Commerce										
Experiential Learning Course												
8	C6022	Start-up / MSME / Innovation Development Plan / Sector Specific Report	PW	-	-	-	45	45	1	100	-	100
Total				405	0	0	450	855	28	380	420	800



II MBA I Semester												
#	Course Code	Title of the Course	Category	Teaching and Learning Scheme				Hours	Credits	Assessment Marks		
				CI		LI	TW + SL			H	C	CIE
				L	T	P	SL					
Theory Courses												
1	C6023	Supply Chain Management	PC	60	-	-	60	120	4	40	60	100
2	C6024	AI for Business	PC	60	-	-	60	120	4	40	60	100
3	C6025	Business Analytics	PC	60	-	-	60	120	4	40	60	100
4		Professional Elective-I	PE	60	-	-	60	120	4	40	60	100
5		Professional Elective-II	PE	60	-	-	60	120	4	40	60	100
6		Professional Elective-III	PE	60	-	-	60	120	4	40	60	100
Practical Courses												
7	C6026	Data Visualization Laboratory	PC	15	-	30	15	60	2	40	60	100
Experiential Learning Course												
8	C6027	Summer Internship	PW	-	-	-	90	90	2	100	-	100
Total				375	0	30	465	870	28	380	420	800

II MBA II Semester												
#	Course Code	Title of the Course	Category	Teaching and Learning Scheme				Hours	Credits	Assessment Marks		
				CI		LI	TW + SL			H	C	CIE
				L	T	P	SL					
Theory Courses												
1	C6028	Strategic Management	PC	60	-	-	60	120	4	40	60	100
2		Professional Elective-IV	PE	60	-	-	60	120	4	40	60	100
3		Professional Elective-V	PE	60	-	-	60	120	4	40	60	100
4		Professional Elective-VI(A): Elective Specific Analytics Theory	PE	30	-	-	30	60	2	40	60	100
5		Professional Elective-VI(B): Elective Specific Analytics Laboratory	PE	-	-	60	-	60	2	40	60	100
Experiential Learning Courses												
1	C6029	Pre-submission project Seminar	PW	-	-	-	90	90	2	100	-	100
2	C6030	Main Project Viva-Voce	PW	-	-	-	180	180	4	-	100	100
Total				210	0	60	480	750	22	300	400	700

Common Abbreviations Used in the Curriculum

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|--------------------------------------|-------------------------------------|
| PC – Professional Core | L – Lecture Hours |
| PE – Professional Elective | T – Tutorial Hours |
| OE – Open Elective | P – Practical Hours |
| PW – Project Work | TW – Team Work |
| CI – Classroom Instruction | SL – Self Learning |
| LI – Laboratory Instruction | H – Hours |
| CIE – Continuous Internal Evaluation | C – Credits |
| SEE – Semester End Examination | SDG – Sustainable Development Goals |

List of Professional Electives

Domain: Marketing			
Year & Semester	Professional Elective #	Course Code	Title of the Course
II MBA I Semester	Professional Elective – I	C6031	Digital Marketing
II MBA I Semester	Professional Elective – II	C6032	Sales and Promotion Management
II MBA I Semester	Professional Elective – III	C6033	Brand Management and Consumer Behaviour
II MBA II Semester	Professional Elective – IV	C6043	International Marketing
II MBA II Semester	Professional Elective – V	C6044	Services and Retail Management
II MBA II Semester	Professional Elective – VI(A)	C6045	Marketing Analytics
II MBA II Semester	Professional Elective – VI(B)	C6046	Marketing Analytics Laboratory

Domain: Finance			
Year & Semester	Professional Elective #	Course Code	Title of the Course
II MBA I Semester	Professional Elective – I	C6034	Security Analysis and Portfolio Management
II MBA I Semester	Professional Elective – II	C6035	FINTECH
II MBA I Semester	Professional Elective – III	C6036	Strategic Cost and Management Accounting
II MBA II Semester	Professional Elective – IV	C6047	International Financial Management
II MBA II Semester	Professional Elective – V	C6048	Risk Management and Financial Derivatives
II MBA II Semester	Professional Elective – VI(A)	C6049	Financial Analytics
II MBA II Semester	Professional Elective – VI(B)	C6050	Financial Analytics Laboratory

Domain: Human Resource			
Year & Semester	Professional Elective #	Course Code	Title of the Course
II MBA I Semester	Professional Elective – I	C6037	Talent and Performance Management Systems
II MBA I Semester	Professional Elective – II	C6038	Learning and Development
II MBA I Semester	Professional Elective – III	C6039	Employee Relations
II MBA II Semester	Professional Elective – IV	C6051	International Human Resource Management
II MBA II Semester	Professional Elective – V	C6052	Leadership and Change Management
II MBA II Semester	Professional Elective – VI(A)	C6053	HR Analytics
II MBA II Semester	Professional Elective – VI(B)	C6054	HR Analytics Laboratory

Domain: Entrepreneurship			
Year & Semester	Professional Elective #	Course Code	Title of the Course
II MBA I Semester	Professional Elective – I	C6040	Startup and MSME Management
II MBA I Semester	Professional Elective – II	C6041	Family Business Management
II MBA I Semester	Professional Elective – III	C6042	Innovation and Entrepreneurship
II MBA II Semester	Professional Elective – IV	C6055	Entrepreneurial Finance
II MBA II Semester	Professional Elective – V	C6056	Entrepreneurial Marketing
II MBA II Semester	Professional Elective – VI(A)	C6057	Technology Business Incubation
II MBA II Semester	Professional Elective – VI(B)	C6058	Business Incubation – Idea Laboratory

I MBA I Semester

C6001- Management and Organizational Behaviour

Teaching and Learning Scheme				Hours	Credits	Assessment Marks		
CI		LI	TW+SL			H	C	CIE
L	T	P	SL					
60	0	0	60	120	4	40	60	100

Course Description

Course Overview

The course on Management and Organizational Behavior helps students understand key management functions and the impact of human behavior in organizations. It focuses on motivation, leadership, communication, teamwork, and decision making, preparing students to manage people effectively and build positive workplace cultures.

Course Pre/Co-requisites

This course has no specific prerequisite or co-requisite.

Relevant SDG(s)

SDG 5 - Gender Equality

SDG 8 - Decent Work and Economic Growth

Course Outcomes

After the completion of the course, the student will be able to:

- C6001.1 Explain management functions, roles, and skills in organizational settings.
- C6001.2 Apply planning and decision-making techniques in dynamic environments.
- C6001.3 Analyze organizational structures, authority, and control systems.
- C6001.4 Evaluate individual and group behavior for effective teamwork.
- C6001.5 Assess leadership styles and motivation theories for managing people.

Course Syllabus

Unit-I:

Introduction to Management: Nature and scope of management, The Management Process, Management Functions, Kinds of Managers, Managerial Roles and Skills, Evolution of Management, Theories of Management Classical Theories, Scientific Management, Administrative Theory, Behavioral Theory, Management Sciences Theories – Systems Theory, Contingency Theory.

Unit-II:

Planning and Decision Making: Planning and Goal Setting, Organizational Planning, Lean Planning, Vision, Mission and Goals, Types of Plans, Steps in Planning Process, Approaches to Planning, Planning in Dynamic Environment. Types of Decisions, Decision-making Process, decision making styles, vrooms participative decision-making model.

Unit-III:

Organizing and Controlling: Principles of Organizing, Organizational Structure, Designing Organizational Structure. Types of organizational structures Mechanistic and Organic Structures, Virtual and Remote Structures, Contemporary Organizational Design and Challenges, Power, Authority and influence. Controlling: The Control Process, Types of Control, Controlling for Organizational Performance, Financial Controls, Balanced Scorecard, Bench marking, and Contemporary Issues in Controlling.

Unit-IV:

Organizational Behavior: Individual and Group Behavior: Importance of Organizational Behavior, Culture and Dynamics of Diversity, Personality Theories Transaction Analysis, Johari Window Perception, Formation of Group Behavior, Classification of Groups, Group Properties, Group Cohesiveness, Building Teams.

Unit-V:

Leadership and Motivation: Leadership Traits, Leadership Styles, Leadership Theories, organizational cultural, organizational Politics, Motivation: Approaches to Motivation, Maslow's Needs Hierarchy Theory, Two-factor Theory of Motivation, McGregor's Theory, ERG Theory, McClelland's Needs Theory, Valence Theory.

Books and Materials

Text Books:

1. K. Aswathappa *Organisational Behaviour*, 8thed., Himalaya Publications, 2021.
2. Harold Koontz, Heinz Wehrich, Mark V Cannice *Essentials of Management.*, 11th ed., Tata McGraw Hill Education, 2020.
3. Stephen P. Robbins, Timothy A. Judge, Neharika Vohra *Organizational Behaviour.*, 18th ed., Pearson Education, 2018.

Reference Books:

1. Ricky W Griffin. *Management Principles and Practices.*, 11thed., Cengage Learning, 2017.
2. Richard L. Daft. *New Era of Management.* , 11th ed., Cengage Learning, 2017.
3. Chandrani Singh, Aditi Ktri. *Principles and Practices of Management and Organizational Behaviour.* , 1st ed., Sage Publications, 2016.
4. Afsaneh Nahavandi, Robert B. Denhardt, Janet V. Denhardt, Maris P. Aristigueta. *Organizational Behaviour.*, 1st ed., Sage Publications, 2015.

C6002–Business Economics

Teaching and Learning Scheme				Hours	Credits	Assessment Marks		
CI		LI	TW+SL	H	C	CIE	SEE	Total
L	T	P	SL					
60	0	0	60	120	4	40	60	100

Course Description

Course Overview

Business Economics provides a foundation for understanding how economic principles influence business decisions. It explores demand and supply, production and cost behavior, market structures, and pricing strategies, while also considering global business practices. The course connects economic theory with real-world applications, enabling learners to analyze market behavior, evaluate alternatives, and make informed decisions for sustainable business growth.

Course Pre/Co-requisites

This course has no specific prerequisite and co-requisite.

Relevant SDG(s)

SDG 8 - Decent Work and Economic Growth

SDG 9 – Industry, Innovation, and Infrastructure

Course Outcomes

After the completion of the course, the student will be able to:

- C6002.1 Examine the concepts of business economics and its role in managerial decision making.
- C6002.2 Analyze the impact of demand and supply in establishing market equilibrium.
- C6002.3 Analyze the relationship between production output and cost structures to identify optimal production levels and cost efficiencies.
- C6002.4 Analyze the influence of different market structures on pricing and output decisions in competitive environments.
- C6002.5 Design effective pricing strategies for products and services based on market conditions and economic analysis.

Course Syllabus

Unit-I:

Introduction to Business Economics: Definition, Nature and Scope, Relationship with Other Disciplines, Business Decision-making Process, Basic Economic Principles- The Concept of Opportunity Cost, Marginalism, Equi-Marginalism, Incremental Concept, Time Perspective, Discounting Principle, Risk and Uncertainty.

Unit-II:

Theory of Demand and Supply: Demand Analysis: Demand Function, Determinants of Demand, Demand Schedule and Demand Curve. Movement along and shift in Demand Curve. Types of Demand, law of Demand- Assumption and Exceptions. Elasticity of Demand-Types, Measurement and Significance. Demand Forecasting- Need and Methods. Supply Analysis- Supply Function, Determinants of Supply, Law of Supply, Elasticity of Supply, Market Equilibrium.

Unit-III:

Production and Cost Analysis: Production - Production Function, Cobb-Douglas Production Function,

Production Function with One and Two Variables, Marginal Rate of Technical Substitution, Iso-quant and Iso-cost curves, Returns to Scale, Economies of Scale, Indifference Curve. Innovations and Global Competitiveness. Cost Analysis-Cost Concepts, Determinants of Cost, Cost-Output Relationship in the Short run and Long-run, Short-run vs Long-run Costs, Average Cost Curves, Break Even Analysis (with sample problems).

Unit-IV:

Market Structures - Pricing and Output decisions: Classification of Market Structures, Features and Competitive Situations. Pricing and Output decisions- Price-Output Determination under Perfect Competition, Monopoly, Monopolistic Competition and Oligopoly – both the Long-run and the Short-run.

Unit-V:

Pricing Strategies: Pricing Policy, Price Discrimination, Cost Plus Pricing, Pricing of Multiple Products, Transfer Pricing, Pricing over Product Life Cycle. Theory of Firm, Managerial Theories and Behavioral Theories of Firm. International Price Discrimination- Dumping, Effects of Dumping.

Books and Materials

Text Books:

1. D.M. Mithani *Managerial Economics.* , 9th ed., Himalaya Publishing House, 2022.
2. Satya P. Das & J.K. Goyal *Managerial Economics.*, 2nd ed., Sage Publications, 2022.
3. H L Ahuja *Business Economics.*, 13th ed., S. Chand & Co, 2019.

Reference Books:

1. Dominick Salvatore, Siddhartha K. Rastogi. *Managerial Economics.*, 9th ed., Oxford Publications, 2020.
2. Geetika, Piyali Ghosh, Purba Roy Choudhury. *Managerial Economics.* , 3rd ed., Tata McGraw-Hill, 2018.
3. Suma Damodaran. *Managerial Economics.* , 2nd ed., Oxford Publications, 2018.

C6003 - Financial Reporting and Analysis

Teaching and Learning Scheme				Hours	Credits	Assessment Marks		
CI		LI	TW+SL			CIE	SEE	Total
L	T	P	SL	H	C			
60	0	0	60	120	4	40	60	100

Course Description

Course Overview

This course provides a comprehensive foundation in accounting principles and practices, equipping students with the skills to record, classify, and analyze business transactions effectively. It begins with an introduction to the importance, objectives, and principles of accounting followed by an in-depth study of the accounting cycle and preparation of final accounts. Students will learn valuation models for assets, goodwill, inventory, and methods of depreciation, along with the issue and redemption of shares and debentures. The course also emphasizes the preparation and interpretation of financial statements through tools like funds flow, cash flow, ratio analysis, while integrating accounting standards.

Course Pre/Co-requisites

This course has no specific prerequisite and co-requisite.

Relevant SDG(s)

SDG 8 - Decent Work and Economic Growth

SDG 16 - Peace, Justice and Strong Institutions

Course Outcomes

After the completion of the course, the student will be able to:

C6003.1 Apply accounting principles for preparation of financial accounting.

C6003.2 Apply valuation methods to calculate closing value.

C6003.3 Examine the procedure followed to issue of shares and debentures.

C6003.4 Analyze financial statements to assess financial health of business.

C6003.5 Analyze the Accounting Standards to do the uniformity in accounting.

Course Syllabus

Unit-I:

Introduction to Accounting: Importance, Objectives and Principles, Accounting Concepts and Conventions. Generally Accepted Accounting Principles (GAAP), their Implications on Accounting System, Double Entry System, Recording Business Transactions, Classification of accounts. Accounting cycle. The Accounting Process: Overview, Books of Original Record, Journal, Ledger, Trial Balance, Classification of Capital and Revenue Expenses, Final Accounts Trading, P&L Account, Balance Sheet with Adjustments, Rectification of Errors.

Unit-II:

Valuation Models: Valuation of Assets, Tangible vs. Intangible Assets. Inventory Valuation: Methods of Inventory Valuation and Valuation of Goodwill, Methods of Valuation of Goodwill. Depreciation, Methods of Depreciation, their Impact on Measurement of Business Accounting.

Unit-III:

ISSUE OF SHARES: : Entries for issue of shares, Forfeiture and re- issue of forfeited shares. Issue of shares at discount and premium. **ISSUE OF DEBENTURES:** Meaning of redemption, Issue and redemption of debentures, Redemption out of capital and profits.

Unit-IV:

Financial Statement Analysis-I: Statement of Changes in Working Capital, Funds from Operations, Paid Cost and Unpaid Costs. Distinction between Cash Profits and Book Profits, Preparation and Analysis of Cash Flow Statement and Funds Flow Statement, Horizontal Analysis and Vertical Analysis of Company.

Unit-V:

Financial Statement Analysis-II: Analysis and Interpretation of Financial Statements, Liquidity, Leverage, Solvency and Profitability Ratios, Du Pont Chart, Accounting Standards: Accounting Standards Issued by ICAI, Focus on INDAS, International Financial Reporting Standards (IFRS).

Books and Materials

Text Books:

1. Dhanesh K.Khatri *Financial Accounting & Analysis.* ,Tata McGraw-Hill Publishing Limited,2015.
2. Dr. S. N. Maheshwari, Dr. S. K. Maheshwari *Financial Accounting*,5th ed.,Vikas Publishing House Private Limited,2013.
3. S. P. Jain, K. L. Narang *Financial Accounting, 10th edition.*, 4th ed., Kalyani Publication,2009.

Reference Books:

1. S. E. V. Subrahmanyam. *Financial Accounting and Analysis.*, Student helpline Publishing House Private Limited,2011.
2. Ambrish gupta. *Financial Accounting Management - An Analytical Perspective.*, Pearson Education,2009.
3. R. Narayanaswamy. *Financial accounting: A managerial perspective.*, Prentice Hall of India, 2008.

C6004 - Research Methodology and Statistical Analysis

Teaching and Learning Scheme				Hours	Credits	Assessment Marks		
CI		LI	TW+SL	H	C	CIE	SEE	Total
L	T	P	SL					
60	0	0	60	120	4	40	60	100

Course Description

Course Overview

This course provides overview of research, types of research design, Importance of report writing and also solid foundation of basic statistics and at the same time provides an indication of the relevance and importance of the theory in solving practical problems in the business field. The mathematical statistics skills sustained from this course form a suitable base to analytical and theoretical concepts encountered in the business environment.

Course Pre/Co-requisites

This course has no specific prerequisite and co-requisite.

Relevant SDG(s)

SDG 4 – Quality Education

SDG 9 – Industry, Innovation, and Infrastructure

Course Outcomes

After the completion of the course, the student will be able to:

- C6004.1 Summarize the basic concepts of research and measurement of variables.
- C6004.2 Interpret various types of research design and data collection tools and methods for research process.
- C6004.3 Apply different methods of representing data through Graphs and Tables and various small sample tests used for hypothesis testing.
- C6004.4 Analyze the application of suitable statistical tools for interpretation of Qualitative & Quantitative data.
- C6004.5 Examine time series data analysis and importance of writing research report.

Course Syllabus

Unit-I:

Introduction to Research: Meaning, Scope, Role of Business Research, Types of Research, Research Process- Conceptualization of variables and Measurement – Types and measurement of variables – Ethics in business research.

Unit-II:

Research Design: Research Problem- purpose of Research design, Types of Research Design- Experimental research design, Research Design for cross sectional, longitudinal studies, – Characteristics of the good research design, sampling and its applications. Data Collection Methods & Tools: Types of Data, Sources and Instruments for data, Guidelines for questionnaire, Sampling and its application. Measurement and Scaling - Reliability and validity in measurement of variables- sources of error in measurement.

Unit-III:

Tabulation of Univariate: Bivariate and multivariate data, Data classification and tabulation, Diagrammatic and graphical representation of data. One dimensional, two dimensional and three-dimensional diagrams and

graphs. Introduction to statistics, measurement of central tendency and dispersion. Small Sample Tests - t-Distribution-properties and applications, testing for one and two means, paired t-test, hypothesis formulation and testing.

Unit-IV:

Analysis of Variance: One Way and Two-Way ANOVA (with and without Interaction). Chi-Square distribution: Test for a specified Population variance, Test for Goodness of fit, Test for Independence of Attributes. Correlation Analysis- correlation, limits for coefficient of Correlation, Karl Pearson's coefficient of correlation, Spearman's Rank correlation, Linear and Multiple regression analysis, Discriminant analysis, Exploratory Factor Analysis.

Unit-V:

Time Series Analysis and Report Writing: Components, Models of Time Series–Additive, Multiplicative and Mixed models; Trend Analysis- Free hand curve, Semi averages, moving averages, Least Square methods and Index numbers – introduction, Characteristics and uses of index numbers, types of index numbers, un weighted price indexes, weighted price indexes, Tests of adequacy and consumer price indexes. Report Writing - Importance of Report writing, Types of Research Reports, Report Preparation and presentation, Report structure, Report formulation, Guides for effective documentation, Research Briefings. Referencing styles and citation in Business Management Research.

Books and Materials

Text Books:

1. Donald R Cooper, Pamela S. Schindler *Business Research Methods.* ,12thed.,Tata Mc Graw Hill,2019.
2. William G Zikmund, Barry J Babin, Jon C. Carr, Atanu Adhikari, Mitch Griffin , Barry J. Babin *Business Research Methods.*,Cengage Learning,2012.

Reference Books:

1. S.P. Gupta. *Statistical Methods.*, Sultan Chand & Sons, 2018.
2. Naval Bajpai. *Business Research Methods.* ,2nded., Pearson Publications,2017.
3. P.C. Tulsian, Bharat Jhunjunwala. *Business Statistics.* , S. Chand,2016.
4. Prahalad Mishra. *Business Research Methods.* ,Oxford University Press,2015.

C6005 - Legal and Business Environment

Teaching and Learning Scheme				Hours	Credits	Assessment Marks		
CI		LI	TW+SL	H	C	CIE	SEE	Total
L	T	P	SL					
60	0	0	60	120	3	40	60	100

Course Description

Course Overview

This course teaches students about India's legal framework for business operations, focusing on corporate law, regulatory practices, and government reforms. It covers contract law, the Sale of Goods Act, and the Negotiable Instruments Act, 1881, which are crucial for legal transactions. The course also examines government reforms and regulatory initiatives, preparing students to adapt strategies to evolving legal and policy landscapes. By the end of the course, students will be able to apply legal principles to corporate decision-making, ensure compliance with statutory frameworks, and critically evaluate the impact of regulations on business strategies across industries.

Course Pre/Co-requisites

This course has no specific prerequisite and co-requisite.

Relevant SDG(s)

SDG 4 – Quality Education

SDG 9 – Industry, Innovation, and Infrastructure

Course Outcomes

After the completion of the course, the student will be able to:

- C6005.1 Determine the laws relating to company affairs.
- C6005.2 Apply the knowledge legal course of action in law of contract and sale of goods of act in business.
- C6005.3 Interpret the salient features of negotiable Instrument act 1881 to Business.
- C6005.4 Apply the knowledge the reforms undertaken by the Government with respect to the challenges in business environment.
- C6005.5 Analyze the effect of regulatory framework on business-decision making in various industries in India.

Course Syllabus

Unit-I:

Introduction: Companies Act, 2013, Steps and Procedure for Incorporation of a Company, Appointment of Directors, Powers, Duties, & Liabilities of Directors, Role of Audit and Auditors, Change of Auditors, Related Party Transactions, Company Meetings, Resolutions, Winding-up of a Company.

Unit-II:

Law of Contract: Nature and Types of Contract and Essential Elements of Valid Contract, Offer and Acceptance, Consideration, Capacity to Contract and Free Consent, Legality of Object. Unlawful and illegal Agreements, Contingent Contracts, Performance and Discharge of Contracts, Remedies for Breach of Contract. Contracts-II: Indemnity and Guarantee, Contract of Agency, Sale of Goods Act-1930: General Principles, Conditions & Warranties, Performance of Contract of Sale, Auction Sale and E-Auctions.

Unit-III:

Negotiable Instruments Act – 1881: Negotiable Instruments, Promissory Note, Bills of Exchange, & Cheque, Parties to Negotiable Instruments, Types of Endorsements, Holder, Holder in Due-course, Dishonor

and Discharge of Negotiable Instruments, Offences by the Companies, Amendments, RBI Guidelines on Digital Transactions.

Unit-IV:

Business Environment: Industrial Policy, Five Year Planning, Foreign Direct Investment (FDI), Fiscal Policy, Latest Union Budget, Reforms Undertaken by the Government, Monetary Policy, Banking Sector Reforms, NITI Aayog, Responsibilities and Functions. Green Business Initiatives.

Unit-V:

Business Regulations and Environment Laws: Consumer Protection Act 2019, Information Technology Act 2000, Cyber Security Competition Act 2002, Intellectual Property Rights. Environmental Law: Water, Air Pollution, Green Tribunal in Protecting Environment, Sustainability Reporting Practices.

Books and Materials

Text Books:

1. Ravinder Kumar *Legal Aspects of Business.* ,6thed.,Cengage Learning,2024.
2. Francis Cherunilam *Business Environment Text & Cases.*,13thed.,Himalaya Publications,2022.
3. Akhileshwar Patha *Legal Aspects of Business.*,7thed.,TMH,2019.

Reference Books:

1. MC Kuchhal, Vivek Kuchhal. *Business Legislation for Management.*,9thed.,Vikas Publishing House,2024.
2. V Balachandran. *Legal Aspects of Business.* , 2e, Vijay Nicole Imprints, 2023.
3. Rajdeep Banerjee, Joyeeta Banerjee. *Legal Aspects of Business.* ,1sted.,Sage Publications,2022.
4. Parul Gupta. *Legal aspects of Business.* , 2nded.,Vikas Publishing,2019.

OPEN ELECTIVE-I

C6006 - ESG and Sustainability Management

Teaching and Learning Scheme				Hours	Credits	Assessment Marks		
CI		LI	TW+SL	H	C	CIE	SEE	Total
L	T	P	SL					
45	0	0	45	120	3	40	60	100

Course Description

Course Overview

This course provides a comprehensive understanding of Environmental, Social, and Governance (ESG) principles and their integration into sustainable business practices. It explores the evolution of ESG, global frameworks, environmental management systems, climate strategies, stakeholder engagement, governance ethics, and future trends. Emphasis is placed on applying ESG concepts to real-world business contexts and analyzing their impact on corporate performance, risk management, and long-term value creation.

Course Pre/Co-requisites

This course has no specific prerequisite and co-requisite.

Relevant SDG(s)

SDG 12 - Responsible Consumption & Production

SDG 13 - Climate Action

SDG 17 - Partnerships for Goals

Course Outcomes

After the completion of the course, the student will be able to:

C6006.1 Understand ESG concepts and sustainability in modern business.

C6006.2 Analyze the impact of environmental, social, and governance factors on business performance and stakeholder value.

C6006.3 Develop strategies for integrating ESG principles into business operations and decision making.

C6006.4 Evaluate global frameworks, standards, and regulations related to ESG and sustainability.

C6006.5 Apply governance structures and formulate ethical decision-making frameworks.

Course Syllabus

Unit-I:

Introduction to ESG and Sustainability: The definition and importance of ESG in business Historical evolution of ESG and sustainability concepts and the rise of ESG in corporate and investor agendas; Key concepts such as sustainability, corporate social responsibility (CSR), the triple bottom line (people, planet, profit); Global frameworks and standards including the UN Sustainable Development Goals (SDGs), Global Reporting Initiative (GRI), Sustainability Accounting Standards Board (SASB) and Business Responsibility & Sustainability Reporting (BRSR).

Unit-II:

Environmental Management and Climate Strategies: Climate change and its impact on business operations and strategy, Sustainable practices in manufacturing and operations, Environmental Management Systems (EMS), ISO 14001, Environment Impact assessment (EIA); Resource Management: focusing on water, energy, and waste reduction strategies; The concept of a circular economy: the Ellen MacArthur Foundation, Circular business models and value creation, Life cycle assessment (LCA); Carbon foot-printing and GHG Protocols: measure, report, and reduce greenhouse gas emissions; Scope 1, Scope 2 and Scope 3 emissions; environmental

regulations and compliances, such as carbon taxes and emissions trading systems; Renewable energy and their applications, decarbonization, energy transition strategies.

Unit-III:

Social sustainability and Stakeholder Management: Social Responsibility and Community Engagement: Pyramid of corporate social responsibility (CSR), Community development and impact, stakeholder engagement, Stakeholder theory, Legitimacy theory; Human rights and ethical labor practices in global supply chains, Worker safety and occupational health management; Diversity, Equity, and Inclusion (DEI) in the workplace, Importance of DEI in the workplace and strategies for promoting DEI and gender gap in senior management; Employee wellbeing and development: Employee engagement and retention strategies, Learning/Training and development programs, Mental health and work-life balance initiatives.

Unit-IV:

Governance and Ethics: Corporate governance principles; Board composition, diversity and executive accountability; Unraveling the G dimension of ESG -, ethical decision-making and leadership in business, whistleblower policies; Data privacy and cyber security governance; Corporate disclosure and transparency practices, Stakeholder communication strategies, Green washing: Third-party assurance and verification; Risk management and investor perspectives and opportunities.

Unit-V:

Strategic ESG and Future Trends: Aligning ESG with corporate mission, vision, and business strategy; Embedding ESG across value chains and decision-making; Technological Innovations in ESG: Utilizing technology to advance ESG goals: data analytics for ESG metrics, blockchain for supply chain transparency, Digital transformation and sustainability: smart grids, IoT for resource efficiency; Future Trends and Challenges: ESG in emerging economy.

