

COURSE STRUCTURE AND SYLLABI

Bachelor in Management Studies in Airline and Airport Management

2025-2026



Centurion
UNIVERSITY

Shaping Lives...
Empowering Communities...

SCHOOL OF MANAGEMENT
CENTURION UNIVERSITY OF TECHNOLOGY & MANAGEMENT
Odisha-761211, India

Web Site: - www.cutm.ac.in

**CENTURION UNIVERSITY OF TECHNOLOGY AND MANAGEMENT,
ODISHA**

CERTIFICATE



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This is to certify that the syllabus of the Programmes Bachelor of Management Studies of School of Management is approved in the Academic Council Meeting held on 22nd November 2024.

**Dean
School of Management
CUTM, Odisha**

About the Programme

Airlines and airport management is one of the most sought-after career avenues at present. This programme is designed to develop industry ready professionals to join the aviation sector with specialization in various functional areas pertaining to airlines and airport management. The innovative curriculum and the Choice Based Credit System (CBCS) empowers the students to take command of their learning paths and goals. The outcome-based learning and teaching pedagogy adopted by the seasoned faculty nurtures and develops the students with the knowledge, skills, competency and attitude required by the aviation companies. This programme offers specializations in several emerging domains through a blend of classroom discussions, case analysis, simulations, field visits and hands-on experience through industry integrated internships.

Level: Graduate

Duration: 3 years (6 semesters)

Eligibility Criteria: 10+2 pass or equivalent in any discipline and Centurion University Entrance Exam (CUEE) score

Unique Features

1. First time in Odisha
2. International placement assistance
3. Paid internship opportunity at leading aviation companies in India and abroad
4. Industry oriented curriculum
5. Highly qualified faculty (industry experts and subject matter specialists)
6. Industry integrated hands on training and internship
7. Flexibility through choice based credit system
8. Innovative pedagogy
9. Individual student level mentoring and guidance

Career Opportunities

After successful completion of this programme students would get plenty of opportunity to work in airlines and general aviation as flight planning, ground operations, ramp executive, flight dispatcher, airline safety, airline security, airline commercial and many such roles.

Programme Objectives

This program aims at:

- developing students as highly skilled aviation management professionals with the knowledge, skills, competency and attitude required by the aviation companies
- equip the students with specializations in emerging domains as required by the aviation industry
- nurturing students to take leadership to meet the current and future needs of the industry

Program Outcomes (PO):

PO-01	Knowledge Acquisition	Graduates will demonstrate a deep and comprehensive understanding of the fundamental concepts, theories and practices in their respective major and minor disciplines.
PO-02	Critical Thinking and Problem Solving	Graduates will be proficient in critical thinking and problem-solving, capable of applying analytical skills to address complex challenges within their fields.
PO-03	Effective Communication	Graduates will communicate effectively, both in written and oral forms, enabling them to convey complex information clearly and persuasively.
PO-04	Research and Inquiry Skills	Graduates will possess research and inquiry skills, including the ability to gather, analyze and interpret data to make informed decisions and contribute to knowledge advancement.
PO-05	Interdisciplinary Integration	Graduates will demonstrate the ability to integrate knowledge and principles from multiple disciplines, fostering a multidisciplinary perspective in their work.
PO-06	Ethical and Social Responsibility	Graduates will uphold ethical principles and exhibit social responsibility in their professional conduct, considering the impact of their actions on society and the environment.
PO-07	Leadership and Teamwork	Graduates will be effective leaders and team members, capable of collaborating and leading diverse teams to achieve common goals.
PO-08	Innovation and Entrepreneurship	Graduates will exhibit innovation and entrepreneurship skills, enabling them to identify opportunities and drive positive change in their respective fields.

PO-09	Adaptability and Lifelong Learning	Graduates will be adaptable to evolving technologies and methodologies and exhibit a commitment to lifelong learning and professional development.
PO-10	Cultural Competence and Global Perspective	Graduates will demonstrate cultural competence, respecting and valuing diverse perspectives and working effectively in multicultural settings to address global challenges through local actions.
PO-11	Digital and Technological Skills	Graduates will be able to access, evaluate and use appropriate Integrated Communication Technologies as per the requirement.
PO-12	Sustainability Consciousness	Graduates will be environmentally conscious and consider sustainability principles in their decision-making processes and actions.

PSO-1	Major Discipline Mastery	Graduates will demonstrate advanced expertise and a profound understanding of their chosen major discipline, allowing them to excel in specialized roles and contribute significantly to their field.
PSO-2	Minor Discipline Proficiency	Graduates will exhibit proficiency in their chosen minor discipline, harnessing this additional expertise to enhance problem-solving capabilities and broaden their career opportunities.
PSO-3	Innovation and Applied Skills	Graduates will demonstrate the ability to innovate and apply knowledge from their major and minor disciplines, fostering creative solutions to real-world challenges within their field of study.
PSO-4	Research Proficiency	For programmes with a research component, graduates will possess a high level of research proficiency, encompassing skills in project design, data analysis and academic communication, enabling them to contribute meaningfully to their major discipline's body of knowledge.

Course Structure

Basket	Type of Course	Minimum Credit Requirement for UG	
		4 Years	3 years
		Proposed	Proposed
I	Major (Core) Courses	80	60
II	Minor / Domain (Multi-Disciplinary)	32	24
	Skill Courses (SFS)	8	8
III	Ability Enhancement Courses	12	12
IV	Value Added Courses	12	12
V	Summer Internship / Community Engagement	4	4
VI	Research Project / Dissertation / Production Action Learning	12	0
TOTAL		160	120

MAJOR (CORE) COURSES				
Sl. No.	Course Title	Code	Credit	T+P+P
1	Business Organisation and Management	CUBB1001	4	3+0+1
2	Business Economics	CUBB1002	4	3+0+1
3	Business Accounting	CUBB1003	4	3+0+1
4	Business Statistics	CUBB1024	4	2+2+0
5	Organisational Behaviour	CUBB1005	4	3+0+1
6	Macro Economics	CUBB1006	4	3+0+1
7	Marketing Essentials	CUBB1007	4	3+0+1
8	Human Resource Management	CUBB1008	4	3+0+1
9	Financial Management	CUBB1009	4	3+0+1
10	Strategic Management	CUBB1010	2	1+0+1
11	Strategic Marketing Management	CUBB1011	4	3+0+1

12	Cost and Management Accounting	CUBB1012	4	3+0+1
13	Business Research	CUBB1013	4	2+0+2
14	Business Law	CUBB1014	4	3+1+0
15	Financial Planning	CUBB1015	2	1+0+1
16	Design Thinking and Innovation	CUBB5001	2	1+0+1
17	Production and Operations Management	CUBB1017	4	3+0+1
18	Project Management	CUBB1018	2	1+0+1
19	Logistics and Supply Chain Management	CUBB1019	4	3+0+1
20	Financial Market, Institution and Services	CUBB1020	4	3+0+1
21	Retail Banking and Insurance	CUBB1021	4	3+0+1
22	Operations Research	CUBB1022	2	0+2+0
23	Entrepreneurship and Start-up Ecosystem	CUBB5002	2	1+0+1
TOTAL			80	
VALUE ADDED COURSES				
Sl. No.	Course Title	Code	Credit	T+P+P
1	Environmental Science	CUTM1674	4	3+0+1
2	Gender, Human Rights and Ethics	CUTM1014	3	1.5+0+1.5
3	Indian Society and Culture	CUTM1187	2	1+0+1
4	Climate Change, Sustainability and Organisations	CUTM1015	3	1.5+0+1.5
TOTAL			12	
ABILITY ENHANCEMENT COURSES				
Sl. No.	Course Title	Code	Credit	T+P+P
1	Job Readiness	CUTM1016	6	0+6+0
2	Foreign Language	CUBB2002	2	1+1+0
3	Company Management Operation	CUTM2497	2	1+0+1
4	Airmanship	CUTM2498	2	0+1+1
TOTAL			12	

SKILL				
1	Airline Grooming and Soft Skill	CUTM2496	4	0+4+0
2	Employment/Industry Ready Skills	CUBB1039	4	0+4+0
TOTAL			8	
MINOR / DOMAIN COURSES				
Sl. No.	Course Title	Code	Credit	T+P+P
Airlines and Airport Management				
1	Fundamentals of Airline and Airport Industry	CUTM2499	2	1+0+1
2	COP RTR	CUBB1030	3	1+1+1
3	Ramp Operation and Management	CUBB1031	4	2+1+1
4	Airline and Airport Security Management and Operation	CUBB1032	4	2+1+1
5	Airline & Airport Safety Management and Operation	CUBB1033	4	2+1+1
6	Cargo Management and Operation	CUBB1034	4	2+1+1
7	Passenger and Public Handling in Airline and Airport	CUBB1035	2	1+0+1
8	Airport Management and Operation	CUBB1036	3	2+0+1
9	Meteorology	CUBB1037	2	1+0+1
10	Dangerous Goods	CUBB1038	4	2+1+1
TOTAL			32	

MAJOR (CORE) COURSES

Business Organisation and Management (70 Hours)

Course Code	Course Title	Credits	Type (T+P+Pj)
CCUBB1001	Business Organisation and Management	4	3+0+1

Course Objectives:

This course is designed

- Identify and describe the core principles underlying business establishment, organization, and expansion and analyze the factors influencing the size of business units and determine the concept of optimum size.
- Explain the elements and functions of management, including managerial roles, levels, and skills in the current business environment.
- Illustrate the planning process, including business forecasting, strategic planning, and decision-making and analyze organizational design, structure, and the distribution of authority.
- Investigate the role of change, innovation, and strategic decision-making in business growth and sustainability.
- Discuss the impact of technological advancements and competitive pressures on business strategies.

Course Outcomes:

After completion of the course students will be able:

CO1: Define key business concepts such as forms of business organization, principles of management, and strategic planning.

CO2: Use principles of planning and forecasting to develop business strategies and make informed decisions.

CO3: Evaluate different business models and organizational structures based on their suitability and effectiveness in various contexts.

CO4: Develop a strategic plan incorporating business forecasting, MBO, and decision-making processes for hypothetical business scenarios and propose solutions for enhancing business growth and sustainability in response to technological changes and competitive pressures.

CO5: Critically assess case studies on technological and competitive changes, such as the impact of COVID-19 on business models like hybrid and cloud kitchens.

Course Outcome to Program Outcome Mapping:

Course Outcomes (CO)	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
CO1	3	2	2	2	2	2	1	1	2	1	2	2
CO2	3	3	2	2	2	2	1	2	3	1	2	2
CO3	3	3	2	3	3	2	1	2	3	1	2	2
CO4	3	3	3	3	3	3	2	3	3	2	3	3
CO5	3	3	3	3	3	2	2	3	3	2	3	3

***High-3, Medium-2, Low-1**

COURSE CONTENTS:

MODULE I

Business and its Establishment

Business; Social Responsibility of Business, Establishment of New Business; Principles of Organization; Size of Business Unit, Factors determining Size, Measurement of Size, Concept of Optimum size; Forms of Business Organization; Corporate Expansions; Preparation of Important Documents – MoU.

MODULE II

Management

Elements and Functions of management; Managerial roles, levels, and skills in current scenario, Recent Developments of Management Thought (Fayols 14 Principles of Management, Scientific Management Theory)

MODULE III

Planning, Organizing & Controlling

Planning Process, Business Forecasting, MBO, Strategic Planning; Decision-Making, Forecasting, Organizational Design and Organizational Structure, Power, and Distribution of Authority. Directing and Principle of Controlling, Process of Control and Types of Controls, Human Aspect of Controls.

MODULE IV

Business growth and Sustainability

Change, Context, Decision making, enterprise, innovation, strategies.

[Case study and Class discussion: Technological changes, Changes due competition, Situational Context, COVID online, Hybrid (Zomato, Cloud kitchen)]

Readings

- Y.K.Bhushan - Business organization and management - Sultan Chand
- R.K.Sharma and Shashi k Gupta : Industrial Organisation and Management - Kalyani Publications
- Sherlekar - Business Organisation and Management - Himalaya Publishers
- C.B.Gupta - Industrial Organisation and Management - Sultan Chand
- Harold Koontz Heinz Weihrich and A. Ramachandra Aryasri : Principles of management,McgrawHill
- CB.Gupta - Management Theory and practice, - Sultan Chand
- L.M. Prasad - Principles & Practice of Management, Sultan Chand
- Stephens Robbins - Management,Pearson Education 9. .V.S.P.Rao - Management Excel Books India

Articles

- "The Role of Corporate Social Responsibility in Business: A Review of Literature" Authors: Visser, W. Journal: Corporate Social Responsibility and Environmental Management
- "Business Strategy and Social Responsibility: Aligning Business Objectives with Social Goals" Authors: Porter, M.E., Kramer, M.R. Journal: Harvard Business Review
- "Henri Fayol's 14 Principles of Management: A Review" Authors: Al-Khalifa, K.N., Peterson, A. Journal: Journal of Management History
- "Scientific Management Theory and Its Modern Implications" Authors: Taylor, F.W. Journal: International Journal of Management Reviews
- "The Strategic Planning Process: Concepts and Case Studies" Authors: Mintzberg, H. Journal: Strategic Management Journal
- "Organizational Structure and Control: Balancing Authority and Accountability" Authors: Galbraith, J.R. Journal: Administrative Science Quarterly
- "Innovation Strategies for Business Growth and Sustainability" Authors: Christensen, C.M. Journal: California Management Review
- "Sustainable Business Models: Strategies for Adapting to Technological and Competitive Changes" Authors: Bocken, N.M.P., de Pauw, I., Bakker, C., van der Grinten, B. Journal: Journal of Cleaner Production
- "The Impact of COVID-19 on Business Models: A Case Study of the Food Delivery

Industry" Authors: Pantano, E., Pizzi, G., Scarpi, D., and Dennis, C. Journal: Journal of Business Research

- "Technological Change and Competitive Dynamics in the Business Environment" Authors: Schilling, M.A. Journal: Strategic Management Journal

Business Economics (70 Hours)

Course Code	Course Title	Credits	Type (T+P+Pj)
CUBB1002	Business Economics	4	3+0+1

Course Rationale: The goal of the course is to provide students with a customized, hands-on approach to economics while improving their comprehension of business tactics and decisions. A better comprehension of production procedures that emphasizes the connection between changes in input and output, improving production efficiency, and optimization

Course Objectives

- To apply micro economic concepts and techniques in evaluating business decisions taken by firms
- How tools of standard price theory can be employed to formulate a decision problem, evaluate alternative courses of action, and finally choose among alternatives
- Acquire conceptual and theoretical knowledge of business economics from a management perspective;
- Understand and appreciate the tools of Business economics and their applications and to develop the ability to evolve business/management strategy using economic reasoning;
- Appreciate the new challenges to business management in the internet age and appreciate the linkages between economics and the functional areas of business

COURSE OUTCOMES

After completion of the course students will be able:

CO1: Acquire the conceptual and theoretical knowledge of microeconomics which is relevant for evaluating the economic behavior of an individual economic agent.

CO2: Demonstrate the use of microeconomic concepts like utility satisfying and maximizing traits of consumers, elasticity and opportunity cost in strategic planning; develop an economic perspective of business problems being a leader in future in digital economy.

CO3: Evaluate and compare the various types of market structures and use them when planning price policy of a firm and industry and communicate ideas with the policy maker

CO4: Understand and appreciate the production dynamics – including cost, revenue and profit considerations and according frame policy to remove disequilibrium in market

structure

CO5: Learn the optimization functions for both consumer and producer equilibrium; help to the students how to sustainable resources and utilized economic theory on their day to day life

Course Outcome to Program Outcome Mapping:

Course Outcomes (CO)	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
CO1	3	2	1									
CO2	3				3			2				
CO3			3	2			2					
CO4		3			2	1						
CO5				3		3			2			

***High-3, Medium-2, Low-1**

Course Syllabus

Module I:

Economics: Central problem of an economy. Theory of consumer behaviour: cardinal utility theory, ordinal utility theory (indifference curves, budget line, consumer choice, price effect, substitution effect, income effect for normal, inferior and giffen goods). Demand, Supply and Market equilibrium: individual demand, market demand, individual supply, market supply, market equilibrium; Elasticity of demand and supply.

Module II:

Producer and optimal production choice: optimizing behaviour in short run (geometry of product curves, law of diminishing marginal productivity, three stages of production), optimizing behaviour in long run (isoquants, isocost line, optimal combination of resources) Costs and scale: traditional theory of cost-Short run and Long run (short run and long run, geometry of cost curves, envelope curves), modern theory of cost (short run and long run), economies of scale.

Module III:

Theory of firm and market organization: perfect competition, monopoly, price discrimination; monopolistic competition-basic features, demand and cost, short run equilibrium, long run equilibrium, excess capacity.

Module IV: Factor market: demand for a factor by a firm under marginal productivity theory perfect competition in the product market, monopoly in the product market, market demand for a factor, supply of labour, market supply of labour, factor market equilibrium.

