COEP Technological University (COEP TECH)

A Unitary Public University of Government of Maharashtra w.e.f. 21st June 2022

(Formerly College of Engineering Pune)

Curriculum Structure & Detailed Syllabus (MBA Program)

(Effective from: A.Y. 2023-24)

Program Educational Objectives

1. To produce individuals who will demonstrate strong leadership skills by possessing good ethical and humane values and capability of managing and working in a team with synergy in the business environment.
2. To create Managers with critical and analytical thinking ability to demonstrate creativity and innovation in the process of decision making.
3. To build leaders with powerful written and spoken communication skills to effectively influence stakeholders across different businesses.
4. To create Managers who are aware of their Social Responsibility and have a sustainable attitude.
5. To develop Professionals who will remain competent and consistent by upgrading skills and knowledge to catalyze change in a technology-driven business environment.
6. To churn out entrepreneurs who have the ability to identify ideas and use entrepreneurial skills to build sustainable solutions.

Program Outcomes

At the end of the program, the graduates will be able to

1. Apply the knowledge and theories of management to real life business scenarios.
2. Find and analyze a business issue comprehensively.
3. Exhibit improved entrepreneurial skills to solve business and social problems by applying the principles of creativity & innovation.
4. Develop cohesive work culture and lead the team towards accomplishment of organizational goals.
5. Develop the ability to adapt and progress in the dynamic business environment by unlearning and re-learning the newest skills.
6. Apply the advanced information systems and analytical tools and techniques along with different frameworks and theories related to management and decision making.
7. Analyze & implement the environmental, global, social, political, technological, environmental, health, safety, sustainability, ethical and legal context of business.
8. Design reporting documents and present and propagate information effectively.

Correlation between the PEOs and the POs

PEOs → / POs ↓	1	2	3	4	5	6
1						
2		√				
3		√				√
4	√					
5					√	
6		√			√	
7				√		
8			√			

List of Abbreviations

Abbreviation	Title	No. of Courses	Credits	% of Credits
PCC	Program Core Course			
PEC	Program Elective Core			
PSBC	Program Specific Bridge Course			
IOC	Interdisciplinary Open Course			
MLC	Mandatory Learning Course			
LLC	Liberal Learning Course			
SLC	Self-Learning Course			
DEC /SEC	Departmental Elective Course / **Specialization Elective Courses**			
LC	Laboratory Course			
SBC	Specific Bridge Course			
Audit	Audit Course			

Semester: IV

Program Core Courses-PCC for MBA

No.	Course Type	Course Code	Course Name	Teaching Scheme			Credits
				L	T	P	
1	PCC	PCC-1	Business Simulation	3	2	0	2
2	PCC	PCC-2	Corporate Governance and Business Ethics	3	2	0	2
3	PCC	PCC-3	Strategic Thinking	3	2	0	2
4	PCC	PCC-4	Dissertations	3	2	0	2
			Total credits				8

Specialization Elective Courses-SEC- Finance

No.	Course Type	Course Code	Course Name	Teaching Scheme			Credits
				L	T	P	
1	SEC	SEC-1	Insurance Management	3	2	0	2
2	SEC	SEC-2	Taxation	3	2	0	2
3	SEC	SEC-3	International Finance	3	2	0	2
4	SEC	SEC-4	Financial Risk Management	3	2	0	2
			Total credits				8

Specialization Elective Courses- BUSINESS ANALYTICS

No.	Course Type	Course Code	Course Name	Teaching Scheme			Credits
				L	T	P	
1	SEC	SEC-1	Data Security and Cyber Law	3	2	0	2
2	SEC	SEC-2	Time series forecasting	3	2	0	2
3	SEC	SEC-3	Data Insights and Visualisations	3	2	0	2

4	SEC	SEC-4	Data Science and Machine Learning for Business Analytics	3	2	0	2
			Total credits				8

PCC-1 Business Simulation	Semester IV
Credits: 2	LTP: 3:2:0

Teaching Learning Scheme

Lectures: 2 hrs /week

Examination Scheme
Internal Assessment (20 Mks)
Mid Sem Assessment: (30 Mks)
End Semester Assessment: (50 Mks)

Course Outcomes:

CO#	COGNITIVE ABILITIES	Course Outcome
		Students will be able to
CO1	UNDERSTAND	Apply theoretical business concepts in simulated environments
CO2	APPLYING	Enhance team collaboration and communication
CO3	ANALYZE	Understand complex organizational interactions
CO4	EVALUATE	Develop strategic decision-making capabilities
CO5	CREATE	Build financial and operational management skills

Learning Outcome
1. Basic terminology comprehension
2. Conceptual knowledge application
3. Practical skill development
4. Critical thinking enhancement
5. Advanced analytical capabilities
6. Strategic innovation skills

Unit: 1 Foundational Knowledge (6 Hrs.)

1.1 Business Fundamentals Introduction

Course overview, Organizational structures, Management principles, Team formation, Initial team building exercise

1.2: Financial Management Basics

Accounting principles, Financial statement analysis, Basic financial metrics,, Cash flow fundamentals, Interactive financial modeling workshop

1.3: Strategic Management Overview

Strategic planning concepts, SWOT analysis techniques, Competitive landscape understanding

Strategic decision-making framework, Case study introduction

1.4: Marketing Fundamentals

Market segmentation strategies, Consumer behavior insights, Marketing mix principles

Branding fundamentals, Marketing strategy development exercise

1.5: Operations Management NOT NEEDED

Supply chain basics, Production planning, Resource allocation strategies, Efficiency and

productivity metrics, Operational simulation mini-exercise

1.6: International Business Context

Global market dynamics, Cross-cultural business considerations, Economic environment analysis, International trade principles, Geopolitical business impact discussion

Unit: 2 Theoretical Preparation (6 Hrs.)