Books and Materials

Text Books:

1. Kristyn Noeth *The ESG and Sustainability Desk book for Business: A Guide to Policy, Regulation, and Practice.*, 1sted.,Après,2024.
2. Tracy Dathe, Marc Helmold, René Dathe, Isabel Dathe *Implementing Environmental, Social and Governance (ESG) Principles for Sustainable Businesses: A Practical Guide in Sustainability Management.*, 2024.
3. *Sustainability Management (Responsible Leadership and Sustainable Management)*,1sted., Springer International Publishing AG,2024.
4. Crane, A. Matten, D.Spence, L. *Corporate Social Responsibility: Readings and cases in a global context* 4thed.,Routledge.2019.

Reference Books:

1. O'Connor, B. *The ESG investing handbook: Insights and developments in environmental, social and governance investment.*, Harriman House, 2021.
2. Serafeim, G. *Purpose and profit: How business can lift up the world.* Harper Collins Leadership., 2020.
3. Eccles, R. G., & Klimenko, S. *The investor revolution: Shareholders are getting serious about sustainability.*, Harvard Business Review Press, 2019

4. C.V. Baxi and Ajit Prasad. *Corporate Social Responsibility: Concepts and Cases.*, The Indian Experience, Excel Books.

C6007 - Cyber Security

Teaching and Learning Scheme				Hours	Credits	Assessment Marks		
CI		LI	TW+SL	H	C	CIE	SEE	Total
L	T	P	SL					
45	0	0	45	90	3	40	60	100

Course Description

Course Overview

This course provides a comprehensive foundation in cyber security concepts, principles, and practices. It covers key objectives of security, types of cyber threats and crimes, and the legal and ethical frameworks governing cyber security. Students will learn about security management, governance, risk management, and technical controls, along with tools and technologies such as cryptography, IAM, AI, and blockchain. The course also emphasizes contemporary applications, personal cyber security practices, emerging technologies, and digital forensics to prepare students for managing security in evolving digital environments.

Course Pre/Co-requisites

This course has no specific prerequisite and co-requisite.

Relevant SDG(s)

SDG 9 - Industry, Innovation and Infrastructure

SDG 16 - Peace, Justice and Strong Institutions

Course Outcomes

After the completion of the course, the student will be able to:

- C6007.1 Apply cyber security concepts, objectives, and frameworks to safeguard information systems.
- C6007.2 Analyze cyber threats, crimes, attacker motives, and legal frameworks to design effective responses.
- C6007.3 Apply cyber security management practices, policies, and technical controls for organizational protection.
- C6007.4 Analyze the role of emerging technologies such as AI, blockchain, and quantum computing in enhancing cyber security.
- C6007.5 Apply personal cyber security best practices, digital forensics methods, and ethical approaches to build digital trust and resilience.

Course Syllabus

Unit-I:

Foundations of Cyber security: Introduction to Information Systems, Cyberspace and Cyber security, Cyber security vs. Information Security. Key Concepts of Cyber security: definition, meaning and scope of cyber security. Key objectives of cyber security: confidentiality, integrity & availability (CIA triad). Essential Security and Privacy Goals. Cyber security Vulnerabilities and Challenges, Common Vulnerabilities and Exposures (CVE).

Unit-II:

Cyber Threats, Crimes, and Legal Frameworks: Types of Cybercrime and Threat Actors, Motives of attackers, Cyber attack Tools and Methods, Cyber Kill Chain and Response, National and International Cyber security Policies, Cyber security Laws and Ethics, Role of Law Enforcement and Cyber Forensics, Cybercrime Investigation and Evidence Handling.

Unit-III:

Cyber security Management and Controls: Information Security Governance and Risk Management. Cyber security Management Practices, Security Policies, Procedures, and Controls, Security Incident Response and Business Continuity, Data and Application Security. Overview of Technical Controls, Physical and User Access Security, Internet of Things (IoT) Security.

Unit-IV:

Cyber security Tools, Technologies, and Emerging Frameworks: Cyber security Frameworks and Industry Standards, Cyber Resilience and Human Factor, Cryptography and Digital Signatures, Identity and Access Management (IAM), Antivirus, Email Security, Role of AI, Blockchain, and Quantum Computing in Cyber security.

Unit-V:

Contemporary Applications, Personal Cyber security and Information Security: Personal Cyber security Best Practices, Privacy and Data Protection Regulations, Cyber security. Credentials for Information Security Professionals, Employment Policies and Practices, Security Management Maintenance Models, Digital Forensics.

Books and Materials

Text Books:

1. Susan Lincke. *Information Security Planning: A Practical Approach.*, Springer. 2024.
2. Ajay Singh. *Introduction to Cyber security: Concepts, Principles, Technologies and Practices.*, Universities Press (India) Pvt. Ltd. 2023
3. Jocelyn O. Padallan. *Cyber security.*, Arceler Press.2020.(e-book).

Reference Books:

1. Susanne Chishti and Janob Barberis. *The Fintech Book*, Wiley David L.Shrier and Alex Pentlan, *Global Fintech.*, The MIT Press, 2022.
2. Whitman, Michael E., and Herbert J. Mattord. *Principles of information security.* Boston., MA: Thomson Course Technology, 2017, Cengage Learning.

C6008 - Cross Cultural Management

Teaching and Learning Scheme				Hours	Credits	Assessment Marks		
CI		LI	TW+SL			H	C	CIE
L	T	P	SL					
45	0	0	45	90	3	40	60	100

Course Description

Course Overview

This course explores the impact of culture on business practices and management across global contexts. It examines national and organizational cultural dimensions, management styles, communication patterns, negotiation approaches, and cross cultural teamwork. Emphasis is placed on applying cultural frameworks to business challenges and analyzing how cultural differences influence organizational behavior, leadership, communication, and conflict resolution in international business settings.

Course Pre/Co-requisites

This course has no specific prerequisite and co-requisite.

Relevant SDG(s)

SDG 9 - Industry, Innovation & Infrastructure

SDG 16 - Peace, Justice and Strong Institutions

Course Outcomes

After the completion of the course, the student will be able to:

- C6008.1 Apply cultural frameworks and dimensions to assess the influence of national and business cultures in global contexts.
- C6008.2 Analyze cultural dilemmas and management styles to reconcile differences in international business decision-making.
- C6008.3 Apply cultural insights to organizational structures, leadership practices, and marketing strategies in diverse environments.
- C6008.4 Analyze intercultural communication barriers and negotiation strategies to enhance international business effectiveness.
- C6008.5 Apply cross-cultural management approaches to develop effective teams, resolve conflicts, and build strong intercultural relationships.

Course Syllabus

Unit-I:

Introduction: Determinants of Culture, Facets of Culture, Levels of Culture, National Cultural Dimensions in the Business Context. The Influence of National Culture on Business Culture. Business Cultures: East and West.

Unit-II:

Cultural Dimensions and Dilemmas: Value Orientations and Dimensions, Reconciling Cultural Dilemmas, Culture and Styles of Management: Management Tasks and Cultural Values.

Unit-III:

Culture and Organizations: Culture and Corporate Structures, Culture and Leadership, Culture and Strategy, Cultural Change in Organizations, Culture and Marketing, Cultural Diversity.

Unit-IV:

Culture and Communications: Business Communication across Cultures, Barriers to Intercultural Communication, Negotiating Internationally.

Unit-V:

Cross Cultural Team Management: Working with International Teams, Group Processes During International Encounters, Conflicts and Cultural Difference, Understanding and Dealing with Conflicts, Developing Intercultural Relationships.

Books and Materials

Text Books:

1. Marie-Joelle Browaeys, Roger Price. *Understanding Cross-Cultural Management* 4thed., Pearson,2019.
2. David C.Thomas. *Cross Cultural Management.*, 4thed., Sage Publications,2017.
3. Nigel Holdon. *Cross Cultural Management: Knowledge Management Perspective.*, Pentice Hall, 2012.

Reference Books:

1. Richard Mead. *International Management-Cross cultural Dimension.*,3thed., Blackwell, 2015.
2. Parissa Haghirian. *Multinational and Cross-Cultural Management.*, Routledge, 2012.
3. Jerome Dumetz. *Cross-cultural Management Textbook: Lessons from the world leading experts in cross-cultural management.*, Create Space Independent Publishing Platform; Student edition (September 5, 2012), Oakland, USA.

C6009 - Banking and Insurance

Teaching and Learning Scheme				Hours	Credits	Assessment Marks		
CI		LI	TW+SL			CIE	SEE	Total
L	T	P	SL	H	C			
45	0	0	45	90	3	40	60	100

Course Description

Course Overview

This course provides a comprehensive understanding of the principles and practices of banking and insurance in India. It covers the structure of the Indian banking system, types of banks, and their role in financial intermediation. Learners will explore banking operations such as account management, payment systems, loan portfolios, credit risk, and NPAs, along with the fundamentals of insurance, types of policies, underwriting, and claims management. The course also examines the regulatory framework of RBI and IRDAI, including compliance measures like AML and KYC norms. In addition, it addresses emerging risks, fintech innovations, cyber security challenges, and the role of digital technologies in enhancing financial inclusion.

Course Pre/Co-requisites

This course has no specific prerequisite and co-requisite.

Relevant SDG(s)

SDG 8 – Decent Work and Economic

SDG 17 - Partnerships for the Goals

Course Outcomes

After the completion of the course, the student will be able to:

C6009.1 Apply the fundamental concepts and functions of banking in the context of the economy.

C6009.2 Analyze core banking operations to interpret account management, transaction systems, credit facilities, and risk management practices in the banking sector.

C6009.3 Apply the principles of insurance to assess different policy structures and claims management procedures.

C6009.4 Assess the role of regulatory bodies and guidelines in insurance companies.

C6009.5 Analyze risks, technology use, and innovations that shape modern banking and insurance.

Course Syllabus

Unit-I:

Banking: Introduction to Banking, Structure of Indian Banking System, Types of Banks - retail, commercial, cooperative, development banks. Role of Commercial Banks, Banking Sector Reforms and Financial Intermediation.

Unit-II:

Banking Operations and practices: Account types, payment systems -NEFT, RTGS, UPI, payment gateways. Types of Loans and Advances, Loan portfolio and credit risk assessment, Non Performing Assets (NPAs)- Causes and Recovery, Priority Sector Lending

Unit-III:

Insurance Fundamentals: Insurance, Advantages, disadvantages, principles, elements of insurance contract, Types of Insurance- Life, General, Health. Policy structure, underwriting process, claims management and customer service in insurance.

Unit-IV:

Regulatory framework for Banking and Insurance: Role and functions of RBI, RBI guidelines and monetary policy. Role and functions of IRDAI, IRDAI regulations 2002, Anti-money laundering (AML) measures and KYC norms.

Unit-V:

Risk and technology in banking and Insurance: Risk management in banking and insurance, Cyber security concerns in financial services, Role of fintech, digital wallets, insurtech, AI applications, Financial Inclusion and Microfinance, Innovations in banking.

Books and Materials

Text Books:

1. O.P. Agarwal. *Banking and Insurance*, 5th Himalaya Publishing House, 2024.
2. E. Gordon & P.K. Gupta. *Banking and Insurance*, Himalaya Publishing House, 2023.
3. Neelam C. Gulati. *Banking and Insurance.*, Excel Books.

Reference Books:

1. Michael W. Brandl. *Money, Banking, Financial Markets & Institutions.*, 2nd ed., Cengage, 2025.
2. M.N. Mishra & S.B. Mishra. *Principles and Practice of Insurance.*, 2nd ed., S. Chand Publishing.
3. Bharati V. Pathak. *Indian Financial System.*, 5th ed., Pearson Education, 2018.

C6010 - Business Communication Laboratory

Teaching and Learning Scheme				Hours	Credits	Assessment Marks		
CI		LI	TW+SL	H	C	CIE	SEE	Total
L	T	P	SL					
15	0	30	15	60	2	40	60	100

Course Description

Course Overview

This course provides students with the linguistic competence and professional communication skills required for active participation in business contexts. It focuses on the acquisition of specialized business vocabulary and the effective use of language in meetings, teleconferences, professional correspondence, and public speaking. Students will be trained to organize, conduct, and conclude meetings, and to produce formal proposals as outcomes of group discussions. The course further introduces fundamental negotiation strategies and emphasizes the importance of cultural awareness and workplace communication practices. Upon completion of the course, students will be able to demonstrate proficiency in professional business communication, adapt effectively to diverse organizational settings, and apply structured negotiation and presentation skills in real-world contexts.

Course Pre/Co-requisites

This course has no specific prerequisite and co-requisite.

Relevant SDG(s)

SDG 4 – Quality Education

SDG 8 – Decent Work and Economic Growth

Course Outcomes

After the completion of the course, the student will be able to:

- C6010.1 Interpret the various methods of communication and their application for effective spoken and written communication in business.
- C6010.2 Develop business writing skills for drafting effective and professional e-mails, proposals, and business-related documents.
- C6010.3 Justify the importance of writing business reports and proposals.
- C6010.4 To enhance students' professional communication through presentations and interview skills.
- C6010.5 Exemplify the need for up-skilling on the contemporary aspects of business communication.

Course Syllabus for Laboratory Experiments

Unit-I:

Introduction: Introduction to Business Communication, Business Communication Models, Communication Barriers, Communication Media Choices, Inter-cultural and Team Communication, Interpersonal Communication, Respecting Social Protocol, Networking and Socializing Professionally, Non-Verbal Communication, Listening, Communication through social media, Business Meetings.

Unit-II:

Developing Business Writing Skills: Process of Writing, Drafting, Revising Visuals, Editing, Proofreading and Formatting, Writing Positive and Neutral Messages, Persuasive Messages, Bad News Messages, Business Letter Writing, Kinds of Business Letters, Communicating with E-Mail and Memos. Improving Readability of Written Communication Hemingway Editor.

Unit-III:

Business Reports and Proposals: Writing the Report, Planning the Report, Steps in Writing Business Reports, Parts of a Report, Corporate Report and Business Proposal, Citing Sources.

Unit-IV:

Oral and Employment Communication: The Role of Business Presentations, Planning and Organizing Presentations, Team Presentations, Online Presentations. Understanding Yourself, Career, Goal Setting, Preparing a Resume, Resume Formats, Writing Covering Letters, Enquiry Mails, and Preparing for the Job Interview.

Unit-V:

Contemporary Aspects in Communication: Business Etiquette, Developing Professional Telephone Skills, Mass Media, Public Relations Management, Cross-Cultural and Global Communication, Communication in Information Technology, e-Business related Operations.

Laboratory Equipment/Software/Tools Required:

1. Desktop Computer system with MS Office
2. Relevant case study, Material and activity printouts

Books and Materials

Reference Books:

1. Mary Ellen Guffey and DanaLoewy. *Business Communication*,11th Cengage,2025.
2. Lehman and Dufrene. *Business Communication*., 10th Cengage,2022.
3. Dr.V.K.Jain, Dr. Omprakash Biyani. *Business Communication*., S.Chand, 2022.
4. Kelly M. Quintanilla and Shawn T. Wahl. *Business and Professional Communication*.,4th Sage Publications,2020.

C6011 - Statistical Data Analysis Laboratory

Teaching and Learning Scheme				Hours	Credits	Assessment Marks		
CI		LI	TW+SL	H	C	CIE	SEE	Total
L	T	P	SL					
15	0	30	15	60	2	40	60	100

Course Description

Course Overview

This course equips students with practical skills in using MS Excel and SPSS for statistical data analysis. It covers data handling, visualization, and advanced functions for effective decision-making. Students will learn to apply statistical methods such as measures of central tendency, dispersion, correlation, regression, hypothesis testing, ANOVA, chi-square, and time series forecasting. Emphasis is placed on interpreting results and developing analytical insights for research and business applications.

Course Pre/Co-requisites

This course has no specific prerequisite and co-requisite.

Relevant SDG(s)

SDG 4 – Quality Education

SDG 9 – Industry, Innovation, and Infrastructure

Course Outcomes

After the completion of the course, the student will be able to:

- C6011.1 Apply the functions and features of Excel/SPSS to manage and analyze datasets.
- C6011.2 Analyze and interpret data using statistical measures such as central tendency, dispersion, correlation, and regression.
- C6011.3 Apply hypothesis testing techniques (t-test, F-test, ANOVA, chi-square) to real-world problems.
- C6011.4 Analyze time series data using forecasting methods to support decision-making.
- C6011.5 Apply data visualization tools such as charts, graphs, and pivot tables for effective presentation of results.

Course Syllabus for Laboratory Experiments

Unit-I:

Introduction to Statistical Packages: MS – EXCEL or SPSS: Introduction, Uses, Functions and Features of Statistical Packages, getting started with Excel/SPSS, Highlights and Main Functions: Home, Insert, Page Layout, Formulae, Data, Review, View, Add-ins, Using Help Function, Customizing the Quick Access Toolbar.

Unit-II:

Creating and Using Templates: Working with Data: Entering, Editing, Copy, Cut, Paste, Paste Special, Formatting Data and Using the Right Mouse Click, Saving, Page Setup, and Printing, Using Headers and Footers, Manipulating Data, Using Data Names and Ranges, Filters and Sort and Validation Lists.

Unit-III:

Data from External Sources: Using and Formatting Tables, Basic Formulae and Use of Functions, Data Analysis Using Charts and Graphs, Managing, Inserting, and Copying Worksheets, Securing the Document, Advanced Formulae and Functions, Worksheet Features, Data Analysis using Pivot Tables and Pivot Charts.

Unit-IV:

Data Analysis – I: Tabulation, Bar Diagram, Multiple Bar Diagram, Pie Diagram, Measures of Central Tendency: Mean, Median, Mode. Measures of Dispersion: Variance, Standard Deviation, Coefficient of Variation, Correlation and Regression Lines.

Unit-V:

Data Analysis – II: t-test, F-test, ANOVA One-way classification, Chi-square Test, Independence of attributes. Time series: Forecasting Method of Least Squares, Moving Average Method, Inference and Discussion of Results.

Laboratory Equipment/Software/Tools Required:

1. Desktop Computer system with MS Office
2. Desktop Computer system with SPSS

Books and Materials

Text Books:

1. SC Srivastava *Industrial Relations and Labour Laws* 8th ed., Vikas Publishing House Ltd, 2022.
2. D.P.Sahoo *Employee Relations, Text & Cases*, 1th ed., Sage Publications, 2020.
3. C.S. Venkat Rathnam *Industrial Relations*, 2nd ed., Oxford University Press, New Delhi, 2019.
4. Parul Gupta *Industrial Relations & Labour Laws for Managers*, Sage Publications, 2019.

Reference Books:

1. Arun Monappa. *Industrial Relations*. Tata McGraw-Hill Publishing Company Limited, New Delhi, 2017.
2. C. B. Mamoria, S. Mamoria and S. Gankar. *Dynamics of Industrial Relations*, 13th ed., Himalaya Publishing House Pvt.Ltd, 2014.
3. P. N. Singh and Neeraj Kumar. *Employee Relations Management*. Pearson Education, 2010.
4. Ministry of Labour and Employment, Government of India. *Labour Code*. https://labour.gov.in/sites/default/files/Labour_Code_Eng.pdf

I MBA II Semester

C6012 - Human Resource Management

Teaching and Learning Scheme				Hours	Credits	Assessment Marks		
CI		LI	TW+SL	H	C	CIE	SEE	Total
L	T	P	SL					
60	0	0	60	120	4	40	60	100

Course Description

Course Overview

Human Resource Management (HRM) is the strategic approach to managing people in organizations to maximize their performance and align with organizational goals. It encompasses workforce planning, recruitment, selection, training, performance appraisal, compensation, and employee relations. HRM also ensures employee welfare, legal compliance, and fosters motivation, engagement, and career development. Modern HRM integrates technology, analytics, and e-recruitment while addressing employee diversity, well-being, and organizational culture. By balancing organizational needs with employee satisfaction, HRM plays a vital role in building competitive advantage, ensuring productivity, and sustaining effective governance in today's dynamic business environment.

Course Pre/Co-requisites

This course has no specific prerequisite and co-requisite.

Relevant SDG(s)

SDG3 - Good Health and Well Being

SDG 5 - Gender Equality

SDG 8 - Decent Work & Economic Growth

Course Outcomes

After the completion of the course, the student will be able to:

C6012.1 Apply HRM concepts and analyze their role in organizations.

C6012.2 Interpret job analysis and apply recruitment and e-recruitment practices.

C6012.3 Evaluate training, development, and appraisal systems for organizational alignment.

C6012.4 Analyze compensation, rewards, and welfare measures for employee productivity.

C6012.5 Examine employee relations, grievance handling, and labor laws for effective HR governance.

Course Syllabus

Unit-I:

Foundations of HRM: Introduction to HRM, Line Managers, HRM: Managerial and Operative Functions, New Approaches to Organizing HR, Globalization & Competition Trends, Technological Trends, Trends in Nature of Work, Workforce and Demographic Trends, Economic Challenges, Equal Employment Opportunity and DEI. HR Score Card. Self Directed Work Teams (SDWT) Human Resource Information System (HRIS), e-HRM, Introduction to HR Analytics and AI in HRM, Green HRM, Agile HRM.

Unit-II:

Talent Acquisition: Basics of Talent Management Process, Job Analysis, Methods for Collecting Job Analysis Information, Job Descriptions and Specifications, Job Design, Job Enlargement, Job Enrichment and Job Rotation, Job Satisfaction. HR Planning, Recruitment, e-Recruitment & Selection Process, Planning & Forecasting of human Resources, Sources of Recruitment, Recruitment on Diverse Work Force, Employee Testing and Selection, Basic Types of Interviews, Errors in Interviews.

Unit-III:

Learning and Development, Performance Management: Importance of Training and Development, Training Process, Analyzing Training Needs & Designing the Program, Implementation of training programs, Training Methods, Management Development Process, Evaluation of Training and Development programs. Performance Management: Concept of Performance Management and Appraisal, The Performance Management Process, Traditional and modern Performance Appraisal Methods, Career Management.

Unit-IV:

Compensation and Employee Welfare: Basic Factors in Determining Pay Rates, Job Evaluation Methods, Compensation and Reward Structure, Pricing Managerial and Professional Jobs, Pay for Performance. Employee Insurance, Retirement Benefits, Employee Welfare Facilities. Salient Features of Workmen Compensation Act & Minimum Wages Act.

Unit-V:

Employee Relations: Labor Movement, Collective Bargaining Process, Grievances: Grievances Redressal Procedure, Employee Separation, Employee Safety and Health, Occupational Safety Law, Workplace Health Hazards Problems and Remedies. Stress Management and Work-Life Integration. Salient Features of Industrial Disputes Acts 1947, Factories Act. Prevention of Sexual Harassment (PoSH) and Migrant Labor Act.

Books and Materials

Text Books:

1. Gary Dessler, Biju Varkkey *Human Resource Management*, 17th ed., Pearson, 2023.
2. P. SubbaRao *Essentials of Human Resource Management*, 6th ed., Himalaya Publishing, 2021.
3. Biswajeet Pattanayak *Human Resource Management*, 5th ed., PHI Learning Pvt. Ltd., 2018.

Reference Books:

1. K. Aswathappa. *Human Resource Management: Text and Cases*, 8th ed., TMH, 2017.
2. Robert L. Mathis, John H. Jackson, Manas Ranjan Tripathy. *Human Resource Management*, Cengage Learning 2016.
3. Sharon Pande and Swapnalekha Basak. *Human Resource Management, Text and Cases*, 2nd ed., Vikas Publishing, 2016.

C6013 - Marketing Management

Teaching and Learning Scheme				Hours	Credits	Assessment Marks		
CI		LI	TW+SL	H	C	CIE	SEE	Total
L	T	P	SL					
60	0	0	60	120	4	40	60	100

Course Description

Course Overview

This course introduces core marketing concepts, strategies, and practices. It covers consumer behavior, customer value, segmentation, targeting, positioning, product and brand management, pricing, distribution, and promotion. Students also explore digital, global, rural, and green marketing along with ethical aspects. The course equips learners with skills to design and implement effective marketing strategies in dynamic business environments.

Course Pre/Co-requisites

This course has no specific prerequisite and co-requisite.

Relevant SDG(s)

SDG 9 – Industry, Innovation, and Infrastructure

SDG 12 - Responsible Consumption and Production

Course Outcomes

After the completion of the course, the student will be able to:

- C6013.1 Understand the core concepts of marketing, marketing environment and process of Marketing Research.
- C6013.2 Analyze market opportunities and customer value with the help of marketing mix variables.
- C6013.3 Design a customer driven strategy through Market Segmentation, Targeting and Positioning.
- C6013.4 Analyze the significance of Distribution decisions, Promotion and Communication strategies.
- C6013.5 Assess the importance of pricing decisions and contemporary marketing topics.

Course Syllabus

Unit-I:

Introduction to Marketing: Importance and Scope of Marketing, Philosophies of Marketing, Core Marketing Concepts, Marketing Mix, Extended Marketing Mix, Market Place, Market Space, Marketing Environment, Marketing Strategies and Plans, The New Marketing Realities, Marketing Analytics: An Introduction. Market Research, Marketing Research Process, Marketing Information Systems. Marketing Research and Ethics, International Marketing Research.

Unit-II:

Analyzing Marketing Opportunities, Customer Value and Marketing Mix: Consumer Decision-making, Building Customer Value, Analyzing Consumer Markets, Consumer Behavior, Cultural, Social & Personal Factors, Developing Products & Brands, Product Levels; Classifying Products, Product Range, Product Line & Product Mix, Product Life Cycles, New Product Development, New Service Development, Stages of Product/ Service innovation development, The Process of Adoption, Branding– Importance, Role, Scope and Elements.

Unit-III:

Designing a Customer Driven Strategy: Market Segmentation, Targeting, Positioning Process, Segmentation of Consumer Market, Business Market, Requirement for Effective Segmentation, Market Targeting, Evaluating Market Segmentation, Selecting Target Market, Segmentation, Positioning and Repositioning, Positioning Maps, Product Positioning Strategies.

Unit-IV:

Distribution Decisions, Promotion and Communication Strategies: Marketing Channels, Channel Intermediates and Functions, Channel Structure, Channel for Consumer Products, Business and Industrial Products, Alternative Channel, Channel Strategy Decisions. The Promotional Mix, Marketing Mix, Expanded marketing Mix, Advertising, Word of Mouth, Sales Promotion, Personal Selling, Direct and Online Marketing, Public Relations. Marketing Communication: Communication Process.

Unit-V:

Pricing Decisions and contemporary trends: Importance of Price, Cost Determinant of Price, Markup Pricing, Profit Maximization Pricing, Break-even Pricing, Pricing Strategies, Ethics of Pricing Strategy, Product Line Pricing, Rural Marketing, Bottom of the Pyramid, Relationship Marketing, Retail Marketing, Digital marketing, social media and Mobile Marketing, Global marketing, Green Marketing, Market Sustainability and Ethics.

Books and Materials

Text Books:

1. G. Shainesh, Philip Kotler, Kevin lane Keller, Alexander Chernev, Jagdish N.Sheth *Marketing Management*,16thed., Pearson, 2022.
2. Philip Kotler, Gray Armstrong, Prafulla Agnihotri *Principles of Marketing.*, 6e, Pearson Education, 2020.
3. Ramaswamy, Nama Kumari *Marketing Management.*,6thed.,Sage Publications, 2018

Reference Books:

1. Mukesh Chaturvedi & A.V. Shukla. *Marketing - A New Age Perspective.*,6thed.,Vikas Publishing, 2025.
2. Rosalind Masterson, Nichola Phillips, David Pickton. *Marketing: An Introduction.*,6thed.,Sage Publications, 2021.
3. Lamb, Hair, Sharma, Mc Daniel. *Principles of Marketing.* , A South Asian Perspective Cengage Learning, 2016.
4. Arun Kumar & N. Meenakshi. *Marketing Management* ,3thed., Vikas Publications,2016.

C6014 - Financial Management

Teaching and Learning Scheme				Hours	Credits	Assessment Marks		
CI		LI	TW+SL	H	C	CIE	SEE	Total
L	T	P	SL					
60	0	0	60	120	4	40	60	100

Course Description

Course Overview

This course aims to provide the students with an understanding of fundamental concepts that underpin financial decision making and the emerging role of financial management in supporting business objectives. It also covers essential techniques for evaluating long term investment opportunities through capital budgeting methods, equipping them with informed proposals for investment, capital structure decisions, identifying optimal combinations of debt and equity mix to maximize firm value. The curriculum also delves into dividend policy theories, guiding students on appropriate earnings distribution strategies that align with shareholder interests and firm growth. Lastly, it also emphasizes the significance of effective working capital management, highlighting its role in maintaining liquidity, operational efficiency, and overall financial stability.

Course Pre/Co-requisites

This course has no specific prerequisite and co-requisite.

Relevant SDG(s)

SDG 4 – Quality Education

SDG 8 - Decent Work & Economic Growth

SDG 16 - Peace, Justice & Strong Institutions

Course Outcomes

After the completion of the course, the student will be able to:

- C6014.1 Interpret the fundamental concepts, objectives and the evolving role of financial management within a business entity.
- C6014.2 Implement various analytical techniques to make sound capital budgeting decisions for long term investments.
- C6014.3 Analyze different theories and factors influencing capital structure decisions to determine an optimal mix of debt and equity financing.
- C6014.4 Assess various dividend theories and policies to determine the appropriate distribution of earnings to shareholders while considering firm value.
- C6014.5 Interpret the fundamental concepts, objectives and the evolving role of financial management within a business entity.