Books Recommended:

1. Dominick Salvatore (2009). Principles of Microeconomics (5th ed.) Oxford University Press
1. Lipsey and Chrystal. (2008). Economics. (11th ed.) Oxford University Press
2. Koutosyannis (1979). Modern Micro Economics. Palgrave Macmillan
3. Pindyck, Rubinfeld and Mehta. (2009). Micro Economics. (7th ed.). Pearson

Business Accounting (70 Hours)

Course Code	Course Title	Credits	Type (T+P+Pj)
CUBB1003	Business Accounting	4	3+0+1

Course Rationale:

This course emphasis on the role, functions and interpretation of accounting require for managers. It will help students in applying the knowledge to work in the corporate environment. This course will expose students to gain knowledge on accounting and its applications of accounting in diriment corporate sectors.

Course Objective:

- To introduce the fundamental concepts of accounting, including its principles, scope, and objectives.
- To develop skills in recording financial transactions using journals, ledgers, and trial balances.
- To familiarize students with the preparation and presentation of financial statements for sole proprietors and companies.
- To understand the significance and application of depreciation methods in financial accounting.
- To equip students with analytical techniques for financial statement analysis, including ratio analysis and cash flow statements.

Course Outcomes

On successful completion of this course, students will be able to:

CO1: Demonstrate an understanding of accounting principles, concepts, and conventions.

CO2: Apply the rules of journalizing and double-entry bookkeeping to record and classify financial transactions.

CO3: Prepare accurate financial statements, including trading accounts, profit and loss accounts, and balance sheets.

CO4: Evaluate the impact of depreciation and apply appropriate methods for charging it in financial records.

CO5: Analyze and interpret financial statements using horizontal analysis, vertical analysis, and ratio analysis to support decision-making for various stakeholders.

Course Outcome to Program Outcome Mapping:

Course Outcomes (CO)	PO 1	PO 2	PO 3	PO 4	PO 5	PO 6	PO 7	PO 8	PO 9	PO1 0	PO1 1	PO1 2
CO1	3	3										
CO2	3	3									2	
CO3	3	3	3									
CO4	3	3		2								
CO5		3			2	2						

***High-3, Medium-2, Low-1**

Course Syllabus

Module: I

Accounting, meaning, definition, objectives, scope, basic, terms, accounting principles, branches of accounting, uses & limitations of Accounting, Concepts & Conventions, Accountings uses, Accounting information, Accounting equations – Meaning of accounting equation, compensation of accounting, effects of transactions.

Module: II

Basic Accounting Procedure – Journal, rules of debit & credit, method of journalizing, advantage, double entry system – its advantage, ledger, meaning, utility, posting entries. Practical system of book keeping – Cashbook, types of cash book, Single column, double column, entries, Trial Balance, Objective, preparation, errors & rectification, Suspense Accounting – meaning, utility & preparation.

Depreciation: meaning, causes, factors affecting depreciation, methods of charging depreciation, straight line and written - down methods.

Module: III

Preparation of Financial Statements: Preparation of trading account, profit & loss account and balance sheet for a sole proprietor, understanding financial statements of a joint stock company, activities of cash flow statement, understanding the contents of a corporate annual report,

Module: IV

Analyzing Financial Statements: Objectives of financial statement analysis; sources of information; standards of comparison; techniques of financial statement analysis - horizontal analysis, vertical analysis, and ratio analysis. Meaning and usefulness of financial ratios; analysis of financial ratios from the perspective of different stakeholders like investors, lenders, and short-term creditors; profitability ratios, solvency ratios, liquidity ratios, and turnover ratios; limitations of ratio analysis.

Books Recommended:

1. Financial Accounting by S. N. Maheshwari and Suneel K Maheshwari, Vikas Publishing House
2. R. Narayanaswamy, Financial Accounting: A Managerial Perspective, PHI
3. Financial Accounting by Jawaharlal and Seema Srivastava, HPH
4. Financial Accounting by P. Jain and K. L. Narang , Kalyani Publishers.

Business Statistics (84 hours)

Course Code	Course Title	Credits	Type (T+P+Pj)
CUBB1024	Business Statistics	4	2+2+0

The course aims to introduce students to statistical concepts and techniques that are crucial for understanding data, interpreting results and applying statistical methods in various business contexts.

Course Objectives:

- Understand the role of statistics in business and its importance in decision making
- Develop the ability to collect, organize and present data effectively.

- To understand statistical data and descriptive statistics for business data analysis.
- Gain proficiency in using Excel for data analysis
- Develop critical thinking and problem-solving skills through the application of statistical methods to business scenarios.

Course Outcomes:

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

CO1: Demonstrate an understanding of key statistical concepts and methodologies, including sampling techniques, data collection, data presentation, statistical tools, regression analysis.

CO2: Utilize appropriate statistical methods to analyse data and interpret the results in a business context, making data driven decisions.

CO3: Competently use statistical software (EXCEL) to perform data analysis and generate reports.

CO4: Know about the basic knowledge of about various types of correlation and regression.

CO5: Leverage statistical tools and reasoning to solve real-world business problems and enhance decision-making processes.

Course Outcome to Program Outcome Mapping:

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

***High-3, Medium-2, Low-1**

COURSE CONTENTS:

Module I: Introduction to Statistics & Basic Concepts:

Introduction – Meaning, Functions and Uses of Statistics; Limitations of statistics, Collection of Data, Techniques of Data Collection, Census Technique and Sampling Technique (Concepts). Classification: Meaning, and Methods of Classification of Data. Tabulation: Meaning, Parts of a Table – Simple problems on Tabulation; Diagrammatic Presentation: Meaning and Types (Graphs).

Practice: Data Collection, compilation and drawing appropriate graphs/charts (use of excel).

Module II: Measures of Central Tendency:

Measures of Central Tendency: Arithmetic Mean: Calculation of Arithmetic Mean for Individual, Discrete and Continuous Series, Weighted average.

Median: Calculation of Median for Individual, Discrete and Continuous Series.

Mode: Calculation of Mode for Individual, Discrete and Continuous Series using, Empirical relation between Mean Median and Mode. – Problems

Practice: Measures of Central tendency (use of excel).

Module III: Measures of Dispersion:

Measures of Dispersion: Range, Mean Absolute deviation, Quartiles, Quartile Deviation, Variance, Standard Deviation and Coefficient of Variation in Individual, Discrete and Continuous Series; Skewness.

Practice: Measures of Dispersion (use of excel), Calculate the Coefficient of variation of two distributions (with figures of mean and standard deviation) and compare their consistency and variability.

Module IV: Analysis of Correlation and Regression:

Correlation: - Meaning and Types of correlation- Positive and negative correlation simple, partial, and multiple correlation, Pearson's coefficient of Correlation.

Regression: Meaning of Regression, Regression lines, Regression equations and estimation.

Practice: Calculation of Correlation and regression (use of excel)

Books for Reference:

1. Levin, Richard, David S. Rubin, Statistics for Management. 7th ed., Pearson Education.
2. Gupta, S.C. Fundamentals of Statistics. Himalaya Publishing House.
3. P. K. Viswanathan, Business Statistics: An Applied Orientation, Pearson Education.
4. Anderson, Sweeney, and Williams, Statistics for Students of Economics and Business, Cengage Learning.
5. Vohra N. D., Business Statistics, McGraw Hill Education.

Organisational Behaviour (70 Hours)

Course Code	Course Title	Credits	Type (T+P+Pj)
CUBB1005	Organisational Behaviour	4	3+0+1

Course Rationale: This course aims to help the students to acquire and develop skill to understand, analyse the behaviour of people within the organisation.

Course Objective

To help students to observe, experience, analyze individual behaviour and Group behaviour.

- Students will learn in improving employee behaviour, enhancing leadership skills.
- Students will learn on how to increase employee motivation and satisfaction.

Course Outcomes

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

CO1: To understand the behaviour of people in the organisation in order to be employed and applicability of the concept of organisational behaviour.

CO2: To evaluate and examine the work styles, communication preferences and employee traits that can help to create effective work teams in the organisation.

CO3: To analyse own management style as it relates to influencing and managing behaviour in the organization systems thus helping in enhancement of critical thinking and analysis skills.

CO4: To develop the competency to assess others behaviour, give feedback and integrate into a group environment which will help in employees growth in their organisation thus helping in becoming an entrepreneur as well)

CO5: To develop leadership skills, work flexibility and commitment that enables one to understand and move forward with the situational demand

Course Outcome to Program Outcome Mapping:

Course Outcomes (CO)	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
CO1	3	3			2							
CO2		3		2		3						
CO3			3				2	3				
CO4				3	2				3			
CO5						3	3			2		

***High-3, Medium-2, Low-1**

Course Syllabus

Module-I

The study of organizational behaviour: Concept, nature, scope and importance of OB. Learning: Concept and theories of learning,

Module-II

Perception: Concept, nature and process; Personality: Determinants of personality, theories of personality, individual difference, matching personality and jobs, personality and organisation. Motivation: Concepts and their application, need, content & process theories.

Module-III

Groups and Teams: Definition, difference between groups and teams; stages of group development, group cohesiveness, types of teams; Leadership: Styles and theories. Attitude: Characteristics and components of attitude, attitude & productivity, Cognitive dissonance theory.

Module-IV

Organisational Power and Politics: Nature of organisational politics. Conflict: Concept, sources, types, stages of conflict, management of conflict, Organisational Change: Concept, Kurt Lewin theory of change, resistance to change, managing resistance to change.

Books-Recommended

1. Stephen P. Robbins - Organizational Behaviour, PHI
2. L.M. Prasad - Organizational Behaviour, Sultan Chand & Sons.
3. R. Aswathappa - Organizational Behaviour, Himalaya Pub. House.

Macro Economics (70 Hours)

Course Code	Course Title	Credits	Type (T+P+Pj)
CUBB1006	Macro Economics	4	3+0+1

Course Rationale:

Gaining an understanding of fundamental macroeconomic principles is the goal of the course. The open economy is included in the policy framework and the contemporary instruments of macroeconomic analysis are explored.

Course Objectives:

- Develop a macro-economic perspective
- Understand macro-economic paradigms
- Acquire knowledge of economic environment of a nation and the role of government in the economy;
- To develop a basic understanding of macroeconomic stability and its importance to develop an ability to understand macroeconomic policies and their likely impacts;
- To appreciate the challenges to government decision-making in a globalized world to gain an understanding of the linkages between economic policies and business performance.

Course Outcomes:

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

CO1: Understand the theoretical and conceptual knowledge of macroeconomics. Understand the preliminary concepts associated with the determination and measurement of aggregate macroeconomic variable like savings, investment, GDP, money, inflation, and the balance of payments.

CO2: Demonstrate a firm knowledge of the interrelationships among consumers, government, business and the rest of the world in Indian macro-economy.

CO3: Learn fiscal and monetary policy decisions to counter economic problems by using macro-economic instruments; develop the ability to distinguish the functions of these tools in controlling inflation, regulating money supply, and promoting economic growth.

CO4: Identify the process of how the nation's output of goods and services is measured through the national income.

CO5: Ability to understand about how to make sustainable economic growth of a nation

Course Outcome to Program Outcome Mapping:

Course Outcomes (CO)	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
CO1	3	2	1									
CO2	2		3	2								
CO3		3	2		3							
CO4	3		2			1						
CO5				3	2	3						

***High-3, Medium-2, Low-1**

Course Syllabus:

Module: I: Measurement of macroeconomic variables:

Circular flow of Income; National Income Accounts, Gross Domestic Product, National Income, Personal and Personal disposable income; Classical theory of income and employment: Quantity Theory of Money – Cambridge version, Classical aggregate demand curve, Classical theory of interest rate.

Module II: Keynesian theory of Income and employment:

Simple Keynesian model, components of aggregate demand-Consumption, Saving, Investment, equilibrium income, changes in equilibrium, multiplier (investment, Government expenditure, lump sum tax, foreign trade).

Module III: Money:

Functions of money, quantity theory of money, determination of money supply and demand, H theory of money multiplier, indicators and instruments of monetary control; Inflation: meaning, demand and supply side factors, consequences of inflation, anti-inflationary policies, natural rate theory, monetary policy-output and inflation, Phillips curve (short run and long run).

Module IV: Open Economy:

Brief introduction to BoP account, market for foreign exchange and exchange rate, monetary and fiscal policy in open economy.

Books Recommended

1. Froyen, R. T., 'Macroeconomics', Theories and Policies, Pearson
2. Mankiw, G. N., 'Macroeconomics', Worth publishers
3. Dornbusch and Fischer, 'Macroeconomics', Tata McGraw Hill

Marketing Essentials (70 hours)

Course Code	Course Title	Credits	Type (T+P+Pj)
CUBB1007	Marketing Essentials	4	3+0+1

Introduction

This course provides an introduction to the principles and practices of marketing. It explores how organizations create value for customers, build strong brands, and achieve business success through effective marketing strategies. The course combines foundational theory with a hands-on project to prepare students for marketing roles in a competitive environment.

Course Objectives

- To provide foundational knowledge of marketing concepts and their practical applications.
- To develop skills in understanding consumer behaviour and market dynamics.
- To foster analytical and strategic thinking for creating effective marketing solutions.

Course Outcomes

By the end of this course, students will be able to:

- Evaluate complex market environments and consumer behaviour trends.
- Develop integrated marketing strategies that align with business objectives.
- Apply digital and traditional marketing tools to optimize customer engagement.
- Apply data analytics to measure and improve marketing performance.
- Develop and present comprehensive marketing projects with strategic insights.

Course Outcome to Program Outcome Mapping

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

CO4	3	3	3	3	1	2		3	1	1	3	1	3	3	3
CO5	3	3	3	3		2	1	3	1	1	3	1	3	3	3

***High-3, Medium-2, Low-1**

Course Details

Module 1: Introduction to marketing (12 Hours)

Definition, importance, and scope of marketing. Evolution of marketing: traditional vs. modern approaches and orientations (Production concept, Product concept, Selling concept, Marketing concept, Holistic marketing concept). Core Marketing Concepts. Marketing vs. selling. Marketing Myopia. Products vs. Services. Marketing Environment: Environmental Scanning, Components of Macro and Micro Environment, Factors Affecting Marketing Environment (PESTEL) and SWOT frameworks in the Indian context. The marketing mix (McCarthy's 4 Ps; Boom and Bitner's 7 Ps and 4 Cs). Strategic marketing planning process.

Module 2: Segmentation, Targeting and Positioning (8 Hours)

Levels of Market Segmentation, Basis for Segmenting Consumer Markets, Difference between Segmentation, Targeting and Positioning; Consumer Behaviour for study, Factors influencing consumer behaviour and Buyer decision-making processes. Real-world applications of consumer insights.

Module 3: Product and Pricing Decisions (12 Hours)

Product concept, Classification of products (Consumer and Industrial), Concept of Product Life Cycle (PLC), PLC marketing strategies, Product Classification, Product Line Decision, Product Mix Decision, Branding Decisions, Packaging & Labelling, New Product Development. Pricing Decisions: Determinants of Price, Pricing Methods (Non-mathematical treatment), Adapting Price (Geographical Pricing, Promotional Pricing and Differential Pricing)

Module 4: Place and Promotion Strategies (10 Hours)

Promotion Mix: Factors determining promotion mix, Promotional Tools –basics of Advertisement, Sales Promotion, Public Relations & Publicity and Personal Selling; Place (Marketing Channels): Channel functions, Channel Levels, Types of Intermediaries: Types of Retailers, Types of Wholesalers.

Text and Reference Books

- Kotler, P. & Keller, K. L.: Marketing Management, Pearson.
- Kotler, P., Armstrong, G., Agnihotri, P. Y., & Ul Haq, E.: Principles of Marketing: A South Asian Perspective, Pearson.
- Ramaswamy, V.S. & Namakumari, S.: Marketing Management: Global Perspective-Indian Context, Macmillan Publishers India Limited.

- Zikmund, W.G. & D' Amico, M.: Marketing, Ohio: South-Western College Publishing.

Suggested Activities and Project (28 hours)

- Case Studies: Analyze marketing strategies of local, national and multinational companies.
- Developing customer personas and analyzing buying behavior.
- Field Research: Conduct primary research on customer preferences and competitor analysis.
- Final Project: Students will develop a marketing plan for a real or hypothetical business. This includes conducting a comprehensive market analysis, defining the STP strategy, and presenting actionable recommendations for the marketing mix.

Human Resource Management (70 Hours)

Course Code	Course Title	Credits	Type (T+P+Pj)
CUBB1008	Human Resource Management	4	3+0+1

Course Rationale:

This course intends to provide knowledge and skills to manage human resources of an organization.

Course Objectives

- To acquaint students with knowledge and skills to manage and resolve human resource issues faced by organizations in general.
- To equip students with tools to be used in human resource planning, recruitment and selection.
- To provide knowledge on types of training programs and their importance
- To develop understanding on methods of performance appraisal, compensation policies and their effectiveness in organizations
- To make the students appreciate the importance of employee health and safety; employee welfare, Grievance handling mechanism and healthy employer- employee relations.