2.1: Comprehensive Business Scenario Introduction

Detailed simulation framework explanation, Company background presentation
Role assignments, Initial market conditions briefing, Team strategy initial brainstorming

2.2: Financial Modeling Workshop

Advanced spreadsheet skills, Financial projection techniques, Budget development, Investment analysis, Risk assessment strategies

2.3: Strategic Planning Deep Dive

Competitive analysis techniques, Long-term strategic planning, Scenario planning
Decision-making frameworks, Team strategic planning session

Unit: 3 Marketing Strategy Development (6 Hrs.)

3.1: Marketing Strategy Development

Advanced market research techniques, Customer segmentation, Positioning strategies, Marketing communication planning, Team marketing strategy workshop

3.2: Operations and Supply Chain Management

Advanced operational strategies, Logistics optimization, Cost management, Efficiency improvement techniques, Operational strategy development

3.3: Integrated Business Simulation Preparation

Comprehensive scenario walkthrough, Team strategy alignment, Risk management strategies, Simulation rules and evaluation criteria, Final preparation workshop

Unit: 4 Simulation Execution Immersive Business Experience (6 Hrs.)

4.1: Simulation Rounds

Quarterly business simulation cycles, Real-time decision-making, Performance tracking
Intermediate feedback sessions, Progressive complexity introduction, Adaptive challenge mechanisms

Unit 5 Reflection and Analysis Learning Consolidation (6 Hrs.)

5.1: Comprehensive Performance Review

Detailed simulation performance analysis, Team and individual performance evaluation
Strategic decision impact assessment, Lessons learned discussion

5.2: Industry Expert Panel

Guest speakers from various industries, Real-world business insights, Simulation experience validation,, Q&A session, Career guidance

5.3: Final Presentation Preparation

Team presentation development, Strategic narrative construction, Performance justification, Visual and analytical presentation skills

5.4: Final Simulation Showcase

Team final presentations, Comprehensive course reflection, Individual and team awards, Future learning recommendations, Course conclusion

Reference Material will be provided by Faculty incharge as and when its topics getting covered

PCC-2 Corporate Governance and Business Ethics	Semester IV
Credits: 2	LTP: 3:2:0

Teaching Learning Scheme

Lectures: 2 hrs /week

Examination Scheme
Internal Assessment (20 Mks)
Mid Sem Assessment: (30 Mks)
End Semester Assessment: (50 Mks)

Course Outcomes:

CO#	COGNITIVE ABILITIES	Course Outcome
		Students will be able to
CO1	UNDERSTAND	To discuss unethical business practices with examples and how through codes of business ethics the companies could avoid them.
CO2	APPLYING	To explain the nature, aspects and the growing importance of business ethics in today's economy.
CO3	ANALYZE	To examine the vital characteristics of Business ethics and ethical problems arising in a business organization.

Learning Outcome:

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

- Understand the concept of business ethics
- Describe the need and scope of business ethics
- Discuss significance of business ethics
- Explain unethical business practices and ways to control them

Unit: 1 Conceptual Framework of Corporate Governance   (8 Hrs.)
MODULE-I

- Conceptual Framework of Corporate Governance- Introduction, Need and Scope - Evolution and Development of Corporate Governance - Developments in Corporate Governance – A Global Perspective-Various Committees-OECD Principles of Corporate Governance - Developments in India - Elements of Good Corporate Governance.
- Overview of Various Committees – Global (Cadburry / Greenbury/ Hamel) – OECD Principles of Corporate Governance - Committees in India – CII Code of Corporate Governance - Naresh Chandra Committee - Kumar Mangalam Birla Committee - Narayana Murthy Committee - Reserve Bank of India Advisory Group on Corporate Governance -FICCI Report on Corporate Governance -J. J. .Irani Committee – Kotak Committee
- Board-Role   &   Responsibilities-Selection-Appointment-Composition-Qualifications- Quality-Training-Meetings-Board Committees (Various Board Committees, their Composition, Role and Responsibilities, Contribution to Board Governance - Audit Committee - Shareholders Grievance Committee- Remuneration Committee-

Nomination Committee- Corporate Governance Committee- Corporate Compliance Committee).

Unit 2: Stakeholders and Legislative Framework (8 Hrs.)
MODULE-I (Contd...)

- Related Issues - Independent Directors – Whistle Blower / Policy - Insider Trading – Related Party Transactions- Arms Length
- Legislative Framework of Corporate Governance in India - under Listing Agreement – Clayuse-49, SEBI Guidelines, Companies Act.
- Corporate Governance and Stakeholders-Shareholders – Investors – Lenders - Employees- Customers- Vendors – Government – Society.

Unit 3: Introduction- Ethics, Business Ethics, (8 Hrs.)
MODULE-II
- Introduction- Ethics, Business Ethics, Introduction-Basic Concepts-Determinants of Ethical Behaviour (Individual-Family-Corporate-Global)
- Business Ethics-What / Why / Principles of Business Ethics – Attributes – Internal & External Factors affecting Business Ethics - Danger Signs / Business Costs / Ethical Decision-Making
- lllustrative Ethical Issues – Individual / Local / Global
- Business Ethics in Functional Areas – (Finance / Marketing /HRM / IPRs / IT) - Ethical Corporation – Emerging Challenges

Unit 4: Case Studies on Corporate Governance & Business Ethics (8 Hrs.)