Course Syllabus

Unit-I:

The Finance Function: Nature and Scope, Evolution of Finance Function, Its New Role in the Contemporary Scenario, Goals of Finance Function, Profit Maximization and Wealth Maximization, The Components of Financial System, the Agency Relationship and Costs; Risk-Return Trade off; Concept of Time Value of Money, Future Value and Present Value and the Basic Valuation Model.

Unit-II:

The Investment Decision: Investment Decision Process, Project Generation, Project Evaluation, Project

Selection and Project Implementation. Developing Cash Flow, Data for New Projects, Capital Budgeting Techniques: Traditional and DCF Methods. The NPV vs. IRR Debate, Approaches for Reconciliation. Capital Budgeting Decision under Conditions of Risk and Uncertainty. Cost of Capital: Concept and Measurement of Cost of Capital, Weighted Average Cost of Capital and Marginal Cost of Capital. Importance of Cost of Capital in Capital Budgeting Decisions.

Unit-III:

Capital Structure Decisions: Capital Structure vs. Financial Structure, Capitalization, Financial Leverage, Operating Leverage and Composite Leverage. EBIT-EPS Analysis, Indifference Point/Break-even Analysis of Financial Leverage, Capital Structure Theories: The Modigliani Miller Theory, NI, NOI Theory and Traditional Theory.

Unit-IV:

Dividend Decisions: Dividends and Value of the Firm, Relevance of Dividends, the MM Hypothesis, Factors Determining Dividend Policy, Dividends and Valuation of the Firm, the Basic Models, Forms of Dividend. Declaration and Payment of Dividends. Bonus Shares, Rights Issue, Share-splits, Major Forms of Dividends, Cash and Bonus Shares. Dividends and Valuation. Major. Theories centered on the works of Gordon, Walter and Lintner, Dividend Policies of Indian companies.

Unit-V:

Working Capital Management and Finance: Working Capital Management: Components of Working Capital, Gross vs. Net Working capital, Determinants of Working Capital Needs, the Operating Cycle Approach. Financing of Working Capital through Bank Finance and Trade Credit. Management of Current Assets: Basic Strategies for Cash Management, Cash Planning, Cash Budget, Cash Management Techniques/Processes. Marketable Securities: Characteristics, Selection Criterion, Management of Receivables, Credit Policy, Credit Evaluation of Individual Accounts, Monitoring Receivables. Management of Inventory, Inventory Management Process, Inventory Control Systems, Analysis of Investment in Inventory.

Books and Materials

Text Books:

1. Richard A. Brealey, Stewart C. Myers, and Franklin Allen. *Principles of Corporate Finance* 10thed., McGraw-Hill Education, 2011.
2. James C. Van Horne and John M. Wachowicz Jr *Fundamentals of Financial Management*. 18thed., Pearson Education, 2010.

Reference Books:

1. Prasanna Chandra. *Financial Management*, 6thed., Mc Graw Hill, 2019
2. M.Y Khan, P K Jain. *Financial Management-Text and Problems*, 8thed., Mc Graw Hill, 2019.
3. Arindam Banerjee. *Financial Management*, Oxford Publications, 2016.
4. I M Pandey. *Financial Management*, 11thed., Vikas Publications, 2015.
5. Eugene F. Brigham Michael C. Ehrhardt *Financial Management*, 12thed., Cengage Learning, 2012.
6. James C Vanhorne, Sanjay Dhamija. *Financial Management and Policy*, 12thed., Pearson Education, New Delhi, 2011.

C6015 - Quantitative Analysis for Business Decisions

Teaching and Learning Scheme				Hours	Credits	Assessment Marks		
CI		LI	TW+SL	H	C	CIE	SEE	Total
L	T	P	SL					
60	0	0	60	120	4	40	60	100

Course Description

Course Overview

This course provides a solid foundation of basic concepts of operations research and at the same time provides an indication of the relevance and importance of the theory in solving practical problems in the business field. The operations research methods can learn from this course and form a suitable base to analytical and theoretical concepts encountered in the business environment.

Course Pre/Co-requisites

This course has no specific prerequisite and co-requisite.

Relevant SDG(s)

SDG 4 – Quality Education

SDG 9 – Industry, Innovation, and Infrastructure

Course Outcomes

After the completion of the course, the student will be able to:

- C6015.1 Analyze various OR models and evaluate their applications in solving managerial problems.
- C6015.2 Evaluate Linear Programming Problems using graphical, simplex methods and interpret the results.
- C6015.3 Apply various methods to compute optimal solutions for assignment and transportation models.
- C6015.4 Design decision trees and analyze networks to determine critical paths and project duration.
- C6015.5 Analyze queuing models and game theory concepts in operations management.

Course Syllabus

Unit-I:

Introduction to Operations Research: Nature and Scope of Operations Research: Origins of OR, Applications of OR in different Managerial Areas, Problem Solving and Decision-making, Quantitative and Qualitative Analysis. Defining a Model, Types of Models, Process for Developing an Operations Research Model, Practices, Opportunities and Shortcomings of using an OR Model.

Unit-II:

Linear Programming Method: Structure of LPP, Assumptions of LPP, Application Areas of LPP, Guidelines for Formulation of LPP, Formulation of LPP for Different Areas, Solving of LPP by Graphical Method: Extreme Point Method, Simplex Method, Big -M Method, Converting Primal LPP to Dual LPP, Limitations of LPP.

Unit-III:

Assignment Model: Algorithm for Solving Assignment Model, Hungarians Method for Solving Assignment Problem, Variations of Assignment Problem: Multiple Optimal Solutions, Maximization Case in Assignment Problem, Unbalanced Assignment Problem, Travelling Salesman Problem, Simplex Method for Solving Assignment Problem. Transportation Problem: Mathematical Model of Transportation Problem, Methods for Finding Initial basic Feasible Solution: Northwest Corner Method, Least Cost Method, Vogels Approximation Method, Test of Optimality by MODI Method, Unbalanced Supply and Demand, Degeneracy and its Resolution.

Unit-IV:

Decision Theory: Introduction, Ingredients of Decision Problems. Decision-making under Uncertainty, Cost of Uncertainty under Risk, under Perfect Information, Decision Tree, Construction of Decision Tree. Network Analysis: Network Diagram, PERT, CPM, Critical Path Determination, Project Completion Time, Project Crashing.

Unit-V:

Queuing Theory: Queuing Structure and Basic Component of a Queuing Model, Distributions in Queuing Model, Different Queuing Models with FCFS, Queue Discipline, Single and Multiple Service Station with Finite and Infinite Population. Game Theory, Saddle Point, Value of the Game.

Books and Materials

Text Books:

1. James E. Sallis, Geir Gripsrud, Ulf Henning Olsson, Ragnhild Silkoset. *Research Methods and Data Analysis for Business Decisions*. , A Primer Using SPSS,1sted., Springer International Publishing,2021.
2. Mik Wisniewski, Dr Farhad Shafti *Quantitative Analysis for Decision Makers*,7thed., Pearson,2019.
3. Miguel Ángel Canela, Inés Alegre, Alberto Ibarra *Quantitative Methods for Management: A Practical Approach*,1sted., Springer International Publishing,2019.

Reference Books:

1. N.V.S. Raju. *Operations Research: Theory and Practice*., CRC Press, 2020.
2. R. Pannerselvam. *Operations Research*.,3rded., Prentice Hall International,2015.
3. J.K. Sharma.*Operations Research: Theory and applications*.,5thed., Macmillian,2013.
4. I Subba Rao. *International Business*.,Himalaya Publications, 2007.

C6016 – Entrepreneurship and Design Thinking

Teaching and Learning Scheme				Hours	Credits	Assessment Marks		
CI		LI	TW+SL	H	C	CIE	SEE	Total
L	T	P	SL					
60	0	0	60	120	4	40	60	100

Course Description

Course Overview

The course's goal is to determine both the customer discovery and the student flow. The students must be able to come up with concepts and analyse them using cutting-edge management models and theories in order to conceptualize prototypes based on customer demands. To determine whether the prototype's Minimum Viable Price (MVP) is marketable, it will be put to the test.

Course Pre/Co-requisites

This course has no specific prerequisite and co-requisite.

Relevant SDG(s)

SDG 1 - No Poverty

SDG 8 - Decent Work & Economic Growth

SDG 9 - Industry, Innovation and Infrastructure

Course Outcomes

After the completion of the course, the student will be able to:

C6016.1 Identify students mind set in which they are interested.

C6016.2 Utilize innovation and design thinking approaches to investigate the needs of the customer.

C6016.3 Create concepts, then consider many options to see which best meets the needs of the customer.

C6016.4 Create and test the prototype using the needs of the customer.

Course Syllabus

Unit-I:

Introduction to Entrepreneurship: Evaluation of Entrepreneurship, Definition and characteristics of entrepreneurs, Types of entrepreneurs, Myths and realities of entrepreneurship, Risk-taking and resilience, Creativity and innovation, Growth mindset and opportunity recognition, Role of Entrepreneurship in Economic Development and Social sustainability. The individual Entrepreneurial Mindset and Personality: The Entrepreneurial Journey, Stress and the Entrepreneur, The Entrepreneurial Ego, Entrepreneurial Motivations, Motivational Cycle, Entrepreneurial Motivational Behavior, Entrepreneurial Competencies.

Unit-II:

Strategic Perspectives in Entrepreneurship: Strategic Planning, Strategic Actions, Strategic Positioning, Business Stabilization, Building the Adaptive Firms, Understanding the Growth Stage, Internal and External Growth Strategies, Unique Managerial Concerns of Growing Ventures.

Unit-III:

Opportunities and Challenges of Entrepreneurship: Initiatives by the Government of India to Promote Entrepreneurship, Social and Women Entrepreneurship. Feasibility Analysis, Industry and Competitor Analysis, Formulation of the Entrepreneurial Plan, The Challenges of New Venture Start-ups, Developing an Effective

Business Model, Blue and Red Ocean Strategies, Sources of Finance, Critical Factors for New venture Development, Evaluation Process. Intellectual Property Protection: Patents, Copyrights, Trademarks and Trade Secrets, Avoiding Trademark Pitfalls.

Unit-IV:

Design Thinking – An Introduction: Principles of Design Thinking, Process of Design Thinking, planning a Design Thinking Project, Problem identification, Problem statement, Problem Analysis, Reformation of the Problem, Empathetic Design Methods.

Unit-V:

Prototype, Testing Ideas, Implementing Design Thinking: Creativity, Creativity Process, Creativity Techniques, Business Idea, Evaluation of Ideas, Kano Method, Finding Gaps in the Market Place, Prototype, Lean Startup Method, Visualization, Presentation Techniques, Desirability Testing, Methods to Initiate Ventures, Creating New Ventures, Acquiring an Established Venture, Franchising- Advantages and Disadvantages, Implementing Design Thinking, Agility for Design Thinking.

Books and Materials

Text Books:

1. Ali J Ahmed, Punita Bhatt, Lain Acton. *Entrepreneurship in Developing and Emerging Economies*, 1st ed., Sage Publications, 2019.
2. Christian Mueller - Roterberg *Handbook of Design Thinking – Tips and Tools for how to design Thinking.*, Independently Published, US, 2018.
3. D F Kuratko and T V Rao *Entrepreneurship-A South-Asian Perspective.*, 1st ed., Cengage Learning, 2012.

Reference Books:

1. Chandramouli Subramanian, Thyagarajan Paramsvivan & Sankaran Venkataramani. *Design Thinking – A hands on Approach.*, 1st ed., Universities Press, 2025.
2. Robert D. Hisrich, Michael P. Peters, Dean A. Shepherd. *Entrepreneurship.*, 10th ed., Mc Graw Hill, 2018.
3. Bruce R. Barringer & R. Duane Ireland. *Entrepreneurship Successfully launching new ventures.*, 4th ed., Pearson, 2015.

C6017 - Production and Operations Management

Teaching and Learning Scheme				Hours	Credits	Assessment Marks		
CI		LI	TW+SL	H	C	CIE	SEE	Total
L	T	P	SL					
60	0	0	60	120	4	40	60	100

Course Description

Course Overview

This course gives a comprehensive understanding to the fundamental concepts and principles of production and operations management within an organization. It covers the key steps involved in product design, emphasizing value analysis to enhance product quality and cost effectiveness. Students will explore critical aspects of plant location and layout, enabling them to make informed decisions that optimize operational efficiency and resource utilization. Additionally, the course provides the methods for scheduling process, highlighting the factors that influence timely and cost effective production planning. It also emphasizes on modern materials management practices, including electronic procurement (e-Procurement) and Green Purchasing, which are vital for sustainable production and efficient supply chain management system.

Course Pre/Co-requisites

This course has no specific prerequisite and co-requisite.

Relevant SDG(s)

- SDG 4 - Quality Education
- SDG 8 - Decent Work and Economic Growth
- SDG 9 - Industry, Innovation and Infrastructure
- SDG 12 - Responsible Consumption & Production

Course Outcomes

After the completion of the course, the student will be able to:

- C6017.1 Understand the concepts of production and operations management in an organization.
- C6017.2 Analyze the steps involved in product design for value analysis.
- C6017.3 Examine the various aspects of plant location and layout.
- C6017.4 Summarize the process and factors that influence scheduling.
- C6017.5 Interpret the various aspects of materials management like e-Procurement, Green Purchasing.

Course Syllabus

Unit-I:

Introduction to Operations Management: Functional Subsystems of Organization, Definition, Systems Concept of Production, Types of Production Systems, Flow, Job Shop, Batch Manufacturing and Project, Strategic Operations Management, Corporate Strategic, Generic Competitive Strategies, Functional Strategies, Productivity, World Class Manufacturing, Sustainable Operations Management, Industry 4.0.

Unit-II:

Product Design and Analysis: New Product Development, its Concepts, Steps of Product Design, Process Planning and Design, Selection of Process, Responsibilities of Process Planning Engineer, Steps in Process Planning. Process Design, Process Research, Pilot Plant Development, Capacity Planning, Enhanced Capacity using Optimization. Value Analysis, Value Engineering, Lean Production System.

Unit-III:

Plant Location and Plant Layout: Factors Influencing Plant Location, Break-even Analysis. Single Facility Location Problem, Multi-Facility Location Problems, Model for Multi Facility Location Problem, Model to Determine X-Coordinates of New Facilities, Model to Determine Y- Coordinate. Plant Layout - Plant Layout: Introduction, Classification of Layout, Advantages and Limitations of Product Layout, Advantages and Limitations of Group Technology Layout, Layout Design Procedures.

Unit-IV:

Scheduling and Quality Control: Introduction, Johnson's Algorithm, Extension of Johnson's Rule. Job Shop Scheduling: Introduction, Types of Schedules, Schedule Generation, Heuristic Procedures, Priority Dispatching Rules. Two Jobs and m Machines Scheduling, Quality Control Concepts, Control Charts for Attributes and Variables, Gantt Charts.

Unit-V:

Materials Management: Integrated Materials Management, Components of Integrated Materials Management, Materials Planning, Inventory Control, Purchase Management, e Procurement, Green Purchasing, Stores Management, EOQ, Models of Inventory, Operation of Inventory Systems, Quantity Discount, Implementation of Purchase Inventory Model, Incoming. Materials Control, Obsolete Surplus and Scrap Management, ABC Analysis, XYZ Analysis, VED Analysis, FSN Analysis, SDE Analysis.

Books and Materials

Text Books:

1. K. Ashwathappa, Sridhar Bhatt. *Production and Operations Management*, 2nded., Himalaya Publishing House, 2021.
2. S N Chary. *Production and Operations Management*, 6thed., Mc Graw Hill, 2019.

Reference Books:

1. Metters, King-Metters, Pullman, Walton. *Successful Service Operations Management*, Cengage, 2024.
2. B. Mahadevan. *Operations Management: Theory and Practice*, 3rded., Pearson Education, 2018.
3. Ajay K. Garg. *Production and Operations Management*, TMH, 2017.
4. Panneerselvam. *Production and Operations Management*, 3rded., PHI, 2012.
5. K. Boyer, Rohit Verma. *Operations Management*, Cengage Learning, 2011.

OPEN ELECTIVE-II

C6018 - Project Management

Teaching and Learning Scheme				Hours	Credits	Assessment Marks		
CI		LI	TW+SL	H	C	CIE	SEE	Total
L	T	P	SL					
45	0	0	45	90	3	40	60	100

Course Description

Course Overview

This course provides thorough understanding of project management principles and practices. Students will explore the key characteristics that define projects and examine the different stages of the project life cycle, highlighting their applications in diverse industries. The course emphasizes the importance of effective project planning and guides students through conducting comprehensive feasibility studies to assess project viability, including technical, economic, and operational aspects and also learn to evaluate project financial viability using standard techniques. Additionally, the course introduces tools and methodologies for successful project execution, monitoring, and control, with a focus on agile approaches to adapt to changing project environments, leadership, team dynamics, and stakeholder management that are critical for ensuring project success.

Course Pre/Co-requisites

This course has no specific prerequisite and co-requisite.

Relevant SDG(s)

SDG 4 – Quality Education

SDG 9 – Industry, Innovation, and Infrastructure

SDG 12 - Responsible Consumption & Production

Course Outcomes

After the completion of the course, the student will be able to:

- C6018.1 Understand the key characteristics of projects, outline the stages of the project life cycle, and diverse applications of projects across various sectors.
- C6018.2 Apply project planning principles and conduct comprehensive feasibility studies to appraise project viability.
- C6018.3 Evaluate the financial viability of projects using standard project evaluation techniques and cost analysis.
- C6018.4 Apply tools and methodologies for effective project execution, monitoring, and control, by using agile approaches.
- C6018.5 Interpret the human and organizational factors significant for successful project management.

Course Syllabus

Unit-I:

Introduction: Introduction to Project Management, Project Characteristics, Project Life Cycle, Project Identification, Formulation and Implementation, Project Management in different Sectors: Construction, Services Sector, Public sector and Government Projects. Systems Approach to Project Management.

Unit-II:

Project Appraisal: Project Planning, Steps in Project Planning, Scheduling, Project Appraisal, Feasibility Study, Technical, Commercial, Economic, Financial, Management, Social Cost Benefit Analysis, Project Risk Analysis.

Unit-III:

Project Finance: Project Cost Estimation, Project Financing, Investment Criteria, Project Evaluation Techniques, Pay Back Period, Accounting Rate of Return, Net Present Value, Internal Rate of Return, Profitability Index, Cash Flows Estimation for New and Replacement Projects, Cost of Capital, Risk Analysis.

Unit-IV:

Project Quality Management and Control: Quality Policy, ISO Standards ISO 21500:2012, ISO 10006:2017, ISO 31000:2018, Network Diagrams, Network Analysis, Critical Path, Quality Management, Project Execution, Monitoring and Control, Agile Project Management, Scrum, Lean Production and Project Management.

Unit-V:

Organizational Behavior in Project Management: Organizational Structure and Integration, Role of Project Manager, Roles in the Project Team, Project Stakeholder Engagement, Leadership in Project Management, Participative Management, Team Building Approach, Conflict Management in Projects, Stress Management.

Books and Materials

Text Books:

1. Stewart R. Clegg, Torgeir Skyttermoen, Anne Live Vaagasar. *Project Management*. ,1sted., Sage Publications,2021.
2. Jeffrey K. Pinto. *Project Management*.,5thed., Pearson Education,2020.
3. Prasanna Chandra. *Projects, Planning, Analysis, Selection, Financing, Implementation and Review*.,9thed., Tata McGraw Hill,2019.

Reference Books:

1. K. Nagarajan. *Project Management*,8thed., New Age International Publishers,2020
2. Jack Gido, Jim Clements, Rose Baker. *Mind Tap for Successful Project Management*,7thed.,Cengage Learning,2018.
3. John M, Nicholas, Herman Steyn. *Project Management for Engineering, Business and Technology*.,5thed.,Routledge,201

C6019 - Business Ethics and Corporate Governance

Teaching and Learning Scheme				Hours	Credits	Assessment Marks		
CI		LI	TW+SL			H	C	CIE
L	T	P	SL					
45	0	0	45	90	3	40	60	100

Course Description

Course Overview

The aim of the course is to introduce the students towards Business Ethics and Professional Ethics. It also aims to inculcate ethical behaviour in students when they will join their professional streams. Going further the students shall also be introduced to the concepts of Corporate Governance and CSR which are nowadays mandatory for smooth functioning of Companies.

Course Pre/Co-requisites

This course has no specific prerequisite and co-requisite.

Relevant SDG(s)

SDG 9 – Industry, Innovation, and Infrastructure

SDG 12 - Responsible Consumption & Production

Course Outcomes

After the completion of the course, the student will be able to:

- C6019.1 Examine the Need for Business Ethics and Corporate Governance in India.
- C6019.2 Apply Knowledge of Established Ethical Practices in Professional Sphere.
- C6019.3 Deconstructing Codes and Committees in Corporate Governance.
- C6019.4 Interpret the Role of Board in Corporate Governance.
- C6019.5 Analyze the Role of CSR as a Business Strategy and Responsibility.

Course Syllabus

Unit-I:

Business Ethics in the Changing Environment: Business Ethics, Levels of Business Ethics, Myths about Business Ethics, Stages of Moral Development Kohlberg’s Study, Carol Gilligan’s Theory, Principles of Ethics.

Unit-II:

Professional Ethics: Introduction to Professional Ethics, Ethics in Production and Product Management, Ethics of Marketing Professionals, Ethics in HRM, Ethics of Finance and Accounting Professionals, Ethics of Advertisement, Ethics of Media Reporting, Ethics of Healthcare Services. Ethical Dilemma, Mounting Scandals, Ethical Issues, Preparatory Ethics: Proactive Steps, Cyber Ethics, Board diversity.

Unit-III:

Corporate Governance: Introduction to Corporate Governance, Major Corporate Governance Failures, Need for Corporate Governance, Corporate Governance in India, Theories of Corporate Governance: Agency Theory, Stewardship Theory and Stakeholder Theory, Problems of Governance in Companies, Role of Capital Markets, Regulator, Government in Corporate Governance

Unit-IV:

Corporate Governance Codes and Committees: Global Reporting Initiative, OECD Principles, Cadbury Committee Report, Kumara Mangalam Birla Committee Report, Naresh Chandra Committee Report, Narayana

Murthy Committee Report, Kotak Committee Report, SEBI Clause 49 Guidelines, Corporate Governance Committees Whistle blowing and ethical leadership. Role of Board: Types of Directors, Functions of the Board, Structure of the Board, Role of the Board in Subcommittees, Audit, Compensation Committee, Role, Duties and Responsibilities of Directors, Conflicts of Interest, Remedial Actions. Governance Ratings, Merits and Demerits of Governance Ratings.

Unit-V:

Corporate Social Responsibility (CSR): Models for Implementation of CSR, Scope of CSR, Steps to attain CSR, Business Council for Sustainable Development (BCSD) India, Ethics and Social Responsibility of Business, Social Responsibility and Indian Corporations, CSR as a Business Strategy for Sustainable Development, CSR Committee, Recent Amendments in Companies Act (Sec: 135).

Books and Materials

Text Books:

1. O.C. Ferrell, John Fraedrich & Linda Farrel. *Business Ethics- Ethical Decision Making and Case* 13thed., Cengage, 2024.
2. A. C. Fernando. *Business Ethics and Corporate Governance*. 2thed., Pearson, 2018.
3. Jyotsna G B, R C Joshi. *Business Ethics and Corporate Governance*. 1sted., TMH, 2019.

Reference Books:

1. C.S.V. Murthy. *Business Ethics* 1sted., Himalaya Publishing House, 2019.
2. Martin J. Ossewaarde. *Introduction to Sustainable Development* 1sted., sage Publication, 2018.
3. Christine A. Mallin. *Corporate Governance* 4thed., Oxford University Press, South Asia Edition, 2016.
4. T.N. Sateesh Kumar. *Corporate Governance*, Oxford University Press, 2015.
5. Bob Tricker. *Corporate Governance Principles, Policies and Practices*, Oxford University Press, 2015.

C6020 - International Business

Teaching and Learning Scheme				Hours	Credits	Assessment Marks		
CI		LI	TW+SL	H	C	CIE	SEE	Total
L	T	P	SL					
45	0	0	45	90	3	40	60	100

Course Description

Course Overview

This course provides students with a comprehensive understanding of International Business in the context of globalization. It covers trade theories, balance of payments, and global economic policies, emphasizing the role of economic integration and trade agreements in international cooperation and market expansion. The course also explores how multinational enterprises design strategies, organizational structures, and entry modes to operate successfully across diverse markets. It also covers functional areas like production, marketing, finance, and human resources, focusing on managing cross-cultural differences and global operational challenges.

Course Pre/Co-requisites

This course has no specific prerequisite and co-requisite.

Relevant SDG(s)

SDG 12 - Responsible Consumption and Production

SDG 16 - Peace, Justice and Strong Institutions

Course Outcomes

After the completion of the course, the student will be able to:

- C6020.1 Demonstrate the ability to apply fundamental concepts of international business and evaluate business opportunities and challenges in global environments.
- C6020.2 Apply various trade theories and influence of balance of payment in global business environment.
- C6020.3 Examine the concept of economic integration and international trade agreements in the context of global economic cooperation.
- C6020.4 Analyze strategic frameworks and organizational structures of international businesses, strategic alliances, and global design issues for effective international operations.
- C6020.5 Determine the key functional issues in international production, marketing, finance, and human resource management to evaluate cross-cultural challenges and global business practices.

Course Syllabus

Unit-I:

Introduction to International Business: Need for International Business, Drivers of Globalization, Distinction between Domestic and International Business, International Business Approaches, Modes of International Business, Impediments in International Business, Opportunities and Challenges of International Business, Ease of Doing Business (World Bank), Multinational Corporation (MNCs), International Business Environment: Cultural, Political, Social and Technological Environment..

Unit-II:

International Trade Theories: Classical Theories: Mercantilism, Absolute Advantage Theory, Comparative Advantage Theory and Factor Endowment Theory. Modern Theories: Country Similarity Theory, Product Life Cycle Theory, New Trade Cycle Theory and National Competitive Advantage Theory. India's Foreign Trade, Foreign Direct Investment in India, Balance of Payments.

Unit-III:

International Business and Economic Integration: Levels of Economic Integration, Benefits and Challenges of Economic Integration, Free Trade Agreement (FTA), The Customs Union, The Common Market, The Economic Union. Arguments Surrounding Economic Integration, Regional Economic Groups: European Union, NAFTA, ASEAN, SAARC, QUAD and G8, Rise of BRICS. Multilateral Trade Agreements: GAAT, WTO, TRIPS and TRIMS, UNCTAD. International Trade Policy of India. Recent Trade-Tariff Wars.

Unit-IV:

Strategy and Structure of International Business: Environmental Analysis, Value Chain Analysis, Types of Strategies, Strategy Implementation Process, Control and Evaluation, Mergers and Acquisitions, Strategic Alliances, Nature, Benefits, Pitfalls of Strategic Alliances, Scope of Strategic Alliance, Alliance Development Process, Economic Considerations for Strategic Alliances, Issues in Global Organizational Design.

Unit-V:

International Business Operations: Issues involving International Production: Sourcing and Vertical Integration. Major Activities in International Marketing: Brand Decisions, PLC, Issues of International Financial management: Forex Market, International Monetary System, International Financial Markets, Export Financing. Managing International HR Activities: HR Planning, Recruitment and selection, Expatriate Selection and Training. Cross Cultural Issues in International Business.

Books and Materials

Text Books:

1. Michael R. Czinkota, Ilkka A. Ronkainen, Suraksha Gupta. *International Business*. 9thed., Cambridge University Press, 2021.
2. K Ashwatappa. *International Business*. 6thed., Mc Graw Hill, 2019.
3. Charles W. L Hill, G. Thomas M Hult, Rohit Mehtani. *International Business*. 11thed., Mc Graw Hill, 2019.

Reference Books:

1. Mike W. Peng. *Global Business*. 5thed., Cengage, 2025.
2. EHUD Menipaz, Amit Menipaz and Shiv S Tripathi. *International Business – Theory and Practice*. 1sted., Sage Publishers, 2017.
3. Sanjay Misra, P.K. Yadav. *International Business: Text & Cases*., PHI, 2009.
4. Rakesh Mohan Joshi. *International Business*., Oxford University Press, 2009.
5. Subba Rao. *International Business*., Himalaya Publications, 2007.

C6021 - E-Commerce

Teaching and Learning Scheme				Hours	Credits	Assessment Marks		
CI		LI	TW+SL	H	C	CIE	SEE	Total
L	T	P	SL					
45	0	0	45	90	3	40	60	100

Course Description

Course Overview

The aim of the course is to introduce the students towards Business Ethics and Professional Ethics. It also aims to inculcate ethical behaviour in students when they will join their professional streams. Going further the students shall also be introduced to the concepts of Corporate Governance and CSR which are nowadays mandatory for smooth functioning of Companies.