Course Outcomes

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

CO1: Prepare appropriate Human Resource Plan in an organisation

CO2: Carry out recruitment and selection process

CO3: Organize an induction programme for newly joined employees

CO4: Develop HR policies for development and retention of human resources

CO5: Manage performance, grievances of employees

Course Outcome to Program Outcome Mapping:

Course Outcomes (CO)	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
CO1	3	3				2	3	2				
CO2	3	3		2					2			
CO3		3	2		2							
CO4						3	2					
CO5	3	2		2								

***High-3, Medium-2, Low-1**

Course Contents:

Module: I

Concept, nature and scope of human resource management vis-a-vis personnel management. role and functions of HR manager, HR role in strategy formulation, Emerging challenges of human resource management

Module: II

Human Resource planning: Forecasting demand and supply, HRIS, succession planning; **Job analysis:** job description & job specification; **Recruitment and Selection:** Sources of recruitment (internal & external), E- recruitment, Selection Process; **Orientation Process.**

Module: III

Human Resource Development: Concept and challenges **Training and Development:** Concept, needs, methods and effectiveness; **Career Planning:** Career anchor and career life stages; **Performance Management System:** concepts, use, methods, common problems of rating; **Compensation:** job evaluation, components of pay structure, factors influencing compensation levels, wage differentials & incentives, profit sharing, gain sharing, employees' stock option plans, fringe benefits

Module: IV

Industrial Relations: Introduction to industrial relations, Trade unions role, types, functions, problems, **Industrial dispute-** concept, causes & machinery for settlement of disputes;

Grievance- concepts, causes & grievance redressal machinery; **Discipline-** concept, aspect of discipline & disciplinary procedure; **Collective Bargaining-** concept, types, process, problems, essentials of effective collective bargaining.

Text Books:

- Dessler, G: Human Resource Management, Pearson.
- Pattanaik B - Human Resource Management, PHI
- E.B. Flippo-Personnel Management
- C.B. Mamoria - Personnel Management.
- R. Armstrong- Human Resources Management
- Fisher Schenfeldt & Shaw - Human Resource Management
- P. Subba Rao - Human Resources Management - Texts & Cases, Excell Books

Financial Management (70 Hours)

Course Code	Course Title	Credits	Type (T+P+P)
CUBB1009	Financial Management	4	3+0+1

Course Rationale:

- It focuses on graduating students with in-depth knowledge of corporate finance, investment management and corporate evaluation. Apply appropriate methods and analytical procedures to conduct analysis of practical financial problems and propose valid solutions based on this analysis.

Course Objectives:

- The course aims to familiarize the learners with the principles and practices of financial management.
- To understand the concept of time value of money and its use in corporates.
- To analyze the techniques of capital budgeting used for decision making.
- To understand the concept of working capital management

Course Outcomes:

On successful completion of the course, students

1. Will be able to take short term and long term financial decisions in a company.

2. Can apply time value of money for decision making. They also can do the risk return analysis for the investment.
3. Will be able to find out the cost of capital and can take correct decision for preparing capital structure of a company.
4. Can apply capital budgeting techniques to take long term investment decisions in a company.
5. Can calculate and manage the working capital requirement of a company.

Course Outcome to Program Outcome Mapping:

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

***High-3, Medium-2, Low-1**

COURSE CONTENTS:

Module I:

Introduction

Nature of Financial Management: Finance and related disciplines; Scope of Financial Management; Profit Maximization, Wealth Maximization - Traditional and Modern Approach; Functions of finance – Finance Decision, Investment Decision, Dividend Decision; Objectives of Financial Management; Organisation of finance function; Concept of Time Value of Money, present value, future value, and annuity; Risk & Return: Historical return, expected return, absolute return, holding period return, annualized return, arithmetic & geometric return; Risk - Systematic & unsystematic risk – their sources and measures.

Module II: Cost of Capital and Financing Decision

Different Sources of Finance including internal sources, external sources and other sources, Concept and Measurement of Cost of Capital: Explicit and Implicit costs; Measurement of cost of capital; Cost of debt; Cost of perpetual debt; Cost of Equity Share; Cost of Preference Share; Cost of Retained Earning; Computation of over-all cost of capital based on Historical and Market weights, Capital Structures: Approaches to Capital Structure Theories - Net Income approach, Net Operating Income approach, Modigliani-Miller (MM) approach, Traditional approach, Capital

Structure and Financial Distress; Leverage Analysis: Operating and Financial Leverage; EBIT - EPS analysis; Combined leverage.

Module III: Capital Budgeting

Long -term investment decisions: Capital Budgeting - Principles and Techniques; Nature and meaning of capital budgeting; Estimation of relevant cash flows and terminal value; Evaluation techniques - Accounting Rate of Return, Net Present Value, Internal Rate of Return & MIRR, Net Terminal Value, Profitably Index Method..

Module IV: Managing Profit

Trade-Off Theory. Dividend Policy Decision - Dividend and Capital; The irrelevance of dividends: General, MM hypothesis; Relevance of dividends: Walter's model, Gordon's model, Forms of dividend payment, types of dividend policies and Determinants of Dividend policy.

Module V: Working Capital Decisions

Working Capital Management: Management of Cash - Preparation of Cash Budgets (Receipts and Payment Method only); Cash management technique, Receivables Management – Objectives; Credit Policy, Cash Discount, Debtors Outstanding and Ageing Analysis; Costs - Collection Cost, Capital Cost, Default Cost, Delinquency Cost, Inventory Management (Very Briefly) - ABC Analysis; Minimum Level; Maximum Level; Reorder Level; Safety Stock; EOQ, Determination of Working Capital.

Text Books:

- Chandra, P. (2007).. Financial Management-Theory and Practice. New Delhi: Tata McGraw Hill.
- Pandey, I. M. (2015). Financial Management. New Delhi: Vikas Publications.

Reference Books:

- Khan, M.Y & Jain, P. K (2018). Financial Management New Delhi: Tata McGraw Hill.

Strategic Management (42 hours)

Course Code	Course Title	Credits	Type (T+P+Pj)
CUBB1010	Strategic Management	2	1+0+1

Introduction

This course is designed to provide students with the tools and frameworks necessary to understand, formulate, and implement effective business strategies. The course explores competitive analysis, resource allocation, and decision-making processes that align organizational goals with external opportunities.

Course Objectives

- To introduce students to strategic management concepts and processes.
- To develop the ability to analyze competitive environments and internal resources.
- To equip students with the skills to formulate and implement strategic plans.

Course Outcomes

By the end of this course, students will be able to:

CO1: Understand the principles of strategic management and its importance.

CO2: Analyze external and internal environments using strategic tools.

CO3: Formulate strategies for achieving competitive advantage.

CO4: Evaluate the effectiveness of strategic decisions.

CO5: Collaborate on real-world projects to develop and present strategic solutions.

Course Outcome to Program Outcome Mapping

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

***High-3, Medium-2, Low-1**

Course Details

Module 1: Foundations of Strategic Management (4 Hours)

Understanding strategy; Evolution of strategic management. Importance of Strategic Decision Making; The process of strategic management. Understanding strategic intent; Vision, and Mission statement; How to formulate vision and mission statements? Characteristics and differences between goals and objectives: Environmental Appraisal and Scanning. Industry Attractiveness and Competitive Strategies; Portfolio analysis: BCG (growth-share) matrix, GE business screen, McKinsey 7S Model.

Module 2: Corporate Level Strategies (4 Hours)

Expansion Strategies, Stability Strategies, Retrenchment Strategies, Combination Strategies. Concentration strategies, Integration strategies: Horizontal Integration and Vertical Integration; Diversification strategies: Concentric Diversification, Conglomerate Diversification, Need for Diversification Strategies, Risk of Diversification and Successful Diversification Cases. Internationalization Strategies, Porter Diamond Model, Types of International Strategies, Advantages and Disadvantages of Expansion through Internationalization. Strategies for local companies competing with Global Companies and the Emergence of the Indian MNC.

Module 3: Strategy Formulation and Decision-Making (4 Hours)

Business Level Strategies: Industry structure and positioning of the firm in the industry. Generic business strategies, Tactics for business strategies: Timing Tactics, Market Location tactics. Functional Level Strategies. Strategic Analysis and Choice: Strategy Analysis and its Importance, Process of Strategic Choice, Focusing on Strategic Alternatives. Analyzing the Strategic Alternatives, choosing from the Strategic Alternatives. Tools and Techniques for Strategic Analysis

Module 4: Strategy Implementation and Control (2 Hours)

Concept of Strategy Implementation, Nature of strategy Implementation, Barriers to strategy Implementation. Structural Implementation. Behavioural Implementation. Functional Implementation. Operational Implementation. Strategic Evaluation and Control. Ethical issues in Strategic Management.

Text and Reference Books

- Strategic Management and Business Policy, Azhar Kazmi, McGraw Hill
- Exploring Corporate Strategy: Text and Cases, Gerry Johnson and Kevan Scholes, Pearson Publications
- Economics of Strategy, Besanko, Dranove, Shanley & Chaefer, John Weley & Sons
- Fundamentals of Business Strategy, Edited by Augier & Teece, Sage
- Competitive Strategy, Michael E. Porter, Free Press
- Competitive Advantage, Michael E. Porter, Free Press
- Strategic Management: An Integrated Approach, Charles W. L. Hill and Gareth R. Jones, Biztantra
- Cases in Strategic Management, Amita Mittal, McGraw Hill
- Strategic Management: A South Asian Perspective, Hitt, Ireland, Hoskisson and Manikutty, Cengage Learning
- Business Strategy: Managing Uncertainty, Opportunity, and Enterprise, J. C. Spender, Oxford University Press

- Tilt: Shifting Your Strategy from Products to Customers, Niraj Dawar, Harvard Business Review
- The Strategy-Focused Organization: How Balanced Scorecard Companies Thrive in the New Business Environment, Robert S. Kaplan and David P. Norton, Harvard Business Review

Suggested Activities and Project (28 hours)

- Case Studies: Analyze strategic decisions of local, national and multinational companies.
- Simulation: Participate in an online simulation to manage a virtual company's business strategy.
- Industry analysis: Apply Porter's Five Forces to a specific industry.
- Develop a strategic roadmap for a hypothetical company.
- Final project: Students will analyze a company's strategic position and propose recommendations for improving its competitive advantage. The project will include environmental analysis, resource evaluation and implementation strategies.

Strategic Marketing Management (70 hours)

Course Code	Course Title	Credits	Type (T+P+Pj)
CUBB1011	Strategic Marketing Management	4	3+0+1

Introduction

Strategic Marketing Management builds on foundational marketing concepts to explore how strategic decisions shape organizational success. Students learn to align marketing goals with business objectives, leverage competitive advantages, and adapt to changing market environments.

Course Objectives

- To enable students to develop marketing strategies aligned with business goals.
- To provide tools for competitive analysis and strategic decision-making.
- To enhance students' ability to innovate and respond to market challenges.

Course Outcomes

By the end of this course, students will be able to:

CO1: Articulate the strategic role of marketing in achieving organizational goals.

CO2: Conduct in-depth competitive and environmental analyses.

CO3: Formulate marketing strategies to address complex business challenges.

CO4: Apply branding and innovation to create unique value propositions.

CO5: Develop and present strategic marketing plans effectively to stakeholders.

Course Outcome to Program Outcome Mapping

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

***High-3, Medium-2, Low-1**

Course Details

Module 1: Strategic Marketing Foundations (10 Hours)

Overview of strategic marketing and its importance. Corporate strategy vs. marketing strategy. Environmental scanning: PESTEL analysis. Internal analysis: SWOT and resource-based view. Boston Consultative Group (BCG) matrix. Ansoff's Grid. Fundamentals of market research: tools and techniques. Marketing Plan components - understanding and evaluation. Business Unit Planning.

Module 2: Competitive Analysis and Positioning (10 Hours)

Porter's Generic Strategies, Industry analysis using Porter's Five Forces. Identifying and leveraging competitive advantages. Strategic positioning and differentiation. Value chain analysis and its marketing implications. Creating competitive advantage through marketing.

Module 3: Advanced Marketing Strategies (12 Hours)

Market entry strategies and global marketing. Innovation and new product development. Customer relationship management (CRM) and loyalty programs. Pricing and revenue optimization strategies. Branding and positioning strategies. Pricing, distribution, and promotion strategies. Product lifecycle and innovation in marketing.

Module 4: Marketing Analytics and Emerging Trends (10 Hours)

Role of data analytics in strategic marketing. Key performance indicators (KPIs) for marketing success. Emerging technologies: AI, IoT, blockchain and other technology in marketing. Rural marketing, guerrilla marketing, not-for-profit marketing, green marketing, sustainability, and ethical considerations in marketing strategy.

Text and Reference Books

- Aaker, D. A., Strategic Market Management, Wiley.
- Kotler, P., Keller, K. L., Marketing Management, Pearson.
- Ries, A., Trout, J., Positioning: The Battle for Your Mind, McGraw-Hill.
- Day, G. S., Market Driven Strategy: Processes for Creating Value, Free Press.
- Day, G. S., Market Driven Strategy: Processes for Creating Value, Free Press.

Suggested Activities and Project (28 hours)

- Case Studies: Analyze marketing strategies of local, national and multinational companies.
- Marketing Simulation: Participate in an online simulation to manage a virtual company’s marketing strategy.
- Field Research: Conduct primary research on customer preferences and competitor analysis. Competitive benchmarking exercise using industry data.
- Workshop on marketing analytics tools.
- Final Project: Students will create a strategic marketing plan for an organization, addressing real-world challenges such as market entry, competitive positioning, or product innovation.

Cost and Management Accounting (70 Hours)

Course Code	Course Title	Credits	Type (T+P+Pj)
CUBB1012	Cost and Management Accounting	4	3+0+1

Course Rationale:

This course will equip the students with various concepts, tools, and techniques of Cost and Management accounting. It will provide an understanding of methods of cost accounting and its relevance in management decision making. Students will be able to apply and improve the operations of organizations through the application of management accounting techniques.

Course Objectives:

- To acquaint students with role of Management Accounting in planning, control and decision-making.
- To provide an understanding of methods of cost accounting and its relevance in management decision making

Course Outcomes:

Upon successful completion of this subject students will able to

CO1: Apply and improve the operations of organizations through the application of management accounting techniques

CO2: Apply relevant costing methods to analyze specific business issues

CO3: Prepare and analyze budgets, including flexible budgets, and use budgetary control to monitor performance against targets.

CO4: Use cost information to support managerial decisions such as pricing, outsourcing, and investment appraisal.

CO5: Conduct variance analysis to identify deviations between actual and budgeted costs and recommend corrective actions.

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

***High-3, Medium-2, Low-1**

Course Contents:**Module: I**

Nature, Scope of Management Accounting: Meaning, definition, nature and scope of Management Accounting; Comparison of Management Accounting with Cost Accounting and Financial Accounting. **Cost concepts:** Meaning, Scope, Objectives, and Importance of Cost Accounting; Cost, Costing, Cost Control, and Cost Reduction; Elements of Cost, Components of total Cost, Cost Sheet. **Classification of Costs:** Fixed, Variable, Semivariable, and Step Costs; Product, and Period Costs; Direct, and Indirect Costs; Relevant, and Irrelevant Costs; Shut-down, and Sunk Costs; Controllable, and Uncontrollable Costs; Avoidable, and Unavoidable Costs; Imputed / Hypothetical Costs; Out-of-pocket Costs; Opportunity Costs; Expired, and Unexpired Costs; Conversion Cost. **Cost Ascertainment:** Cost Unit and Cost Center. Introduction to Overhead allocation, Overhead apportionment, and Overhead absorption.

Module: II

Cost-Volume-Profit Analysis: Contribution, Profit-Volume Ratio, Margin of safety, Cost Break-even Point, Composite Break-even Point, Cash Break-even Point, Key Factor, Break-even Analysis. Relevant Costs and Decision Making: Pricing, Product Profitability, Make or Buy, Exploring new markets, Export Order, Sell or Process Further, Shut down vs. Continue.

Module: III

Budgets and Budgetary Control: Meaning, Types of Budgets, Steps in Budgetary Control, Fixed and Flexible Budgeting, Cash Budget. Responsibility Accounting: Concept, Significance, Different responsibility centers, Divisional performance – Financial measures, Transfer pricing.

Module: IV

Standard Costing and Variance Analysis: Meaning of Standard Cost and Standard Costing, Advantages, Limitations and Applications; Material, Labor, Overhead and Sales variances. Introduction to Target Costing, Life Cycle Costing, Quality Costing, and Activity based Costing.