MODULE-III

- Illustrative Case Studies based on Corporate Governance & Business Ethics – Enron – Satyam – Sahara – Volks Wagen – Nike -Tata Steel / Motors – Marico-Infosys.

BOOKS RECOMMENDED:

1. Business Ethics -An Indian Perspective (A. C. Fernando - Pearson)
2. Business Ethics – (K. Aswathappa, J. Usha Rani, Sunanda Gundavajhala – Himalaya Publishing House)
3. Business Ethics & Corporate Governance – Jyotsna G. B., R. C. Joshi – McGraw Hill)
4. Corporate Governance – Principles & Practices (Sandeep Goel – McGraw Hill)
5. Corporate Governance in India – An Evaluation (Subhash Chandra Das – PHI Learning Pvt Ltd.)
6. **Case Studies in Ethics & Corporate Governance, VOL-I, ICFAI University (OLD BOOK)**

PCC-3: Strategic Thinking	Semester 4
Credits: 2	LTP: 3:2:0

Teaching Learning Scheme

Lectures: 2 hrs. /week

Examination Scheme

Internal Assessment (20 Mks)
Mid Sem Assessment: (30 Mks)
End Semester Assessment: (50 Mks)

Course Outcomes:

CO#	COGNITIVE ABILITIES	Course Outcome
CO1	REMEMBERING	Recall fundamental concepts, terms, and frameworks related to strategic thinking.
CO2	UNDERSTANDING	Explain the significance of strategic thinking in organizational contexts and differentiate it from strategic planning.
CO3	APPLYING	Apply strategic frameworks and tools (e.g., SWOT, PESTLE, scenario planning) to real-world business scenarios.
CO4	ANALYSING	Analyze complex business challenges and identify the interdependencies within and between functional areas.
CO5	EVALUATING	Evaluate strategic alternatives and decision-making approaches for their effectiveness in various business environments.
CO6	CREATING	Develop innovative and actionable strategies to address dynamic business problems and align them with organizational goals.

Unit 1: Introduction to Strategic Thinking and Management   **(5 Hrs)**

- Definition and Scope of Strategic Thinking
- Difference Between Strategic Thinking and Strategic Planning
- Characteristics of a Strategic Thinker
- Levels of Strategy**:** Corporate, Business, and Functional
- Strategic Thinking vs. Operational Thinking
- Importance of Vision, Mission, and Goals in Strategic Thinking
- Case Studies**:** Historical examples of strategic success and failures**.**

Unit 2: Tools and Frameworks for Strategic Analysis   **(5 Hrs)**

- Environmental Scanning: Internal and External Analysis
    - o SWOT Analysis
    - o PESTLE Analysis
- Industry and Competitor Analysis:
    - o Porter's Five Forces Framework
    - o Value Chain Analysis
- Scenario Planning and Forecasting
- Strategic Decision-Making Tools:

- o BCG Matrix
- o GE/McKinsey Matrix
- o Blue Ocean Strategy
- Case Studies: Using tools in real-world scenarios.

Unit 3: Strategic Thinking in Functional Areas of Management   (5 Hrs)
- Integration of Strategic Thinking in Key Functional Areas:
  - o Marketing Strategies
  - o Financial Strategies
  - o Operations and Supply Chain Strategies
  - o Human Resource Strategies
- Linking Functional Strategies to Corporate Strategy
- Cross-functional Collaboration for Strategy Development
- Case Studies: Functional strategies driving organizational success.

Unit 4: Leadership and Strategy Execution   (5 Hrs)
- Role of Leadership in Strategic Thinking and Execution
- Developing Strategic Alignment Across Teams
- Challenges in Strategy Execution
  - o Communication Barriers
  - o Resistance to Change
  - o Resource Allocation
- Key Models for Strategy Execution:
  - o Balanced Scorecard
  - o OKRs (Objectives and Key Results)
- Case Studies: Leadership's role in successful strategy execution.

Unit 5: Decision-Making in Strategic Thinking   (5 Hrs)
- Strategic Decision-Making Under Uncertainty
- Decision-Making Frameworks:
  - o Rational Model
  - o Incremental Model
  - o Garbage Can Model
- Ethics and Social Responsibility in Strategic Decision-Making
- Case Studies: Ethical dilemmas and strategic decisions.

Unit 6: Innovation, Adaptability, and Sustainability in Strategy   (5 Hrs)
- The Role of Innovation in Strategic Thinking
  - o Disruptive Innovation
  - o Business Model Innovation
- Global Perspectives in Strategic Thinking:

- o   Strategies for Global Expansion
- **Case Studies**: Sustainable and innovative strategic practices.

Textbooks:
"Strategic Management: Concepts and Cases" Fred R. David, Forest R. David
"Blue Ocean Strategy: How to Create Uncontested Market Space and Make the Competition Irrelevant" W. Chan Kim, Renée Mauborgne
"Competitive Strategy: Techniques for Analyzing Industries and Competitors" Michael E. Porter

Reference Books:
"Strategic Thinking for Leaders: A Systems Approach to Creating and Sustaining Value" J. William R. Barger, Brian G. Dive
Strategy Safari: A Guided Tour Through the Wilds of Strategic Management" Henry Mintzberg, Bruce Ahlstrand, Joseph Lampel

PCC-4: DISSERTATION	Semester 4
Credits: 2	LTP: 3:2:0

Teaching Learning Scheme	**Examination Scheme**
	Internal Assessment (20 Mks)
Lectures: 4 hrs. /week	End Semester Assessment: (80 Mks)

Course Outcomes:

CO#	COGNITIVE ABILITIES	Course Outcome: (Student will be able to)
CO1	APPLYING	Apply the subject knowledge learned over two years
CO2	ANALYSING	Research must be carried out based on the selected topic, identifying problem statement, type of data analysis and tools, write research based paper for the selected subject
CO3	EVALUATING	Appropriate tools should be used for carrying out research
CO4	CREATING	Compile a report, write and solve organization challenges

DISSERTATION NOTE

Introduction:

Dissertation is academic writing based on research.