Course Pre/Co-requisites

This course has no specific prerequisite and co-requisite.

Relevant SDG(s)

SDG 10 - Reduced Inequalities

SDG 17 - Partnerships for the Goals

Course Outcomes

After the completion of the course, the student will be able to:

- C6021.1 Analyze the growth patterns of Indian e-commerce and differentiate between the strategies of Flipkart and Amazon India.
- C6021.2 Compare B2B, B2C, C2C, C2B, and hybrid models and evaluate the impact of technologies like AI, ML, blockchain, and UPI on the Indian e-commerce ecosystem.
- C6021.3 Assess the effectiveness of payment gateways, security mechanisms, and logistics models including 3PL and hyper local delivery in the Indian context.
- C6021.4 Share examples of companies that explain their business approaches. Apply strategies like influencer marketing, WhatsApp commerce, and vernacular content to rural and Tier 2/3 markets.
- C6021.5 Understand and Apply regulations to meet Compliances.

Course Syllabus

Unit-I:

Introduction to E-Commerce : Concepts and evolution of e-commerce, Indian e-commerce market landscape and statistics, Key success factors in Indian e-commerce startups, Case study: Flipkart vs Amazon India.

Unit-II:

Business Models in E-Commerce and Digital infrastructure: Business Models in E- Commerce B2B, B2C, C2C, C2B, and hybrid models, Marketplace vs inventory, led models, Subscription and freemium models, Case studies: Nykaa, Zomato, Meesho, Digital Infrastructure - Internet and mobile penetration in India, Cloud computing and data centers, Role of AI, ML, blockchain in Indian e-commerce, UPI and India Stack: Driving digital inclusion.

Unit-III:

Payment Systems, Fintech and Social Media Marketing: Digital wallets, UPI, and payment gateways, online payment mechanism, RBI regulations and guidelines, Security and fraud prevention, Fintech startups and innovations in India. Role of third-party logistics (3PL), Reverse logistics and cash-on-delivery challenges, The

Philosophy of Participation, Social Media Value Chain, The LARA Framework, Social Footprints, Sentiment Analysis, Case Studies, Indian Postal Service's role in rural e-commerce.

Unit-IV:

E-Marketing & Social Commerce and Rural E-Commerce & Digital India: SEO/SEM, affiliate marketing, influencer marketing, viral and permission marketing. WhatsApp commerce and live selling, Role of regional languages and vernacular content, Case studies: v, Moj, Sharechat, YouTube India. Digital literacy and access challenges, Opportunities in Tier 2, Tier, 3 and rural markets, Government initiatives: Digital India, ONDC, Case study: Reliance Jio's disruption.

Unit-V:

Legal and Regulatory Framework: Information Technology Act, 2000, Consumer Protection (E-Commerce) Rules, 2020, FDI Policy fore-commerce, Data privacy laws and compliance. (DPDP Act), General data protection regulation (GDPR).

Books and Materials

Text Books:

1. Kenneth C. Laudon, Carol Guercio Traver. *E-Commerce: Business*. 18thed., Pearson, 2024.
2. P.T. Joseph, S.J. *E-Commerce: An Indian Perspective* 7thed., PHI Learning Pvt. Ltd, 2023.
3. C.S.V. Murthy. *E-Commerce: Concepts, Models and Strategies*, Himalaya Publishing House, Reprint Edition, 2023.

Reference Books:

1. Tuten, T., and M. R. Solomon. *Social Media Marketing-Tracy L.*, Tuten, Michael R Solomon. In (2017).
2. Bharat Bhasker. *Electronic Commerce: Framework, Technologies and Applications* 4thed., Tata McGraw Hill Education, 2013.
3. Bajaj and Nag. *E-Commerce: The Cutting Edge of Business.*, Tata McGraw Hill.

C6022 – Start-up / MSME / Innovation Development Plan / Sector Specific Report

Teaching and Learning Scheme				Hours	Credits	Assessment Marks		
CI		LI	TW+SL	H	C	CIE	SEE	Total
L	T	P	SL					
0	0	0	45	45	1	100	0	100

Course Description

Course Overview

The Program provides practical industry exposure through four approaches: Start-up, MSME, Innovation Development, and Sector-Specific Analysis. Students gain insights into entrepreneurial journeys, small business operations, innovation planning, and sectoral practices. The course emphasizes problem-solving, analytical thinking, and professional skills, enabling students to connect theory with real-world business applications

Course Pre/Co-requisites

This course has no specific prerequisite and co-requisite.

Relevant SDG(s)

SDG 1 - No Poverty

SDG 8 - Decent Work & Economic Growth

SDG 9 - Industry, Innovation and Infrastructure

Course Outcomes

After the completion of the course, the student will be able to:

- C6022.1 Apply management concepts to analyze start-up, MSME, innovation, and sector-specific practices.
- C6022.2 Analyze business models and operational processes to identify strengths, weaknesses, and improvement areas.
- C6022.3. Apply problem-solving skills to real-world challenges in entrepreneurial and organizational contexts.
- C6022.4. Analyze industry trends, policies, and competitive strategies to assess their impact on firms.
- C6022.5. Apply experiential learning to bridge academic knowledge with practical business decision-making.

Approach to Summer Internship

1. START-UP:

- (a) Company Profile & Founding Journey: Include the start-up's origin story, vision, founding team, funding stages, and current status (incubator, accelerator, market stage).
- (b) Business Model Analysis: Explain the value proposition, revenue model, customer segments, and go-to-market strategy
- (c) Roles & Responsibilities during Internship: Detail your tasks, problem-solving contributions, learning outcomes, and exposure to entrepreneurial challenges.
- (d) SWOT Analysis & Strategic Recommendations: Analyze strengths, weaknesses, opportunities, and threats, and suggest future strategies for growth/scalability.

2. MSME (Micro, Small & Medium Enterprise):

- (a) MSME Background & Operational Context: Provide a brief overview of the company, its size (micro/small/medium), industry type, location, and core operations.
- (b) Spectrometer

- (c) **Functional Area Observations:** Describe the internship role, specific departmental exposure (HR, Marketing, Operations, etc.), and process understanding.
- (d) **Challenges Faced by the MSME:** Discuss typical pain points such as resource constraints, market competition, digitization gaps, or financial limitations
- (e) **Suggestions for Process Improvement:** Offer actionable recommendations to improve efficiency, customer reach, or financial performance.

3. INNOVATION DEVELOPMENT PLAN:

- (a) **Identification of a Problem Area:** Begin by clearly stating the real-world problem or unmet need identified through observation, research, or stakeholder inputs.
- (b) **Ideation & Conceptualization:** Outline the innovation idea (product, service, process), how it was developed, and how it addresses the defined problem.
- (c) **Feasibility & Impact Assessment:** Assess technical feasibility, market potential, cost benefit analysis, and possible risks involved.
- (d) **Implementation Roadmap:** Provide a plan with milestones, resource requirements, stakeholder involvement, and scalability scope.

4. SECTOR-SPECIFIC REPORT:

- (a) **Industry Overview:** Present a macro-level view of the chosen sector (e.g., BFSI, FMCG, Healthcare, IT, etc.), including size, trends, challenges, and opportunities.
- (b) **Company-Specific Analysis:** Highlight the organization's position in the sector, its market share, competitors, and key strategic moves
- (c) **Internship Learnings & Functional Insights:** Reflect on your experience in a functional area and its alignment with sector trends (e.g., digital banking in BFSI).
- (d) **Policy or Regulatory Impacts:** Discuss relevant government policies, economic factors, or sector-specific reforms that influence the company's operations.

II MBA I Semester

C6023 – Supply Chain Management

Teaching and Learning Scheme				Hours	Credits	Assessment Marks		
CI		LI	TW+SL	H	C	CIE	SEE	Total
L	T	P	SL					
60	0	0	60	120	4	40	60	100

Course Description

Course Overview

This course provides a comprehensive understanding of Supply Chain Management (SCM) and Logistics, focusing on their strategic role in enhancing organizational efficiency and competitiveness. It covers objectives, processes, stages, best practices, logistics, distribution systems, outsourcing strategies, transportation models, performance measurement tools, bullwhip effect, supply chain coordination, partnerships, trust, and information technology. Students learn green supply chain management and sustainability concepts, and are equipped to analyze, design, and apply supply chain and logistics strategies.

Course Pre/Co-requisites

This course has no specific prerequisite and co-requisite.

Relevant SDG(s)

SDG 9 - Industry, Innovation & Infrastructure

SDG 12 - Responsible Consumption & Production

SDG 13 - Climate Action

Course Outcomes

After the completion of the course, the student will be able to:

- C6023.1 Apply supply chain concepts and strategies to analyze real-world business scenarios for achieving efficiency, sustainability, and strategic fit.
- C6023.2 Interpret logistics concepts, functions, and strategies to design efficient distribution systems and gain competitive advantage in supply chain operations.
- C6023.3 Articulate the role of distribution and network design decisions in shaping effective and technology-driven supply chain systems.
- C6023.4 Analyze supply chain performance using measurement tools and models to evaluate challenges and strategies in global supply chain networks.
- C6023.5 Apply the concept of coordination mechanisms and technology-enabled practices to improve collaboration, reduce bullwhip effect, and enhance supply chain efficiency.

Course Syllabus

Unit-I:

Understanding Supply Chain: Objectives of a Supply Chain, Importance, Stages of Supply Chain, Value Chain Process, Cycle View of Supply Chain Process, Key Issues in SCM, supply Chain Drivers and Obstacles, Supply Chain Strategies, Strategic Fit, Best Practices in SCM, Obstacles of Streamlined SCM, Green Supply Chain Management, Supply Chain Sustainability.

Unit-II:

Logistics: Evolution, Objectives, Components and Functions of Logistics Management, Difference between Logistics and Supply Chain, Distribution related Issues and Challenges. Gaining Competitive Advantage through Logistics Management, Transportation: Functions, Costs, and Mode of Transportation Network and Decision,

Models, Containerization, Cross Docking, Reverse Logistics. Outsourcing: Nature and Concept, Strategic Decision to Outsourcing, Third-party Logistics (3PL), Fourth-party Logistics (4PL).

Unit-III:

Designing the Supply Chain Network: Designing the Distribution Network, Role of Distribution, Factors Influencing Distribution, Design Options, e-Business and its Impact, Distribution Networks in Practice, Network Design in the Supply Chain, Role of Network, Factors Affecting the Network Design Decisions, Modelling for Supply Chain.

Unit-IV:

Supply Chain Performance: Bullwhip Effect and Reduction, Performance Measurement: Dimension, Tools of Performance Measurement, SCOR Model. Demand Chain Management, Global Supply Chain, Challenges in Establishing Global Supply Chain, Factors that influence Designing Global Supply Chain Network.

Unit-V:

Coordination in a Supply Chain: Importance of Coordination, Lack of Supply Chain Coordination and the effects, Obstacles to Coordination, Managerial Levels, Building Partnerships and Trust, Continuous Replenishment and Vendor Managed Inventories, Collaborative Planning, Forecasting and Replenishment. Role of Information Technology in Supply Chain, Supply Chain 4.0.

Books and Materials

Text Books:

1. IMT Ghaziabad. *Advanced Supply Chain Management* Sage Publications, 2021.
2. K Sridhara Bhat. *Logistics & Supply Chain Management*, 1st ed., HPH, 2017.
3. Chopra, Sunil, Meindl, Peter and Kalra, D. V. *Supply Chain Management: Strategy, Planning and Operation*. 6th ed., Pearson Education, 2016.

Reference Books:

1. Ballou, R.H.. *Business Logistics Management* 5th ed., Pearson Education, 2014.
2. Altekar, Rahul V. *Supply Chain Management: Concepts and Cases* 1st ed., PHI Learning, 2005.

C6024 - AI for Business

Teaching and Learning Scheme				Hours	Credits	Assessment Marks		
CI		LI	TW+SL	H	C	CIE	SEE	Total
L	T	P	SL					
60	0	0	60	120	4	40	60	100

Course Description

Course Overview

This course introduces the fundamentals and applications of Artificial Intelligence (AI) in business. It covers AI types, implementation strategies, and enterprise adoption frameworks. Students will explore AI-driven decision-making, product development, intelligent automation, and domain-specific applications across marketing, finance, HR, healthcare, supply chain, and customer experience. The course also emphasizes ethical, security, and regulatory aspects of AI, enabling learners to critically analyze challenges and opportunities in integrating AI into business practices.

Course Pre/Co-requisites

This course has no specific prerequisite and co-requisite.

Relevant SDG(s)

SDG 9 – Industry, Innovation, and Infrastructure

SDG 8 - Decent Work & Economic Growth

SDG 16 - Peace, Justice and Strong Institutions

Course Outcomes

After the completion of the course, the student will be able to:

C6024.1 Apply AI concepts, subfields, and features to identify business opportunities and challenges.

C6024.2 Analyze the role of AI in decision-making, business strategy, and predictive analytics through case studies.

C6024.3 Apply AI tools, techniques, and product development frameworks to real-world business applications.

C6024.4 Analyze intelligent automation solutions, including RPA, NLP, and AI-driven CRM systems, for enhancing customer experience.

C6024.5 Evaluate ethical, legal, and regulatory challenges in AI adoption, ensuring responsible and secure business practices.

Course Syllabus

Unit-I:

Introduction to Artificial Intelligence: Definition and scope, Evolution of AI in Business, Importance and applications of AI, Foundations of AI, Features of AI, Goals of AI, Managerial view of AI, AI subfields, issues and challenges in AI.

Unit-II:

AI Types and Implementation: AI types Based on capabilities: Narrow AI, General AI, Super AI, Based on functionalities: Reactive Machines, Limit memory -generative AI, virtual assistant and chat bots, responsible AI, Self-aware AI, Generative AI. Role of Data in enterprise AI, a blue print for enterprise, AI implementation.

Unit-III:

AI Application in Business: AI Product Development Lifecycle, Product market Fit, Stages of the AI

lifecycle, AI in Customer relationship management, healthcare, Finance, Retail, Agriculture, Education, Supply chain, Sales forecasting, HR Analytics.

Unit-IV:

AI Agents & Robots: Autonomous agents, Agentic AI, Robots in used today, Human- machine collaboration, Managing automation with robots. AI & ML – overlaps among AI, ML and Data science.

Unit-V:

AI in Business and Analytics: Role of AI in modern business strategy AI-driven decision-making – Case studies: AI in marketing, HR, supply chain – Predictive analytics using AI – Ethics and challenges in business AI, Use Cases.

Books and Materials

Text Books:

1. Pavan Kumar Gurazada, Seema Gupta. *Artificial Intelligence in Business.* , Vikas Publishing House,2025.
2. Rahul De'. *AI for Managers.*, Cengage Learning. 2025.
3. Marily Nika. *Building AI-Powered Products-The Essential Guide to AI and Gen AI Product Management.*4th ed., O'Reilly,2025.

Reference Books:

1. Saptarshi Goswami, Amit Kumar Das, Amlan Chakravarti. *AI for Everyone – A Beginner's Handbook for AI.* , Pearson India. 2024.
2. Rahul Dubey. *Emerging Technologies for Effective Management*, Cengage Learning. 2023.
3. Doug Rose. *Artificial Intelligence for Business: What you need to know about Machine Learning and Neural Networks*, Pearson, 2021.

C6025 - Business Analytics

Teaching and Learning Scheme				Hours	Credits	Assessment Marks		
CI		LI	TW+SL	H	C	CIE	SEE	Total
L	T	P	SL					
60	0	0	60	120	4	40	60	100

Course Description

Course Overview

This course introduces the fundamentals of data analytics, covering descriptive, predictive, and prescriptive approaches for business decision-making. It emphasizes data visualization, statistical measures, data preparation, and machine learning algorithms for supervised and unsupervised learning. The course also explores data mining, warehousing, simulation techniques, and industry applications, enabling students to apply analytical methods and analyze real-world business problems using modern tools and techniques.

Course Pre/Co-requisites

This course has no specific prerequisite and co-requisite.

Relevant SDG(s)

SDG 9 - Industry, innovation and infrastructure

SDG 12 - Responsible Consumption & Production

SDG 17 - Partnerships for the Goals

Course Outcomes

After the completion of the course, the student will be able to:

- C6025.1 Apply statistical methods, probability distributions, and visualization tools to summarize and interpret business data.
- C6025.2 Implement supervised learning algorithms such as KNN, SVM, Decision Trees, and Neural Networks for classification and prediction.
- C6025.3 Analyze datasets using correlation, regression, and ANOVA to identify relationships and build predictive models.
- C6025.4 Apply unsupervised and reinforcement learning techniques (clustering, PCA, association rules, Q-learning) for pattern discovery and decision analysis.
- C6025.5 Analyze business problems using data mining, warehousing, and simulation techniques to support effective decision-making.

Course Syllabus

Unit-I:

Introduction to Data Analytics: Introduction to Data, Importance of Analytics, Data for Business Analytics, Big Data, Business Analytics in Practice. Data Visualization, Data Visualization Tools, Data Queries, Statistical Methods for Summarizing Data, Exploring Data using Pivot Tables.

Unit-II:

Descriptive Statistical Measures: Population and Samples, Measures of location, Measures of Dispersion, Measures of Variability, Measures of Association. Probability Distribution and Data Modeling, Discrete Probability Distribution, Continuous Probability Distribution, Random Sampling from Probability Distribution, Data Modeling and Distribution fitting.

Unit-III:

Predictive Analytics: Karl Pearson Correlation Technique, Multiple Correlation, Spearman's Rank Correlation, Simple and Multiple Regression, Regression by the Method of Least Squares, Building Good Regression Models. Regression with Categorical Independent Variables, Linear Discriminant Analysis, One-Way and Two-Way ANOVA.

Unit-IV:

Data Mining: Scope of Data Mining, Data Exploration and Reduction, Unsupervised Learning, Cluster Analysis, Association Rules, Supervised Learning, Data Partitioning, Classification Accuracy, Prediction Accuracy, K-Nearest Neighbors, Classification and Regression Trees, Logistics Regression.

Unit-V:

Applications and Use Cases: In-depth analysis of successful analytics projects across various industries, Lessons learned and best practices, Special Topics in Business Analytics: Customer analytics, Financial Analytics, Supply Chain Analytics, Emerging trends and Technologies (e.g., AI, big data, IoT).

Books and Materials

Text Books:

1. James E.Sallis, Geir Gripsrud, Ulf Henning Olsson, Ragnhild Silkoset. *Research Methods and Data Analysis for Business Decisions.* , A Primer Using SPSS, 1thed.,Springer International Publishing,2021.
2. James Evans. *Business Analytics.*,3rded., Pearson Education,2020.

Reference Books:

1. Anil Maheswari. *Big Data*, Tata McGraw Hill,2thed., New Delhi,2019.
2. Mannino, Michael.*Database Design, Application Development, and Administration: Design, Query, Formulation, and Administration Using Oracle and Postgre SQL.* , SAGE Publications, 2018.
3. Dinesh Kumar, U. *Business analytics: The science of data-driven decision making*, Wiley, 2017.

C6026 - Data Visualization Laboratory

Teaching and Learning Scheme				Hours	Credits	Assessment Marks		
CI		LI	TW+SL	H	C	CIE	SEE	Total
L	T	P	SL					
15	0	30	15	60	2	40	60	100

Course Description

Course Overview

This course introduces the concepts, principles, and practices of data visualization to transform data into meaningful insights. It covers measurement scales, models, and visualization techniques for both structured and unstructured data. Students will learn visualization design principles, effective use of color and encoding, dashboard development, and storytelling approaches. Emphasis is placed on best practices, analytical dashboards, and identifying misleading visualizations to ensure accurate interpretation and decision-making.

Course Pre/Co-requisites

This course has no specific prerequisite and co-requisite.

Relevant SDG(s)

SDG 4 – Quality Education

SDG 9 – Industry, Innovation, and Infrastructure

Course Outcomes

After the completion of the course, the student will be able to:

- C6026.1 Apply visualization principles, models, and chart selection methods to represent data effectively.
- C6026.2 Analyze visualization design practices using principles such as Gestalt, data-ink ratio, and color encoding.
- C6026.3 Apply structured and unstructured data visualization techniques, including dashboards, charts, and storytelling tools.
- C6026.4 Analyze multivariate relationships, feature selection, and data patterns using advanced visualization methods.
- C6026.5 Apply storytelling frameworks and dashboards to communicate insights while identifying and avoiding misleading visualizations.

Course Syllabus for Laboratory Experiments

Unit-I:

Introduction to data and visualization Data: Information and knowledge measurement scales – variable selection – type conversion – statistical model – algorithmic model – history of visualization – gestalt’s principles – seven stages of data visualization – data science process – types of charts – chart selection guide.

Unit-II:

Understanding visualization and the interface: Best visualization practices – effectiveness of visual encodings – color design principles – Edward Tufte’s design principles – data – ink ratio – minimizing chart junk – minimizing lie factor – connecting to data sources – tables – charts – dashboards – stories.

Unit-III:

Deployment of Structured data: Visualization of structured data – data dictionary – exploring the data – univariate, bivariate and multivariate analysis and relevant charts – heat maps – dual axis charts – modelling and feature selection.

Unit-IV:

Deployment of Unstructured data: Visualization of unstructured data – text data visualization – forms of text data – word cloud – word tree – joint plot – subjectivity and objectivity – visualizing networks – visual storytelling.

Unit-V:

Dashboards and storytelling: Storytelling frameworks – data storytelling – narrative storytelling – analytical dashboard – misleading charts and graphs – cherry picking data – correlation and causation – Simpson’s paradox – scaling – drill down bias – data discrepancy.

Laboratory Equipment/Software/Tools Required:

1. Desktop Computer system with MS Office
2. Desktop Computer system with SPSS

Books and Materials

Text Books:

1. Sharada Sringswara, Purvi Tiwari, U. Dinesh Kumar. *Data Visualization.* , Wiley, 2022.
2. Jonathan Schwabish. *Data Visualization in Excel.*, Routledge.

Reference Books:

1. Seema Acharya. *Mastering Data Visualization using Tableau.*, Wiley, 2024.
2. Mathew O.ward, Georges Grinstein, Daniel Keim. *Interactive data Visualization.*, Routledge, 2015.

II MBA II Semester

C6028 - Strategic Management

Teaching and Learning Scheme				Hours	Credits	Assessment Marks		
CI		LI	TW+SL	H	C	CIE	SEE	Total
L	T	P	SL					
60	0	0	60	120	4	40	60	100

Course Description

Course Overview

This course provides a comprehensive understanding of strategic management concepts, processes, and tools for analyzing and formulating strategies. It emphasizes environmental scanning, competitive analysis, and the use of frameworks such as SWOT, Porter's Five Forces, BCG, and GE matrices. Students will explore strategy formulation and implementation in diverse organizational contexts, including global and internet-based markets. The course also covers turnaround, diversification, mergers, acquisitions, alliances, and international strategies, along with strategy evaluation, control mechanisms, and the role of strategists in ensuring organizational success.

Course Pre/Co-requisites

This course has no specific prerequisite and co-requisite.

Relevant SDG(s)

SDG 8 - Decent Work & Economic Growth

SDG 9 – Industry, Innovation, and Infrastructure

SDG 12 - Responsible Consumption

Course Outcomes

After the completion of the course, the student will be able to:

- C6028.1 Apply strategic management concepts, processes, and models to develop vision, mission, and objectives for organizations.
- C6028.2 Analyze industry structure, competitive forces, and internal resources using tools such as SWOT, Value Chain, and Porter's Five Forces for strategic analysis.
- C6028.3 Apply appropriate strategies for implementation, considering leadership, structure, culture, and global market conditions.
- C6028.4. Analyze turn around, diversification, mergers, acquisitions, and international strategies to evaluate organizational growth options.
- C6028.5 Apply strategy evaluation and control techniques, including benchmarking, strategic audits, and performance measurement, to ensure effective execution.

Course Syllabus

Unit-I:

Introduction: Concepts in Strategic Management, Strategic Management Process, developing a Strategic Vision, Mission, Objectives, Policies, Factors that Shape a Company's Strategy, Environmental Scanning: Industry and Competitive Analysis. Evaluating Company's Resources and Competitive Capabilities by using SWOT Analysis, Value Chain Analysis and Competitive Advantage.

Unit-II:

Tools and Techniques for Strategic Analysis: Porter's Five Force Model, BCG Matrix, GE Model, TOWS Matrix, IE Matrix, The Grand Strategy Matrix. Market Life Cycle Model and Organizational Learning, Impact Matrix and the Experience Curve, Generic Strategies, Strategy Formulation, Types of Strategies: Offensive

Strategy, Defensive strategy. Exit and Entry Barriers, Tailoring Strategy to Fit Specific Industry and Company Situations.

Unit-III:

Strategy Implementation: Strategy and Structure, Strategy and Leadership, Strategy and Culture Connection, Operationalizing and Institutionalizing Strategy, Strategies for Competing in Global Markets and Internet Economy, Organizational Values and their Impact on Strategy, Resource Allocation as a Vital Part of Strategy, Planning Systems for Implementation.

Unit-IV:

Turnaround and Diversification Strategies: Turnaround Strategy, Management of Strategic Change, Strategies for Mergers, Acquisitions, Takeovers and Joint Ventures. Alliances and Cooperatives, Diversification Strategy: Why Firms Diversify, Different Types of Diversification Strategies, the Concept of Core Competence, Strategies and Competitive Advantage in Diversified Companies and its Evaluation. International Strategies.

Unit-V:

Strategy Evaluation and Control: Establishing Strategic Controls for Measuring Performance, Appropriate Measures, Role of the Strategist, Using Qualitative and Quantitative Benchmarking to Evaluate Performance, Strategic Information Systems, Problems in Measuring Performance, Guidelines for Proper Control, Strategic Surveillance, Strategic Audit, Strategy and Corporate Evaluation and Feedback in the Indian and International Context.

Books and Materials

Text Books:

1. Michael A Hitt, R Duane Ireland, Robert E. Hoskisson. *Strategic Management Strategic Management: Competitiveness & Globalization – Concepts and Cases*, 12thed., Cengage, 2024.
2. Dr. C.B. Gupta, *Strategic Management: Texts and Cases*, S Chand, 2023.
3. Richard Lynch, *Strategic Management*, 9thed., Sage Publications, 2021.
4. Mason A. Carpenter, Wm Gerard Sanders, Prashant Salwan, *Strategic Management A Dynamic Perspective*, 2nd Pearson, 2e, 2017

Reference Books:

1. V.S.P. Rao, V. Hari Krishna *Strategic Management*, 1sted., Excel Books, 2012.
2. Adrian & Alison, *Strategic Management: Theory & Applications*, Oxford University Press, 2010.
3. S K Sarangi *Modern Strategic Management* Everest Publishing, 2012.

PROFESSIONAL ELECTIVES

DOMAIN: MARKETING

C6031 - Digital Marketing

Teaching and Learning Scheme				Hours	Credits	Assessment Marks		
CI		LI	TW+SL	H	C	CIE	SEE	Total
L	T	P	SL					
60	0	0	60	120	4	40	60	100

Course Description

Course Overview

This course offers insights into the principles and practices of digital marketing, covering key channels such as search engines, online advertising, social media, mobile, and email. It emphasizes strategic planning, execution, and performance measurement to enhance customer reach, engagement, and loyalty in the digital marketplace.

Course Pre/Co-requisites

This course has no specific prerequisite and co-requisite.

Relevant SDG(s)

SDG 8 - Decent Work & Economic Growth

SDG 9 – Industry, Innovation, and Infrastructure

SDG 16 - Peace, Justice and Strong Institutions

Course Outcomes

After the completion of the course, the student will be able to:

C6031.1 Apply digital marketing concepts and strategies in business contexts.

C6031.2 Examine the traditional and digital marketing approaches for effectiveness.

C6031.3 Apply SEO, SEM, social media, and other digital channels for customer acquisition and retention.

C6031.4 Analyze customer segmentation and behavior to design targeted campaigns.

C6031.5 Assess the performance measurement tools to evaluate and optimize digital marketing efforts.

Course Syllabus

Unit-I:

Understanding Digital Marketing: Concept, Need and Scope of Digital Marketing, Comparison of Marketing and Digital Marketing, Components of Digital Marketing, Benefits of Digital Marketing, Digital Marketing Platforms and Strategies, Digital Marketing Trends.

Unit-II:

Channels of Digital Marketing: Digital Marketing: Website Marketing, Search Engine Marketing, Online Advertising, Email Marketing, Blog Marketing, Social Media Marketing, Audio, Video and Interactive Marketing, Online Public Relations, Mobile Marketing, Migrating from Traditional Channels to Digital Channels. Marketing in the Digital Era: Segmentation: Importance of Audience Segmentation, Use of Digital Media by different Segments. Organizational Characteristics, Purchasing Characteristics, Using Digital Media for Reach, Acquisition and Retention of New Customers, Digital Media for Customer Loyalty.

Unit-III:

Digital Marketing Plan: Need of a Digital Marketing Plan, Elements of a Digital Marketing Plan: Marketing Plan, Executive Summary, Mission, Situational Analysis. Opportunities and Issues, Goals and Objectives, Marketing Strategy, Action Plan, Budget, Writing the Marketing Plan and Implementing the Plan.