Text Books:

- C.T. Horngren, Gary L. Sundem, Jeff O. Schatzberg, and Dave Burgstahler: Introduction to Management Accounting, Pearson
- M.N. Arora: A Textbook of Cost and Management Accounting, Vikas Publishing House Pvt. Ltd.
- M.Y. Khan, and P.K. Jain, Management Accounting: Text Problems and Cases, McGraw Hill Education (India) Pvt. Ltd.
- S.N. Maheshwari, and S.N. Mittal, Cost Accounting: Theory and Problems, Shree Mahavir Book Depot (Publishers)

BUSINESS RESEARCH (84 hours)

Course Code	Course Title	Credits	Type (T+P+Pj)
CUBB1013	Business Research	4	2+0+2

Course Objectives:

The course aims to equip students with the knowledge and skills necessary to conduct rigorous and impactful business research, contributing to their overall competence in the business field.

- To introduce students to the fundamental concepts and principles of business research, including its purpose, scope, and relevance in the business environment.
- To develop students' skills in formulating research questions, designing research projects, and selecting appropriate methodologies to address specific business problems. To foster an appreciation for the ongoing development of research skills and the continuous need to stay informed about new research methodologies and tools in the field of business.

- To familiarize students with various tools and techniques used in business research, including data collection methods, sampling techniques, and data analysis software. To enhance students' abilities to critically analyze and interpret data, allowing them to draw meaningful conclusions and make informed recommendations.
- To provide opportunities for students to apply research methods to real-world business issues, enabling them to understand how research can inform business strategy and decision-making.
- To develop students' abilities to effectively communicate research findings through written reports and oral presentations, tailored to both academic and business audiences.

Course Outcomes:

On successful completion of this course

CO1: Students will be able to identify and articulate research problems or questions relevant to business scenarios. Students will be able to apply research findings to solve real-world business problems and make strategic decisions based on data-driven insights.

CO2: Students will develop the ability to conduct comprehensive literature reviews, critically evaluating existing research to identify gaps and inform their research questions.

CO3: Students will be able to design a research project, including selecting appropriate methodologies, sampling techniques, and data collection methods.

CO4: Students will be proficient in collecting, analyzing, and interpreting data using relevant tools and techniques, including statistical software where applicable. Students will enhance their critical thinking skills by evaluating research outcomes, drawing conclusions, and making informed decisions based on evidence.

CO5: Students will be able to write clear and concise research reports, presenting findings in a manner suitable for academic and business audiences.

Course Outcome to Program Outcome Mapping:

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

***High-3, Medium-2, Low-1**

Course Contents:**Module I:****Research methodology:**

Research: Meaning and Objective, Types of Research, Research methods and methodology, Role of Research in business and industry, Limitation of Research, Process of Research; Review of Literature. Research Problems: meaning, Selection of problem, techniques in defining problem; setting objectives.

Module II:**Planning a Research:**

Research Design: meaning, types & principles, Sample Design: meaning, steps & methods, Determination of Sample Size, Scaling Technique, Methods of data Collection, Questionnaire-meaning, designing, preparation and administering questionnaires, problems in questionnaires, features of good questionnaire, Data processing: Editing, coding, classification, tabulation & presentation, analysis and interpretation of data, concepts of validity and reliability

Data Analysis Using Excel**Module III:****Testing of Hypothesis & Report writing:**

Meaning & formulation of hypothesis, Parametric test (Z test, T Test), Non-parametric Test (Chi-square test), ANOVA, Correlation. Reporting: Meaning, types of reports, research report format; characteristics of report, Steps in report writing, Guidelines for effective reporting writing, bibliography.

Text Book:

1. David M. Levine, Mark L. Berenson, Timothy C. Krehbiel, P. K. Viswanathan, Business Statistics: A First Course, Pearson Education.
2. Business Research Methods by Donald R. Cooper and Pamela S. Schindler
3. Gupta Suresh: Research Methodology, Deep and Deep Publications, New Delhi
4. Kothari, C.R, Research methodology, New Age International Publishers, New Delhi

Business Laws (70 Hours)

Course Code	Course Title	Credits	Type (T+P+Pj)
CUBB1014	Business Laws	4	3+1+0

Course Objectives:

To provide a comprehensive understanding of the fundamental principles and key provisions of the Indian Contract Act, 1872.

- To enable students to analyze the essential aspects of the Sale of Goods Act, 1930, focusing on rights and obligations under a contract of sale.
- To familiarize students with the general principles of partnership law under the Indian Partnership Act, 1932, and the Limited Liability Partnership Act, 2008.
- To develop insights into regulatory frameworks, including the Competition Act, 2002, and the Consumer Protection Act, 2019, emphasizing consumer rights and competitive practices.
- To equip students with knowledge of the Foreign Exchange Management Act, 1999, including its application in regulating foreign exchange and adherence to RBI guidelines.

Course Outcomes:

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

CO1: Analyze the essentials of valid contracts and apply the principles of contract law in real-world scenarios.

CO2: Evaluate the rights and duties of buyers and sellers under the Sale of Goods Act and resolve disputes related to the sale of goods.

CO3: Distinguish between different forms of partnerships, including LLPs, and assess their legal and operational implications.

CO4: Critically examine the principles of competition law and consumer protection regulations to identify and address unfair trade practices.

CO5: Apply the regulatory framework of the Foreign Exchange Management Act to financial and cross-border transactions while adhering to KYC norms.

Course Outcome to Program Outcome Mapping:

COs/POs	PO-01	PO-02	PO-03	PO-04	PO-05	PO-06	PO-07	PO-08	PO-09	PO-10	PO-11	PO-12
CO1	3	3	2	2	1	2	1	1	2	1	2	1
CO2	3	3	2	2	1	2	1	2	1	1	1	1
CO3	3	3	2	2	2	2	2	2	1	1	2	1
CO4	3	3	2	3	2	3	2	1	2	1	2	2
CO5	3	2	2	3	2	3	1	1	3	1	3	2

*High-3, Medium-2, Low-1

COURSE CONTENTS:

Module I:

Indian Contract Act, 1872

Nature of contract and its essentials, Void, valid and voidable contracts, Consent, consideration and its impact on contract, Agreements in restraint of trade, Performance, breach, revocation and termination of contract, Agency and bailment contracts, Contract of Indemnity, Contract of Guarantee and Pledge.

Module II:

Sale of Goods Act, 1930

Nature of sale, conditions and warranties, Performance of contract of sale and right of unpaid seller.

Module III:

Indian Partnership Act, 1932 and Limited Liability Partnership Act, 2008

General nature of Partnership, Rights and duties of Partners, Reconstitution of Firm and Registration and dissolution. Formation and incorporation of LLP, Partners and their relations, financial disclosures, conversion into LLP, Foreign LLP, Winding up and dissolution.

Module IV:

Competition Act, 2002 and Consumer Protection Act, 2019

Competition Act, 2002: Objectives and basic concepts, Consumer, goods, service, Prohibition of anti-competitive agreements, Prohibition of Abuse of Dominant Position;
Consumer Protection Act, 2019: Important definitions, Consumer Disputes Redressal Commission, Measures to Prevent Unfair Trade Practices, Offences and Penalties

Module V:

Foreign Exchange Management Act, 1999

Important definition, Regulation and management of foreign exchange, RBI Guide lines on KYC.

Text Books:

- Bose, D.C. (2008). *Business Law*. New Delhi: PHI Limited.
- Chopra, R. K. (2015). *Business Laws*. New Delhi: Himalaya Publishing House.
- Kuchhal, M. C., & Kuchhal, V. (2018). *Business Laws*. New Delhi: Vikas Publishing.

- Singh,A. (2009). *Business Law*. Delhi: Eastern Book Company.

Financial Planning (42 Hours)

Course Code	Course Title	Credits	Type (T+P+Pj)
CUBB1015	Financial Planning	2	1+0+1

Course Objectives:

After completing this course, students will be able to:

- Grasp the fundamentals of financial planning and acquire knowledge of tax planning strategies
- Understand different types of investments, along with their risk-return characteristics.
- Comprehend retirement planning and the significance of risk management and insurance.

Course Outcome:

After successfully completing this course, students will be able to:

CO1: Explain the fundamentals of financial planning, including its goals, objectives, and importance.

CO2: Identify and compare different types of savings plans and the importance of emergency fund planning.

CO3: Apply the principles of portfolio management, including asset allocation and portfolio construction.

CO4: Identify available deductions and exemptions and create tax-efficient investment plans.

CO5: Evaluate different insurance products and policies to meet personal and family needs.

Course Outcome to Program Outcome Mapping:

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

***High-3, Medium-2, Low-1**

Course Contents:

Module: I

Fundamentals of Financial Planning: Overview of Financial Planning, Importance of financial planning, Financial planning goals, objectives, Importance and process, Role of a Financial Planner

Budgeting and Savings: Importance of Budgeting, Steps to Create a Budget, Types of Savings Plans, Emergency Fund Planning

Module: II

Investment Basics: Types of Investments, Risk and Return, Diversification, Investment Strategies

Portfolio Management: Principles of Portfolio Management, Asset Allocation, Portfolio Construction, Performance Measurement

Module: III

Tax Planning: Basics of Taxation in India, Tax Planning Strategies, Deductions and Exemptions, Tax-efficient Investment Plans

Insurance Planning: Life Insurance, Health Insurance, Property and Casualty Insurance, Insurance Products and Policies

Module: IV

Retirement Planning: Importance of Retirement Planning, Retirement Goals and Needs, Pension Plans and Provident Fund, Annuities and Retirement Products

Estate Planning: Basics of Estate Planning, Wills and Trusts, Power of Attorney, Estate Taxation

Text Books:

1. "Rich Dad Poor Dad" by Robert T. Kiyosaki
2. "Let's Talk Money" by Monika Halan
3. "The Intelligent Investor: A Guide to Financial Independence" by Benjamin Graham (with Indian Perspective Additions)
4. "Yours Financially" by Amit Trivedi

Design Thinking and Innovation(42 Hours)

Course Code	Course Title	Credits	Type (T+P+P)
CUBB5001	Design Thinking and Innovation	2	1+0+1

Course Rationale:

The course will orient the students on the basics of the design thinking process and familiarize them with the elements and application of Design thinking.

Course Objectives:

The course aims to

- Orient the participants on the basics of the design thinking process
- Familiarize participants with the elements and application of Design thinking
- Develop critical thinking abilities and analytical skills

Course Outcome:

After completion of the course, the students will be able to

CO1: Understand the concepts of design thinking approaches

CO2: Apply the design thinking process to innovative problem solving

CO3: Apply critical thinking abilities to solve difficult problems

CO4: Develop innovative ideas through structured brainstorming sessions

CO5: Empathize the need of the stakeholders

Course Outcome to Program Outcome Mapping:

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

***High-3, Medium-2, Low-1**

Course Contents:

Module: I

Basics of Design Thinking, Why Design Thinking, Design Thinking Mindset (Inspiration, Ideation and Implementation) Design thinking process, (Empathy, Define, Ideate, Prototype, Test). Cases of application of Design thinking approach (Intuit, IDEO, Infosys, IBM, Google, Apple, Jubilant Foods). This will be in a flip class mode followed by a workshop, to be conducted by an external expert and a faculty anchor.

Module: II

Executing a Design Thinking Project- Apply Interviewing and empathy building technique, Drawing inferences from the observations, Defining a point of view, Ideation process, developing and testing prototypes and writing a story of a minimum viable solution.

Text Book:

- Tom Kelly & Jonathan Littman (2001). “The Art of Innovation” Broadway Publication.

Reference Book:

- Brown Tim (2008). “Design Thinking”, Harvard Business Review

PRODUCTION AND OPERATIONS MANAGEMENT (70 Hours)

Course Code	Course Title	Credits	Type (T+P+Pj)
CUBB1017	Production and Operations Management	4	3+0+1

Course Objective

Key points: *Briefly explain why the course is to be studied. Specify who should study the course and requirement of prior knowledge and skill, if any.*

- To develop an understanding of production and operation designs adopted in modern industry
- To understand manufacturing 4.0 and appreciate technology integration in smart production
- To obtain an understanding of quality management practice in organizations and how total quality management and six-sigma facilitate organizational effectiveness.
- To understand the roles of inventories and basics of managing inventories in various demand settings

Course outcome

Key points: State clearly what knowledge and skill a student is expected to learn at the end of the course and will be able to apply.

CO1: Students can Comprehend the basic concepts of Manufacturing Operations Management (MOM) and Manufacturing Execution System (MES) in Industry 4.0.

CO2: Can be able to Construct Network, Prepare Gantt Chart, and Process Map

CO3: Calculate Economic Order Quantity (EOQ) for inventory management.

CO4: will analyze the Market Dynamics and Customer Insights through a project

CO5: Will be able to understand the Production process and work as a Production Manager.

Course Outcome to Program Outcome Mapping:

COs \ POs	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
CO1	3	2	1	2	2	1	1	1	2	1	3	2
CO2	3	3	2	2	3	1	1	2	1	1	3	1
CO3	2	3	2	2	2	1	1	1	2	1	2	2
CO4	2	3	2	3	3	2	2	1	2	2	2	2
CO5	3	3	2	2	3	2	3	2	2	1	3	2

***High-3, Medium-2, Low-1**

COURSE CONTENTS:

Module I: Production Operation Management and Industry 4.0

Product and Process design: Product design, New Product development process. The Smart Backbone of Industry 4.0; Introduction, Basic concepts of Manufacturing Operations Management (MOM)/Manufacturing Execution System (MES) for Industry 4.0, Smart manufacturing; The roots of smart manufacturing, Pillars of smart manufacturing.

PRACTICE

Article discussion and presentation

PROJECT

Identify a project: The project will involve a multidisciplinary approach, collaboration and effective communication to meet project timelines and deliver quality products.

TOOL TO BE USED

Gate Process: Concept to Prototypes design, An overview on 3D Experience Platform

Module II: Facility Location and Layout

Facility Location, Location Analysis: Techniques. Facility Layout. Capacity Planning, Capacity Planning Decisions and Production Planning & Control (PPC).

PRACTICE

Practice numerical concepts

Module III: Capacity Planning, Sequencing and Scheduling

Networking: CPM and PERT.

Sequencing and Scheduling: Objective of Scheduling, Sequencing; Gantt chart. Common Production Scheduling KPIs, Sequencing model - "n" jobs 1 machine, "n" jobs 2 machines, "n" jobs "m" machines.

PRACTICE

Practice numerical concepts

TOOL TO BE USED

Network and Gantt Chart using Excel

Module IV: Quality Assurance

Quality Assurance: Quality in operations- Process Map, Pareto Chart, Strategy for maintaining quality and stability, JIT, Kanban, TQM, Six Sigma, Performance and quality, Control Charts and Purchase Management.

PRACTICE

Practice numerical concepts

TOOL TO BE USED

Creately, Visual paradigm, Excel

Module V: Inventory Management

Inventory Management, Inventory Control: Purpose of Inventories, Costs of Inventories, Basic EOQ Model, ABC Inventory Management, Using P and Q System.

PRACTICE

Practice numerical concepts

PROJECT (Self -Learning)

Texts Books

- Operations and Supply Chain Management, by Roberta S. Russell; Bernard W. Taylor; Venkataramanaiah Saddikuti; Pavan Kumar Gudavalleti, 10ed, Wiley, 2023.
- Production And Operations Management by S. Chary, 6ed. McGraw Hill Education, 2019.
- Operations Management, by Jay Heizer, Barry Render, Chuck Munson, Amit Sachan, 12ed, Pearson Education, 2017
- Production And Operations Management by S. Anil Kumar, N. Suresh, New Age International Pvt. Ltd Publishers; 2ed, 2018.

References

- Production and Operations Management by R. Panneerselvam, 3ed. Prentice Hall India Learning Private Limited, 2012.

Links

1. <https://digitalleadership.com/blog/disruptive-innovation-examples/>
2. <https://www.netsuite.com/portal/resource/articles/inventory-management/inventory-management-trends.shtml>
3. https://asana.com/id/resources/capacity-planning?utm_campaign=&utm_source=&utm_medium=&gclid=CjwKCAjwLcKbA9EiwAka9QRnl_DMI7H8HmTUyDMR1znI8J2CVn5DerGnoYgXKPQB2kw3lWsKqDKxoCwQQAyD_BwE&gclid=aw.ds
4. Pareto Chart in VisualParadigm: <https://online.visual-paradigm.com/charts/templates/pareto-charts/>; <https://online.visual-paradigm.com/app/diagrams/#infoart:proj=0&type=ParetoCharts&gallery=/repository/42d858c7-6c27-4f96-a54d-10f43856d971.xml&name=Pareto%20Chart>
5. Process Mapping: [https://www.canva.com/templates/?query=process-mapping](https://www.canva.com/templates/?query=process-mapping;);
6. How to Create Process Map: <https://creately.com/guides/process-mapping-guide/>
7. Create a Basic Control Chart : <https://www.youtube.com/watch?v=RPvLqDIUJdk>
8. Steps in Creating a Control Chart in excel: <https://www.indeed.com/career-advice/career-development/upper-control-limit-excel>

9. Gantt Chart: <https://www.youtube.com/watch?v=xsxi4qaEnOg>
10. <https://www.edrawmax.com/pert-chart/how-to-create-a-pert-chart-in-excel/>
11. <https://www.projectmanager.com/guides/pert-chart>
12. https://cutm4.odoo.com/web#action=37&model=ir.module.module&view_type=kanban&cid_s=1&menu_id=2

Projects

1. **New Product Development-** Design any new product
2. **Process Improvement:** Analyze and identify bottlenecks or inefficiencies in a production unit
3. **Sustainability Initiatives:** Identify opportunities for incorporating sustainable practices into a production unit, such as implementing energy-efficient technologies, reducing waste generation, and promoting recycling or reuse programs.
4. **Supplier Relationship Management:** Develop strategies and processes to effectively manage relationships with suppliers, including supplier selection, performance evaluation
5. Analysis of Market Dynamics and Customer Insights of a Manufacturing unit/Service

Project Management (42 hours)

Course Code	Course Title	Credits	Type (T+P+Pj)
CUBB1018	Project Management	2	1+0+1

Course Objective:

The objectives of the course are

- Develop and implement all project procedures.
- Learn project management methodology to initiate and manage projects efficiently and effectively
- Acquire key project management skills and strategies for productive guidance, efficient communication, and supervision of the project's team

Achieve the project's main goal within the given constraints

Course Outcomes:

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

CO1: Acquire 10 knowledge area identified by PMI and its application while working on a real project.