A dissertation is a report of an extensive original research project completed as the final requirement for MBA

Dissertations give students an opportunity to:

· Explore their area of interest in depth.

· Demonstrate accuracy and skills in investigating and discussing a problem.

· Manage a critical project from the beginning to the end, most probably, for the first time.

· Apply the skills they have learned in college in a more practical way.

· Experience the process of producing knowledge.

A dissertation is a substantial document that examines a subject and reviews different points of view (about the said subject) based on original research. It demonstrates the author's mastery of the subject, scholarly methods, the main facts, and unique points of view in it.

Duration:

Dissertation takes place in fourth semester.

It is the culmination of the entire course studies undertaken during the two years.

Presentations:

A detailed individual presentation of the research will be scheduled based on selected topics.

Project Report:

Project report will be used as guideline for the work students have completed during the Dissertation. Students need to make sure that they submit a complete report to the college.

Guidelines for project report shall be shared in the classroom.

Evaluation:

Total marks allotted: 100 External Viva will be conducted.

MBA General Management – Finance Specialization

SEC-1: Insurance	Semester 4
Credits: 2	LTP: 3:2:0

Teaching Learning Scheme

Lectures: 2 hrs. /week

Examination Scheme

Internal Assessment (20 Mks)
Mid Sem Assessment: (30 Mks)
End Semester Assessment: (50 Mks)

CO#	COGNITIVE ABILITIES	Course Outcome
CO1	REMEMBERING	Grasp the basic concepts and principles of insurance, including the differences between life and general insurance.
CO2	UNDERSTANDING	Explain the importance, nature, and functions of various types of insurance such as life, fire, and marine insurance.
CO3	APPLYING	Apply knowledge of insurance contracts and policies to real-world scenarios and case studies.
CO4	ANALYSING	Analyze different types of insurance policies and their implications for policyholders and insurers.
CO5	EVALUATING	Evaluate the impact of privatization on the insurance business and compare the performance of private and government insurance companies.
CO6	CREATING	Develop strategies for effective insurance management, including premium payments, claim settlements, and policy revival.

Units	Topics	Hrs
Introduction to Insurance	Concept & Principles of insurance	**(3 Hrs.)**
	Insurance types	
	IRDAI	
Life Insurance	Need & Overview	**(6 Hrs.)**
	Life insurance types	
	Factors affecting life insurance	
	Premium calculations	
	Role of actuarial science in life insurance	
	Legal aspects of life insurance contracts	
Fire & Marine Insurance	Importance & types of fire insurance	**(6 Hrs.)**
	Marine insurance types & coverage	
	Difference between fire insurance & marine insurance	
	Risk assessment & premium calculations in fire & marine insurance	
	Analysis of claim settlements in fire & marine insurance	
	Legal & Regulatory aspects of fire & marine insurance	

Insurance Payment Premiums	Factors affecting premiums	**(3 Hrs.)**
	Premium calculations & policy lapse	
	Indian Taxation laws about premiums	
Life Insurance Claim Settlements	Maturity, death & surrender	**(5 Hrs.)**
	Process of claim settlement	
	Challenges in life insurance claim settlements	
	IRDAI guidelines on claim settlements	
	Consumer Rights & Grievance Redressal	
General Insurance Claim Settlements	Types of general insurance claims	**(5 Hrs.)**
	Process of claim settlements	
	Challenges in general insurance claim settlements	
	IRDAI guidelines on claim settlements	
	Consumer Rights & Grievance Redressal	
Insurance Business	Indian Insurance Market	**(2 Hrs.)**
	Future Trends	

Textbooks:
(1) Life Insurance in India: Opportunities, Challenges and Strategic Perspective by H. Sadhak
(2) Principles and Practice of Insurance

Reference Books: IRDAI Handbook

SEC-2: Taxation	Semester 4
Credits: 2	LTP: 3:2:0

Teaching Learning Scheme	Examination Scheme
	Internal Assessment (20 Mks)
Lectures: 2 hrs. /week	Mid Sem Assessment: (30 Mks)
	End Semester Assessment: (50 Mks)

CO#	COGNITIVE ABILITIES	Course Outcome
CO1	REMEMBERING	Remembering various concepts of taxation
CO2	UNDERSTANDING	Understanding procedures of taxation
CO3	APPLYING	Applying knowledge of tax laws
CO4	ANALYSING	Analysing case studies in direct and indirect tax
CO5	EVALUATING	-
CO6	CREATING	-

Unit 1 Introduction to Taxation (Hrs : 4)

Right to collect tax, Progressive vs Regressive, Direct vs Indirect, Adam Smith's canons of taxation, Tax planning, Tax management, Tax management & Tax evasion

Unit 2 Direct Tax -I (Hrs : 10)