Unit-IV:

Search Engine Marketing (SEM) and Online Advertising: Importance of SEM, Understanding Web Search: Key Words, HTML Tags, Inbound Links. Online Advertising vs. Traditional Advertising. Payment Methods of Online Advertising: CPM (Cost-per-Thousand) and CPC (Cost-per-click). Display of Ads: Choosing a Display Ad Format, Landing Page and its Importance.

Unit-V:

Social Media Marketing: Understanding social media, Social Networking with Facebook, LinkedIn, Blogging as a Social Medium, Microblogging with Twitter, Social Sharing with YouTube, social media for Customer Reach, Acquisition and Retention. Measurement of Digital Media: Analyzing Digital Media Performance, Analyzing Website Performance, Analyzing Advertising Performance.

Books and Materials

Text Books:

1. Dinesh Kumar. *Marketing in the Digital Age.*, Sage Publications, 2021.
2. Annmarie Hanlon. *Digital Marketing: Strategic Planning & Integration.*1sted.,Sage Publications,2019.
3. Chuck Hemann & Ken Burbary. *Chuck Hemann & Ken Burbary.*,2nded., Pearson,2018.
4. Frank Hoy, Pramodita Sharma, *Entrepreneurial Family Firms*,1sted., Prentice Hall,2010.

Reference Books:

1. Judy Strauss & Raymond Frost. *E-Marketing.*, Pearson, 2016.
2. Vandana Ahuja. *Digital marketing.*, Oxford University Press 2015.
3. Michael R Solomon, Tracy Tuten. *Social Media Marketing.*,1thed., Pearson,2015.
4. Michael Miller. *B2B Digital Marketing.*,1sted., Pearson, 2014.

C6032 - Sales and Promotion Management

Teaching and Learning Scheme				Hours	Credits	Assessment Marks		
CI		LI	TW+SL	H	C	CIE	SEE	Total
L	T	P	SL					
60	0	0	60	120	4	40	60	100

Course Description

Course Overview

This course provides an in-depth understanding of promotion and its tools, including advertising, sales promotion, personal selling, public relations, direct and online marketing. It covers advertising media, planning, budgeting, and effectiveness evaluation, along with sales management processes such as forecasting, budgeting, salesforce recruitment, training, and motivation. The course also explores sales promotion strategies, ethical and legal considerations, and distribution management, focusing on channel design, intermediaries, retailing, wholesaling, and conflict management in both domestic and international markets.

Course Pre/Co-requisites

This course has no specific prerequisite and co-requisite.

Relevant SDG(s)

SDG 8 – Decent Work and Economic Growth

SDG 12 – Responsible Consumption and Production

Course Outcomes

After the completion of the course, the student will be able to:

- C6032.1 Apply promotion mix elements such as advertising, sales promotion, personal selling, PR, and direct marketing in business contexts.
- C6032.2 Analyze different advertising media, budgeting methods, and effectiveness measures for selecting suitable promotional strategies.
- C6032.3 Apply sales management techniques including sales forecasting, budgeting and sale force management.
- C6032.4 Analyze various promotion strategies to address market requirements through product life cycle stages.
- C6032.5 Apply ethical principles and strategic approaches to manage channel relationships, wholesaling, retailing, and international distribution.

Course Syllabus

Unit-I:

Promotion: Introduction to Promotion, Concept, Evolution, Promotion Mix: Advertising, Sales Promotion, Personal Selling, Publicity, Public Relations, Direct Marketing, Word of Mouth, Online Marketing. Managing Promotional Tools: Direct Marketing, Direct Marketing Decisions, Direct Marketing Objectives, Advantages of Direct Marketing, Measurement of Direct Marketing Effort, Public Relations. Setting Objectives, Programme Implementation and Publicity.

Unit-II:

Advertising and Advertising Media: Importance and Functions of Advertising, Role of Advertising, AIDA model, Types of Advertising, Advertising Plan, DAGMAR Approach, Visualization of Advertising Layout – Functions, Principles, and Elements of a layout. Types of Media: Print, Electronic and Other Media; Merits

and Demerits of each media. Media Planning: Frequency, Reach and Outcome. Appeals, Setting Advertising Objectives, Advertising Message, Advertising Budget, Evaluation of Advertising Effectiveness – Methods, and Regulation of Advertising in India – Misleading and deceptive advertising.

Unit-III:

Sales Management: Importance, Types of Selling, Difference between Selling and Marketing, Sales Activities, Selling Skills, Selling Strategies, Selling Process, Sales Planning Process, Sales Forecasting Methods, Sales Budgeting Process. Sales Force Management: Recruitment and Selection, Training, Motivation, Compensation, Control and Evaluation.

Unit-IV:

Sales Promotion: Concepts, Need and Objective, Personal Selling vs. Advertising, Types of Sales Promotion, Sales Promotion Strategies: Sales Promotion and Product Life Cycle, Cross Promotion, Surrogate Selling, Bait and Switch advertising, Ethical and legal aspects of sales promotion.

Unit-V:

Sales Distribution: Distribution Channels, Need for Channels, Channel Intermediaries and Functions, Channel Structure, Channels for Consumer Products, Business and Industrial Products, Alternative channels, Channels for Rural Markets, Channel Strategy Decisions. Designing, Motivating and Evaluating Channel Members, Managing Retailers, Wholesalers, Franchisers. Managing Conflict, Reasons for Channel Conflicts. Managing International Channel of Distribution. Ethical issues in Sales and Distribution Management.

Books and Materials

Text Books:

1. Pingali Venugopal. *Sales and Distribution Management*. 2nded., Sage Publications, 2021.
2. George E. Belch, Michel E. Belch, Keyoor Purani. *Advertising and Promotion: An integrated*. 2017.
3. Michel E. Belch, *Marketing communication Perspective*., 9thed., Mc Graw Hill, 2017.
4. Terence A. Shimp, J. Craig Andrews. *Advertising, Promotion, and other aspects of Integrated*. 2017.
5. Terence *Marketing Communications*., 9thed., Cengage, 2016.

Reference Books:

1. Ramendra Singh. *Sales and Distribution Management: A Practice-Based Approach*., 6thed., Vikas, 2016.
2. Jaishri Jethwaney, Shruti Jain. *Advertising Management*., Oxford, 2015.
3. Richard R Still, Edward W Cundiff, Norman A P Govoni. *Sales and Distribution Management*, 5thed., Pearson, 2011.

C6033 - Brand Management and Consumer Behaviour

Teaching and Learning Scheme				Hours	Credits	Assessment Marks		
CI		LI	TW+SL			H	C	CIE
L	T	P	SL					
60	0	0	60	120	4	40	60	100

Course Description

Course Overview

This course provides an in-depth understanding of brand management concepts, strategies, and processes, including brand equity, valuation, positioning, and loyalty. It emphasizes planning and implementing brand marketing programs, measuring brand performance, and managing brands over time. The course also explores consumer behavior theories, models, motivation, personality, attitudes, cultural and social influences, and the consumer decision-making process, enabling students to apply branding and consumer insights to effective marketing strategies.

Course Pre/Co-requisites

This course has no specific prerequisite and co-requisite.

Relevant SDG(s)

SDG 3 - Good Health and Well-being

SDG 5 - Gender Equality

SDG 12 - Responsible Consumption and Production

Course Outcomes

After the completion of the course, the student will be able to:

C6033.1 Apply branding concepts and processes to build and manage strong brands.

C6033.2 Analyze brand equity, positioning, loyalty, and valuation to assess brand performance.

C6033.3 Apply consumer behavior models and research techniques in developing marketing strategies..

C6033.4 Analyze the influence of motivation, personality, learning, culture, and social factors on consumer decision-making.

C6033.5 Interpret social influences on consumer discuss process and consumption behaviour.

Course Syllabus

Unit-I:

Introduction to Brand Management: Concept of Brand, Brand Vs Product, Co Branding and Corporate Branding, Branding opportunities and challenges. Brand Names and Brand Extensions- Meaning, Advantages, Disadvantages. Brand Equity- Models, Strategic Brand Management Process. Brand Loyalty, Brand Relationship. Building brand loyalty - Brand Positioning. Brand Image and Personality - Brand Valuation -Brand Tracking and Monitoring.

Unit-II:

Planning & Implementing Brand Marketing Programs: Criteria for Choosing Brand Elements, Options & tactics for Brand Elements, Use of IMC for Brand Building, Leveraging Brand Associations to building Brand Equity. Measuring & Interpreting Brand Performance- Developing A Brand Equity Measurement & Management System, Measuring Sources of Brand Equity & Outcome of Brand Equity. Branding strategies- Concept and types of branding strategies. Designing & Implementing Branding Strategies Managing Brands over Time.

Unit-III:

Introduction to Consumer Behavior: Meaning and Definition of Consumer Behavior. Need and Advantages to Study Consumer Behavior. Differences between consumer buying and organizational buying. Consumer behavior and marketing strategy; profiling consumers and their needs; Market segmentation and consumer research; Organizational Buying Behaviors. Models of Consumer Behavior- Advert Sheth Model, EKB Model, Howard Sheth Model, Family Decision-making Model, Pavlovian Model and Economic Model.

Unit-IV:

Consumer Motivation, Personality: Learning Memory and Involvement- Introduction, needs, objectives and Scope of Consumer Motivation. Overcoming Problems of Motivational Conflict. Defense Mechanism, Motive arousal, Motivational theories. Consumer Personality: Learning Memory and Involvement Consumer attitudes, beliefs, feelings and Behavior Consumer Learning attitudes and components of learning Memory system, memory process, concept of involvement, dimensions of involvement.

Unit-V:

Cultural and Social Influences on Consumer Behavior: Characteristics of Culture, values, sub cultures, cross cultural and multi-cultural influences on Consumer Behavior. Social Class and Group influences on Consumer Behavior with regard to money and other status symbols, conformity to group norms behavior and Influence, family life influences, standard of life and living Influences. Consumer Decision Process: Problem Recognition – Information Search – Evaluation of Alternatives – Outlet Selection and Purchase – Consumption – Post-Purchase Consumption Behavior.

Books and Materials

Text Books:

1. Wayne D. Hoyer, Deborah J. MacInnis R Rik Pieters. *Consumer Behaviour.*, 2nded., Cengage,2024.
2. Kevin lane Keller; Ambi M. G. Parameswaran; IssacJacob. *Strategic Brand Management.*,5thed., Pearson India,2020.
3. Blackwell and Engel. *Consumer Behavior.*, Cengage Publication, Indian Edition ,2012.
4. Majumudar Ramanuj. *Consumer Behavior - Insights from Indian Market.*,2nded., PHI, 2009.
5. Subroto Sen Gupta. *Brand Positioning.*, Tata McGraw-Hill ,2005.
6. Pati. D. *Branding Concepts and Process.*, Macmillan Publisher, New Delhi, 2002.

Reference Books:

1. Chandershekhar, K.S. *Product Management- Text, Applications and Cases.*, Himalayan Publishing Houser, 2012.
2. Kapferer. J.N. *The Strategic Brand Management-Advanced Insights & Strategic Thinking*,5thed.Kogan Page,2012..
3. Apan K. Panda. *Product and Brand Management.*, Oxford University Press,2016.

C6043 - International Marketing

Teaching and Learning Scheme				Hours	Credits	Assessment Marks		
CI		LI	TW+SL	H	C	CIE	SEE	Total
L	T	P	SL					
60	0	0	60	120	4	40	60	100

Course Description

Course Overview

This course explores the nature, scope, and significance of international marketing, highlighting the opportunities and challenges in global markets. It covers environmental drivers, trade policies, and integration agreements influencing international business. Students will learn about global consumer behavior, international market research, entry strategies, and the role of digital transformation in global commerce. The course further emphasizes global marketing mix decisions, pricing and promotion strategies, cultural negotiations, export documentation, and implementation of international marketing programs.

Course Pre/Co-requisites

This course has no specific prerequisite and co-requisite.

Relevant SDG(s)

SDG 8 - Economic Growth

SDG 10 - Reduced Inequalities

SDG 17 - Partnerships for the Goals

Course Outcomes

After the completion of the course, the student will be able to:

- C6043.1 Apply international marketing concepts and strategies to expand businesses into global markets.
- C6043.2 Examine global environmental drivers, trade agreements, and policies influencing international marketing decisions.
- C6043.3 Apply international market research techniques for opportunity analysis, entry mode selection, and assessment of market potential.
- C6043.4 Analyze marketing mix elements, including product, pricing, distribution, and promotion, in diverse cultural contexts.
- C6043.5. Apply international marketing strategies through effective negotiations, export procedures, and E-Marketing practices.

Course Syllabus

Unit-I:

Introduction to International Marketing: Nature, Importance, Features and Scope of International Marketing, Comparison of Domestic and International Marketing, Environment and Sustainability, Opportunities and Challenges in International Marketing, Stages of International Marketing Involvement, Motivating Factors of International Marketing, Reasons and Strategies of Internationalization.

Unit-II:

Global Environmental Drivers: WTO and Globalization, Types of External Environments: Political, Economic, Social, Technological, Environmental and Legal. EXIM Policy of India. International Trade and its Barriers, Trade in Goods & Services, Regional Integration and Multi-lateral Trade Agreements.

Unit-III:

Global Customers: Drivers of the Global Consumers, Influences on the Global Consumer, Industrial Buyer, Government Buyer, International Marketing Research: Opportunity Analysis, Country (Market) Selection, Assessing International Market Size and Sales Potential. Government Policies of Target Markets, SWOT Analysis of Target Markets, Global Market Entry Modes and Strategies, Opportunities and Challenges of Entry Modes. Digital Revolution & Global E-Commerce.

Unit-IV:

Global Marketing: Globalization Drivers: Market, Cost, Environmental, Competitive Factors. International Marketing Mix, Developing the Global Marketing Program, Segmentation of Products and Services, Distributors & Channels, Direct & Indirect Marketing Channels. Promotion Strategies, Pricing Strategies, Factors influencing Pricing Decisions, Concept of International Product Life Cycle.

Unit-V:

Implementing Global Marketing Strategies: Negotiation with Customers and Selection Method, Cultural and International Negotiations, E-Marketing Channels Organization, Implementing Global Marketing Program, Export Documentation, Export Procedures, Steps in processing an Export Order.

Books and Materials

Text Books:

1. Michael R. Czinkota, Ilkka A. Ronkainen. *International Marketing*, 10thed., Cengage, 2017.
2. Justin Paul, Ramneek Kapoor. , *International Marketing: Text and Cases*, 2nded., TMH, 2012.
3. Prateek Maheshwari. *International Marketing*, 4th 8thed., Wiley, 2017.

Reference Books:

1. Philip R. Cateora John L Graham Prashant Salwan. *International Marketing*. 13thed., TMH, 2011.
2. Warren J. Keegan, Mark C. Green,. *Global Marketing*, 7thed., Pearson, 2013.
3. Daniel Baack, Barbara Czarnecka, Donal Baack *International Marketing* , 2e, Sage, 2019
4. P.K. Vasudeva. *International Marketing*, 2nd 4thed., Excel Books, 2012.

C6044 – Services and Retail Management

Teaching and Learning Scheme				Hours	Credits	Assessment Marks		
CI		LI	TW+SL	H	C	CIE	SEE	Total
L	T	P	SL					
60	0	0	60	120	4	40	60	100

Course Description

Course Overview

This course provides an in-depth understanding of services marketing and retail management. It covers the concepts, characteristics, and challenges of services, service quality, customer expectations, and strategies for service recovery. Students will explore service design, blueprinting, service scape, and ethics in service firms. The course also introduces retailing fundamentals, strategies, and the Indian retail scenario, along with merchandise management, store design, pricing, promotion, and location strategies. Emphasis is placed on customer behavior, retail growth opportunities, and the role of e-tailing in the competitive marketplace.

Course Pre/Co-requisites

This course has no specific prerequisite and co-requisite.

Relevant SDG(s)

SDG 9 – Industry, Innovation, and Infrastructure

SDG 11 – Sustainable Cities and Communities

SDG 12 – Responsible Consumption

Course Outcomes

After the completion of the course, the student will be able to:

- C6044.1. Explain the components of the services marketing mix and evaluate consumer behaviour and service recovery strategies in various service contexts.
- C6044.2. Examine the service blueprints and assess the service quality using models like the GAP model, and recommend strategies for service excellence and ethics.
- C6044.3 Analyze retail strategies and differentiate between various retail formats while evaluating retail opportunities in India, including rural markets..
- C6044.4. Design effective store layouts and formulate merchandise presentation strategies that enhance the customer experience..
- C6044.5 Develop strategic pricing and promotional plans for different retail formats, including e-tailing, while assessing site attractiveness and demand factors.

Course Syllabus

Unit-I:

INTRODUCTION TO SERVICES MARKETING: Services: Concepts, Characteristics and Classification of Services, Factors responsible for Growth of Services Sector, Challenges faced by the Services Sector, Services Marketing Mix, Service Marketing Triangle, Consumer Behaviour in Services, Consumer Expectations and Perception of Service, Customer Satisfaction, Listening to Customers through Research, Building Customer Relationships, Service Failure, Service Recovery Strategies

Unit-II:

DESIGNING AND MANAGING SERVICES: Service Innovation: Design and Mapping Patterns, Service Quality and Quality Measurement, Gap model of Service Quality, Service Excellence, Service Standards: Factors

& Types, Physical Evidence: Managing Physical Evidence, Servicescape and Designing the Servicescape, Service Blueprinting, Strategies to match Service Promises with Delivery, Service Guarantee, Ethics in Service Firms.

Unit-III:

INTRODUCTION TO RETAILING: Introduction to retailing, functions of retailing, types of retailing, Emergence of organized retailing, customer buying behaviour in retailing, retailing strategy, target market and retail format, growth strategies of retail in competitive markets. **RETAILING IN INDIA:** The present Indian retail scenario, factors affecting retailing in India, retailing opportunities in India, Rural retailing, region wise analysis of Indian retailing.

Unit-IV:

MERCHANDISE AND STORE MANAGEMENT: Sources of merchandise, category management, allocation of merchandise, merchandise presentation techniques, logistics management, Objectives of good store design, store layout, types of store layout and design, Space planning, store atmospherics, traffic flow and analysis.

Unit-V:

LOCATION, PRICING AND PROMOTION STRATEGIES: Shopping centres, freestanding sites, location and retail strategies, factors affecting the demand for a region or trade area, factors affecting the attractiveness of a site, retail pricing strategies, pricing adjustments, using price to stimulate retail sales, promoting the merchandise, retail promotion strategies, E-tailing: Types, Benefits & Challenges.

Books and Materials

Text Books:

1. Douglas K. Hoffman & John E.G. Bateson *Services Marketing*, 6thed., Cengage, 2025.
2. S. Shahjahan, *Services Marketing*, Himalaya Publishing House, 2017.
3. Govind Apte, *Services Marketing*, 4th, Oxford Press, 2011.

Reference Books:

1. John E. G. Bateson, K. Douglas Hoffman. *Services Marketing*, 4thed., Cengage Learning, 2012
2. Bajaj Tuli Srinivastava, *Retail Management*, 3rded., Oxford Publications, 2016.
3. Levy & Weitz. *Retailing Management*, McGraw Hill, 2015

C6045 - Marketing Analytics

Teaching and Learning Scheme				Hours	Credits	Assessment Marks		
CI		LI	TW+SL	H	C	CIE	SEE	Total
L	T	P	SL					
30	0	0	30	60	2	40	60	100

Course Description

Course Overview

This course introduces the concepts, scope, and applications of marketing analytics, emphasizing its role in data-driven decision-making. Students will learn to organize and summarize marketing data using MS Excel, apply segmentation and positioning techniques, optimize pricing strategies, and evaluate promotional effectiveness. The course also covers customer analytics, including journey mapping, persona development, and customer lifetime value, enabling students to leverage analytics for improved marketing strategies and business intelligence.

Course Pre/Co-requisites

C6013 – Marketing Management

C6031 – Digital Marketing

C6032 – Sales and Promotion Management

Relevant SDG(s)

SDG 9 – Industry, Innovation, and Infrastructure

SDG 11 – Sustainable Cities

SDG 13 – Climate Action

Course Outcomes

After the completion of the course, the student will be able to:

- C6045.1. Apply marketing analytics tools and techniques to organize, summarize, and interpret marketing data.
- C6045.2. Analyze segmentation and positioning strategies using clustering, perceptual mapping, and decision models.
- C6045.3. Apply pricing analytics methods, including demand estimation, bundling, and optimization models, for effective pricing decisions.
- C6045.4. Analyze promotional effectiveness using media selection, simulation models, and advertising response metrics.
- C6045.5. Apply customer analytics methods such as journey mapping, persona building, and CLV estimation to enhance customer experience and retention.

Course Syllabus

Unit-I:

Introduction to Marketing Analytics: Definition, Need and Scope of Marketing Analytics, Marketing Analytics Vs Marketing Research, Levels in Marketing Analytics, Adoption and Application of Marketing Analytics, Marketing Analytics and Business Intelligence. MS Excel as a Tool for conduction of Marketing Analytics. Using MS Excel to Organize and Summarize Marketing Data: Creation of Pivot Tables and Organizing Data. Summarizing Revenue Data: Month-wise and Product wise. Slicing & Dicing of Data: Pareto Principle, Report Filters and Slicers. Demographic Analysis: Analyzing Sales Data by Age, Gender, Income and Location, Construction of Crosstabs of Two Demographic Variables.

Unit-II:

Segmentation & Positioning Analytics: Segmentation Analytics: Cluster Analysis and its Applications, Location-wise Clustering, Using Solver to find Optimal Clusters. Using Conjoint Analysis to Segment a Market, Using Decision Trees for Segmenting the Market. Perceptual Mapping, White Spaces, Umbrella Brands, Multidimensional Scaling.

Unit-III:

Pricing Analytics: Pricing, Goals of Pricing, Price Elasticity, Estimating Linear and Power Demand Curves, Using Excel Solver to Optimize Price, Incorporating Complementary Products, Using Solver Table to Price Multiple Products and Finding Demand Curve for All Products. Price Bundling, Bundling Prices to Extract Consumer Surplus, Mixed Bundling, Using Evolutionary Solver to Find Optimal Bundle Prices. Price Skimming.

Unit-IV:

Promotion Analytics: Promotion Analytics: Promotions and Types of Promotions, Discounting & Types of Discounting. Measuring the Effectiveness of Advertising: The Adstock Model. Media Selection Models: Linear Media Allocation Model, Quantity Discounts, Monte Carlo Media Allocation Simulation. Pay per Click Advertising.

Unit-V:

Customer Analytics: Customer Journey Mapping and the Process of Mapping (How to). Metrics for Tracking Customer Experience: Customer Feedback Metrics & Behavior Derived Customer Metrics. Customer Persona, Building a Customer Persona and its Benefits, Parts of Buyer Persona. What Customer Wants: Using Conjoint Analysis for Levels in Consumer Decision Process in Product Choices and Product Attributes. Customer Lifetime Value (CLV). Calculating Customer Lifetime Value: Measuring Sensitivity Analysis with Two-Way Tables, Estimating the Chance if Customer is still Active.

Books and Materials

Text Books:

1. Seema Gupta & Avadhoot Jathar. *Marketing Analytics*, Wiley, 2021.
2. Wayne L. Winston, *Marketing Analytics: Data Driven Techniques with Microsoft Excel*, 2014
3. Moustusy Maity and Pavankumar Gurazada. *Marketing Analytics for Strategic Decision Making*, 4th Oxford Higher education, 2021.

Reference Books:

1. Mike Grigsby. *Marketing Analytics*, Kogan Page 2015
2. Robert Kozielski. *Measuring Marketing Analytics*, Emerald Publishing, 2018.

C6046 - Marketing Analytics Laboratory

Teaching and Learning Scheme				Hours	Credits	Assessment Marks		
CI		LI	TW+SL	H	C	CIE	SEE	Total
L	T	P	SL					
0	0	60	0	60	2	40	60	100

Course Description

Course Overview

This laboratory course provides hands-on experience in applying marketing analytics for data-driven decision-making. Students will collect, organize, and summarize marketing data using MS Excel, apply segmentation and positioning techniques on real or simulated datasets, perform pricing optimization exercises to identify revenue-maximizing strategies, and evaluate promotional effectiveness through practical analysis. The lab also introduces customer analytics tasks such as journey mapping, persona development, and computation of customer lifetime value. Through these activities, students develop practical skills to leverage analytics for improving marketing strategies and enhancing business intelligence.

Course Pre/Co-requisites

This course has no specific prerequisite and co-requisite.

Relevant SDG(s)

SDG 9 – Industry, Innovation, and Infrastructure

SDG 11 – Sustainable Cities

SDG 13 – Climate Action

Course Outcomes

After the completion of the course, the student will be able to:

- C6046.1. Apply marketing analytics tools and techniques to organize, summarize, and interpret marketing data.
- C6046.2. Analyze segmentation and positioning strategies using clustering, perceptual mapping, and decision models.
- C6046.3. Apply pricing analytics methods, including demand estimation, bundling, and optimization models, for effective pricing decisions.
- C6046.4. Analyze promotional effectiveness using media selection, simulation models, and advertising response metrics.
- C6046.5. Apply customer analytics methods such as journey mapping, persona building, and CLV estimation to enhance customer experience and retention.

Course Syllabus for Laboratory Experiments

Unit-I:

Introduction to Marketing Analytics: Definition, Need and Scope of Marketing Analytics, Marketing Analytics Vs Marketing Research, Levels in Marketing Analytics, Adoption and Application of Marketing Analytics, Marketing Analytics and Business Intelligence. MS Excel as a Tool for conduction of Marketing Analytics. Using MS Excel to Organize and Summarize Marketing Data: Creation of Pivot Tables and Organizing Data. Summarizing Revenue Data: Month-wise and Product wise. Slicing & Dicing of Data: Pareto Principle, Report Filters and Slicers. Demographic Analysis: Analyzing Sales Data by Age, Gender, Income and Location, Construction of Crosstabs of Two Demographic Variables.

Unit-II:

Segmentation & Positioning Analytics: Segmentation Analytics: Cluster Analysis and its Applications, Location-wise Clustering, Using Solver to find Optimal Clusters. Using Conjoint Analysis to Segment a Market, Using Decision Trees for Segmenting the Market. Perceptual Mapping, White Spaces, Umbrella Brands, Multidimensional Scaling.

Unit-III:

Pricing Analytics: Pricing, Goals of Pricing, Price Elasticity, Estimating Linear and Power Demand Curves, Using Excel Solver to Optimize Price, Incorporating Complementary Products, Using Solver Table to Price Multiple Products and Finding Demand Curve for All Products. Price Bundling, Bundling Prices to Extract Consumer Surplus, Mixed Bundling, Using Evolutionary Solver to Find Optimal Bundle Prices. Price Skimming.

Unit-IV:

Promotion Analytics: Promotion Analytics: Promotions and Types of Promotions, Discounting & Types of Discounting. Measuring the Effectiveness of Advertising: The Adstock Model. Media Selection Models: Linear Media Allocation Model, Quantity Discounts, Monte Carlo Media Allocation Simulation. Pay per Click Advertising.

Unit-V:

Customer Analytics: Customer Journey Mapping and the Process of Mapping (How to). Metrics for Tracking Customer Experience: Customer Feedback Metrics & Behavior Derived Customer Metrics. Customer Persona, Building a Customer Persona and its Benefits, Parts of Buyer Persona. What Customer Wants: Using Conjoint Analysis for Levels in Consumer Decision Process in Product Choices and Product Attributes. Customer Lifetime Value (CLV). Calculating Customer Lifetime Value: Measuring Sensitivity Analysis with Two-Way Tables, Estimating the Chance if Customer is still Active.

Laboratory Equipment/Software/Tools Required:

1. Desktop Computer system with MS Office
2. Desktop Computer system with SPSS

Books and Materials

Text Books:

1. Seema Gupta & Avadhoot Jathar. *Marketing Analytics*, Wiley, 2021.
2. Wayne L. Winston, *Marketing Analytics: Data Driven Techniques with Microsoft Excel*, 2014
3. Moustusy Maity and Pavankumar Gurazada. *Marketing Analytics for Strategic Decision Making*, 4th Oxford Higher education, 2021.

Reference Books:

1. Mike Grigsby. *Marketing Analytics*, Kogan Page 2015
2. Robert Kozielski. *Measuring Marketing Analytics*, Emerald Publishing, 2018.

PROFESSIONAL ELECTIVES

DOMAIN: FINANCE

C6034 – Security Analysis and Portfolio Management

Teaching and Learning Scheme				Hours	Credits	Assessment Marks		
CI		LI	TW+SL			H	C	CIE
L	T	P	SL					
60	0	0	60	120	4	40	60	100

Course Description

Course Overview

This course provides a comprehensive understanding of investment and portfolio management by covering key concepts, tools, and techniques used in financial decision-making. Students will gain insights into portfolio analysis through risk-return trade-offs, Markowitz's theory, CAPM, and APT. The course also explores fixed-income securities along with equity valuation using Security analysis approaches. This course examines derivatives markets with a focus on futures, forwards and options while also highlighting the performance evaluation of mutual funds using evaluation models.