CO2: Apply managerial skill to procure a project, plan, schedule, hire and allocate resource and deliver a project

CO3: Will build soft skill to lead and comply and communicate with all stakeholders' expectation

CO4: Will be able to prepare a WBS structure

CO5: Able to prepare a DPR

Course Outcome to Program Outcome Mapping:

Course Outcomes (CO)	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
CO1	3	2	2	3	2	3	2	3	3	2	3	3
CO2	2	2	1	1	2	2	3	2	2	1	1	3
CO3	2	3	2	2	1	1	2	2	3	1	2	2
CO4	1	1	2	1	3	2	1	2	2	2	2	1
CO5	1	2	1	2	1	2	2	1	2	3	2	1

***High-3, Medium-2, Low-1**

Course Contents

Module: I

Project Management framework; Introduction to Project Management: Project Life Cycle and Organisation, Project vs. Operational work, Stakeholders, Organisational Influences Project Management Process for a Project, groups, Initiating, planning, executing, monitoring & controlling and closing process groups., Project management Knowledge area; Project Integration Management; Develop project charter, develop project management plan, direct and manage project execution, monitor and control project work, perform integrated change control, close project or phase.

Module: II

Project Scope Management: collect requirements, define scope, create WBS, verify scope, control scope, Project Time Management; Define activities, sequence activities, estimate, develop and schedule, Project Cost Management; Estimate costs, determine budget, control costs

Module: III

Project Quality Management: Plan quality, perform quality assurance, perform quality control, Project HR Management; Develop HR plan, acquire project team, develop and manage project team, Project Communications Management; Identify stakeholders, plan communication, distribute information, manage expectation of stake holders, report performance.

Module: IV

Project Risk Management; Plan risks: identify risks, perform quality and quantitative risk analysis, plan risk responses, monitor and control risks, Project Procurement Management; Plan procurements, conduct procurements, administer procurements, close procurements, Project Stakeholders Management; Identifying stakeholders, stakeholder analysis, engagement.

Text Books:

- Project Management: A Managerial Process, Clifford F Gray & Eric W Larson, Tata McGrawHill
- A Guide to the Project Management Body of Knowledge, 6th Edition, PMI
- Project Management- A system Approach to Planning, Scheduling and Controlling (Harold Kerzner). CBS Publishers and Distributors, New Delhi.

Reference Books:

- Projects, Preparation, Appraisal and Implementation (Prasanna Chandra), 3rd Edition, Tata Mc Graw Hill, New Delhi.
- Project Management (Nagarajan, K), New Age Publishers, New Delhi.
- Project Management. A Managerial Approach (Meredith, R.J and Mantel, S.J), Wiley (India).

LOGISTICS AND SUPPLY CHAIN MANAGEMENT (LSCM) (70 Hours)

Course Code	Course Title	Credits	Type (T+P+Pj)
CUBB1019	Logistics And Supply Chain Management (LSCM)	4	3+0+1

Course Objective:

This course is aimed at

- Creating awareness on the desirability of supply chain management (SCM) concepts for the Indian Industry and focuses on integrated supply chain management systems.
- The integration of the physical (material flow) and virtual (information flow) value chain across multiple organizations is highlighted.
- The emphasis is on cross-functional approaches to supply chain management, including marketing, sales, research & development, finance and accounting, manufacturing/operations, and information technology.
- The students will be able to rethink the way the organization integrates suppliers, production and distribution in the globally competitive economy.

Course Outcome:

After completion of this course students will be able to

CO1: Students will develop a thorough understanding of the concepts, objectives, and decision-making phases in supply chain management (SCM).

CO2: Students will be equipped with the knowledge to design effective supply chain and logistics networks, considering strategic decisions, sourcing importance, distribution channel design, and the role of third-party and integrated service providers.

CO3: Students will learn demand forecasting methods, customer service strategies, and methods to mitigate issues such as the bullwhip effect.

CO4: Students will explore the role of information technology in supply chain management, focusing on CRM and SRM approaches, and understand how technology integrates with logistics to streamline operations.

CO5: Students will analyze various performance metrics, including the SCOR model and balanced scorecard, to evaluate supply chain performance.

Course Outcome to Program Outcome Mapping:

CO/PO	PO-01	PO-02	PO-03	PO-04	PO-05	PO-06	PO-07	PO-08	PO-09	PO-10	PO-11	PO-12
CO1	3	2	1	2	2	2	1	1	2	1	2	2
CO2	3	3	2	2	3	2	3	3	2	2	2	3
CO3	3	3	2	2	2	2	1	1	2	1	2	3
CO4	3	3	2	2	2	2	2	3	3	2	3	3
CO5	3	2	2	3	3	2	2	2	2	1	3	3

***High-3, Medium-2, Low-1**

Course Content:

Module: I

Overview of supply chain management, objectives of a supply chain and the decision phases in a supply chain, the process views of a supply chain, nature and scope of supply chain management, model of supply chain management, Logistics, warehousing and Expediting, Logistics and SCM Relationship, Importance of Logistics/supply chain management.

Drivers of supply chain performance, A framework for structuring drivers, Facilities, Inventory, Transportation, Information, Sourcing, Pricing, Obstacles to achieving fit.

Module: II

Logistics/supply chain network design and its importance, steps involved in logistics/supply chain network design process, factors influencing network design decisions, “design of channel of distribution” and the considerations of channel design.

Strategic Decisions in Supply Chain, Linking to corporate strategies, Role of Third party and integrated- logistics service providers.

Role of sourcing in supply chain

Importance of sourcing in a supply chain, sourcing grid matrix and guidelines, purchasing procedures and commonly deployed practices, strategic sourcing.

Module: III

Demand management and customer service, performance measures for customer service, demand management process and the problems in demand management, basic approach to demand forecasting and the forecasting methods or techniques, how to establish a customer service strategy. “Bull-whip effect” in a supply chain, managerial levers to achieve coordination within a supply chain.

Role of transportation in a supply chain, characteristics of transportation modes and carrier selection, transportation infrastructure available in the country, concepts of transportation economy and pricing, various transportation strategies employed by transportation managers.

Role of Information Technology in a supply chain, customer relationship management (CRM) approach and the supplier relationship management (SRM) approach, various logistics/supply chain information technologies used.

Unit: IV

Organisation and control in supply chain Need for logistics/supply chain organisational structure and its importance, various types of organisational structures in integrated logistics which have been evolved over time, organisational design.

Dimensions of performance measures, measurement criteria used in supply chain management, major categories of performance metrics, performance measures for supply chain management, various types of performance measures, SCOR model and balanced score card method, Confidence limit.

Global SCM and future of SCM Cost drivers and impact on global supply chain configuration, challenges in establishing a global supply chain, changing perspectives of logistics infrastructure.

Books Recommended:

1. Supply Chain Management – N Chandrasekharan(Text)
2. Supply Chain Management - Chopra • Meindl (Text)
3. Supply Chain Management - K Shridhar Bhatt
4. Supply Chain Management for competitive Advantages –Rajaram

Financial Markets, Institutions & Services (70 Hours)

Course Code	Course Title	Credits	Type (T+P+Pj)
CUBB1020	Financial Markets, Institutions & Services	4	3+0+1

Course Outcomes

Upon completing this course, students will be able to:

- Understand the role and importance of various financial markets such as money, capital, currency, debt, derivative, and commodity markets.
- Gain insights into the secondary market in India, including stock markets, regional and modern stock exchanges, and international stock exchanges.
- Understand the concepts of financial services and classify financial services, including fund-based and non-fund-based services.

Course Outcomes

Upon completing this course, students will be able to:

CO1: Investigate the various elements influencing financial markets and explore how these markets are interconnected with the broader economy.

CO2: Analyze the processes involved in issuing corporate securities and examine the functions and operations of primary and secondary markets in India.

CO3: Identify and Analyze different financial services such as leasing, hire purchase, factoring, and forfaiting that organizations use for short-term funding.

CO4: Analyze mutual funds and insurance products to understand their role and benefits as investment options.

CO5: Analyze the Concept of Credit Ratings: Investigate the different types of credit ratings, their advantages and disadvantages, and how they influence investment decision-making.

Course Outcome to Program Outcome Mapping:

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

***High-3, Medium-2, Low-1**

Course Content:

Module: I

Structure of Indian Financial System: An overview of the Indian financial system, financial sector reforms: context, needs and objectives; significant reforms in the last decade; competition; deregulation; capital requirements; issues in economic reforms and restructuring;

Introduction to Financial Markets in India: Role and Importance of Financial Markets, Financial Markets: Money Market; Capital Market; Factors affecting Financial Markets, Linkages Between Economy and Financial Markets, Integration of Indian Financial Markets with Global Financial Markets, Primary & Secondary Market, Currency Market, Debt Market, Derivative Market, Commodity Market - role and functions of these markets.

Module: II

Capital Markets in India: Primary Market for Corporate Securities in India: Issue of Corporate Securities: Secondary Market in India: Introduction to Stock Markets, Regional and Modern Stock Exchanges, International Stock Exchanges, Demutualization of exchanges, Comparison between NSE and BSE, Raising of funds in International Markets: ADRs and GDRs, FCCB and Euro Issues; Indian Stock Indices and their construction, SEBI

Money Markets in India: Money Market: Meaning, Role, and Participants in Money Markets, Segments of Money Markets, Call Money Markets, Repos and reverse Repo concepts, Treasury Bill Markets, Market for Commercial Paper, Commercial Bills, and Certificates of Deposit. Role of STCI and DFHI in money market

Module: III

Financial Services[Meaning, Nature, Classification, Scope, Some Special Fund and Non-fund Based Financial Services,

Leasing and Hire Purchase :Concepts of leasing, types of leasing – financial & operating lease, direct lease and sales & lease back, advantages and limitations of leasing, Hire Purchase & Installment Purchase, difference between Hire Purchase & Leasing, Choice criteria between Leasing and Hire Purchase, Factoring, forfaiting and its arrangement,
 Venture Capital: Concept, history and evolution of VC, the venture investment process, various steps in venture financing, incubation financing.

Module IV

Mutual Funds: Concepts, Types, Characteristics and Present Status of Mutual Fund Industry in India,

Insurance: concept, classification, principles of insurance, IRDA and different regulatory norms, operation of General Insurance, Health Insurance, Life Insurance.

Credit Ratings: Introduction, types of credit rating, advantages and disadvantages of credit ratings, Credit rating agencies and their methodology, International credit rating practices.

Books

1. "Indian Financial System" by M. Y. Khan
2. "Financial Institutions and Markets" by L. M. Bhole and Jitendra Mahakud
3. "Management of Banking and Financial Services" by Justin Paul and Padmalatha Suresh
4. "Indian Economy: Performance and Policies" by Uma Kapila

Retail Banking and Insurance (70 Hours)

Course Code	Course Title	Credits	Type (T+P+Pj)
CUBB1021	Retail Banking and Insurance	4	3+0+1

Course Objectives:

- To provide a comprehensive understanding of retail banking operations, services, and their integration with insurance products.
- To explore the evolution, role, and significance of retail banking and insurance in the Indian financial system.
- To familiarize students with various insurance products, underwriting processes, and the regulatory framework in India.
- To develop skills in analyzing customer needs and offering suitable banking and insurance products.
- To examine recent trends, challenges, and innovations in the retail banking and insurance sectors.

Course Outcomes:

Upon successful completion, students will be able to:

CO1: Demonstrate knowledge of retail banking services and customer relationship management in banking.

CO2: Evaluate various types of retail banking products like loans, deposits, and credit cards.

CO3: Understand the structure and functioning of the insurance industry in India, including life, health, and general insurance.

CO4: Analyze regulatory and compliance aspects related to retail banking and insurance under RBI and IRDAI frameworks.

CO5: Assess customer profiles and recommend suitable financial and insurance products.

Course Outcome to Program Outcome Mapping:

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

***High-3, Medium-2, Low-1**

Course Content:**Module 1: Introduction to Retail Banking**

Definition and Scope of Retail Banking

Evolution and Growth in India

Key Products: Savings Accounts, Current Accounts, Fixed Deposits, Loans (Home, Vehicle, Personal), Credit and Debit Cards

Retail Banking Process and Delivery Channels: Branch Banking, Internet Banking, Mobile Banking

Customer Relationship Management in Retail Banking

Module 2: Regulatory Framework for Retail Banking in India

Role of the Reserve Bank of India (RBI)

Banking Ombudsman Scheme

Guidelines on KYC and AML Compliance

Emerging Trends: Neo-banks, Open Banking, and Green Banking

Module 3: Introduction to Insurance

Basics of Insurance: Principles, Importance, and Types (Life, Health, General)

Insurance Products in India: Term Plans, Endowment Plans, ULIPs, Vehicle, and Property Insurance

The Role of Actuaries in Insurance

Underwriting and Claims Management

Module 4: Insurance Market in India

History and Evolution of Insurance in India

Role of the Insurance Regulatory and Development Authority of India (IRDAI)

Bancassurance: Models and Benefits

Customer Profiling and Insurance Need Analysis

Module 5: Integration of Retail Banking and Insurance

Concept and Scope of Bancassurance

Cross-Selling Techniques and Benefits

Marketing Strategies for Combined Products

Challenges and Opportunities in Indian Markets

Module 6: Technology, Innovations, and Future Trends

Digital Banking and Payment Systems

Fintech and InsurTech: Role in Enhancing Customer Experience

Artificial Intelligence, Blockchain, and Big Data in Retail Banking and Insurance

Sustainable Banking and Insurance Practices

Text Books:

- "Retail Banking in India" by R. K. Uppal – Focuses on Indian retail banking practices and emerging trends.
- "Insurance Principles and Practice" by M. N. Mishra and S. B. Mishra – A comprehensive book covering insurance operations and regulations in India.
- "Banking Awareness" by N. S. Toor – Essential for understanding banking systems and practices in India.
- "Principles of Banking" by Indian Institute of Banking & Finance (IIBF) – Detailed insights into banking operations with a focus on the Indian financial ecosystem.
- "Digital Banking in India" by Abhishek Gupta – Discusses the rise of digital banking innovations in India.
- "Insurance Management" by S. Arunajatesan and T. R. Viswanathan – Explains insurance operations and practices in India.

Operations Research(56 Hours)

Course Code	Course Title	Credits	Type (T+P+Pj)
CUBB1022	Operation Research	2	0+2+0

Course Objectives:

The objectives of this course are to:

- Provide students with an understanding of the fundamental concepts and techniques of Operation Research.
- Enable the formulation and analysis of mathematical models for decision-making scenarios.
- Equip students with problem-solving tools like linear programming, transportation models, and network analysis.
- Develop the ability to apply OR techniques to optimize real-world problems in logistics, finance, engineering, and management.

Course Outcomes (COs):

By the end of this course, students will be able to:

- CO1: Demonstrate an understanding of the key concepts in Operation Research
- CO2: Formulate and solve linear programming problems.
- CO3: Analyze and solve transportation problems.
- CO4: Analyze and solve transportation assignment problems.
- CO5: Apply network analysis techniques like CPM and PERT for project planning and management.