Heads of Income, Income from Capital Gains, Meaning of capital assets, LTCG & STCG, Indexation, Exemptions under capital gain, Profits & gains from Business & Profession, Allowable expenses, Depreciation, Sums on Capital Gains & PGBP

Unit 3 Direct Tax – II (Hrs : 8)

Corporate Taxation, Tax saving schemes, VIDS, ITR Filing, Assessment procedure, Tax Audit, International Taxation, Transfer Pricing, DTAA, ICDS principles

Unit 4 GST - I (Hrs : 10)

Benefits of GST, Definition of goods, service, Input Tax credit, CGST, SGST, IGST, Valuation Rules, Taxation of import & export under GST

Unit 5 GST II (Hrs : 8)

Need of Registration, Process, Timing, Pros & Cons of voluntary registration, Reverse Charge Mechanism, RCM in goods and services, Liability in case of RCM, Composition scheme eligibility, procedure to apply for composition, QRMP scheme, Restrictions of composite dealers

Reference Books:
1. Taxmann's Students' Guide to Income Tax & GST 2024-25
2. Corporate Tax Planning and Business Tax procedures – V K Singhania
3. Taxmann – GST Act with Rules

SEC 3 : **International Finance**	Semester IV
Credits: 2	LTP: 3:1:0

Teaching Learning Scheme   **Examination Scheme**

Lectures: 3-4 hrs. /week (Total hours 32)   Internal Assessment: 20 Marks

Mid-term Examination   30 Marks

End Semester Assessment: 50 Marks

Course Outcomes (COS)
 Students will be able to ………….

 CO1 Define and describe various concepts from international finance.

 CO2 Demonstrate /Understand basics of foreign exchange market and exchange rates

  CO3 Explain how to use foreign exchange derivatives and other techniques to manage
foreign exchange exposures of firms.

  CO4 Identify and distinguish between different kinds of foreign exchange management
techniques including hedging, currency arbitrage, etc.

 CO4 Interpret the exact nature of the issues pertaining to multinational financing and
 investment decisions

 CO5 Analyze the outcomes of multinational financing and investment decisions.

 CO6 Apply the concepts of transactions exposure and its various types to real business and
 investment decision scenarios.

 CO7 Evaluate the impact of international taxation systems and its legal aspects on
 international financial transactions.

 CO8 Develop an overall understanding of International Financial Reporting Standards
(I.F.R.S) and Indian Accounting Standards (I.A.S) in the context of the working of Foreign
Exchange Trade Settlement in India along with the provision through SWIFT, CHIPS,
CHAPS, M-Bridge etc.

Course Contents

Unit: 1 Introduction to International Finance (6 Hrs)

Introduction to International Finance: Meaning, goals, importance and scope. The challenges of international finance. The finance function in a global economy. Global financial system and markets. Participant in the global financial system. Functioning of the global financial markets. The international monetary system. International financial institutions such as the IMF, World Bank etc. the SDRs and the Economic and Monetary Union (EMLI).

Case study on challenges of international finance and two Different Case Studies on Unit 1

Unit: 2 The Foreign Exchange Market. (8 Hrs)

Introduction to Foreign Exchange Markets: Structure of Foreign Exchange Markets, Types of Transactions and Settlement Date, Exchange Rate Quotations and Arbitrage, Interest Rate Parity, Purchasing Power Parity and Fisher's Parity, Forecasting Exchange Rates: Efficient Market Approach, Fundamental Approach, Technical Approach, Global Financial Markets and Interest Rates, Concept and Types of Currency, Convertibility of Currency, Exchange Rate: the Nature, Types and Regimes, Demand for and Supply of Foreign Currency.

Case Study on interest rate and purchasing power parity. Other Case Studie on Unit 2

Unit: 3 Transactions in Foreign Exchange Market (8 Hrs)
Types of transactions: Spot Transactions, Forward Contracts, Future Transactions, Swap Transactions, Option Transactions etc. The risk management process. Objectives of hedging policy. Currency futures and options Measurement of exposure and risk. Managing transaction exposure, operating exposure. The international financing decisions and borrowing options. Foreign and Euro bond markets. Types of bonds.

Case Study on hedging policy and related two case studies.

Unit: 4 International Legal Framework and Taxation (4 Hrs)
Nature of international legal system. International double taxation and the ways to regulate it. Money laundering: Nature, Organization: Stages and Methods. Money laundering and International Legal Framework: The Role and Functions of FATF.
Case Study on Money Laundering and the Law to regulate it. Other related case studies.

Unit 5   International Financial Risk Management   **(6 Hrs)**

International financial management. Foreign exchange risk. Currency risk management. Nature and types of currency risks. Risks related to international financial investment: Risk related to FDIs. Political Risk. International Financial Reporting Standards: IFRS and IAS.Foreign exchange trade settlement in India. Project appraisal in the International context.
 Case Study on currency risk management and other related case studies.