Course Pre/Co-requisites

Innovation and Design Thinking.

Relevant SDG(s)

SDG 4 – Quality Education

SDG 9 – Industry, Innovation, and Infrastructure

SDG 16 - Peace, Justice and Strong Institutions

Course Outcomes

After the completion of the course, the student will be able to:

- C6034.1 Examine the investment environment in Indian security market.
- C6034.2 Analyze interrelationship among risk and return for selecting best portfolios.
- C6034.3 Analyze bond theorems for selecting best investment alternatives.
- C6034.4 Apply security analysis for calculating intrinsic value of equity share.
- C6034.5 Analyze mutual funds to assess performance of different funds.

Course Syllabus

Unit-I:

Introduction to Investment: Introduction, Features of Investment, Investment, Speculation and Gambling, Investment Avenues, and Investment Process. The Investment Environment, Indian Financial System and Structure, Securities Market of India, Securities Trading and Settlement, Types of Orders, Margin Trading, Roles and Responsibilities of SEBI.

Unit-II:

Portfolio Analysis: Risk and Return Analysis, Markowitz Portfolio Theory, Mean–Variance Approach, Portfolio Selection, Efficient Portfolios, Single Index Model, Capital Asset Pricing Model, Arbitrage Pricing Theory.

Unit-III:

Bond Valuation: Classification of Fixed Income Securities, Types of Bonds, Interest Rates, Term Structure of Interest Rates, Measuring Bond Yields, Yield to Maturity, Yield to Call, Holding Period Return, Bond Pricing Theorems, Bond Duration, Modified Duration. Active and Passive Bond Management Strategies, Bond immunization, Bond Volatility, Bond Convexity.

Unit-IV:

Equity Valuation: Intrinsic Value versus Market Value, Equity Valuation Models- Discounted Cash Flow Techniques, Dividend Discount Models (DDM), Growth Rate cases for DDM, Free Cash Flow Valuation Approaches, Relative Valuation Techniques, Earnings Multiplier Approach, Price/ Earnings, Price/ Book Value, Price/ Sales Ratio, Economic Value Added. **Security Analysis:** Fundamental Analysis- Economic Analysis, Industry Analysis, Company Analysis. Technical Analysis, Efficient Market Hypothesis.

Unit-V:

Derivatives: Overview of Indian Derivatives Market, Option Markets, Option Strategies and Option Valuation, Forward & Future Markets, Mechanics of Trading.

Performance Evaluation of Mutual Funds: Mutual Funds, Types of Mutual Funds Schemes, Structure, Trends in Indian Mutual Funds, Net Asset Value, Risk and Return, Performance Evaluation Models- Sharpe Model, Treynor Model, Jensen Model, Fama's Decomposition.

Books and Materials

Text Books:

1. Punithavathy Pandian. *Security Analysis and Portfolio Management.*, Vikas Publishing House Private Limited, New Delhi, 2009.
2. Donald E.Fischer, Ronald J.Jordan. *Security Analysis and Portfolio Management.*, Prentice Hall of India, New Delhi,2009.

Reference Books:

1. Prasanna Chandra. *Investment Analysis and Portfolio Management.*, Tata McGraw-Hill, New Delhi, 2013
2. Tanuja. *Security Analysis and Portfolio Management.*, Students helpline Publishing House Private Limited, Hyderabad, 2011.
3. S.Kevin. *Security Analysis and Portfolio Management.*, Prentice Hall of India, New Delhi, 2009.
4. Bhalla.V.K. *Investment Management.*, S. Chand publications, New Delhi, 2009.

C6035 – FINTECH

Teaching and Learning Scheme				Hours	Credits	Assessment Marks		
CI		LI	TW+SL	H	C	CIE	SEE	Total
L	T	P	SL					
60	0	0	60	120	4	40	60	100

Course Description

Course Overview

This course introduces the role of financial technology (FinTech) in transforming banking, payments, lending linked to money, capital markets, and sustainable finance. It explores technology enablers such as UPI, IMPS, APIs, robo advisors, and blockchain while analyzing the applications of FinTech in financial services. Students will gain insights into digital transformation, customer-centric solutions, regulations, challenges, and sustainable financial practices, enabling them to apply technological and strategic knowledge to real-world financial ecosystems.

Course Pre/Co-requisites

This course has no specific prerequisite and co-requisite.

Relevant SDG(s)

SDG 4 – Quality Education

SDG 8 – Economic Growth

SDG 9 – Industry, Innovation, and Infrastructure

SDG 10 – Reduced Inequalities

Course Outcomes

After the completion of the course, the student will be able to:

- C6035.1 Apply the concepts of FinTech and India Stack to understand the digital transformation of financial services.
- C6035.2 Analyze the role of technology enablers such as APIs, robo-advisors, and blockchain in reshaping financial ecosystems.
- C6035.3 Apply FinTech solutions to banking, lending, and borrowing practices for enhancing financial services and customer experiences.
- C6035.4 Analyze the impact of FinTech innovations in capital markets, InsurTech, PropTech, and RegTech through real-world cases.
- C6035.5 Apply knowledge of regulatory frameworks, cyber security, and sustainable finance to address challenges in the FinTech industry.

Course Syllabus

Unit-I:

Introduction to Fintech:: Digital Transformation in Manufacturing and Service Industry, The changing structure of the financial ecosystem. Fintech and its advantages, Digital India and its role in promoting Fintech. Introduction to India Stack – Unique Identification, Presence Less Verification, eKYC, Digital Signature, Digital Document Repository (DigiLocker), Use of DigiLocker to Expedite Recruitment Process, Cashless Digital Payments, Account Aggregation, Receivables Exchange TReDS, Regulatory Framework.

Unit-II:

Technology Enablers for FinTech: Digital Payments, Unified Payment Interface (UPI), Payment Gateway,

The Instant Mobile Payment System (IMPS), Chatbots - Customer Relationship and Service, Use of Chatbots in P2P Platforms, Chatbots for Guiding Personal Financial Management, Robo Advisors or Algorithm-Based Planners - The Advantages of Robo Advisors, Application Programming Interface (API), Blockchain – key concepts, applications, Distributed ledger technology and Decentralized Finance (DeFi)]Cross Border Trade Using Blockchain, Value Chain of Blockchain, Working of a Business Blockchain, Case Study Capgemini Solution on AWS Managed Blockchain: From Proof of Concept to Production.

Unit-III:

FinTech in Banking: Digital Transformation in Banks. Changing Customer Expectations, Fitment of FinTech Companies in Digital Transformation – Core Banking Solutions, Network Banking and Cheque Truncation System, Cards with Chip and Pin, Net banking, Toll Gate Collections, PoS Terminals, Buy Now Pay Later (BNPL), Prepaid Mechanisms. FinTech in Lending and Borrowing: Introduction to the Business of Lending - Credit-worthiness of the Borrower, FinTech in Lending Business, Latest Technology Trends in Lending, Case Study - Amazon SMB Lending - Amazon as a FinTech Lender, Case Study—Indifi - How the Platform Works.

Unit-IV:

FinTech in Capital Markets: Raising Capital, Types of Securities, Important Stakeholders in Capital Markets, The Trade Lifecycle, Clearing, Settlement & Back office Operations – Clearing, Settlement, Asset Servicing, How Technology Supports Capital Market Processes Other Types of FinTech Companies: Insurtech, PropTech – Case Study—Property Locator App of DBS Bank, TailFin, EnablingTech, RegTech.

Unit-V:

Fintech Regulations and Challenges, Concerns and Trends in FinTech World: Concerns of FinTech Companies, Challenges Faced by FinTech Companies. Cyber security Sustainable Finance: Sustainable business practices, the role of Fintech in the Society, Green economic growth, Financial Inclusion and the role of Technology.

Books and Materials

Text Books:

1. Chandrahauns Chavan and Atul Patankar. *Introduction to Fintech.*, Pearson,2024.
2. Peter Goldfish. *A Global guide to Fintech and Future Payment Trends.*, Routledge, 2023.

Reference Books:

1. Chenjiazi Zhong. *Crypto currencies and Beyond, Business experts press.* , LLC, 2025.
2. T Sanjay Phadke. *Fintech Futue The Digital DNA Finance.*,Sage, 2020.

C6036 - Strategic Cost and Management Accounting

Teaching and Learning Scheme				Hours	Credits	Assessment Marks		
CI		LI	TW+SL	H	C	CIE	SEE	Total
L	T	P	SL					
60	0	0	60	120	4	40	60	100

Course Description

Course Overview

This course on Strategic Cost and Management Accounting equips students with knowledge of cost concepts, analysis, and control for effective decision-making. It covers distinctions between financial, cost, and management accounting, cost classification, overhead allocation, job and process costing, and decision areas such as pricing, product mix, and make-or-buy. The course also focuses on advanced tools like Cost-Volume-Profit (CVP) analysis, Activity-Based Costing (ABC), Standard costing, variance analysis, enabling students to plan, control, and evaluate performance for improved organizational efficiency and profitability.

Course Pre/Co-requisites

This course has no specific prerequisite and co-requisite.

Relevant SDG(s)

SDG 9 – Industry, Innovation, and Infrastructure

SDG 12 – Responsible Production

Course Outcomes

After the completion of the course, the student will be able to:

- C6036.1 Apply the concepts of cost, management, and financial accounting to business situations for planning and control.
- C6036.2 Apply costing methods such as job costing, process costing, and unit costing to prepare cost sheets and support decision-making.
- C6036.3 Analyze Cost-Volume-Profit relationships and Activity-Based Costing systems to evaluate profitability and efficiency.
- C6036.4 Assess the budgetary control and types including flexible and zero-based budgeting, to support effective resource management.
- C6036.5 Analyze standard costing and variance reports to interpret performance deviations and suggest corrective actions.

Course Syllabus

Unit-I:

Introduction to Cost and Management Accounting, Cost Analysis and Control: Management Accounting Vs. Cost Accounting Vs. Financial Accounting, Role of Accounting Information Planning and Control, Strategic Decisions and the Management Accountant. Enhancing the value of Management Accounting Systems. Cost Concepts and Managerial use of Classification of Costs, Cost Analysis and Control- Direct and Indirect Expenses, Allocation and Apportionment of Overheads, Calculation of Machine Hour rate.

Unit-II:

Costing for Decision making: Unit Costing, Job Costing, Cost Sheet, Tender and Process Costing and their Variants, Treatment of Normal Losses and Abnormal Losses, Inter-process Profits, Costing for By-products and Equivalent Production. Application of Managerial Costing for Control, Profit Planning, closing down of a Plant,

dropping a Product line, Charging General and Specific Fixed Costs, Fixation of Selling Price, Make or Buy Decisions, Key or Limiting Factor. Selection of Suitable Product Mix, Desired level of Profits, Diversification of Products, closing down or Suspending activities.

Unit-III:

Cost-Volume-Profit (CVP) Analysis and Activity-Based Costing (ABC): Essentials of CVP Analysis. The Breakeven Point using Equation Method, Contribution Margin Method and Graph Method. Target Operating Income. Target Net Income and Income Taxes. Breakeven Analysis for Decision making. Margin of Safety. Application of BEP for various Business Problems. CVP analysis in Service and Nonprofit Organizations. Activity Based Cost (ABC) Systems: Comparison of Traditional and Activity Based Cost Systems. Emergence of ABC Systems. Activity Hierarchies. Tracing Costs to Activities, Tracing Costs from Activities to Products, Customer Profitability, Process Efficiency. Activity Based Management. ABC Systems in Service Organizations. The Technological Edge of using ABC.

Unit-IV:

Budgetary Control: Budget, Budgetary Control, Steps in Budgetary Control, Flexible Budget. Different Types of Budgets- Sales Budget, Cash Budget, Production Budget, Performance Budgets and Computerized Budgeting. Activity Based Budgeting. Budgeting Process in Non-Profit Organizations. Zero Based Budgeting. Criticisms of Budgeting. An Introduction to Cost Audit and Managerial Audit.

Unit-V:

Standard Costing and Variance Analysis: Standard Costing – Establishing cost standards, Standard Cost and Standard Costing, Standard Costing Vs Budgetary Control, Standard Costing Vs Estimated Cost, Standard Costing and Marginal Costing, Analysis of Variance, Material Variance, Labour Variance and Sales Variance. Reconciling Budgeted Profit and Actual Profit. Standard Absorption Costing. Volume Efficiency and Capacity Variance.

Books and Materials

Text Books:

1. S. P. Jain and K. L. Narang. *Cost and Management Accounting.* , Kalyani Publishers, New Delhi, 6e, 2019.
2. James Jiambalvo. *Managerial Accounting.*, John Wiley & Sons, Inc. New Delhi, 7e, 2019.
3. M. Y. Khan, P. K. Jain. *Management Accounting.*, Theory and Problems, TMH, New Delhi, 7e 2017.
4. Horngre, Data, Foster. *Cost Accounting: A Managerial Emphasis.*, Pearson Education, 16e, 2017.

Reference Books:

1. Colin Drury. *Cost and Management Accounting.*, Cengage Learning, 8e, 2015.
2. T Hansen Mowen. *Cost and Management Accounting & Control.*, Thompson Publications, 5e, 2012.
3. John K Shank and Vijay Govindarajan. *Strategic Cost Management The new tool for competitive Advantage.*, The Free press. 2008.
4. Atkinson, Banker, Kaplan and Young. *Management Accounting.*, PHI, 2006.

C6047 – International Financial Management

Teaching and Learning Scheme				Hours	Credits	Assessment Marks		
CI		LI	TW+SL			CIE	SEE	Total
L	T	P	SL	H	C			
60	0	0	60	120	4	40	60	100

Course Description

Course Overview

This course provides an in-depth understanding of the financial decision-making process in a global context. It covers the international flow of funds through balance of payments. The course explores the evolution of the international monetary system, exchange rate regimes, and the functioning of the foreign exchange market. Students will learn to analyze exchange rate dynamics, government interventions, and theories linking interest rates, inflation and exchange rates. It also emphasizes asset liability management, including international capital budgeting, cost of capital, portfolio management, and FDI.

Course Pre/Co-requisites

This course has no specific prerequisite and co-requisite.

Relevant SDG(s)

SDG 8 – Economic Growth

SDG 10 – Reduced Inequalities

SDG 17 – Partnerships for the Goals

Course Outcomes

After the completion of the course, the student will be able to:

- C6047.1. Apply the concepts of International financial management to evaluate financial market scenario.
- C6047.2. Analyze the trends in exchange rate developments from historic to recent times in global world.
- C6047.3. Analyze foreign exchange rates applicable in international transactions in IFM..
- C6047.4. Apply the parity measures to figure out the appropriate exchange rates in deregulated markets in IFM
- C6047.5. Analyze the Exim policy guidelines which impact the international financial transactions

Course Syllabus

Unit-I:

Introduction:: An Overview, Importance, Nature and Scope of International Financial Management, Domestic FM vs. IFM, International Business Methods, Recent Changes and Challenges in International Financial Management.

Unit-II:

International Flow of Funds Balance of Payments (BOP), Fundamentals of BOP, Accounting Components of BOP, Factors affecting International Trade Flows, Agencies that facilitate International Flows. Indian BOP Trends. International Monetary System: Evolution, Gold Standard, Breton Woods System, inter war years the Flexible Exchange Rate Regime, Evaluation of Floating Rates, the Current Exchange Rate arrangements, the Economic and Monetary Union (EMU) and Developments.

Unit-III:

Foreign Exchange Market: Function and Structure of the Forex Markets, Major Participants, Types of Transactions and Settlement Dates, Foreign Exchange Quotations. Process of Arbitrage, Speculation in the

Forward Market. Currency Futures and Options Markets, Overview of the other markets, Euro Currency Market, Euro Credit Market, Euro Bond Market, International Stock Market- Dow Jones, Nasdaq, Shanghai Stock Exchange and Landon stock exchange.

Unit-IV:

Exchange Rates: Measuring Exchange Rate Movements, Factors influencing Exchange Rates. Government influence on Exchange Rates, Exchange Rate Systems. Managing Foreign Exchange Risk. International Arbitrage and Interest Rate Parity. Relationship between Inflation, Interest Rates and Exchange Rates, Purchasing Power Parity, International Fisher Effect, Interest Rate Parity, Role of RBI and FEMA Guidelines in India.

Unit-V:

Asset-liability Management Foreign Direct Investment, International Capital Budgeting, International Capital Structure and Cost of Capital. International Portfolio Management. International Financing: Equity, Bond Financing, Parallel Loans, International Cash Management, Accounts Receivable Management, Inventory Management. Payment methods of International Trade, Trade Finance Methods, Export – Import Bank of India, Recent Amendments in EXIM policy, Regulations and Guidelines.

Books and Materials

Text Books:

1. Jeff Madura, , *International Corporate Management* 13thed., Cengage,2016.
2. P.G.Apte,. *International Financial Management.*, Tata Mc Graw Hill, New Delhi, 2009.

Reference Books:

1. Madhu Vij. *International Financial Management.* Excel, 2012.
2. Srivastava,. *Multinational Financial Management* Excel Publications, Hyderabad, 2009.
3. V.A.Avadhani. *International Financial Management*, Himalaya Publishing House, Hyderabad

C6048 - Risk Management and Financial Derivatives

Teaching and Learning Scheme				Hours	Credits	Assessment Marks		
CI		LI	TW+SL	H	C	CIE	SEE	Total
L	T	P	SL					
60	0	0	60	120	4	40	60	100

Course Description

Course Overview

This course Risk Management and Derivative Market provides a comprehensive understanding of the principles, tools and techniques used to identify measure and mitigate financial risks in modern financial systems. It begins with an overview of risk management, its scope, benefits, and classification into systematic and unsystematic risk. Students will explore risk measurement tools such as Capital Adequacy Ratio, Basel Norms and quantitative models like Value at Risk and Cash Flow at Risk. The course also covers the evolution, structure and regulation of derivative market including forwards, futures, options and swaps with applications in managing interest rate, currency, equity, and commodity risks. Through theoretical insights and practical problem-solving, learners will develop the ability to design hedging strategies, apply pricing models like Black-Scholes and Binomial theorems and understand global as well as Indian practices in derivatives and risk management.

Course Pre/Co-requisites

This course has no specific prerequisite and co-requisite.

Relevant SDG(s)

SDG 8 – Economic Growth

SDG 11 – Sustainable Cities

SDG 13 – Climate Action

Course Outcomes

After the completion of the course, the student will be able to:

- C6048.1. Examine the knowledge of derivatives in solving problems involved in financial risks.
- C6048.2. Analyze the different types of risk for reducing the risk.
- C6048.3. Learn various aspects about Derivatives Market in India..
- C6048.4. Identify the risk Management process involved in Option market.
- C6048.5. Examine the different swaps for reducing financial risk involved in market.

Course Syllabus

Unit-I:

Introduction to Risk Management: Risk Management, Scope of Risk Management, Benefits of Risk Management, Classification of Risks: Systematic Risk and Unsystematic Risk, Business Risk, Financial Risk. Financial Markets, Market Risk: Price Risk, Currency Risk, Liquidity Risk, Interest Risk, Credit and Counterparty Risk, Operational Risk, Model Risk, Risk Management Process.

Unit-II:

Risk Measurement Tools: Capital Adequacy Ratio, Basel Norm: Basel Accord I, II & III, Need and Scope of studying Basel Norms, Types of risk: Interest Rate Risk, Market Risk, Credit Risk, Operational Risk, Exchange Rate Risk, and Liquidity Risk. Value at Risk (VaR), Cash Flow at Risk: Applications and Problems on VaR & CaR. .

Unit-III:

Introduction to Derivative Markets: Derivative Market, Types of Derivatives, Development and Growth of Derivative Markets, Factors influencing the Growth of Derivatives Market in India, Regulations of Derivative Market. Forward and Future Contracts: Forward Contract, Pricing Forward Contracts, Foreign Currency Forward Contract, Commodity Forward Contract, Counterparty Risk in the Forward Contract, Difference between Forward and Spot Market Futures Contract: Future Contract Design, Physical Settlement, Delivery Options and Cash Settlement, Future Market, Global Futures Market size, Commodity Futures, Equity Futures, Stock Index Futures, Currency Futures, Futures on Government Bonds, Notes and Bills, Cost of Carry Model for Futures and Forwards.

Unit-IV:

Risk Management Techniques: Options Contract: Options Contract and The Structure of Option Market, Types of Options, Option Strategies, Principles of Call Option Pricing, Put Option Pricing, Put - Call Parity Theorem: Option Pricing, Arbitrage Pricing. Binomial Pricing Model: The Black- Scholes Options Pricing Model, Uses of Options Strategies.

Unit-V:

Risk Management Techniques – SWAPS Contract: SWAP Market and its Evolution, Interest Rate Swap: Structure of a Typical Interest Rate Swap, Pricing and Valuation of Interest Swaps, Interest Rate Swap Strategies, Interest Rate Swaps in India. Currency Swaps: Currency Swaps Stature, Currency Swaps Pricing and Valuing Currency Swap, Currency Swap in India, Equity Swap: Equity Swap Pricing and Valuing of Equity Swap, Equity Swap Strategies, Pricing and Valuing

Books and Materials

Text Books:

1. Don M Chance, Robert Brooks *An Introduction to Derivatives and Risk Management*, 9thed., Cengage Learning, 2013.
2. R. Madhumathi & M. Ranganatham. *Derivatives and Risk Management* Pearson, 2012

Reference Books:

1. W. George E Rejda. *Financial Derivatives*, Prentice Hall India. 2011.
2. R. Madhumathi & M. Ranganatham. *Derivatives and Risk Management*, Pearson, 2012
3. Rene M. Stulz. *Risk Management & Derivatives*, Cengage Learning, 2003
4. Jayanth Rama Varma. *Derivatives and Risk Management*, 2nd , TMH, 1e ,2011.

C6049 - Financial Analytics

Teaching and Learning Scheme				Hours	Credits	Assessment Marks		
CI		LI	TW+SL	H	C	CIE	SEE	Total
L	T	P	SL					
30	0	0	30	60	2	40	60	100

Course Description

Course Overview

The aim of the course is to identify the various financial analytics that are applied in an organization. The students shall be able to explore on financial statement, time value of money, capital budgeting, equity and bond valuation. This course helps them to visualize the data to make better decisions on the people management.

Course Pre/Co-requisites

C6003 – Financial Reporting and Analysis

C6014 – Financial Management

C6034 – Security Analysis and Portfolio Management

Relevant SDG(s)

SDG 9 – Industry, Innovation, and Infrastructure

SDG 11 – Sustainable Cities

SDG 13 – Climate Action

Course Outcomes

After the completion of the course, the student will be able to:

- C6049.1. Analyse the various techniques of financial statement for better performance of the company.
- C6049.2. Examine the relevance of time value money, risk and return for the investment proposals.
- C6049.3. Apply capital budgeting techniques to select best investment opportunity .
- C6049.4 Classify the various methods of the equity valuation for better performance of the stock market
- C6049.5. Identify the different techniques of Bond and immunization strategies.

Course Syllabus

Unit-I:

Techniques of Financial Statement: Horizontal, Vertical Analysis, Trend Analysis, Ratio Analysis, Liquidity, Profitability, Solvency and Turnover Ratio, Valuation of Ratios, Statement of Cash Flow, Classification of Cash Flow, Computing Net Cash Flow: Operating, Investing and Financing Activities. Reporting and Interpretation using Spreadsheet

Unit-II:

Time Value of Money:: Future Value: Simple, Compound Interest and Annuity, Present Value: Discounted, Annuity, Equated Loan Amortization, Perpetuity using Spreadsheets. Risk and Return: Holding Period Returns, Arithmetic Mean vs Geometric Mean, Risk: Standard Deviation, Coefficient of Variation, Beta, Covariance of Stock.

Unit-III:

Capital Budgeting Techniques: Capital Budgeting Techniques: Payback Period, Accounting Rate of Return, Net Present Value, Internal Rate of Return, Profitability Index, Decision Tree, Cash Flow in Capital Budgeting, Cost of Capital, Advance Capital Budgeting Techniques, Adjusted Present Value Approach, Competing Project Risk using Spreadsheets.

Unit-IV:

Equity Valuation: Calculation of Portfolio Mean and Variance, Capital Asset Pricing Model (CAPM), Variance: Covariance Matrix, Estimating Beta and Security Market Line. Industry Analysis, Economic Analysis and Technical Analysis in Stock, Real Option in Capital Budgeting.

Unit-V:

Bond Valuation:: Duration, Duration of Bond with Uneven Payments, Immunization Strategies, Modeling the Term Structure, Calculating Expecting Bond Return in a Single and Multi- period Framework, Semi-annual Transition Matrix, Computation of Bond Beta.

Books and Materials

Text Books:

1. Sheeba Kapil. *Financial Valuation and Modeling* 1thed., Wiley,2022.
2. R. Narayanaswamy. *Financial Accounting*.7thed., Managerial Perspective, PHI,2022.
3. Timothy Mayes. *Financial Analysis*., 7th MS Excel, Cengage,2013.

Reference Books:

1. N R Parasuraman. *Financial Management-step by step approach*.1sted., Cengage,2014.
2. Simon Bennings. *Financial Modeling-Using Excel*, MIT Press , 3thed.,Camberidge,2014.
3. Vijay Gupta. *Financial Analysis using Excel* , VJ Books Inc, Canada.

C6050 - Financial Analytics Laboratory

Teaching and Learning Scheme				Hours	Credits	Assessment Marks		
CI		LI	TW+SL	H	C	CIE	SEE	Total
L	T	P	SL					
0	0	60	0	60	2	40	60	100

Course Description

Course Overview

This laboratory course aims to provide practical exposure to financial analytics used in organizations. Students will work with financial statements, apply concepts of time value of money, and perform capital budgeting exercises. They will also practice equity and bond valuation techniques and learn to visualize financial data for effective interpretation. Through these activities, the lab equips students with the ability to analyze financial information and make better, data-driven decisions in people and resource management.

Course Pre/Co-requisites

This course has no specific prerequisite and co-requisite.

Relevant SDG(s)

SDG 9 – Industry, Innovation, and Infrastructure

SDG 11 – Sustainable Cities

SDG 13 – Climate Action

Course Outcomes

After the completion of the course, the student will be able to:

- C6050.1. Analyse the various techniques of financial statement for better performance of the company.
- C6050.2. Examine the relevance of time value money, risk and return for the investment proposals.
- C6050.3. Apply capital budgeting techniques to select best investment opportunity .
- C6050.4 Classify the various methods of the equity valuation for better performance of the stock market
- C6050.5. Identify the different techniques of Bond and immunization strategies.

Course Syllabus for Laboratory Experiments

Unit-I:

Techniques of Financial Statement: Horizontal, Vertical Analysis, Trend Analysis, Ratio Analysis, Liquidity, Profitability, Solvency and Turnover Ratio, Valuation of Ratios, Statement of Cash Flow, Classification of Cash Flow, Computing Net Cash Flow: Operating, Investing and Financing Activities. Reporting and Interpretation using Spreadsheet

Unit-II:

Time Value of Money:: Future Value: Simple, Compound Interest and Annuity, Present Value: Discounted, Annuity, Equated Loan Amortization, Perpetuity using Spreadsheets. Risk and Return: Holding Period Returns, Arithmetic Mean vs Geometric Mean, Risk: Standard Deviation, Coefficient of Variation, Beta, Covariance of Stock.

Unit-III:

Capital Budgeting Techniques: Capital Budgeting Techniques: Payback Period, Accounting Rate of Return, Net Present Value, Internal Rate of Return, Profitability Index, Decision Tree, Cash Flow in Capital Budgeting, Cost of Capital, Advance Capital Budgeting Techniques, Adjusted Present Value Approach, Competing Project Risk using Spreadsheets.

Unit-IV:

Equity Valuation: Calculation of Portfolio Mean and Variance, Capital Asset Pricing Model (CAPM), Variance: Covariance Matrix, Estimating Beta and Security Market Line. Industry Analysis, Economic Analysis and Technical Analysis in Stock, Real Option in Capital Budgeting.

Unit-V:

Bond Valuation:: Duration, Duration of Bond with Uneven Payments, Immunization Strategies, Modeling the Term Structure, Calculating Expecting Bond Return in a Single and Multi- period Framework, Semi-annual Transition Matrix, Computation of Bond Beta.

Laboratory Equipment/Software/Tools Required:

1. Desktop Computer system with MS Office
2. Desktop Computer system with SPSS

Books and Materials

Text Books:

1. Sheeba Kapil. *Financial Valuation and Modeling* 1thed., Wiley,2022.
2. R. Narayanaswamy. *Financial Accounting*.7thed., Managerial Perspective, PHI,2022.
3. Timothy Mayes. *Financial Analysis.*, 7th MS Excel, Cengage,2013.

Reference Books:

1. N R Parasuraman. *Financial Management-step by step approach*.1sted., Cengage,2014.
2. Simon Bennings. *Financial Modeling-Using Excel, MIT Press* , 3thed.,Camberidge,2014.
3. Vijay Gupta. *Financial Analysis using Excel* , VJ Books Inc, Canada.