Course Outcome to Program Outcome Mapping:

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

***High-3, Medium-2, Low-1**

Detailed Syllabus

Unit 1: Introduction to Operation Research

Definition and Scope of Operation Research

Applications in various industries

Phases of OR study

Tools and techniques of OR

Unit 2: Linear Programming

Formulation of Linear Programming Problems (LPP)

Graphical solution method

Simplex method and duality theory

Sensitivity analysis

Unit 3: Transportation and Assignment Problems

Transportation model: Initial feasible solution and optimization methods (MODI method)

Assignment model: Hungarian method

Variants like unbalanced problems

Unit 4: Network Analysis

Project management: CPM and PERT

Determination of critical path

Time-cost trade-offs

Applications in resource allocation:

Books:

- "Operations Research: An Introduction" by Hamdy A. Taha
- "Introduction to Operations Research" by Frederick S. Hillier and Gerald J. Lieberman
- "Operations Research" by S.D. Sharma
- Online Resources:

Entrepreneurship and Start-Up Ecosystem (42 Hours)

Course Code	Course Title	Credits	Type (T+P+Pj)
CUBB5002	Entrepreneurship and Start-Up Ecosystem	2	1+0+1

Course Rationale:

This course emphasis on the skillset and the knowledge required to be an entrepreneur. It will facilitate the students in applying their knowledge to work in forming their own enterprise. This

course will expose students to gain knowledge regarding the start-up ecosystem and will familiarize the students regarding the procedure to apply and to register in Start-Up Odisha and Start-Up India.

Course Objective:

- To create an environment to understand the Start-Up Ecosystem
- To develop and hone the Entrepreneurial Skill Set in Students for Enterprise Start-up
- To motivate Students to Create their own Entrepreneurial Venture
- To explain the advantages of registering in Start- Up Odisha and Start-Up India
- To Sensitize the students to understand entrepreneurship as a career and skills required.

Course Outcomes

On successful completion of this course, students will be able to:

- CO1: Understand the concept of entrepreneurship and its importance in the economy.
- CO2: Gain knowledge of the start-up ecosystem, key players, and government policies.
- CO3: Develop skills to identify business opportunities and conduct feasibility studies.
- CO4: Understand the process of starting and scaling a start-up, including funding sources, legal requirements, and market strategies.
- CO5: Analyse the challenges and risks involved in entrepreneurship and how to manage them effectively and explore case studies of successful Indian start-ups to understand best practices.

Course Outcome to Program Outcome Mapping:

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

***High-3, Medium-2, Low-1**

Course Syllabus

Module: I

Start-up Environment: Definition and characteristics of start-ups, Types of start-ups (Social, impact based, rural start-ups), Start-up India policy, Start-up Odisha policy, Knowledge of Key Accelerators, Incubators and Mentors in India, Understanding their role and advantages and disadvantages.

Module: II

Entrepreneurship: Concept of entrepreneurship and intrapreneurship, Types of Entrepreneurs, Nature and Importance, Entrepreneurial Traits and Skills, Entrepreneurship as a career, Identification of opportunity and converting idea to reality, Role of family, Society, EDIs. Sickness of Small-Scale Industries, Causes and symptoms of sickness, cures of sickness, Role of Banks and Governments in reviving industries.

Module: III

Entrepreneurial Skill Set and Motivation: Motivational Factors, Different Types of Skill Set needed for an Entrepreneur, Existing Skills vs Acquired Skills. Soft Skills, Leadership Skills, Communication Skills

Books Recommended:

1. Entrepreneurship Development and Management, Vasant Desai, HPH
2. Entrepreneurship Management, Bholanath Dutta, Excel Books
3. Entrepreneurial Development, Sangeeta Sharma, PHI
4. Entrepreneurship Development by Khanka

Value Added Courses – Compulsory

Environmental Science (70 Hours)

Course Code	Course Title	Credits	Type (T+P+Pj)
CUTM1674	Environmental Science	4	3+0+1

Introduction

The National Education Policy (NEP) 2020 underlines the importance of making environmental education an integral part of curricula and encouraging environmental awareness and sensitivity towards its conservation and sustainable development. Environment Education, therefore, needs to include areas such as climate change, pollution, waste management, sanitation, conservation of biological diversity, management of biological resources and biodiversity, forest and wildlife conservation, and sustainable development.

Course Objectives

- To understand the relationship among human being, natural resource and environment on the historical perspectives.
- To orient students towards the principles of sustainable development goals and train them for conserving Biodiversity and maintaining Ecosystem balance.
- To analyze environmental issues and problems critically, and develop strategic environmental management policies and practices.

Course Outcome

After the successful completion of the course, students should be able to:

CO1: Explain the historical perspectives of human, natural resource and environment interactions.

CO2: Identify, classify, evaluate and prospect the natural resources integrated with Sustainable Development Goals.

CO3: Analyze issues and concerns of Biodiversity conservation and Ecosystem services at local, regional and global scales.

CO4: Demonstrate their environmental management competency to combat pollution, waste generation and climate change.

CO5: Conduct independent project works and address current environmental challenges complying with Environmental agreements, treaties, acts and laws.

Course Outcome to Program Outcome Mapping:

CO/PO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
CO1	3	3	2	2	3	2	1	1	1	3	1	2
CO2	3	3	3	3	3	3	2	3	3	3	1	3
CO3	3	3	3	3	3	2	2	2	3	3	2	3
CO4	3	3	3	3	3	3	3	3	3	3	1	3
CO5	3	3	3	3	3	3	3	3	3	3	3	3

*High-3, Medium-2, Low-1

Course Syllabus

Module-1: Human and Environment

Introduction to Human and the Environment: Overview of human-environment interactions throughout history; Importance of mastery of fire, the origin of agriculture, and the emergence of city-states; Discussion on the impact of ancient civilisations on the environment. Emergence of Environmentalism: Anthropocentric and eco-centric perspectives; Study of significant thinkers and their contributions to environmental philosophy; Environmental movements, Analysis of critical events such as the UN Conference on Human Environment 1972.

Module-2: Natural Resources and Sustainable Development

Understanding Natural Resources: Definition and classification of natural resources; Renewable and Non-renewable, Biotic and abiotic resources, Forest, Grasslands, Wildlife, Water, Mineral, Food, Land, Energy; Introduction to sustainable development: Sustainable Development Goals (SDGs), targets and indicators; Discussion on challenges and strategies for achieving sustainability. World commission on Environment and Development.

Module-3: Conservation of Biodiversity and Ecosystem

Levels and types of Biodiversity, Biodiversity in India and the world, Biodiversity Hotspots, Land Use and Loss of Biodiversity: deforestation, urbanisation, desertification; trends in biodiversity loss; Case studies on the impact of human activities on biodiversity hotspots. Conservation of Biodiversity and Ecosystems: Understanding biodiversity and its distribution; Discussion on major ecosystem types: forests, grasslands, agriculture, coastal and marine and their characteristics; Ecosystem services: Classification and significance; Exploration of threats to biodiversity and ecosystems; *in-situ* and *ex-situ* conservation, protected areas, traditional knowledge, sacred groves, community based conservation.

Module-4: Environmental Pollution and Management

Pollution and its impact; Overview of pollution: air, water, soil, noise, solid waste, hazardous waste; Discussion on transboundary pollution and its consequences; Understanding environmental issues at micro, meso, synoptic, and planetary scales; Case studies highlighting the adverse effects of pollution on human health and ecosystems. Addressing Environmental Pollution and Health:

Strategies for pollution control and management; Examination of air, water, soil, and noise pollution and their health impacts; Introduction to waste management practices and their significance. Introduction to environmental management systems such as ISO 14001 and the role of organizations like UNEP and IPCC in global environmental governance; Case studies on the implementation of environmental policies and regulations in different contexts.

Module-5: Environmental Policies and Practices

Introduction to environmental laws and regulation: Constitutional provisions - Article 48A, Article 51A(g) and other derived environmental rights; Introduction to environmental legislations on the forest, wildlife and pollution control: The Wild Life (Protection) Act, 1972; The Water (Prevention and Control of Pollution) Act, 1974; The Forest (Conservation) Act, 1980; The Air (Prevention and Control of Pollution) Act, 1981; The Environment (Protection) Act, 1986; The Biological Diversity Act, 2002; Noise Pollution (Regulation and Control) Rules, 2000; National Green Tribunal; Climate Change policies, Greenhouse gas emissions and their impact on global climate; Climate change mitigation measures and practices: UNFCCC, Concept of NET ZERO. Environmental Treaties: Major international environmental agreements, conventions and their significance: CBD, CITES, UNCCD, Analysis of India's status and commitments under these agreements.

SUGGESTED READINGS

- Rajagopalan, R. (2011). Environmental Studies: From Crisis to Cure. India: Oxford University Press.
- Sinha, N. (2020) Wild and Wilful. Harper Collins, India.
- Krishnamurthy, K.V. (2003) Textbook of Biodiversity, Science Publishers, Plymouth, UK.
- Kanchi Kohli and Manju Menon (2021). Development of Environment Laws in India, Cambridge University Press.
- Ministry of Environment, Forest and Climate Change (2019). A Handbook on International Environment Conventions & Programmes. <https://moef.gov.in/wp-content/uploads/2020/02/convention-V-16-CURVE-web.pdf>
- Headrick, Daniel R. (2020). Humans versus Nature- A Global Environmental History, Oxford University Press.
- Chiras, D. D and Reganold, J. P. (2010). Natural Resource Conservation: Management for a Sustainable Future. 10th edition, Upper Saddle River, N. J. Benjamin/Cummins/Pearson.
- Harper, Charles L. (2017). Environment and Society, Human Perspectives on Environmental Issues 6th Edition. Routledge.
- Jackson, A. R., & Jackson, J. M. (2000). Environmental Science: The Natural Environment and Human Impact. Pearson Education.
- Pittock, Barrie (2009) Climate Change: The Science, Impacts and Solutions. 2nd Edition. Routledge.
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Gender, Human Rights and Ethics (63 Hours)

Code: CUTM1014

Credit: 1.5+0+1.5

Course Code	Course Title	Credits	Type (T+P+Pj)
CUTM1014	Gender, Human Rights and Ethics	3	1.5+0+1.5

Course Objectives:

This course is about gender, human rights, and ethics in which the student will be sensitized and exposed to related issues in the context of business and organizations in India. The specific objectives are:

- To develop an understanding of gender, human rights, and ethics in an unequal society like India
- Sensitization of how gender, human rights, and ethics are significant in organizations.
- Integrating concerns related to gender, human rights, and ethics in organizations.

Course Outcomes:

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

CO1: Students will analyse the differences between sex and gender, the social construction of gender, and its outcomes, including gender roles, labour division, and power hierarchies.

CO2: Students will evaluate gender implications in workplace practices, management, and leadership

CO3: Will gain an understanding of human rights concepts, types, and their relevance in organizations. They will explore international human rights laws, the Universal Declaration of Human Rights, and organizational challenges related to social discrimination and inequality.

CO4: Develop knowledge of Indian and Western ethical systems, including utilitarianism, duty ethics, virtue ethics, and ethical relativism.

CO5: Investigate the persistence of social discrimination, efforts to address past violations, and the ongoing struggle for justice and accountability.

Course Outcome to Program Outcome Mapping:

CO/PO	PO-01	PO-02	PO-03	PO-04	PO-05	PO-06	PO-07	PO-08	PO-09	PO-10	PO-11	PO-12
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CO1	3	3	2	2	2	3	2	1	2	3	1	2
CO2	3	3	2	2	2	3	3	2	2	2	1	2
CO3	3	3	2	3	2	3	2	1	2	3	2	2
CO4	3	2	2	3	2	3	1	1	2	1	2	2
CO5	3	3	2	3	2	3	2	2	2	2	1	2

***High-3, Medium-2, Low-1**

Course Contents:

Module: I

Difference between sex and gender; social construction of gender and its outcomes in the form of behavior, roles, gender based division of labour, hierarchy; gender relations. Gender issues in organisations - significance of relations between structures, practices, context, interactions and power for construction of gender at organisational level Gender implications at workplace, management and leadership, Laws and Acts Comparing different types of organisations; how to create a gender sensitive organisation.

Module: II

Introduction to human rights, Meaning and Definition, Types Human Rights Law: Protection, violation and the legal framework for their protection - International Human Rights Law, Universal Declaration of Human Rights Conflicts of Rights and its Significance to Organisations: Challenges of the past and challenges for the future. Persistence of social discrimination and inequality; efforts in the search for justice for past violations, continued struggle for human rights and accountability in an organisational context.

Module: III

Introduction to and study of ethics; Indian and Western ethics Different ethical systems and perspectives; ethical relativism and its implications, utilitarianism, duty ethics and virtue ethics in organisations Critique of various ethical positions and develop their own position in an organizational context.

References:

- “Why Gender is a Development Issue”, Handout 4, Oxfam Gender Training Manual (1994)
- Freedman, Jane. (2002), “Introduction: Feminism or Feminisms?” in *Feminism*, Viva Books, N. Delhi.
- Chafetz, J.S. (1990), “The Coercive Bases of Gender Inequality”, in *Gender Equity: An Integrated Theory of Stability and Change*, Sage.

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

***High-3, Medium-2, Low-1**

Course Contents:

Module: I

Introduction to Indian Society: Indian Society - Roots of Indian Society; Social Structure – Rural and Urban Contexts; Social Institutions in Indian Society; Caste, Tribe, Dalits and Other Excluded Groups; Power and Conflicts.

Module: II

Introduction to Culture in Indian Society: Basic understanding of culture in India; Languages and Literature in India; Culture Change and its Impact on Indian Society

Module: III

Social Movements : tribal, women and environment, *Reformers and Radicals:* Rammohan Roy, Syed Ahmed Khan, Jyotirao Phule, Gopal Krishna Gokhale, Bal Gangadhar Tilak, Tarabai Shinde, Dayananda Saraswati and Vivekananda *Nurturing a Nation* :M. K. Gandhi, Rabindra Nath Tagore, B R Ambedkar, Mohammad Ali Jinnah, EV Ramaswami, Jawaharlal Nehru, Rammanohar Lohia, Jayaprakash Narayan, Verrier Elwin Peasant, Tribal, Women and Environment movement

Module: IV

Social Issues in Modern India: Poverty - multidimensional aspects; Gender issues in development; Constitution of India: Slums; Informal sector; Child, Physically challenged

Module: V

Science, Technology and Society: Appropriate Technology; Science, Technology and Development Linkage; Science and Technology Policy.

Book Reference:

- "Indian Society" by Ram Ahuja
- "Culture and Society in India" by A. L. Basham
- "Social Movements in India" by Ghanshyam Shah
- "Poverty and Un-British Rule in India" by Dadabhai Naoroji
- "Science, Technology, and Society" by R. K. Sharma

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

***High-3, Medium-2, Low-1**

Course Contents:

Module-I:

Basics of climate change; impacts on various sectors; responses and mitigation efforts by the state and non-state agencies; debates and critiques, Sectoral implications of climate change: Agriculture and Forestry; Transportation; Buildings; Energy; Industry and Manufacturing, Climate change: specific impacts (Migration, Disasters and Pandemics), Mitigation and adaptation keeping the sustainability of business organisations

Module-II:

Sustainable development, debates, SDGs, challenges and opportunities; The business case and leadership for action, Regulatory environment and International policy; Integrated Reporting Framework for Sustainability, Production and consumption; Design, technology, and planning for sustainability, Communication and marketing; Collaboration and partnerships

References:

- Climate Change- Law, Policy and Governance by Usha Tandon, Eastern Book Company, 2018
- Climate Change: A Very Short Introduction by Mark Maslin, Oxford University Press, 2014
- Sustainable Development Goals Series by Zachary Romano, Springer Publication, 2024.

ABILITY ENHANCEMENT COMPULSORY COURSE

Job Readiness (168 Hours)

Course Code	Course Title	Credits	Type (T+P+Pj)
CUTM1016	Job Readiness	6	0+6+0

Course Objectives

The objectives of the course are

- Develop competent level of English proficiency, i.e., 6.5 band on the CELTS Test
- Enhance proficiency in verbal, quantitative aptitude and logical reasoning skills aiming for Level 4 mastery in MyPerfectice
- Strengthen students’ employability skills through communication, analytical and problem-solving abilities

Course Outcomes

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

CO1. Achieve competency in English language (6.5 band on the CELTS Test)

CO2. Apply English proficiency in real-world scenarios such as professional communication and presentations

CO3. Exhibit verbal ability, strong quantitative aptitude and advanced logical reasoning (Level 4 mastery in MyPerfectice)

CO4. Develop and apply enhanced employability skills, including effective communication, sharp analytical thinking and problem- solving abilities in various professional contexts.

CO5. Commitment to lifelong learning fostering a mindset of continuous improvement in English proficiency and employability skills.