Study Material

  A) Textbook:

  1) Apte, P.G. (2003) International Finance, Tata McGraw Hill
  2) Copeland (2007, Fourth Edition) Exchange Rates and International Finance, Pearson Education.
  3) Srivastava, Rajiv (2014) International Finance, Oxford University Press

  B) Reference Books:
  1) Butler (Second Edition) Multinational finance, Thomson South-Western College Publishing
  2) Desai, Mihir, A. (2006) International Finance: A Case Book, Wiley India.
  3) O'Brian (Second Edition) International Finance, Oxford University Press
  4) Levi (Fourth and Third Edition) International Finance Contemporary Issues, Routledge

C) Web Sources on International Finance

1) https://onlinelibrary.wiley.com/journal/14682362
2) https://www.alphagamma.eu/finance/best-finance-websites/
3)https://library.ccis.edu/finance/international
4)https://www.routledge.com/Routledge-Library-Editions-International-Finance
https://dealroom.net/resources/the-current-state-of-m-a

SEC4: Financial Risk Management	Semester 4
Credits: 2	LTP: 3:2:0

Teaching Learning Scheme

Lectures: 3-4 hrs. /week (Total hours 32)

Examination Scheme

Internal Assessment: (20 Marks)

Mid-term Examination   (30 Marks)

End Semester Assessment: (50 Marks)

CO#	COGNITIVE ABILITIES	Course Outcome
CO1	REMEMBERING	UNDERSTAND the need and aspects of financial risk
CO2	UNDERSTANDING	Describe the various financial risk management tools and techniques available to an individual and to corporates
CO3	APPLYING	IDENTIFY various real-life problems and measure to solve the same using financial risk management techniques
CO4	ANALYSING	DETERMINE the ways of financial risk management techniques to be established for various situations
CO5	EVALUATING	EXPLAIN various financial risk management methods available for various research.
CO6	CREATING	CREATE analytical reports of risk management with research and data interpretations.

*** Use any of the verbs as starting of CO statement from blooms taxonomy as per cognitive abilities level.

Unit 1 - Introduction to Financial risk management -   (6 Hours)

Financial Risk: An Overview, Evolution, and the Environment, Risks like market, credit, liquidity, operational more specifically on the identification of different forms of risk like Currency, interest rate, equity, commodity.

Unit-2 Risk and volatility Measurement: (6 Hours)

Variance- covariance approach, Calculating portfolio risk of more than one Assets. Stress testing and back- testing, Forecasting correlation & Volatility during market crash, Risk

Unit-3 Value at Risk: (6 Hours)

Concept and Applications, Computing value at risk for forex common shares/stocks/fixed income securities etc. estimating value at risk in ALM

Unit-4 Corporate Risk Management: (6 Hours)

 Role of back, middle, and front office, Total risk and Expected cash flows, approaches to risk management, Risk Management process, Tools - Hedging, forwards, and futures.

UNIt-5 Integrated Risk Management framework   (6 Hours)

An integrated approach to risk management considering issues such as operational, supervisory, legal, Accounting, Issue of Governance ratings and risk in institutions.

Textbooks:

1. Financial Risk Management: A Practitioner's Guide to Managing Market and Credit Risk – Steve L. Allen.

Reference Books:

1. Risk Management & Insurance, 8th e BY Williams, C Arthur et al. McGraw Hill

2. Corporate Financial and Risk Management – Nersesian, Roy L. – Jaico Publishing House.

Business Analytics Specialization

SEC-1: Data Security and Cyber Law	Semester IV
Credits: 2	LTP: 3:2:0

Teaching Learning Scheme

Lectures: 2 hrs. /week

Examination Scheme

Internal Assessment (20 Mks)
Mid Sem Assessment: (30 Mks)
End Semester Assessment: (50 Mks)

CO#	COGNITIVE ABILITIES	Course Outcome
CO1	REMEMBERING	Develop a comprehensive understanding of cybersecurity terminologies, threats, and the significance of protecting end-user systems, critical IT infrastructure, and national security.
CO2	UNDERSTANDING	Identify and evaluate various types of cybercrimes and cyberattacks, and apply appropriate measures for prevention, mitigation, and reporting through legal channels.
CO3	APPLYING	Gain knowledge of the IT Act, 2000, and other global cyber laws to address cybercrimes and understand the legal and ethical implications of emerging technologies like AI, IoT, and blockchain.
CO4	ANALYSING	Analyze the principles of data privacy, security, and protection laws such as GDPR and India's Personal Data Protection Bill, and apply them in personal and organizational contexts.
CO5	EVALUATING	Evaluate cybersecurity plans, including policies, risk assessments, audits, and compliance strategies, to ensure effective governance and business continuity.

Unit 1   Overview of Cyber security   (Hrs : 6)
Cyber security increasing threat landscape, Cyber security terminologies: Cyberspace, attack, non-state actors, Cyber terrorism, Protection of end user machine, Critical IT and National Critical Infrastructure, Cyberwarfare, Case Studies.

Unit 2   Cybercrimes   (Hrs : 8)
Cybercrimes targeting Computer systems and Mobiles- data attack, spyware, logic bombs, DoS, DDoS, APTs, virus, Trojans, ransomware, data breach., Online scams and frauds- email scams, Phishing, Online job fraud, Online sextortion, Debit/ credit card fraud, Online payment fraud, Cyberbullying, website defacement, Cybersquatting, Pharming, Cyber espionage, Cryptojacking, Dark web, Social Media Scams & Frauds- impersonation, identity theft, job scams, misinformation, fake news cybercrime against persons - cyber grooming, child pornography, cyber stalking., Social Engineering attacks, Cyber Police stations, Crime reporting procedure, Case studies.

Unit 3	**Cyber Law**	**(Hrs : 6)**

Cybercrime and legal landscape around the world, IT Act,2000, and its amendments. Cyber Offences under IT Act, 2000. Cyber Laws and Legal and ethical aspects related to new technologies- AI/ML, IoT, Blockchain, Darknet and Social media, Cybercrime and punishments, Corporate Governance and Challenges, Case Studies

Unit 4	**Data Privacy and Data Security**	**(Hrs : 7)**

Defining data, meta-data, big data, nonpersonal data. Data protection, Data privacy and data security, Personal Data Protection Bill and its compliance, Data protection principles, Big data security issues and challenges, Data protection regulations of other countries- General Data Protection Regulations (GDPR),2016 Personal Information Protection and Electronic Documents Act (PIPEDA)., social media- data privacy and security issues.