PROFESSIONAL ELECTIVES
DOMAIN: HUMAN RESOURCE

C6037 - Talent and Performance Management Systems

Teaching and Learning Scheme				Hours	Credits	Assessment Marks		
CI		LI	TW+SL	H	C	CIE	SEE	Total
L	T	P	SL					
60	0	0	60	120	4	40	60	100

Course Description

Course Overview

Talent and Performance Management focuses on the strategic importance of acquiring, nurturing, and retaining human capital to achieve organizational excellence. The course introduces students to the concepts, models, and practices of talent management, highlighting its role as a competitive advantage in today's dynamic business environment. Learners will explore frameworks for talent identification, competency mapping, succession planning, and leadership development while also understanding the challenges of managing a diverse workforce. The performance management component emphasizes the design and implementation of effective appraisal systems, setting measurable goals, linking individual performance to organizational objectives, and leveraging feedback for continuous improvement. Through case studies, tools, and analytics, students will gain insights into aligning talent strategies with business goals, optimizing workforce productivity, and fostering a culture of engagement and growth. By the end of the course, students will be equipped with the skills to integrate talent and performance practices for sustainable organizational success.

Course Pre/Co-requisites

This course has no specific prerequisite and co-requisite.

Relevant SDG(s)

SDG 5 - Gender Equality

SDG 8 - Decent Work and Economic Growth

Course Outcomes

After the completion of the course, the student will be able to:

- C6037.1 Apply the Talent Management process by linking its key components to organizational practices.
- C6037.2 Analyze the role of performance management and employee development in enhancing organizational effectiveness.
- C6037.3 Differentiate among various approaches to Performance Management Systems and interpret their applicability in different contexts.
- C6037.4 Examine KRAs, KPIs, and performance metrics & To evaluate employee and organizational performance.
- C6037.5 Assess the significance of reward systems in driving employee motivation and organizational outcomes.

Course Syllabus

Unit-I:

Foundations of Talent Management (TM): Definition, Meaning, Importance, Objectives and Scope of TM. Evolution and development of TM. Need for and Imperatives of TM in modern organizations. Models of TM: McKinsey's TM Framework, Deloitte's TM Wheel, Ulrich's TM Model and CCL's 70-20-10 Model. TM as a competitive advantage for organizations. Role of HR in TM. Key challenges in managing TM today. Strategic Workforce Planning (aligning TM with business strategy). Future Trends in TM: Gig workforce, Remote/Hybrid work, AI in TM.

Unit-II:

Competency based Talent Strategies: Importance of Competencies for TM. Competency Mapping, Assessment and Development. Integration of Competencies with Performance Management, Talent Development, Career Development, Succession Planning and Talent Retention. Employee Succession using 9-Box Talent Management Grid. Leadership Development through identification high potentials, development of a strong Pipeline cum Bench Strength, Retention strategies, EVP, employee branding.

Unit-III:

Introduction to Performance Management (PM): Importance of Performance Management. Contribution of PM. Disadvantages of poorly implemented PM. Role of HR in PMS. Determinants of Performance: Declarative Knowledge, Procedural Knowledge and Motivation. Linkages of PMS with other HR Processes. Different Approaches to PMS: Traditional Performance Appraisal System, MBO and Balanced Scorecard. Linking PM and Strategy. Use of Technology in PMS.

Unit-IV:

PMS Design & Execution: Performance Planning & Agreement on Goals, Setting Key Result Areas (KRAs), Key Performance Indicators (KPIs) and Performance Metrics. Monitoring Performance, Measuring Behaviors and Results. Gathering Performance Information, Presentation of Information, Interpretation and Taking Corrective Action Determining the Overall Rating of Performance. Balance score cards with digital dashboards.

Unit-V:

PM: Employee Development, Reward & Legal Systems: (a) Employee Development: Personal Development Plans: Objectives, Content and Activities. Direct Supervisor's role. 360-Degree Feedback Systems. Ongoing Feedback. PM Skills for Managers: Coaching, Using Different Styles of Coaching and Involving in Ongoing Coaching Process. (b) Reward Systems: Traditional vs Contingent Pay Plans, Pay for Performance. Pay Structures: Job Evaluation, its Methods, and Broad-banding. (c) Legal Systems: PMS and Law, Legal Principles affecting PMS.

Books and Materials

Text Books:

1. Aguinis, H. *Performance management* 5th ed., SAGE Publications, 2023.
2. Cascio, W. F., & Aguinis, H. *Applied psychology in talent management*, 9th ed., SAGE Publications, 2024.

Reference Books:

1. Berger, L. A., & Berger, D. R. *The talent management handbook: Making culture a competitive advantage by acquiring, identifying, developing, and promoting the best people* 3rd ed., McGraw-Hill Professional, 2017.
2. Taylor, S. *Resourcing and talent management: The theory and practice of recruiting and developing a workforce* 9th ed., Kogan Page Ltd, 2024.
3. Schiemann, B. *Reinventing talent management: How to maximize performance in the new marketplace.*, John Wiley & Sons, 2010.

C6038 - Learning and Development

Teaching and Learning Scheme				Hours	Credits	Assessment Marks		
CI		LI	TW+SL	H	C	CIE	SEE	Total
L	T	P	SL					
60	0	0	60	120	4	40	60	100

Course Description

Course Overview

This course on Training and Development offers a comprehensive understanding of how individuals and organizations learn and grow in a dynamic business environment. It covers foundations of learning, strategic role of training, needs assessment, program design, trainer competencies, evaluation frameworks, traditional and technology-enabled training methods, e-learning, blended learning, and digital platforms. The course also emphasizes employee and management development through formal education, development centers, career self-management, well-being, and executive coaching. It addresses contemporary issues like onboarding, diversity and inclusion, cross-cultural training, virtual and hybrid work, competency mapping, and lifelong learning culture..

Course Pre/Co-requisites

This course has no specific prerequisite and co-requisite.

Relevant SDG(s)

SDG 5 - Gender Equality

SDG 8 - Decent Work & Economic Growth

Course Outcomes

After the completion of the course, the student will be able to:

- C6038.1 Apply various learning theories and models to determine their applicability in designing effective instructional strategies for diverse workplace learning outcomes.
- C6038.2 Interpret training strategies, needs assessment methods, and evaluation models to design effective and context-specific training programs that align with organizational objectives.
- C6038.3 Determine the effectiveness of traditional and technology-enabled training methods to determine their suitability for different learning contexts and organizational needs.
- C6038.4 Practice various employee and management development approaches to evaluate their role in enhancing career growth, leadership capabilities, and organizational effectiveness.
- C6038.5 Examine contemporary training and development practices to assess their impact on workforce adaptability, inclusion, and organizational competitiveness in dynamic work environments.

Course Syllabus

Unit-I:

Introduction to Learning: Definition and characteristics of learning, Phases of learning. Theories of learning- Reinforcement Theory, Social Learning Theory, Goal Setting Theory, Gamification & Immersive Learning, Employee Reskilling & Up skilling for the Future Work, Adult Learning Theory (Andragogy), Information Processing Theory. The Learning Process and Cycle (Kolb's Model). Instructional emphasis for different learning outcomes.

Unit-II:

Training Strategy and Designing Training: Evolution of the training function, Strategic Training and

Development process, Training needs in various strategic contexts (growth, stability, retrenchment), Structure and models of training departments, Training Needs Assessment (TNA): tools, techniques, and process. Designing a training program: setting objectives, content design, selecting methods Trainer competencies and styles, Evaluating training effectiveness: Kirkpatrick's and ROI models, post-training support and transfer of learning.

Unit-III:

Training Methods and Technology Enabled Learning: Traditional training methods: Presentation (Lectures, Demonstrations), Hands-on (Simulations, Case Studies, Role Plays), Group building (Team building, Action Learning). E-learning and online modules, Impact of technology on learning: Multimedia, Virtual Classrooms, Computer-Based Training (CBT), Mobile Learning and Blended Learning Models. Learning Management Systems (LMS). Digital training administration tools.

Unit-IV:

Employee and Management Development: Meaning and importance of employee development, Essentials of management development programs (MDPs), Approaches to development: Formal education, Assessment and Development centers, Well-being & Resilience Development, Career Self-Management & Heutagogy. Development planning process, Organizational strategies for career and leadership development. E-learning in employee development. Electronic MDPs and executive coaching.

Unit-V:

Contemporary Issues in Training and Development: Orientation/On boarding training programs, Diversity and inclusion training, Sexual harassment prevention training, Team and cross functional team training, Cross-cultural training for global assignments, Competency mapping and training for talent management Self-Directed Learning & Lifelong Learning Culture, Training for virtual work environments, hybrid roles, and gig economy.

Books and Materials

Text Books:

1. Raymond A. Noe, Amitabh Deo Kodwani. *Employee Training and Development.*, 7thed., McGraw Hill, 2019.
2. P. Nick Blanchard, James W. Thacker, A. Anand Ram. *Effective Training: Systems, Strategies, and Practices.*, 4thed., Pearson, 2012.
3. Rolf Lynton & Uday Pareek. *Training for Development.*, 3thed., Sage Publishers, 2012.

Reference Books:

1. Jean Barbazette. *Training Needs Assessment: Methods, Tools, and Techniques.*, Wiley, 2014.
2. G. Pandu Naik. *Training and Development: Text, Research and Cases.*, Excel Books, 2011.
3. Steve W.J. Kozlowski & Eduardo. *Salas Learning, Training, and Development in Organizations.*, Routledge, 2010.

C6039 - Employee Relations

Teaching and Learning Scheme				Hours	Credits	Assessment Marks		
CI		LI	TW+SL	H	C	CIE	SEE	Total
L	T	P	SL					
60	0	0	60	120	4	40	60	100

Course Description

Course Overview

This course on Industrial Relations and Labor Legislation in India provides a comprehensive understanding of work dynamics, labour relations, and regulatory frameworks. It covers the gig economy, trade unions, collective bargaining, tripartite mechanisms, and sustainable industrial relations. The syllabus covers traditional and contemporary labor legislations, grievance handling, and dispute settlement under the Industrial Disputes Act, 1948. The course concludes with an exploration of 2021-22 labor reforms, focusing on workers' rights, industrial peace, and welfare of interstate migrant workers.

Course Pre/Co-requisites

This course has no specific prerequisite and co-requisite.

Relevant SDG(s)

SDG 5 – Gender Equality

SDG 8 – Decent Work and Economic Growth

SDG 16 – Peace, Justice and Strong Institutions

Course Outcomes

After the completion of the course, the student will be able to:

- C6039.1 Apply the principles of industrial relations and trade union laws to real-world contexts, including the gig economy, employer organizations, and labour relations frameworks.
- C6039.2 Interpret the evolving legal frameworks, bargaining levels, and labour relations in post-liberalized India, including decentralized and sector-specific bargaining practices.
- C6039.3 Determine the principles of tripartism and social dialogue to strengthen labour reforms, and the role of green jobs in shaping sustainable labour relations.
- C6039.4 Practice the provisions and implications of key labour laws to evaluate their role in protecting workers' rights and ensuring equitable labour practices.
- C6039.5 Examine the causes and consequences of industrial disputes, grievance issues, and the implications of labour law reforms (Codes of 2019–2020) for worker security and social welfare.

Course Syllabus

Unit-I:

Industrial Relations: Gig Economy and Changing Dynamics of Labor Relations in India, Approaches to Industrial Relations, Industrial Relations in Comparative Framework, Management and Employer Organizations. Introduction, Origin and Growth of IR. Trade Unions: Introduction, Definition and Objectives, Growth and Structure of Trade Unions in India, Trade Unions Act, 1926 and Legal framework, Union Recognition, Union Problems, Non-Union Firms, Management of Trade Unions in India.

Unit-II:

Collective Bargaining: Nature and Legal Framework of Collective Bargaining, Levels of Bargaining and Agreements, Change in the Labor Management Relations in the Post-Liberalized India, Changes in the Legal

Framework of Collective Bargaining, Negotiated Flexibility, Productivity Bargaining, Public Sector Bargaining, Collective Bargaining in the Gig and Platform Economy, Decentralized Collective Bargaining.

Unit-III:

Tripartism and Social Dialogue: Types and Levels of Tripartism, Social Dialogue and the Reform Process, Strengthening Tripartite Social Dialogue, Green Jobs and Sustainable Industrial Relations.

Unit-IV:

Labor Legislation – I: Factories Act, 1948, Employee Compensation Act, 1923, ESI Act, 1948, The Payment of Wages Act, 1936, Minimum Wages Act, 1948, The Payment of Bonus Act, 1965. The Prohibition of Sexual Harassment of Women at Workplace Act, 2013, The Maternity Benefit Act, 1961, The Payment of Gratuity Act, 1972, The Unorganized Workers' Social Security Act, 2008.

Unit-V:

Labor Legislation – II: Industrial Disputes Act, 1948, Meaning, Nature and Scope of Industrial Disputes, Causes and Consequences. Dispute Settlement Machinery. Grievance Handling, Causes of Grievances, Standing Orders Act 1948. 2021-22 Reforms into Labor Laws: Right to Minimum Wages (Code on Wages, 2019), Social Security for Everyone (Social Security Code, 2020), Right of Security to Workers in all situations (OSH Code (Occupational Safety, Health and Working Conditions Code) – 2020), Towards end to Disputes (Industrial Relations (IR) Code, 2020), Welfare of Interstate Migrant Workers.

Books and Materials

Text Books:

1. SC Srivastava. *Industrial Relations and Labour Laws.*, 8thed., Vikas Publishing House Ltd, 2022.
2. C.S. Venkat Rathnam. *Industrial Relations.*, Oxford University Press, 2nded., New Delhi, 2019.
3. D.P.Sahoo. *Employee Relations, Text & Cases.*, 1thed., Sage Publications, 2020.

Reference Books:

1. Parul Gupta. *Industrial Relations & Labour Laws for Managers.* Sage Publications, 2019.
2. Arun Monappa. *Industrial Relations.* Tata McGraw Hill Publishing Company Limited, New Delhi, 2017.
3. C.B. Marmoria, Marmoria & Gankar. *Dynamics of Industrial Relations*, 13thed., Himalaya Publishing House Pvt. Ltd, 2014.
4. P.N. Singh and Neeraj Kumar. *Employee Relations Management.* Pearson Education, 2010.
5. Ministry of Labour and Employment, Government of India. *Labour Code* (English version). Available at: https://labour.gov.in/sites/default/files/Labour_Code_Eng.pdf.

C6051 - International Human Resource Management

Teaching and Learning Scheme				Hours	Credits	Assessment Marks		
CI		LI	TW+SL	H	C	CIE	SEE	Total
L	T	P	SL					
60	0	0	60	120	4	40	60	100

Course Description

Course Overview

The aim of this course to disseminate functions of International Human resource management from global human resource planning to compensation management and its role in managing multinational corporations

Course Pre/Co-requisites

This course has no specific prerequisite and co-requisite.

Relevant SDG(s)

SDG 5 - Gender Equality

SDG 8 - Decent Work and Economic Growth

Course Outcomes

After the completion of the course, the student will be able to:

- C6051.1 Identify the functions of International Human Resource Management
- C6051.2. Illustrate the process of global HRP and global staffing
- C6051.3. Analyze the needs and methods of training for global workforce.
- C6051.4. Appraise the functional relationship with international compensation management and performance management.
- C6051.5. Examine the significance of international HRM managing multinational corporations

Course Syllabus

Unit-I:

INTRODUCTION:: : Introduction to International Human Resource Management: Meaning, nature, and scope of IHRM, Domestic HRM vs. International HRM, Drivers of internationalization of business and global workforce, Functions and models of IHRM: Morgan's model, Harvard model, Matching model, Strategic IHRM: Linking HR strategy with global business strategy. Organizational structures in international business, Role of IHRM in international business success, Ethics and CSR in international HRM context.

Unit-II:

International Staffing and Talent Management: International HR planning and forecasting, Approaches to international staffing: Ethnocentric, Polycentric, Geocentric, Regio centric, Recruitment and selection for international assignments, Expatriate management lifecycle: selection criteria, predeparture training, on-assignment support, repatriation challenges, Managing inpatriates, third country nationals, and virtual assignments, Talent identification, development, and succession planning in MNCs, Outsourcing, offshoring, and their HR implications, Managing dual-career couples and diversity in global talent pools.

Unit-III:

Cross-Cultural Management and Global Leadership: Understanding culture: Definitions, layers, and characteristics, Hofstede's Cultural Dimensions, Cultural shock, adjustment, and acculturation, Cross-cultural communication: barriers, listening, and negotiation styles, Designing and delivering cross-cultural training

programs. Developing global leadership competencies, Women in international management, Managing multi-cultural and geographically dispersed teams,

Unit-IV:

International Compensation and Performance Management:: International Compensation: Objectives and components of international compensation, Approaches to international compensation: Balance sheet, going rate, host-based, global pay, Expatriate compensation packages: salary, benefits, allowances, incentives, taxation, Performance Management: Performance management systems in multinational contexts, Appraising expatriates and host-country nationals, Aligning performance measures with global business goals, Equity and fairness issues in global pay systems, Legal compliance and ethical considerations in compensation and performance. .

Unit-V:

Global HRM Trends, Challenges and Future Directions: IHRM in international mergers, acquisitions, and joint ventures, Labor relations and international employee relations, IHRM challenges in emerging markets and global crises, Diversity, equity, inclusion, and global workforce management, Role of technology in IHRM: HRIS, AI, remote work, digital onboarding, Global talent shortages, skill gaps, and workforce planning, Corporate social responsibility and sustainability in IHRM, Future of work, gig economy, and implications for global HR.

Books and Materials

Text Books:

1. Srinivas R Kandula *International Human Resource Management* 4thed., Sage Publications,2018.
2. Anne-Wil Harzing and Ashly H. Pinnington. *International Human Resource Management*.4thed., Sage Publications,2017.

Reference Books:

1. S.C. Gupta. *International Human Resource Management*.,2nded., McMilan,2017.
2. Charles M Vance and Yongsunpaik *Managing Global Work force* ,3rded., PHI,2015.
3. Tony Edwards and Chris Rees *International Human Resource Management* , Pearson, 2009.

C6052 - Leadership and Change Management

Teaching and Learning Scheme				Hours	Credits	Assessment Marks		
CI		LI	TW+SL	H	C	CIE	SEE	Total
L	T	P	SL					
60	0	0	60	120	4	40	60	100

Course Description

Course Overview

The aim of the course is to identify the various theories of leadership that attributed to success of the organization. It disseminates change management and signifies the role of leadership in managing resistance to change in an organization.

Course Pre/Co-requisites

This course has no specific prerequisite and co-requisite.

Relevant SDG(s)

SDG 4 – Quality Education

SDG 5 – Gender Equality

SDG 16 – Peace, Justice and Strong Institutions

Course Outcomes

After the completion of the course, the student will be able to:

- C6052.1. Examine the concepts, principles and theories of leadership.
- C6052.2. Appraise the role of leader in the ever-changing business scenario as well as models of change..
- C6052.3. Analyze the role of power, politics and conflicts in times of change, management of resistance to change.
- C6052.4. Explore the process organizational development from a consultative perspective.
- C6052.5 To Apply OD skills to manage and sustain organizational change..

Course Syllabus

Unit-I:

INTRODUCTION TO LEADERSHIP:: Leadership, Role and Functions of a Leader, Leadership Motives, Characteristics of an Effective Leader, Leadership as a Process, The Complexities of Leadership, Effective Leadership Behaviours and Attitudes. Leadership and Power, Coercion, Trait Approach, Leadership Behaviour and Styles, Lewin's Leadership Styles, Ohio State Leadership Study, The University of Michigan Study, Blake and Mouton's Managerial Grid.

Unit-II:

LEADERSHIP THEORIES AND STYLES: : Contingency Theories of Leadership: Fiedler's Contingency Model, The Path-Goal Theory, Leader Member Exchange Theory (LMX), The Hersey - Blanchard Situational Leadership Theory. Transactional Leadership and Transformational Leadership Approaches, leadership styles: Charismatic Leadership, Authentic Leadership, Servant Leadership, Adaptive Leadership, Team Leadership, Leadership and Empowerment, Ethical leadership Competency Models for Leadership at All Levels.

Unit-III:

LEADERSHIP & ORGANIZATIONAL CHANGE: Importance of Change, Nature & Sources of Organizational Change, Role of a Leader in Changing Business Environment, Qualities and Competencies of a Change Leader, Leader as a Change Agent, Aims and Environmental Triggers of change, Levers of Change, Types of

Changes: Planned, Developmental, Transitional and Transformational. Impact of Change on Organizations. Select Change Management Models: Kurt Lewin's Three-step Model, McKinsey's 7-S Model, Action Research Model, John Kotter's Eight-step Model, Organization Intelligence Model, ADKAR Model.

Unit-IV:

MANAGEMENT OF ORGANIZATIONAL CHANGE: Organizational Structure and Change, Organizational Culture: Its Sources, Dimensions and Impact on Organizational Change. Power & Conflict in Times of Change, Leadership in Times of Change. An Integrated Approach to Organizational Change, Change Strategies, Response of Employees to Change: People Opposing Change and People with Positive Response, Resistance to Change and Management of Resistance to Change.

Unit-V:

STRATEGIES FOR MANAGING CHANGE: Factors for Effective Change, Managing change in VUCA world, Organization Development (OD) for Management of Change, OD Process, Skills and Competencies of OD Consultant. OD Interventions for Organization Culture and Design, Sustaining Change after Intervention, Evaluation of an Intervention & Closing an Engagement.

Books and Materials

Text Books:

1. Donald L Anderson. *Organizational Development* 5thed., Sage Publications,2021.
2. Peter G. North house. *Leadership Theory and Practice* 1sted., Sage Publications,2016.

Reference Books:

1. Ratna Raina. *Change Management and OD*,1thed.,Sage Publications,2018
2. Barbara Senior. *Jocelyne Fleming, Organizational Change* , 3rded.,, Pearson publications, 2010.

C6053 - HR Analytics

Teaching and Learning Scheme				Hours	Credits	Assessment Marks		
CI		LI	TW+SL	H	C	CIE	SEE	Total
L	T	P	SL					
30	0	0	30	60	2	40	60	100

Course Description

Course Overview

HR Analytics equips students with the knowledge and tools to make evidence based human resource decisions by leveraging data and metrics. The course emphasizes the role of people analytics in aligning HR practices with business strategy and improving workforce effectiveness. Students will explore the evolution of HR analytics, stages of maturity, and the distinction between HR metrics and analytics. The syllabus covers applications across recruitment, training and development, performance management, compensation, employee engagement, and retention. Learners will gain hands-on exposure to commonly used HR metrics such as cost per hire, time to fill, training ROI, performance indicators, and predictive models for workforce planning. Through case studies, digital tools, and real-world datasets, the course builds skills in interpreting HR dashboards, identifying trends, and translating insights into strategic HR actions. By the end, students will be prepared to integrate analytics into HR decision-making, enhancing organizational productivity and employee experience. .

Course Pre/Co-requisites

C6012 – Human Resource Management

C6037 – Talent and Performance Management Systems

Relevant SDG(s)

SDG 9 – Industry, Innovation, and Infrastructure

SDG 11 - Sustainable Cities

SDG 13 - Climate Action

Course Outcomes

After the completion of the course, the student will be able to:

- C6053.1. Analyze the scope and levels of HR analytics for strategic HR decisions
- C6053.2 Apply data techniques and differentiate among HR analytics models
- C6053.3. Use MS Excel to analyze HR metrics across key HR functions.
- C6053.4. Create dashboards and apply descriptive/diagnostic techniques to HR data..
- C6053.5. Apply predictive models and design prescriptive HR solutions.

Course Syllabus

Unit-I:

Introduction to HR Analytics: History of Different HRM Perspectives, Transition from HRM to HCM and Gaining Sustainable Advantage through HCM. HR Analytics and Changing Role of HR Professionals. Importance and Scope of HR Analytics. Significance of HR Analytics, Benefits of HR Analytics. Four Levels of Analysis: Descriptive, Diagnostic, Predictive and Prescriptive. Key Influencers of HR Analytics Process. Big Data Era in HR Analytics, HR Analytics – Linkage to Business Outcomes.

Unit-II:

Understanding HR Analytics: Conducting HR/Workforce Analytics: Models of HR Analytics: LAMP Model, HC BRidge Model, Bersin’s HR Analytics Maturity Model and HR Value Chain Model. Process of

conducting HR Analytics. Understanding HR Data: Importance of Data, Types and Scales of Data; Methods of Capturing Data, Data Examination & Purification. Understanding various HR Metrics from the perspective of HR Analytics.

Unit-III:

Analytics for Key HR Processes Using MS Excel: Conduction of HR Analytics for key metrics under HR Processes viz. (i) Recruitment & Selection, (ii) Training & Development, (iii) Performance Appraisal, (iv) Talent Management, (v) Employee Engagement, (vi) Compensation Management and (vii) Expatriate Management.

Unit-IV:

Descriptive & Diagnostic HR Analytics: Overview of Select Tools for Conduction HR Analytics: (i) Statistical tools: MS Excel, SPSS & PSPP; (ii) Programming Languages: R & Python; (iii) Visualization Tools: MS Excel, Tableau & Power BI. Descriptive Analytics in HR: HR Dashboards using MS Excel, Slicing and Dicing of HR Data using MS Excel Pivot Table Applications. Data Visualization for Key HR processes. Introduction and scope of diagnostic HR analytics, descriptive vs diagnostic analytics, basic diagnostic techniques: root cause analysis, hypothesis testing for chi square, correlation analysis and regression.

Unit-V:

Predictive & Prescriptive HR Analytics: Predictive HR Analytics: Correlation, Linear and Multiple Regression, Factor Analysis and Cluster Analysis, Comparison of Means and Analysis of Variance for Manpower Demographics, Employee Satisfaction, Training Effectiveness etc. Prescriptive HR Analytics, Predictive vs Prescriptive HR Analytics, Tools for conduction of prescriptive analysis: Decision Trees and What-If Scenarios. Future of HR Analytics.

Books and Materials

Text Books:

1. Rama Shankar Yadav & Sunil Maheshwari. , *HR Analytics* ,Wiley,2021.
2. Pease, G. & Beresford, B *Developing Human Capital: Using Analytics to Plan and Optimize Your Learning and Development Investments.*4th Wiley, 2014.
3. Phillips, J., & Phillips, P.P, *Making Human Capital Analytics Work: Measuring the ROI of Human Capital Processes and OUTCOME* 4th McGraw-Hill, 2014.

Reference Books:

1. Swati Dhir & Suparna Pal. *Human Resource Analytics: Theory and Application Techniques.*, Cengage, 2021..
2. Nishant Uppal, *Human Resource Analytics.*, Pearson, 2021.
3. Pratyush Banerjee, Jatin Pandey & Manish Gupta *HR Analytics: Practical Applications of HR Analytics*, Sage publications, 2019.
4. Dipak Kumar Bhattacharya. *HR Analytics*, Sage publications,2017.

C6054 - HR Analytics Laboratory

Teaching and Learning Scheme				Hours	Credits	Assessment Marks		
CI		LI	TW+SL	H	C	CIE	SEE	Total
L	T	P	SL					
0	0	60	0	60	2	40	60	100

Course Description

Course Overview

This laboratory course provides practical experience in using HR analytics to support evidence-based human resource decisions. Students will learn how people analytics can align HR practices with business strategy and improve workforce effectiveness. The lab covers key areas such as recruitment, training and development, performance management, compensation, employee engagement, and retention. Learners will work with common HR metrics including cost per hire, time to fill, training ROI, and performance indicators, and will use predictive models for workforce planning. Through case studies, digital tools, and real-world datasets, students will practice interpreting HR dashboards, identifying trends, and turning insights into strategic HR actions. By the end of the lab, they will be able to apply analytics to enhance organizational productivity and employee experience.

Course Pre/Co-requisites

This course has no specific prerequisite and co-requisite.

Relevant SDG(s)

SDG 9 – Industry, Innovation, and Infrastructure

SDG 11 - Sustainable Cities

SDG 13 - Climate Action

Course Outcomes

After the completion of the course, the student will be able to:

C6054.1. Analyze the scope and levels of HR analytics for strategic HR decisions

C6054.2 Apply data techniques and differentiate among HR analytics models

C6054.3. Use MS Excel to analyze HR metrics across key HR functions.

C6054.4. Create dashboards and apply descriptive/diagnostic techniques to HR data..

C6054.5. Apply predictive models and design prescriptive HR solutions.

Course Syllabus for Laboratory Experiments

Unit-I:

Introduction to HR Analytics: History of Different HRM Perspectives, Transition from HRM to HCM and Gaining Sustainable Advantage through HCM. HR Analytics and Changing Role of HR Professionals. Importance and Scope of HR Analytics. Significance of HR Analytics, Benefits of HR Analytics. Four Levels of Analysis: Descriptive, Diagnostic, Predictive and Prescriptive. Key Influencers of HR Analytics Process. Big Data Era in HR Analytics, HR Analytics – Linkage to Business Outcomes.