Course Outcome to Program Outcome Mapping:

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

*High-3, Medium-2, Low-1

Course Contents

Course I: CELTS - Listening, Speaking, Reading and Writing

Module I: CELTS Listening

- Notes/ Form/Table completion
- Label the Map/Passage, Multiple Choice Questions
- Complete the Sentences, listening to Find Information
- Assessment on Listening Skills

Module II: CELTS Speaking

- Speaking about self, family, hobbies, interests
- Introduction & Interview
- Topic Discussion (e.g, Environment, Post Covid 19, Job)
- Assessment on Speaking Skills

Module III: CELTS Reading

- Skimming and Scanning
- Sentence Completion
- Choose the Correct options (A, B, C, D)
- Locating the Specific Information
- Assessment on Reading Skill

Module IV: CELTS Writing

- Summarising the chart, table or graph
- Comparing and contrasting graphs and tables
- Describing maps & diagrams
- Agreeing & disagreeing
- Expressing a personal view & opinion
- Assessment on Writing Skill
- Job Application: CV & Cover Letter (2nd year)
- Letter Writing
- Email Writing (2nd year)
- Getting Started –writing an introduction

Course II: CELTS

Verbal Module I:

Grammar (4 Hrs)

- Articles
- Prepositions
- Subject-Verb
- Spotting Errors
- Sentence Correction

Module II: Vocabulary (5 Hrs)

- Synonyms
- Antonyms
- Contextual Vocabulary

Module III: Reading Comprehension (3 Hrs)

- Paragraph/ Sentence Completion
- Jumbled Sentences/ Jumbled Paragraph
- Reading Comprehension

Module IV: Verbal Analogies (3 Hrs)

References Recommended:

Books

- The Official Cambridge Guide to Ielts Student's Book With Answers with DVD Rom
- Simone Braverman's Target Band 7
- Focus on IELTS Foundation Coursebook.

Foreign Language (42 Hours)

Course Code	Course Title	Credits	Type (T+P+Pj)
CUBB2002	Foreign Language	2	1+1+0

Company Management Operation (42 Hours)

Course Code	Course Title	Credits	Type (T+P+Pj)
CUTM2497	Company Management Operation	2	1+0+1

Course Rationale: This course is intended to make the students understand the significance of managing company operation and resources.

Course Objective: To make students understand about

- the importance of company resources management
- the duties and responsibilities of various crew members

Course Outcome: After completion of this course students will be able to

- **CO1:** Demonstrate effective and efficient competency to deal with government agencies and other stakeholders.
- **CO2:** the importance of company resources management
- **CO3:** the duties and responsibilities of various crew members
- **CO4:** Workplace Decorum and Discipline.
- **CO5:** Liaisoning with different departments.

Course Outcome to Program Outcome Mapping:

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

*High-3, Medium-2, Low-1

Course Syllabus

MODULE-I (21 Hours)

Theory

- Aviation personals, Aviation QC, Hierarchy,
- Responsibilities of Aircrew, cabin crew and ground crew

MODULE-II (21 Hours)

Theory

- Organisational behaviour, human factor, Company Resource Management, workplace decorum and discipline, discipline through working with other agencies, discipline for working with government agency during audits

Airmanship (56 Hours)

Course Code	Course Title	Credits	Type (T+P+Pj)
CUTM2498	Airmanship	2	0+1+1

Course Rationale: This course is intended to provide fundamental understanding of airmanship and aircraft handling.

Course Objective: To make students understand about

- The role and importance of airmanship
- Various abbreviations used in aviation
- The importance of safety and security with regard to the airline industry

Course Outcome: After completion of this course students will be able to know

- **CO1:** About how to Fuelling of aircrafts
- **CO2:** How to Handle aircrafts in Normal conditions.
- **CO3:** How to Handle aircrafts in difficult conditions.
- **CO4:** How to act and respond in emergency situation without getting panic.
- **CO5:** what are the responsibilities of an aviator as good airmanship.

Course Outcome to Program Outcome Mapping:

COs	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	------	------	------	------	------	------

CO1	3		2	3				3					3		
CO2	3	2	3	3	3		3	3		3			3		
CO3	3	3	3	3	3		3	3	3	3			3		
CO4	3	3	3	3	3				3	3			3	2	
CO5	3	2	2	3	2		2			3			3		

***High-3, Medium-2, Low-1**

Course Syllabus

MODULE-I (28 Hours)

Theory

- Basic Airmanship, Aviation ABBREVIATIONS, Marshalling, Fuelling of aircraft,
- Aircraft Handling, Aircraft Pushback and towing, Helicopter Operating Areas

MODULE-II (28 Hours)

Theory

- Visual Communications, Airfield Hazard Markings and Obstruction markers,
- Handling arrival aircraft with emergency, Air Ambulance / Medical emergency flight

SKILL

Airline Grooming and Soft Skill (112 Hours)

Course Code	Course Title	Credits	Type (T+P+Pj)
CUTM2496	Airline Grooming and Soft Skill	4	0+4+0

Course Objectives

- Increase the analytical and communication skills of students by providing ample opportunities for practice and make them employable.
- A student will be awarded 6 credits upon achieving a minimum benchmark score i.e. 6.5 in IELTS, 60% in Verbal, 60% in Quantitative Aptitude and 60% in Logical Reasoning.

Course Outcomes

- **CO1:** Analytical Ability, ability to plan & strategic, creative & logical thinking, attention to details, ability to recall (Working Memory), problem solving ability, communication skills (written), spatial ability articulation, data interpretation skills, active Listening, ability to visualize, adaptation skills, decision making, ability to analyse pattern & trends.
- **CO2:** Ensure students to reach the Employability level as described in the link: <https://drive.google.com/file/d/1Wst-jdAJuHHVtYC4F-p3SKuw1PHWO11U/view?usp=sharing>.
- **CO3:** to make them presentable and confident.
- **CO4:** to enhance their ability to analyse the situation and handle accordingly.
- **CO5:** to develop their management and other skills required for the job.

Course Outcome to Program Outcome Mapping:

COs	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
CO1		3	3	3	3			3		3			3	2	3
CO2	3	2	2	3	2					3			3	3	3
CO3	3	2	2	3	3			3	3				3		3

CO4	3	3	3	3	2				2				3		
CO5	3	2	2	3			3		2				3	2	

***High-3, Medium-2, Low-1**

Course Division

Course I: IELTS - Reading, Listening, Speaking and Writing

Module I: IELTS Reading (4 Hrs)

Theory and Practice

- Skimming and Scanning
- Sentence Completion
- Choose the Correct options (A, B, C, D)
- Locating the Specific Information
- Assessment on Reading Skill

Module II: IELTS Listening (4 Hrs)

Theory and Practice

- Notes/ Form/Table completion
- Label the Map/Passage, Multiple Choice Questions
- Complete the Sentences, Listening to Find Information
- Assessment on Listening Skills

Module III: IELTS Speaking (4 Hrs)

Theory and Practice

- Speaking about yourself, your family, your work and your interests
- Introduction & Interview
- Topic Discussion (e.g, Environment, Covid 19, Job)
- Assessment on Speaking Skills

Module IV: IELTS Writing (4 Hrs)

Theory and Practice

- Summarising the chart, table or graph
- Comparing and contrasting graphs and tables
- Describing maps & diagrams
- Agreeing & disagreeing
- Expressing a personal view & opinion
- Assessment on Writing Skill
- CV Writing (2nd year)
- Letter Writing
- Email Writing (2nd year)
- Getting Started –writing an introduction

Course II: IELTS Verbal

Module I: Grammar (4 Hrs)

Theory and Practice

- Articles
- Prepositions
- Subject-Verb
- Spotting Errors
- Sentence Correction

Module II: Vocabulary (5 Hrs)

Theory and Practice

- Synonyms
- Antonyms
- Contextual Vocabulary

Module III: Reading Comprehension (3 Hrs)

Theory and Practice

- Paragraph/ Sentence Completion
- Jumbled Sentences/ Jumbled Paragraph
- Reading Comprehension

Module IV: Verbal Analogies (3 Hrs)

Theory and Practice

Course III: Quantitative Aptitude

Module I: Number System & Operation (10 Hrs)

Theory and Practice

- Speed Math-1 : Multiplication tricks, Square, cube, square root, Cube root tricks
- Speed Math-2 : Speed Calculations
- Number System-01 : Operation on Numbers, Classification of Numbers, Tests of Divisibility, Unit Digit Calculation
- Number System-02 : Arithmetic Progression, Geometric Progression, Factors & Factorials, Trailing Zeroes, Remainder Theorem
- HCF & LCM : Concepts, short tricks, question discussion
- Average : Concepts, short tricks, question discussion
- Assessments

Module II: Basic Arithmetic (10 Hrs)

Theory and Practice

- Percentage-01 : Basics of Percentage, Effective percentage, shortcuts
- Percentage-02 : Advanced questions and discussions
- Profit & Loss-01 : Basics and advanced questions of Profit & Loss and shortcuts
- Profit & Loss-02 : MRP, Discount, Successive discount
- Ratio & Proportion : Types of ratios, Basics & Advanced Question
- Age : Concepts & Shortcuts
- Partnership : Concepts & Shortcuts
- Mixture & Alligation : Rule of Alligation, Basics & Advanced question, Short tricks
- Assessments

Module III: Time & Analysis (10 Hrs)

Theory and Practice

- Time, Speed, Distance : Concepts, Problems based on relations, Average speed, Stoppage time
- Trains : Relative Speed & All types of train problems
- Boats & Streams : Basics, Upstream, Downstream & Shortcuts
- Race : All concepts & Shortcuts
- Time & Work : Efficiency, wages, alternative day, chain rule
- Pipes & Cistern : Positive & Negative work
- Simple Interest : Concepts & Shortcuts on Simple Interest & Installments
- Compound Interest : Concepts & Shortcuts on Simple Interest & Installments
- Logarithm : All Formulae, concepts & Shortcuts
- Assessments

Module IV: Advanced Arithmetic (10 Hrs)

Theory and Practice

- Equation : Linear & Quadratic
- Permutation : All concepts & Shortcuts on factorial, fundamental principles of counting
- Combination : All concepts & Shortcuts on Selection (Groups/teams)
- Probability : Terms related to Probability, Event, Theorems related Probability, Conditional Probability. Shortcuts on coins, dices, balls, cards, etc
- Data Interpretation : (Bar/Pi-Chart /Line) graph
- Mensuration : Area & Volume
- Height & Distance : Lines of Sight, Horizontal line, Angle of Elevation, Angle of Depression
- Assessments

Course IV: Logical Reasoning

Module I: Verbal Reasoning-I (10 Hrs)

Theory and Practice

- Series-1 : Number series (Missing & Wrong)
- Series-2 : Letter, Alpha numeric, Miscellaneous series
- Coding & Decoding : Letter Coding, Number coding, Message coding, Substitution coding, Conditional coding
- Word Problem : Analogy, Odd man out, word formation, letter pair
- Logical Thinking : Brain Riddles
- Assessments

Module II : Verbal Reasoning-II (10 Hrs)

Theory and Practice

- Order & Ranking : Ranking & Sequence
- Direction Sense Test : Shortest Distance, Angular movement concept and Dusk & Dawn
- Clock : Concepts of Angle, Reflex angle, Right angle Opposite, Coincide and Incorrect

- clock
- Calendar : All concepts & Shortcuts
- Blood Relation : Jumbled-up descriptions, coded relations, Relation Puzzles
- Assessments

Module III : Non Verbal Reasoning (10 Hrs)

Theory and Practice

- Cubes & Dices
- Cubes & Cuboids
- Embedded Figure & Figure series
- Figure Puzzle & Figure grouping
- Figure Counting
- Mirror & Water Image
- Paper Cutting & Paper folding
- Assessments

Module IV : Advanced Reasoning (10 Hrs)

Theory and Practice

- Sitting Arrangement : Circular, Square, Rectangular, Linear, Triangular
- Puzzle : Box, Floor, Month, Day
- Advanced Puzzle : 3 variable
- Logical Venn Diagram
- Syllogism
- Statement & Conclusion
- Data Sufficiency
- Assessments

Course V

Passenger announcements and handling of customers, Airline procedural grooming and etiquette, Safety and emergency procedures, Customer service, Amiability, Cultural awareness, Assertiveness, Self-control, Flexibility, Adaptability, Physical stamina, Stress management, Teamwork, Attention to detail, Leadership, Time Management, Problem solving, First Aid, Food and Beverage training.

Employment/Industry Ready Skills (112 Hours)

Course Code	Course Title	Credits	Type (T+P+Pj)
CUBB1039	Employment/Industry Ready Skills	4	0+4+0

Course Rationale: This course is intended to provide insights into the skills, manners and professionalism required to be a resourceful, effective and efficient in identification and management of dangerous goods.

Course Objectives

- Increase the analytical and communication skills of students by providing ample opportunities for practice and make them employable.
- A student will be awarded 6 credits upon achieving a minimum benchmark score i.e. 6.5 in IELTS, 60% in Verbal, 60% in Quantitative Aptitude and 60% in Logical Reasoning.

Course Outcomes

- **CO1:** Analytical Ability, ability to plan & strategic, creative & logical thinking, attention to problem solving ability, communication skills (written), spatial ability articulation, data interpretation skills, active Listening, ability to visualize, adaptation skills, decision making, ability to analyse pattern & trends.
- **CO2:** Ensure students to reach the Employability level at the highest.
- **CO3:** Make them presentable and confident.
- **CO4:** to enhance their ability to analyse the situation and handle accordingly.
- **CO5:** to develop their management and other skills required for the job.

Course Outcome to Program Outcome Mapping:

COs	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
CO1		3	3	3	3			3		3			3	2	3
CO2	3	2	2	3	2					3			3	3	3
CO3	3	2	2	3	3			3	3				3		3

CO4	3	3	3	3	2				2				3		
CO5	3	2	2	3			3		2				3	2	

***High-3, Medium-2, Low-1**

Course Syllabus

COURSE-I (36 Hours)

MODULE-I - Resume Writing And Cover Letters

Theory

- Crafting a professional resume
- Writing effective cover letters
- Tailoring documents for specific job applications

MODULE-II - Interview Skills

Theory

- Preparing for interviews
- Common interview questions and answers
- Mock interviews and feedback

MODULE-III - Job Search Strategies

Theory

- Identifying job opportunities
- Networking and relationship building
- Utilizing online job portals and social media

MODULE-IV- Communication Skills

Theory

- Verbal and non-verbal communication
- Professional email etiquette
- Active listening and feedback.

COURSE-II (38 Hours)

MODULE-I - Professionalism And Work Ethic

Theory

- Time management and punctuality
- Workplace behavior and ethics
- Building a professional image

MODULE-II - Teamwork And Collaboration In Handling Emergencies/Contingencies

Theory

- Domain related Practical's, Case studies, Situation Handling, Emergency Preparedness
- Working effectively in teams
- Conflict resolution
- Leadership and group dynamics

MODULE-III - Problem-Solving And Critical Thinking

Theory

- Analytical thinking
- Creative problem-solving techniques
- Decision-making processes

MODULE-IV- Digital Literacy

Theory

- Basic computer skills
- Proficiency in common software (e.g., Microsoft Office, Google Workspace)
- Understanding of digital communication tools

COURSE-III (38 Hours)

MODULE-I - Customer Service Skills

Theory

- Handling customer inquiries and complaints
- Providing excellent customer service
- Building customer relationships

MODULE-II - Financial Literacy

Theory

- Budgeting and personal finance management
- Understanding pay checks and taxes
- Basic financial planning

MODULE-III - Health And Safety In The Workplace

Theory

- Occupational health and safety principles
- Emergency procedures
- Ergonomics and workplace wellness

MODULE-IV- Career Development And Planning

Theory

- Setting career goals
- Developing a career plan
- Continuing education ,discipline and professionalism

Minor / Domain (Multi-Disciplinary)

Fundamentals of Airline and Airport Industry (42 Hours)

Course Code	Course Title	Credits	Type (T+P+Pj)
CUTM2499	Fundamentals of Airline and Airport Industry	2	1+0+1

Course Rationale: This course is intended to provide basic knowledge about the aviation and Airlines industry.

Course Objective: To make students understand about

- The characteristics of airline industry
- The regulatory authorities of civil aviation
- The importance of safety and security with regard to the airline industry

Course Outcome: After completion of this course students will be able to

- **CO1:** Know the fundamentals and basic knowledge of the airline industry.
- **CO2:** Understand the importance of the security, navigation and air traffic control
- **CO3:** To understand the importance of all the main regulatory authorities of Civil aviation.
- **CO4:** To understand the structure and characteristics of civil aviation.
- **CO5:** The know the important role of safety and security the airline industry.

Course Outcome to Program Outcome Mapping:

COs	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
CO1	3			3	2				2				3	2	
CO2	3	3	3	3	3	2			2	3			3		

CO3	3			3					2	3			3		
CO4	3			3					2	3			3		
CO5	3	2	2	3	2				3	3			3		

***High-3, Medium-2, Low-1**

Course Syllabus

MODULE-I (21 Hours)

Theory

- Air operator permit NSOP, SOP and cargo operations;
- Airports and its areas;
- Facilities of airports and ranking;
- Different departments and Functions of AAI, DGCA, BCAS, IATA and ICAO

MODULE-II (21 Hours)

Theory

- Airline industry, FAA, EASA, JAA, CAA, Civil aviation and airline requirements;
- Roles and responsibility of key personals; AIP, AIC, CAR, and different types of circulars;
- Airlines and different types Aircrafts used in of ops;
- Economic and Social impact;
- IATA 3 letter codes
- Airline profitability;
- New policies of Govt. and future scenario

COP RTR (70 Hours)

Course Code	Course Title	Credits	Type (T+P+Pj)
CUBB1030	COP RTR	3	1+1+1

Course Rationale: This course is intended to provide an understanding of the COP RTR procedures related to airline and airport management.