Unit 5	**Cyber security Management**	**(Hrs : 3)**

Cyber security Plan- cyber security policy, cyber crises management plan., Business continuity, Risk assessment, National cyber security policy and strategy.

Textbooks:

Cyber Security Understanding Cyber Crimes, Computer Forensics and Legal Perspectives by Sumit Belapure and Nina Godbole, Wiley India Pvt. Ltd.

Reference Books:

1. Information Warfare and Security by Dorothy F. Denning, Addison Wesley.
2. Security in the Digital Age: Social Media Security Threats and Vulnerabilities by Henry A. Oliver, Create Space Independent Publishing Platform.
3. Data Privacy Principles and Practice by Natraj Venkataramanan and Ashwin Shriram, CRC Press.
4. Information Security Governance, Guidance for Information Security Managers by W. KragBrothy, 1st Edition, Wiley Publication.
5. Auditing IT Infrastructures for Compliance By Martin Weiss, Michael G. Solomon, 2nd Edition, Jones Bartlett Learning.

SEC-2: Data Insights and Visualizations	Semester IV
Credits: 2	LTP: 3:2:0

Teaching Learning Scheme

Lectures: 2 hrs. /week

Examination Scheme

Internal Assessment (20 Mks)
Mid Sem Assessment: (30 Mks)
End Semester Assessment: (50 Mks)

Unit 1: Excel Fundamentals (6 Hrs)

Session 1: Introduction to Excel Basics
- Fibonacci Sequence, Custom Lists
- Comments, Hide Columns or Rows
- Skip Blanks, AutoFit, Transpose

Session 2: Advanced Tools in Excel
- Union and Intersect
- Flash Fill

Session 3: Formulas and Functions
- Subtract, Square Root, Percent Change
- Names in Formulas
- Dynamic Named Range, Paste Options

Session 4: Formatting Cells
- Decimal Places, Currency vs Accounting
- Date and Time Formats, Fractions
- Text to Numbers, Numbers to Text

Session 5: Advanced Formatting
- Custom Number Format, Format Painter
- Cell Styles, Merge Cells, Strikethrough, Superscript/Subscript

Session 6: Find & Select and Printing Tools
- Find Features, Delete Blank Rows
- Row Differences, Copy Visible Cells Only
- Print Titles, Page Layout

Unit 2: Advance Excel Features (6 Hrs)

Session 7: Sharing & Text Files
- Exporting to PDF
- Import/Export Text Files

Session 8: Count and Logical Functions
- Countif, Count Blank/Nonblank Cells
- Count Characters, Running Total, Sumif, Sumproduct
- Logical Functions: If, Ifs, Switch

Session 9: Cell References and Date/Time Functions
- Copy Exact Formula, 3D-reference, External References

- DateDif, Weekdays, Last Day of the Month

Session 10: Text Functions
- Separate Strings, Text to Columns
- Remove Spaces, Concatenate Strings

Session 11: Lookup & Reference Functions
- Vlookup, Index and Match, Indirect
- Tax Rates, Offset

Session 12: Data Analysis
- Sorting and Filtering
- Creating Charts: Column, Line, Pie, Bar
- Pivot Tables and Pivot Charts

Unit 3 : Theory of Data Visualization   **(6 Hrs)**

Session 13: Introduction to Data Visualization
- Definition and importance
- Real-world applications with examples

Session 14: Simple Statistics for Data Insights
- Quantitative relationships
- Summarizing data

Session 15: Differing Roles of Tables and Graphs
- Choosing the right medium for communication
- When to use tables vs. graphs

Session 16: Variations in Table Design
- Relationships in tables
- Best practices in table design

Unit 4 : Data Visualization and Design Principles   **(6 Hrs)**

Session 17: Visual Perception and Communication
- Pre-attentive processing
- Applying Gestalt principles

Session 18: Variations in Graph Design
- Encoding data in graphs
- Graph design solutions

Session 19: General Design Principles
- Highlighting and organizing data
- Integrating tables, graphs, and text

Unit 5 : Advance Design Principles   **(6 Hrs)**

Session 20: Advanced Table Design
- Structural components and best practices

Session 21: Graph Component-Level Design
- Primary and secondary data components

- Non-data component design

Session 22: Displaying Many Variables at Once
- Combining multiple units of measure
- Using small multiples

Session 23: Ineffective Graphs to Avoid
- Donut, radar, and funnel charts
- Why these graphs often mislead

Session 24: Telling Compelling Stories with Data
- Characteristics of statistical storytelling
- Crafting narratives with real-world cases

Textbooks:
1. Data Visualization in Excel: A Guide for Beginners, Intermediates, and Wonks (AK Peters Visualization Series)
2. High Impact Data Visualization in Excel with Power View, 3D Maps, Get & Transform and Power BI Paperback – 16 November 2016, by Adam Aspin (Author)

SEC-3: Time Series Forecasting	Semester IV
Credits: 2	LTP: 3:2:0

Teaching Learning Scheme

Lectures: 2 hrs. /week

Examination Scheme
Internal Assessment (20 Mks)
Mid Sem Assessment: (30 Mks)
End Semester Assessment: (50 Mks)

Course Objectives:

CO#	COGNITIVE ABILITIES	Course Outcome
CO1	REMEMBERING	Define key terms in forecasting
CO2	UNDERSTANDING	Understand the fundamental concepts and principles of time series forecasting.
CO3	APPLYING	Apply various forecasting techniques to real-world business challenges.
CO4	ANALYSING	Utilize software tools for data analysis and forecasting.
CO5	EVALUATING	Evaluate and select appropriate forecasting techniques based on data characteristics and business needs.
CO6	CREATING	Develop, implement, and monitor forecasting models in different business contexts.