Unit-II:

Understanding HR Analytics: Conducting HR/Workforce Analytics: Models of HR Analytics: LAMP Model, HC BRidge Model, Bersin’s HR Analytics Maturity Model and HR Value Chain Model. Process of conducting HR Analytics. Understanding HR Data: Importance of Data, Types and Scales of Data; Methods of Capturing Data, Data Examination & Purification. Understanding various HR Metrics from the perspective of HR Analytics.

Unit-III:

Analytics for Key HR Processes Using MS Excel: Conduction of HR Analytics for key metrics under HR Processes viz. (i) Recruitment & Selection, (ii) Training & Development, (iii) Performance Appraisal, (iv) Talent Management, (v) Employee Engagement, (vi) Compensation Management and (vii) Expatriate Management.

Unit-IV:

Descriptive & Diagnostic HR Analytics: Overview of Select Tools for Conduction HR Analytics: (i) Statistical tools: MS Excel, SPSS & PSPP; (ii) Programming Languages: R & Python; (iii) Visualization Tools: MS Excel, Tableau & Power BI. Descriptive Analytics in HR: HR Dashboards using MS Excel, Slicing and Dicing of HR Data using MS Excel Pivot Table Applications. Data Visualization for Key HR processes. Introduction and scope of diagnostic HR analytics, descriptive vs diagnostic analytics, basic diagnostic techniques: root cause analysis, hypothesis testing for chi square, correlation analysis and regression.

Unit-V:

Predictive & Prescriptive HR Analytics: Predictive HR Analytics: Correlation, Linear and Multiple Regression, Factor Analysis and Cluster Analysis, Comparison of Means and Analysis of Variance for Manpower Demographics, Employee Satisfaction, Training Effectiveness etc. Prescriptive HR Analytics, Predictive vs Prescriptive HR Analytics, Tools for conduction of prescriptive analysis: Decision Trees and What-If Scenarios. Future of HR Analytics.

Laboratory Equipment/Software/Tools Required:

1. Desktop Computer system with MS Office
2. Desktop Computer system with SPSS

Books and Materials

Text Books:

1. Rama Shankar Yadav & Sunil Maheshwari. , *HR Analytics* ,Wiley,2021.
2. Pease, G. & Beresford, B *Developing Human Capital: Using Analytics to Plan and Optimize Your Learning and Development Investments.*4th Wiley, 2014.
3. Phillips, J., & Phillips, P.P, *Making Human Capital Analytics Work: Measuring the ROI of Human Capital Processes and OUTCOME* 4th McGraw-Hill, 2014.

Reference Books:

1. Swati Dhir & Suparna Pal. *Human Resource Analytics: Theory and Application Techniques.*, Cengage, 2021..
2. Nishant Uppal, *Human Resource Analytics.*, Pearson, 2021.
3. Pratyush Banerjee, Jatin Pandey & Manish Gupta *HR Analytics: Practical Applications of HR Analytics*, Sage publications, 2019.
4. Dipak Kumar Bhattacharya. *HR Analytics*, Sage publications,2017.

PROFESSIONAL ELECTIVES

DOMAIN: ENTREPRENEURSHIP

C6040-Startup and MSME Management

Teaching and Learning Scheme				Hours	Credits	Assessment Marks		
CI		LI	TW+SL	H	C	CIE	SEE	Total
L	T	P	SL					
60	0	0	60	120	4	40	60	100

Course Description

Course Overview

To educate about the significance of MSME and start-up management, and to provide light on how businesses determine their needs. And to educate people about numerous legal issues related to start up management. To create awareness to students about the Government of India. Numerous institutional supports towards entrepreneurship.

Course Pre/Co-requisites

C6016 – Entrepreneurship and Design Thinking

C6042 – Innovation and Entrepreneurship

Relevant SDG(s)

SDG 1 – No Poverty

SDG 8 – Decent Work and Economic Growth

SDG 9 – Industry, Innovation, and Infrastructure

Course Outcomes

After the completion of the course, the student will be able to:

- C6040.1 Examine the concept of Market Research and Demand Forecasting for Entrepreneurs.
- C6040.2 Classifying the various forms and Models of Growth for an Enterprise.
- C6040.3 Examine the Various Growth strategies and Models for Entrepreneurs.
- C6040.4 Appraising the various Market Development Strategies for Entrepreneurs.
- C6040.5 Evaluating the various Marketing Tools available for Entrepreneurial Ventures.

Course Syllabus

Unit-I:

Introduction to Startup and MSME: Definition and classification of startups and MSMEs, Evolution and importance in economic development, Comparison between startups and traditional MSMEs, Opportunity spotting and innovation, The Rise of the Startup Economy, The Six Forces of Change, The Startup Equation, The Entrepreneurial Ecosystem, Entrepreneurship in India. Concept & Definition of Employment, Export and Business Opportunities in MSMEs. Issues and Challenges of MSMEs, MSME Policies in India.

Unit-II:

Startup Requirements: The Big Idea, Generate Ideas with Brainstorming, Business Startup, Ideation, Venture Choices. Identifying Startup Capital Resource Requirements, Estimating Startup Cash Requirements, Developing Financial Assumptions, constructing a Process Map, Positioning the Venture in the Value Chain, launch strategy to reduce Risks, Startup Financing Metrics, Feasibility Analysis, The Cost and Process of Raising Capital, Unique Funding Issues of High-tech Ventures.

Unit-III:

Startup and Legal Environment: Stages of Growth in a New Venture, growing with the Market, growing within the Industry, Venture Life Patterns, Approval for New Ventures, Reasons for New Venture Failures, Scaling

Ventures, Preparing for Change, Leadership Succession. Support for Growth and Sustainability of the Venture. The Legal Environment, Taxes or Duties Payable for New Ventures.

Unit-IV:

Management of MSME: Management of Product Line; Communication with Clients, Credit Monitoring System, Management of NPAs, Sickness in MSME, Reasons and Remedies, Evaluating Entrepreneurial Performance. Restructuring, Revival and Rehabilitation of MSME.

Unit-V:

Institutional Support for MSMEs: Forms of Financial Support, Long-term and Short-term Financial Support, Sources of Financial Support District Industries Centers (DIC), Small Industries Service Institute (SISI), Entrepreneurship Development Institute of India (EDII), National Institute of Entrepreneurship & Small Business Development (NIESBUD), National Entrepreneurship Development Board (NEDB). Going Public (IPO) and Liquidation Dealing with Failure: Bankruptcy, Exit Strategies, Schemes for Women Entrepreneurs.

Books and Materials

Text Books:

1. Ali J Ahmed, Punita Bhatt, Lain Acton. *Entrepreneurship in Developing and Emerging Economies*, 1thed., Sage Publications, 2019.
2. D F Kuratko and T V Rao. *Entrepreneurship-A South-Asian Perspective*, 1thed., Cengage Learning, 2012.
3. D Christian Mueller - Roterberg. *Handbook of Design Thinking –Tips and Tools for how to design Thinking*. , Independently Published, US, 2018.

Reference Books:

1. Chandramouli Subramanian, Thyagarajan Paramsivan & Sankaran Venkataramani. *Design Thinking – A hands on Approach*, 1thed., Universities Press, 2025.
2. Robert D. Hisrich, Michael P. Peters, Dean A. Shepherd. *Entrepreneurship*, 10thed., Mc Graw Hill, 2018.
3. Bruce R. Barringer & R. Duane Ireland. *Entrepreneurship Successfully launching new ventures*, 4thed., Pearson, 2015.

C6041 - Family Business Management

Teaching and Learning Scheme				Hours	Credits	Assessment Marks		
CI		LI	TW+SL	H	C	CIE	SEE	Total
L	T	P	SL					
60	0	0	60	120	4	40	60	100

Course Description

Course Overview

This subject has been designed to equip family business leadership with a specific set of skills which enhances their competencies and conditions them to capitalise on opportunities and challenges. The next generation of family business leaders will gain a deep understanding the business operations, master the latest management methodologies, tools and techniques, governance enhance their leadership skills and help drive innovation to create a business that endures for generations.

Course Pre/Co-requisites

This course has no specific prerequisite and co-requisite.

Relevant SDG(s)

SDG 8 – Economic Growth

SDG 10 – Reduced Inequalities

SDG 12 – Responsible Consumption and Production

Course Outcomes

After the completion of the course, the student will be able to:

- C6041.1 Analyse the importance of Family Business Management concepts.
- C6041.2 Analyse the ownership challenges and implications on family firms.
- C6041.3 Evaluate the succession implications on family business.
- C6041.4 Apply the strategic planning in business management.
- C6041.5 Apply the approaches of change in family business firms.

Course Syllabus

Unit-I:

Introduction to Family Business: Introduction to Joint Hindu Family, Types and Characteristics, Family Business as a Unique Synthesis, Succession and Continuity: The Three-generation Rule, Building Family Businesses that sustain. The Systems Theory Model of Family Business, Agency Theory of Family Business, The Stewardship Perspective of Family Business, Competitive Challenges and Competitive Advantages of Family Businesses. The role of Genograms and Family Messages to understand the Family System. Family Emotional Intelligence, The ECI-U Model.

Unit-II:

Ownership Challenges and Family Governance: Family Governance: Structure, Challenges to Family Governance, Managing the Challenges of Succession. Shareholder Priorities, Managers vs Owners, Responsibilities of Shareholders to the Company, Effective Governance of the Shareholder, Firm Relationship, Enterprise Sustainability: Twelve Elements of Strategic-Fit and its Implications on Family Firms.

Unit-III:

Successor Development: Characteristics of Next Generation Leaders, Next Generation Attributes, Interests

and Abilities for Responsible Leadership. Next Generation Personalities, Managing Interdependence. CEO as an Architect of Succession and Continuity, Types of CEOs, Spouse and the Transfer of Power.

Unit-IV:

Strategic Planning and Transgenerational Entrepreneurship: Family Business Strategy, Life Cycle Stages, Turning Core Competencies into Competitive Advantage. The Unique Vision of Family-controlled Businesses, Strategic Regeneration, The Business Rejuvenation Matrix and Entrepreneurship.

Unit-V:

The Future of Family Business: New Leaders of the Evolution, Three States of Evolution, Continuity and Culture, Changing the Culture, The Change Formula, Organization Development Approaches to Change, Commitment Planning, Organic Competencies and Business's Future, thriving through Competition, Institutionalizing the Change.

Books and Materials

Text Books:

1. Rajiv G. Agarwal. *Family Business Management*. ,6thed., Sage Publications,2022.
2. Ernesto J. Poza, Mary S. Daughterty. *Family Business*.4thed.,, Cengage Learning,2020.
3. Carole Howorth, Nick Robinson. *Family Business*. ,1sted., Routledge,2020.
4. Frank Hoy, Pramodita Sharma. *Entrepreneurial Family Firms*,1sted., Prentice Hall,2010.

Reference Books:

1. Laura Hougaz. *Entrepreneurs in Family Business Dynasties: Stories of Italian-Australian Family Business over 100 years*., Springer, 2015.
2. M. Nordqvist, T. Zellweger. *Transgenerational Entrepreneurship: Exploring Growth and Performance in Family Firms across Generations*., Edward and Elgar Publishing Limited, 2010.

C6042 - Innovation and Entrepreneurship

Teaching and Learning Scheme				Hours	Credits	Assessment Marks		
CI		LI	TW+SL	H	C	CIE	SEE	Total
L	T	P	SL					
60	0	0	60	120	4	40	60	100

Course Description

Course Overview

This course provides insights into the nature and dimensions of creativity and innovation. It explores creative thinking processes, problem-solving models, and techniques to overcome barriers to creativity. Students will understand how creativity links with intelligence, motivation, and environment while also exploring innovation management at individual, organizational, and societal levels. The course emphasizes practical application of creative methods and analytical approaches to innovation in diverse contexts, preparing learners to apply creativity for entrepreneurial, managerial, and strategic purposes.

Course Pre/Co-requisites

This course has no specific prerequisite and co-requisite.

Relevant SDG(s)

SDG 9 – Industry, Innovation, and Infrastructure

SDG 11 – Sustainable Cities

SDG 13 – Climate Action

Course Outcomes

After the completion of the course, the student will be able to:

C6042.1 Apply creativity techniques to analyze real-world problems and propose innovative solutions.

C6042.2 Examine the relationship between creative intelligence, personality traits, and motivation in problem-solving.

C6042.3 Apply convergent and divergent thinking mechanisms to structure and solve ill-defined problems.

C6042.4 Analyze organizational factors, leadership styles, and environmental influences that drive innovation.

C6042.5 Apply open innovation methods and frameworks in managing innovation at micro and macro levels.

Course Syllabus

Unit-I:

The Creativity Phenomenon: Creative Cerebration, Creative Personality and Motivation, Creative Environment, Creative Technology, Creativity Training Puzzles of Creativity, Spiritual and Social Roots of Creativity, Essence, Elaborative and Expressive Creativities, Quality of Creativity, Existential, Entrepreneurial and Empowerment Creativities, Criteria for Evaluating Creativity, Credible Evaluation, Improving the Quality of our Creativity.

Unit-II:

Mastering Creative Problem Solving: Structuring of ill-defined problems, Creative Problem Solving, Models of Creative Problem Solving, Mechanisms of Divergent Thinking, Useful Mechanisms of Convergent Thinking, Techniques of Creative Problem solving.

Unit-III:

Creative Intelligence: Creative Intelligence Abilities, A Model of Creative Intelligence, Convergent Thinking Ability, Traits Congenial to Creativity, Creative Personality and Forms of Creativity, Motivation and Creativity,

Blocks to Creativity: Fears and Disabilities, Strategies for Unblocking Energy of your Creativity, Designing Creativogenic Environment.

Unit-IV:

Innovation Management: Concept of Innovation, Levels of Innovation: Incremental Vs Radical Innovation, Inbound and Outbound Ideation, Open and Other Innovative Ideation Methods. Theories of Outsourcing New Product Development: Transaction Cost, Resource Based, Resource Dependence, Knowledge Based Theories.

Unit-V:

Micro and Macro Perspectives of Innovation: Systems Approach to Innovation- Innovation in the context of Emerging Economies, Organizational Factors affecting Innovation at the Firm Level, Leadership and Innovations, Open Innovation, Innovation Framework, Innovations Developed by Open Technology Communities.

Books and Materials

Text Books:

1. Mike Kennard. *Innovation and Entrepreneurship*, Routledge, 2021.
2. Paul Trott. *Innovation Management and New Product Development*, 4thed., Pearson, 2018.

Reference Books:

1. Vinnie Jauhari, Sudanshu Bhushan. *Innovation Management.*, Oxford Higher Education, 2014.
2. C.S.G. Krishnamacharyulu, R. Lalitha. *Innovation Management.*, Himalaya Publishing House, 2010.
3. Pradip N Khandwalla. *Lifelong Creativity, An Unending Quest.*, Tata Mc Graw Hill, 2004.
4. Brian Clegg, Paul Birch. *Kogan Page, 2009. A Dale Timpe, Creativity.*, Jaico Publishing House, 2003.

C6055 - Entrepreneurial Finance

Teaching and Learning Scheme				Hours	Credits	Assessment Marks		
CI		LI	TW+SL	H	C	CIE	SEE	Total
L	T	P	SL					
60	0	0	60	120	4	40	60	100

Course Description

Course Overview

To educate the importance of entrepreneurial finance and impart knowledge of various aspects of budgeting concepts in the venture, to provide knowledge on numerous venture value factors highlight the financial aspects of expanding businesses.

Course Pre/Co-requisites

This course has no specific prerequisite and co-requisite.

Relevant SDG(s)

SDG 8 – Decent Work and Economic Growth

SDG 10 – Reduced Inequalities

SDG 17 – Partnerships for the Goals

Course Outcomes

After the completion of the course, the student will be able to:

- C6055.1. Applying how to finance a company's ventures throughout their existence.
- C6055.2. Examine where to get startup and first round financing.
- C6055.3. Learn the value of financial planning at every stage of the venture.
- C6055.4. Analyze the principles of venture valuation.
- C6055.5. Recognize the significance of venture capital funding.

Course Syllabus

Unit-I:

Finance for Entrepreneurs: Principles of Entrepreneurial Finance, Role of Entrepreneurial Finance, the Successful Venture Lifecycle, Financing through Venture Lifecycle, Lifecycle Approach for Teaching, Entrepreneurial Finance. Developing Business Idea, Business Model. Screening Venture Opportunities: Pricing / Profitability Considerations, Financial / Harvest Considerations. Financial Plans and Projections.

Unit-II:

Organizing and Operating the Venture: Financing a New Venture, Seed, Startup and First Round Financing Sources, Financial Bootstrapping, Business Angel Funding, First Round Financing Opportunities. Preparing and Using Financial Statements: Obtaining and Recording the Resources to Start and Build a New Venture, Asset and Liabilities and Owners Equity in Business.

Unit-III:

Financial Planning: Financial Planning throughout the Venture's Lifecycle, Short Term Cash Planning Tools, Projected Monthly Financial Statements. Types and Costs of Financial Capital: Implicit and Explicit Financial Capital Costs, Financial Markets, Determining the Cost of Debt Capital, Investment Risk, Estimating the Cost of Equity Capital, Weighted Average Cost of Capital.

Unit-IV:

Venture Valuation: Valuing Early-stage Ventures, Venture Worth, Basic Mechanics of Valuation, Developing the Projected Financial Statements for a Discounted Cash Flow Valuation, Accounting Vs Equity Valuation Cash Flow. Venture Capital Valuation Methods: Basic Venture Capital Valuation Method, Earnings Multiplier and Discounted Dividends.

Unit-V:

Financing for the Growing Venture: Professional Venture Capital, Venture Investing Cycle, Determining the Fund Objectives and Policies, Organizing the New Fund, Soliciting Investments in the new Fund, Capital Call, Conducting Due-diligence and Actively Investing, Arranging Harvest or Liquidation, Other Financing Alternatives: Facilitators, Consultants and Intermediaries, Banking and Financial Institutions, Foreign Investors, State and Central Government Financing Programmes. Receivables Lending and Factoring, Mortgage Lending, Venture Leasing.

Books and Materials

Text Books:

1. Leach, Melicher,. *Entrepreneurial Finance* ,5thed., South-Western College Publication,2022.
2. Marco Da Rin Thomas Hellman. *Fundamentals of Entrepreneurial Finance.*,1thed., Oxford Publishers,2020.
3. M J Alphabets. *Entrepreneurial Finance: Fundamentals of Financial Planning and Management for Small Business.*, 4thed., Wiley, 2015.

Reference Books:

1. Steven Rogers. *Entrepreneurial Finance: Finance and Business Strategies for the Serious Entrepreneur.*, Tata McGraw Hill, 2014.
2. Douglas Cumming.
textit Entrepreneurial Finance, Oxford University Press, 2012.
3. Philip J. Adelman, Alan M. Marks, *Entrepreneurial Finance*, Pearson, 2011.

C6056 - Entrepreneurial Marketing

Teaching and Learning Scheme				Hours	Credits	Assessment Marks		
CI		LI	TW+SL	H	C	CIE	SEE	Total
L	T	P	SL					
60	0	0	60	120	4	40	60	100

Course Description

Course Overview

The Course primarily aims to address the challenges faced by Entrepreneurs who are starting up their business. It also addresses the growth-related marketing challenges faced by start-ups. The students shall be able to examine the Four P's of Marketing in context of new enterprises. The course will also help the students to identify the right marketing tools to be used by new entrepreneurs. .

Course Pre/Co-requisites

This course has no specific prerequisite and co-requisite.

Relevant SDG(s)

- SDG 3 – Good Health and Well-being
- SDG 9 – Industry, Innovation, and Infrastructure
- SDG 17 - Partnerships for the Goals

Course Outcomes

After the completion of the course, the student will be able to:

- C6056.1. Applying the concept of Market Research and Demand Forecasting for Entrepreneurs
- C6056.2 Analyse the various forms and Models of Growth for an Enterprise.
- C6056.3. Examine the Various Growth strategies and Models for Entrepreneurs.
- C6056.4 Appraising the various Market Development Strategies for Entrepreneurs.
- C6056.5. Evaluating the various Marketing Tools available for Entrepreneurial Ventures.

Course Syllabus

Unit-I:

Introduction to Entrepreneurial Marketing: Meaning, Characteristics, Functions, Marketing Challenges, Marketing Mix (7P's), Identifying Entrepreneurial Marketing Opportunities, Market Research, Demand Forecasting.

Unit-II:

Enterprise Growth: Concept of Enterprise Growth, Forms, Types, Structures of Organizational Growth, Gazelles and Mice, Growth Objectives, Operative and Strategic Targets, Growth Analysis, Portfolio Analysis, ERRC Grid, SWOT Analysis, and Raising Entrepreneurial Finance.

Unit-III:

Growth Strategies and Models: Growth Strategies: Concept and Forms, Internal, External and Co-operative Growth strategies. Growth Models: Lifecycle and Phase Model, Integrated Lifecycle Model (Evolutionary), Greiner's Growth Model (Revolutionary), and Complexity Management (Process) Model.

Unit-IV:

Entrepreneurial Market Development Strategies: Segmentation, Targeting, Positioning, Entrepreneurial

Communication Strategy, Entrepreneurial Pricing Strategy, Entrepreneurial Distribution Strategy, Building Customer Relationships, Marketing Plans

Unit-V:

Entrepreneurial Marketing Tools: Concept, Guerrilla Marketing, Ambush / Free-ride Marketing., Tools of Entrepreneurial Marketing: Buzz, social media, Viral Marketing.

Books and Materials

Text Books:

1. Edwin J. Nijssen. *Entrepreneurial marketing An Effectual Approach*, Routledge, 2017.
2. Ian Chaston. *Entrepreneurial Marketing: Sustaining Growth in All Organisations*, Palgrave Macmillan, 2016.
3. Marc Longman. *Entrepreneurial Marketing: A Guide for Startups & Companies with Growth Ambitions*, Garant Publishers, 2011.

Reference Books:

1. Bruce D. Buskirk, Molly Lavik. *Entrepreneurial Marketing: Real Stories and Survival Strategies*, Thomson, 2004.
2. Zubin Sethna, Paul Harrigan, Rosalind Jones. *Entrepreneurial Marketing Global Perspectives*, Emerald Group Publishing, 2013.

C6057- Technology Business Incubation

Teaching and Learning Scheme				Hours	Credits	Assessment Marks		
CI		LI	TW+SL	H	C	CIE	SEE	Total
L	T	P	SL					
30	0	0	30	60	2	40	60	100

Course Description

Course Overview

The course emphasizes the importance of TBI as a powerful economic development tool, which promotes economic growth through innovation in a nation. The subject mainly focuses on planning, training and assessing various skill developments in organizations at various levels and the course also reveals the requisite of technologies, which need support for commercialization and further proliferation of start-up establishments in collaboration with technology advancements.

Course Pre/Co-requisites

This course has no specific prerequisite and co-requisite.

Relevant SDG(s)

SDG 4 – Quality Education

SDG 9 – Industry, Innovation, and Infrastructure

SDG 17 – Partnerships for the Goals

Course Outcomes

After the completion of the course, the student will be able to:

- C6057.1. Analyze the importance of the start-up management in India .
- C6057.2. Analyze the opportunities available for start-ups.
- C6057.3. Evaluate the legal requirements available for the new ventures
- C6057.4. Analyze the availability of financial Support to start-up management
- C6057.5. Apply the global perspective of TBI in new venture creation

Course Syllabus

Unit-I:

Introduction to Technology Business Incubation (TBI): Concepts, Characteristic and Importance, Origin and Growth of TBI Movement, Current Policy for TBI Promotion in India, TBIs in India: Current Status.

Unit-II:

Planning the TBI: Preparatory Process, Feasibility Process and Business Plan, Key Players and Legal Incorporation, Location and Building Criteria, Facilities and Service Design, Incubator Investment Costs, Financial Projections, Sources of Fund for the Incubator, Incubator Benefits.

Unit-III:

TBI Implementation and Operations Organization Structure, Training of the Management Team, Marketing the Incubator, Selecting Tenant Companies, Exit Policy, Serving Tenant Companies: Progression of Service Needs, Training Clients, Counseling and Mentoring, Enhancing and Assessing Performance.

Unit-IV:

TBI in India: Introduction, TBIs: Age, Management, Sponsors and Focus Area, Objectives, Facilities and Staff Strength, Physical Space, Distinguish Features of Institute Promoted TBIs VS Industry VS Stage Agnostic

Vs Tech Sector Focused Vs Sector Agnostic TBIs. Application from Prospective Start-up Founders and Selection Process, R&D Input and Output Contribution related to Government Initiatives.

Unit-V:

Global Perspective of TBI: Introduction, Types and Classification, Goals and Objectives, Functions and Services, TBI Led Process of Business Incubation, Performance Assessment in terms of Outcome and Achievements, Technology Business Incubation for New Venture Creation

Books and Materials

Text Books:

1. M H Bala Subrahmanya, H S Krishna *Technology Business Incubators in India*, Nationalbibliothek, 2021.
2. Apoorv R. Sharma, Balvinder Shukla, and Manoj Joshi. *The Role of Business Incubator in the Economic Growth in India*, Deutsche National bibliothek, 2019.

Reference Books:

1. Rustam Lalkaka. *Technology Business Incubation*., UNESCO, 2006.

C6058 - Business Incubation - Idea Laboratory

Teaching and Learning Scheme				Hours	Credits	Assessment Marks		
CI		LI	TW+SL			H	C	CIE
L	T	P	SL					
0	0	60	0	60	2	40	60	100

Course Description

Course Overview

This laboratory course provides practical exposure to Technology Business Incubation (TBI) as a key driver of economic growth through innovation. Students will work on activities related to planning, training, and assessing skill development at different organizational levels. The lab also focuses on identifying technologies that require support for commercialization and on exploring ways to promote and scale start-ups through collaboration with technological advancements. Through these exercises, students will gain hands-on understanding of how TBI supports innovation, entrepreneurship, and sustainable economic development.

Course Pre/Co-requisites

This course has no specific prerequisite and co-requisite.

Relevant SDG(s)

SDG 4 – Quality Education

SDG 9 – Industry, Innovation, and Infrastructure

SDG 17 – Partnerships for the Goals

Course Outcomes

After the completion of the course, the student will be able to:

- C6058.1. Analyze the importance of the start-up management in India .
- C6058.2. Analyze the opportunities available for start-ups.
- C6058.3. Evaluate the legal requirements available for the new ventures
- C6058.4. Analyze the availability of financial Support to start-up management
- C6058.5. Apply the global perspective of TBI in new venture creation

Course Syllabus for Laboratory Experiments

Unit-I:

Introduction to Technology Business Incubation (TBI): Concepts, Characteristic and Importance, Origin and Growth of TBI Movement, Current Policy for TBI Promotion in India, TBIs in India: Current Status.

Unit-II:

Planning the TBI: Preparatory Process, Feasibility Process and Business Plan, Key Players and Legal Incorporation, Location and Building Criteria, Facilities and Service Design, Incubator Investment Costs, Financial Projections, Sources of Fund for the Incubator, Incubator Benefits.

Unit-III:

TBI Implementation and Operations Organization Structure, Training of the Management Team, Marketing the Incubator, Selecting Tenant Companies, Exit Policy, Serving Tenant Companies: Progression of Service Needs, Training Clients, Counseling and Mentoring, Enhancing and Assessing Performance.

Unit-IV:

TBI in India: Introduction, TBIs: Age, Management, Sponsors and Focus Area, Objectives, Facilities and

Staff Strength, Physical Space, Distinguish Features of Institute Promoted TBIs VS Industry VS Stage Agnostic Vs Tech Sector Focused Vs Sector Agnostic TBIs. Application from Prospective Start-up Founders and Selection Process, R&D Input and Output Contribution related to Government Initiatives.

Unit-V:

Global Perspective of TBI: Introduction, Types and Classification, Goals and Objectives, Functions and Services, TBI Led Process of Business Incubation, Performance Assessment in terms of Outcome and Achievements, Technology Business Incubation for New Venture Creation

Laboratory Equipment/Software/Tools Required:

1. Desktop Computer system with MS Office
2. Desktop Computer system with SPSS

Books and Materials

Text Books:

1. M H Bala Subrahmanya, H S Krishna *Technology Business Incubators in India*, Nationalbibliothek, 2021.
2. Apoorv R. Sharma, Balvinder Shukla, and Manoj Joshi. *The Role of Business Incubator in the Economic Growth in India.*, Deutsche National bibliothek, 2019.

Reference Books:

1. Rustam Lalkaka. *Technology Business Incubation.*, UNESCO, 2006.



Vision

To be a pioneer institute and leader in engineering education to address societal needs through education and practice.

Mission

- To adopt innovative student centric learning methods.
- To enhance professional and entrepreneurial skills through industry institute interaction.
- To train the students to meet dynamic needs of the society.
- To promote research and continuing education.

Quality Policy

We at Vardhaman College of Engineering, endeavor to uphold excellence in all spheres by adopting the best practices in effort and effect.



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