Course Objective: To make students understand about

- Navigation and ATC procedures
- Aircraft navigation and communication
- Radiotelephony procedures and practices

Course Outcome: After completion of this course students will be able to

- **CO1:** Necessary eligibility and criteria needed to Perform Flight operations and aeronautical services involved in the airport management
- **CO2:** Aircraft navigation and communication ,ATC procedures and Interpret the meteorological data
CO3: Adhere to the various govt.bodies and their regulations such as ATC and Other bodies and also know about controlled aerodrome services.
- **CO4:** RTR,TYPES, Aircraft communication system , Navigation system and HF communication procedures with ATC and other Aircrafts on Air.
CO5: To know about Radiotelephony Procedure,Practices and Transmitting Techniques in normal and Distress situations.

Course Outcome to Program Outcome Mapping:

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

***High-3, Medium-2, Low-1**

Course Syllabus

MODULE-I (10 Hours)

Theory

- COP RTR Examination Pattern;
- ITU and WPC India and rules and regulations

MODULE-II (10 Hours)

Theory

- Radio Theory;

- Aircraft Communication and Voice Systems;
- Aircraft Navigation Systems

MODULE-III (15 Hours)

Theory

- Airport and ATC, Aeronautical Services, RADIOTELEPHONY PROCEDURES, Transmitting Technique;
- General RT Phraseology

Practical

- RT Documentation
- RT Usage
- RT Techniques

MODULE-IV (15 Hours)

Theory

- Aerodrome Control of Aircraft Traffic;
- Aerodrome Control of Vehicular Traffic;
- General ATS Surveillance Service Phraseology

MODULE-V (10 Hours)

Theory

- Approach Control;
- Area Control;
- Distress and Urgency Procedures and Communications failure procedures

MODULE-VI (10 Hours)

Theory

- Transmission of Meteorological and other Aerodrome Information;
- Miscellaneous Flight Handling Phraseology;
- HF Communications;
- Visual Signals, Runway/Taxiway Markings/Lightings;
- PRACTICAL TEST – REGULATIONS AND PROCEDURE

Ramp Operation and Management (84Hours)

Course Code	Course Title	Credits	Type (T+P+Pj)
CUBB1031	Ramp Operation and Management	4	2+1+1

Course Rationale: This course is intended to provide fundamental understanding of aircraft ground despatch operations and management.

Course Objective: To make students understand about

- The computer reservation system and departure operations

- Various types of goods, dangerous goods and related security concerns
- Booking, seating arrangements and check in process

Course Outcome: After completion of this course students will be able to

- **CO1:** Knowledge about aircraft ground operations,flight management and check in procedure and baggage handling and overall airport management.
- **CO2:** knowledge about reservation,check-in,baggage handling in BBA,RAMP and BBA.
- **CO3:** About ramp safety and smooth flight departure and passenger facilitation in RAMP.
- **CO4:** to know about Airport infrastucture,aircraft types and lay out of the airport .
- **CO5:** learn about Ramp operations,Staff duties,PPE,ATC procedures and Aircraft documentation.

Course Outcome to Program Outcome Mapping:

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

***High-3, Medium-2, Low-1**

Course Syllabus

MODULE-I (21 Hours)

Theory

- Brief description of air side and land side;
- Physical and mental health of ramp staff;
- Operational area and non-operational area;
- Movement control of different vehicles

MODULE-II (21 Hours)

Theory

- Identifications Lines and marks of ramp;
- Ramp personal portative equipment;
- Boarding and disembarkation;

- Placing of baggage and cargo

MODULE-III (21 Hours)

Theory

- Allocating staff in ramp;
- Ramp communication;
- Documents required for ramp operation;
- Per operational check of ramp;
- Aero braze operation and ladder alignment

Practice

- Aircraft Documentation
- L&T Documentation
- Incident and accident report
- Audit Report

MODULE-IV (21 Hours)

Theory

- BMA;
- BBA;
- Push back;
- Cargo and catering uplifting;
- Taxi in taxi out; Emergency

Airline and Airport Security Management and Operation (84 Hours)

Course Code	Course Title	Credits	Type (T+P+Pj)
CUBB1032	Airline and Airport Security Management and Operation	4	2+1+1

Course Rationale: This course is intended to provide the critically important aspects of security related to aviation industry.

Course Objective: To make students understand about

- Aircraft security regulations and processes
- The importance of crime prevention

Course Outcome: After completion of this course students will be able to

- **CO1:** Perform security audits
- **CO2:** Recognize security threats
- **CO3:** Implement security procedures
- **CO4:** Control people and tools to ensure complete security
- **CO5:** Handle emergencies and learn SOP for contingencies.

Course Outcome to Program Outcome Mapping:

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

***High-3, Medium-2, Low-1**

Course Syllabus

MODULE-I (20 Hours)

Theory

- Overview of International Civil Aviation Security;
- Working at the Airport;
- Access Control- People and Vehicles

MODULE-II (24 Hours)

Theory

- Recognition of Explosive Devices and Other Prohibited Articles;
- Building Search Procedures
- Screening & Searching of Passengers and Baggage;
- Conventional X- Ray Equipment

Practice

- Profiling Techniques
- Screening procedures
- Security reports

MODULE-III (20 Hours)

Theory

- Protection of Aircraft;
- Physical Inspection of Baggage;
- Emergencies and contingencies

MODULE-IV (20 Hours)

Theory

- Escorting people and Consignments;
- Protecting Aircraft Catering Uplift;
- Protecting Cargo, Mail and Couriers;
- Passenger Behaviour Detection and Security Environment

Airline & Airport Safety Management and Operation (84 Hours)

Course Code	Course Title	Credits	Type (T+P+Pj)
CUBB1033	Airline & Airport Safety Management and Operation	4	2+1+1

Course Rationale: This course is intended to provide the critically important of safety related to aviation industry.

Course Objective: To make students understand about

- Aircraft safety regulations and processes
- The importance of crime prevention

Course Outcome: After completion of this course students will be able to

- **CO1:** Perform safety audits
- **CO2:** Recognize safety threats
- **CO3:** Implement safety procedures
- **CO4:** Control people and tools to ensure complete safety
- **CO5:** Implement procedure for safety of Aircraft

Course Outcome to Program Outcome Mapping:

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

***High-3, Medium-2, Low-1**

Course Syllabus

MODULE-I (21 Hours)

Theory

- Ramp Safety,
- Rules and Limitations;
- Safety of Aircraft; Securing Aircraft;
- Positioning of safety cones;
- Foreign Objects Debris;
- Safety of Passengers;
- Safety of Allocated staff

Practice

- PPE
- FOD
- Ramp Safety Report
- Audit Report

MODULE-II (21 Hours)

Theory

- Weather Plan;
- Wing walking;
- Alignment and Release of Ground Support Equipment;
- Ambulift alignment

MODULE-III (21 Hours)

Theory

- Guidelines for equipment parking;
- Medical examination of staff;
- Circle of safety;
- Aircraft cleaning;
- Ramp speed limits

MODULE-IV (21 Hours)

Theory

- Fuelling Safety;
- Fuelling safety zone;
- Spillage/leakage action plan;
- Evacuation of passengers

Cargo Management and Operation (84 Hours)

Course Code	Course Title	Credits	Type (T+P+Pj)
CUBB1034	Cargo Management and Operation	4	2+1+1

Course Rationale: This course is intended to provide insights to the cargo operations management and documentation procedures.

Course Objective: To make students understand about

- The roles and functions of various agencies and freight forwarders
- The principles of accepting air cargo and rating
- The use of various manuals

Course Outcome: After completion of this course students will be able to

- **CO1:** Explain the concept of billing
- **CO2:** Describe various terminology used in airline industry
- **CO3:** Elaborate detailed documentation of incoming and outgoing flights
- **CO4:** Explains about the types of cargo
- **CO5:** Explains about the handling of cargo

Course Outcome to Program Outcome Mapping:

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

*High-3, Medium-2, Low-1

Course Syllabus

MODULE-I (14 Hours)

Theory and Practice

- Cargo Handling;
- Acceptance of cargo;
- Cargo documentation;
- Determination of weight and documentation of weight

Practice

- Cargo Documentation
- Classification of cargo
- Other Documentation

MODULE-II (14 Hours)

Theory

- Cargo loading;
- Unit load devices;
- Pallet loading;
- Container loading;
- Cabin load;
- Dangerous Goods cargo

MODULE-III (14 Hours)

Theory

- Hazard classification;
- Markings and Identification;
- Acceptance, Handling advice and loading, Documentation for Dangerous Goods;
- Incidents with Dangerous Goods;
- Emergency procedures for incidents and accidents with Dangerous Goods

MODULE-IV (14 Hours)

Theory

- Heavy items (HEA);
- Human remains (HUM);
- Valuable cargo (VAL);
- Perishable cargo (PER)

MODULE-V (14 Hours)

Theory

- Food stuffs;
- Hatching eggs;
- Vaccines, medical supplies and live organs;
- Flowers and plants

MODULE-VI (14 Hours)

Theory

- Meat, seafood/fish shipments;
- Film and press shipments;
- Air mail; Notification to captain

Passenger and Public Handling in Airline and Airport (42 Hours)

Course Code	Course Title	Credits	Type (T+P+Pj)
CUBB1035	Passenger and Public Handling in Airline and Airport	2	1+0+1

Course Rationale: This course is intended to make the students understand the significance of passenger and public handling in Airline and Airport.

Course Objective: To make students understand about

- The importance of customer service
- The role and importance of culture, communication, empathy and listening in customer service

Course Outcome: After completion of this course students will be able to

- **CO1:** Learning & Demonstrate effective and efficient skills of contacting passengers and knowing ways & methods of learning by the use of Gadgets in counters during passenger handling.
- **CO2:** Knowing & learning how to handle different types of Passengers (Normal, Admissible, Non-admissible & special) as per the situation.

CO3: Learning the ways of handling passengers in counters and knowing documentations from reservation till Ramp by developing Good listening, problem solving & other skills.

CO4: Knowing flight operations & Necessary aircraft & related other documentation by using Gadgets and other methods with Good Communication & Interpersonal skills.

CO5: Knowing AAI , Airport& Airlines rules and guidelines, Passengers Handling Procedures through operational process by proper management skills.

Course Outcome to Program Outcome Mapping:

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

CO4	3	2	2	3	3				3	3			3		
CO5	3								3	3			3		

***High-3, Medium-2, Low-1**

Course Syllabus

MODULE-I (14 Hours)

Theory

- Booking and confirmation of Tickets at reservation counter;
- Passenger and ticket validation;
- Flight preparation and Station performance;
- Passenger Acceptance;
- Manual Check in procedure;
- Boarding procedure;
- Tarmac Arrival; Tarmac Departure;
- Travel policy;
- Disruption, Overbooking and Denied for Domestic and international Flights;
- Special category of passengers handling

MODULE-II (14 Hours)

Theory

- OCS Procedure;
- Restricted Area Permit;
- Aircraft documentation;
- Handling of Inadmissible passengers;
- Deportee passengers;
- Process of Through check-In;
- Process on Wheelchair Handling;
- Death –on-Board

Practice

- Aircraft Documentation
- L&T Preparation
- Other Passenger Reports
- Departure and Boarding Documentation
- Flight related Documentation (Ex. Tagging, EBT)

MODULE-III (14 Hours)

Theory

- Process for Booking No-show and Gate –on-show passengers;
- Restriction on Baggage weight and excess Baggage charges;
- Process of Self offload passengers;
- Process of transfer of passengers to other Airlines

Airport Management and Operation (56 Hours)

Course Code	Course Title	Credits	Type (T+P+Pj)
CUBB1036	Airport Management and Operation	3	2+0+1

Course Rationale: This course is intended to provide the understanding of tariffs, fares and taxes implied on constructing airfare.

Course Objective: To make students understand about

- The International Regulations for Air Transport
- Tariffs, fares and taxes implied on constructing airfare

Course Outcome: After completion of this course students will be able to

- **CO1:** To know about overall Airport Management and operations, Termilogy and 3 letter codes,Airport layout,GSE,GHA.
- **CO2:** To know about International Regulations for Air Transport like IATA,DGCA,BCAS.
- **CO3:** Demonstrate the ability for proper travel documents and aircraft documentation.
- **CO4:** Learn about tariffs,Airport terminals types,,issues,challenges,waste management,audit
- **CO5:**Learn about Airport business,Revenue generation,Govt ownership,Privatization,Pvt collaborations.

Course Outcome to Program Outcome Mapping:

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

*High-3, Medium-2, Low-1

Course Syllabus

MODULE-I (10 Hours)

Theory

- Understanding the airports;
- Ownership and Operation;
- The Airport business

MODULE-II (10 Hours)

Theory

- Airport Master Planning;
- The Airport and its operational System;
- Airport Certification and ranking

MODULE-III (9 Hours)

Theory

- Terminals and types;
- Airport Security;
- Support Services;
- Airport issues and challenges

Practice

- Aircraft Documentation
- GHA Documentation
- GSE Documentation
- AAI Billing
- Company Audit Report

MODULE-IV (9 Hours)

Theory

- Airport Economics;
- Airside; Landside

MODULE-V (9 Hours)

Theory

- Testing inspection and audit;
- Waste managements;
- Key personals; Key Departments;
- Govt. Agency

MODULE-VI (9 Hours)

Theory

- Pvt. Collaboration;
- Value addition;
- Revenue generation;
- New revenue generating possibilities

Meteorology (42 Hours)

Course Code	Course Title	Credits	Type (T+P+Pj)
CUBB1037	Meteorology	2	1+0+1

Course Rationale: This course is intended to equip the students with the appropriate skills and competency required to understand and manage issues related to metrological issues.

Course Objective: To make students understand about

- The procedures, standards and analysis of weather conditions
- The skills and competency required to handle tuff weather conditions

Course Outcome: After completion of this course students will be able to

- **CO1:** Identify, analyse and take corrective actions based on weather situations
- **CO2:** Understand importance of weather conditions in aviation industry.
- **CO3:** Skills and competency required to handle aircraft tuff weather conditions.
- **CO4:** To know about METAR and Learn how to interpret the data and communicate with Pilot and ATC.
- **CO5:** How to handle weather related issues in Airport in case of delays and cancellation.

Course Outcome to Program Outcome Mapping:

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

*High-3, Medium-2, Low-1

Course Syllabus

MODULE-I (14 Hours)

Theory

- Basic meteorology for Aviators;
- Meteorological weather stations;
- synoptic charts; Station models

MODULE-II (14 Hours)

Theory

- TAF, METAR;
- special weather reports;
- automatic terminal Information Service;
- Use of different type of weather websites and IMD website

Practice

- Aircraft Documentation
- MET Report
- Liaisoning with AAI & ATC

MODULE-III (14 Hours)

Theory

Poor visibility operation;
Diversion due to bad weather;
Meteorology briefing; Impact of Air Transport due to weather

Dangerous Goods (84 Hours)

Course Code	Course Title	Credits	Type (T+P+Pj)
CUBB1038	Dangerous Goods	4	2+1+1

Course Rationale: This course is intended to provide insights into the skills, manners and professionalism required to be a resourceful, effective and efficient in identification and management of dangerous goods.

Course Objective: To make students understand about

- The standards and requirements for crew professionalism
- The skills and competency required at different levels and roles

Course Outcome: After completion of this course students will be able to

- **CO1:** Identify errors and corrective actions on time
- **CO2:** Analyse the depth of knowledge requirement in every crew designation
- **CO3:** identify dangerous goods
- **CO4:** handle dangerous goods
- **CO5:** analyse the potential threat

Course Outcome to Program Outcome Mapping:

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

***High-3, Medium-2, Low-1**

Course Syllabus

MODULE-I (14 Hours)

Theory

- Introduction to Danger;
- Dangerous Goods manuals and reference booklets

MODULE-II (14 Hours)

Theory

- Regulatory framework;
- Extract of Rule 8 of Aircraft Rules 1937

MODULE-III (14 Hours)

Theory

- The aircraft and carriage of dangerous goods;

- Limitations;
- Dangerous articles;
- Items prohibited in aircraft cabin

MODULE-IV (14 Hours)

Theory

- Classification and Identification of Dangerous Goods

Practice

- Classification DGR
- Identification of DGR
- Audit Report
- PPE

MODULE-V (14 Hours)

Theory

- Dangerous Goods in pax and crew baggage;
- Hidden and undeclared Dangerous Goods

MODULE-VI (14 Hours)

Theory

- Dangerous Goods marking and labelling;
- Handling of Dangerous Goods;
- Dangerous Goods Emergency response

Summer Internship (AEEC-SEC) (112 Hours)

Code: CUTM1224

Credit:0+0+4

Course Code	Course Title	Credits	Type (T+P+Pj)
CUTM1224	Summer Internship	4	0+0+4