Unit	Topic	Hrs
Introduction to Business Forecasting	Importance and applications of forecasting in business decision-making	**(3 Hrs)**
	Types of forecasting methods: Qualitative vs. Quantitative techniques	
	Challenges and limitations of forecasting	
Data Patterns	Identifying trends, seasonality, cyclic, and irregular variations in time series data	**(3 Hrs)**
	Graphical analysis and visualization techniques for data patterns	
	Statistical summaries and their role in understanding data patterns	
Moving Averages Methods	Introduction to moving averages: Simple and Weighted Moving Averages	**(4 Hrs)**
	Choosing the appropriate moving average window size	
	Practical implementation of moving averages using Excel/Python	
	Evaluating forecast accuracy: Mean Absolute Error (MAE) and Mean Squared Error (MSE)	

Time Series Forecasting	Introduction to time series models: Autoregressive (AR), Moving Average (MA), ARMA, and ARIMA	**(4 Hrs)**
	Stationarity and Differencing: Making a time series stationary	
	Practical Implementing ARIMA models in Python: Parameter selection and interpretation	
Simple Linear Regression	Introduction to regression and its role in forecasting	**(4 Hrs)**
	Assumptions of linear regression and model diagnostics	
	Error analysis and performance evaluation metrics	
	Implementing simple linear regression using real-world data	
Multiple Linear Regression	Introduction to multiple regression and feature selection	**(4 Hrs)**
	Handling multicollinearity and model refinement	
	Comparing linear regression models: Selecting the best fit	
	Hands-on implementation with Excel	
Judgemental Forecasting	Role of expert judgement in forecasting	**(4 Hrs)**
	Combining qualitative and quantitative techniques	
	Delphi method, market research	
	Sales Forecasting case study	
Managing Forecasting Process	Setting up an effective forecasting system in an organization	**(4 Hrs)**
	Continuous improvement using feedback loops and model updates	
	Ethical & strategic considerations	
	Case Study	

Textbooks:

1. Business Forecasting, John E Hanke, Dean Wichern, Pearson Education.

Reference Books:

1. Journal of Time Series Analysis, Wiley Publications

SEC 4: Data Science and Machine Learning for Business Analytics	Semester IV
Credits: 2	LTP: 3:2:0

Teaching Learning Scheme

Lectures: 2 hrs. /week

Examination Scheme
Internal Assessment (20 Mks)
Mid Sem Assessment: (30 Mks)
End Semester Assessment: (50 Mks)

CO#	COGNITIVE ABILITIES	Course Outcome
CO1	UNDERSTANDING	Describe the concepts of variants of ML algorithms
CO2	APPLYING	Examine concepts of variants to fine tune algorithms
CO3	ANALYSING	Explain functioning of algorithms while optimizing algorithms
CO4	EVALUATING	Choose the algorithm giving robust and reliable performance
CO5	Designing	Validate selected algorithms for drawing conclusion

Unit 1 (Hrs : 8)

Supervised Learning

Linear Regression, Regularization (Ridge, Lasso), Support Vector Machines, Linear SVM, Kernel Trick, Ensemble Methods, Random Forests. Case Study supporting stated algorithms.

Unit 2 (Hrs : 8)

Unsupervised learning

Clustering and its variations, Dimensionality Reduction, Principal Component Analysis (PCA), Implementation of case scenario on stated algorithms. Synthesis of hyper parameters supporting algorithms.

Unit 3 (Hrs : 8)

Deep Learning

Basics-Introduction to Keras API and TensorFlow, Introduction to Neural Networks, Multi-layered Neural Networks, Artificial Neural Networks. Supporting Case study and synthesis.

Unit 4 (Hrs : 8)

Natural Language Processing (NLP)

Basics of NLP, Sentiment analysis and scenarios along with basic libraries of python. Case Study supporting stated algorithms

Unit 5:

Project Based on content of syllabus and students should come up with novel ideas. Project must define problem statement, objectives, scope. Once this is approved then data collection

should be done. Then the project should witness all the tasks, and it should be reviewed by faculty mentor time to time to check the progress. Students should submit the project, and internal evaluation will be based on it. It will be an individual project.

Reference Books:
1. Applied Predictive Analytics: Principles and Techniques for the Professional Data Analyst by Dean Abbott, Wiley Publication
2. Modeling Techniques in Predictive Analytics with Python and R: A Guide to Data Science By Thomas W. Miller (FT Press Analytics) 1st Edition
3. Applied Predictive Modeling, by Max Kuhn, Kjell Johnson, 2016,Springer
4. Python Machine Learning - Second Edition, Sebastian Raschka , Packt Publishing, (2017)
5. https://www.deeplearningbook.org/
6. Neuralnetworksanddeeplearning.com
7. Deep Learning from Scratch: Building with Python from First Principles (Greyscale Indian Edition), by Seth Weidman
8. Generative Deep Learning: Teaching Machines To Paint, Write, Compose, and Play, Second Edition (Grayscale Indian Edition)by David Foster and Karl Friston