

ಡಾ. ಮನಮೋಹನ ಸಿಂಗ್
ಬೆಂಗಳೂರು ನಗರ ವಿಶ್ವವಿದ್ಯಾನಿಲಯ



Dr. MANMOHAN SINGH
BENGALURU CITY UNIVERSITY

Office of the Registrar, Central College Campus, Dr. B.R. Ambedkar Veedhi, Bengaluru – 560 001.
PhNo.080-22131385, E-mail: registrar@bcu.ac.in/registrarbcu@gmail.com

No.BCU/BoS/Syllabus-PG/Commerce/A21 /2025-26

Date:04.03.2026

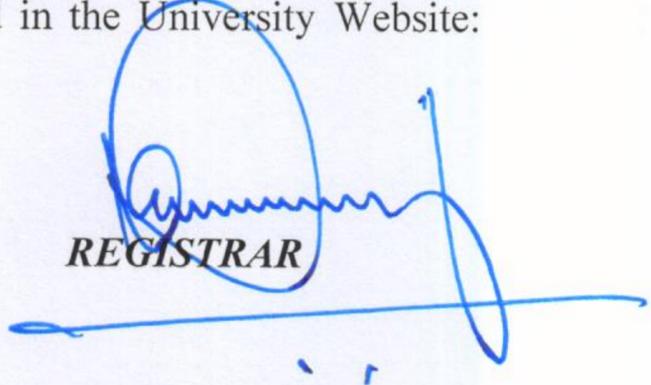
NOTIFICATION

- Sub: Syllabus for the II Semesters Post Graduate Courses
in the Faculty of Commerce –reg
- Ref: 1. The recommendations of the Board of Studies in
Commerce [PG]
2. Orders of the Vice-Chancellor dated:03.03.2026

In pursuance to the recommendations of the Board of Studies in Commerce [PG] and pending ratification by the Academic Council, the Syllabus for II Semester Post Graduate Courses in the Faculty of Commerce. Accordingly, the following CBCS Syllabus for the II Semester PG Courses of Commerce Faculty are hereby notified for implementation effective from the academic year 2025-26.

Sl. No.	Programmes
1.	M.Com [General] – II Semester
2.	M.Com [Financial Analysis] – II Semester
3.	M.Com [Fintech] – II Semester

The detailed Syllabi for above subjects are notified in the University Website: www.bcu.ac.in for information of the concerned.


REGISTRAR

To,

1. The Registrar [Evaluation], MSBCU
2. The Dean, Faculty of Commerce, MSBCU.
3. The Principals of the concerned affiliated Colleges of MSBCU – through email.

Copy to:

1. The P.S. to Vice-Chancellor/Registrar/Registrar (Evaluation), MSBCU
2. Office copy / Guard file / University Website: www.bcu.ac.in

**M.Com (Fin-Tech) - COURSE MATRIX****II SEMESTER**

Paper Code	Subjects	Total Instruction Hrs	Duration of Exam (Hrs)	Marks			Credits
				IA	Exam	Total	
2.1	Analytics for Financial Sector	60	3	30	T - 50 P - 50	100	4
2.2	Fundamental Analysis with Automation	60	3	30	T - 50 P - 50	100	4
2.3	Block chain Technology and Management	60	3	30	70	100	4
2.4	Quantitative Techniques for Finance	60	3	30	70	100	4
2.5	GST & Custom Duty	60	3	30	70	100	4
2.6	Digital Marketing	60	3	30	70	100	4
2.7	Business Models for Start ups	45	3	30	70	100	3
	Certificate Course	-	-	-	-	50	2
II SEMESTER TOTAL OF CREDITS							29

Note:

1. The student has to undergo a **Compulsory Certification Course of minimum two credits** on Advanced Excel / Spreadsheet and submit the certificate by the end of Second semester before the commencement of exams.

AND

2. Any one course related to their area of Specialization in any MOOC platform such as SWAYAM, NPTEL, AICTE, CEC, SPRINGBOARD (INFOSYS), ORACLE, FKCCI, NISM of minimum 30 hours during first year and submit the certificate by the end of Third Semester, which is compulsory.



Name of the Course : Analytics for Financial Sector		
Course Code : 2.1	Course Credits: 4	No. of Hours per week: 4 Hrs.
T : 50 P: 50	Total Marks : 100	Total No. of Teaching Hours: 60 Hrs.
<u>Course Description</u>		
<p>This subject teaches how to use data to understand and solve real-life finance problems. Students start with the basic financial reports of a company (balance sheet, profit and loss, cash flow) and learn what they tell us about strength, risk and profitability. Then, using simple tools in R and Python (two popular, free software languages), students see how to clean data, create charts, find patterns in past prices and returns, and build basic prediction models. The focus is not on “hard coding” but on understanding how computers can quickly analyse large volumes of financial data and support better investment and business decisions.</p>		
Course Objectives:		
<p>The main objectives of this course are to:</p> <ul style="list-style-type: none"> ● To gain understanding on the need and significance of Financial Analytics for various business requirements. ● To understand the Basic concepts of R ● To gain financial analytics knowledge using python ● To identify, formulate, and implement a Fintech project using R ● To prepare the project using Python. 		
Course Outcomes:		
<p>On the successful completion of the course, student will be able to:</p> <ol style="list-style-type: none"> 1. Describe, define and apply the major components of the Financial Analytics and its importance in Fin Tech 2. Learn and apply the financial analytics process in R 3. Learn and apply the financial analytics process in Python 4. Learn and implement the applications of Financial Analytics using R 5. Apply python concepts and practices to advanced financial analytics 		
Module 1	Financial Analytics	10 Hrs
<p>Introduction: Meaning-Importance of Financial Analytics Uses-Features-Documents used in Financial Analytics: Balance Sheet, Income Statement, Cash flow statement-Elements of Financial Health: Liquidity, Leverage, Profitability. Analysts: Role and Responsibilities Information and Knowledge-Methodology-Data-Required Competencies for the Analyst-Hypothesis Driven Methods-Data Mining with Target Variables-Explorative Methods-Business requirements.</p>		
Module 2	Financial Analytics with R	14 Hrs
<p>What is R and its application - Language features: functions, Assignment, Arguments and types. Financial Statistics: Concept and mathematical expectation - Probability - Mean; SD and Variance - Skewness and Kurtosis - Covariance and correlation - Capital Asset Pricing model. Financial Securities: Bond and Stock investments - Housing and Euro crisis - Securities Datasets and Visualization - Plotting multiple series. Time Series and Sharpe ratio: Examining and Stationary - Auto Regressive and integrated moving average Processes. Time periods and Annualizing - Ranking investment candidates - Sharpe Ratio for Income Statement growth.</p>		
Module 3	Financial Analytics with Python	12 Hrs
<p>Numbers in Python: Using type with different and creating an imaginary number - using numbers: using math operations and number formats. Python ingredients: Variables, names and objects - Numbers: Integers - Precedence - Bases - type. Conversion, Strings: Create coin Quotes-Reading Crossovers- Pairs trading-Financial Plots- Financial Data- Regression Analysis. Supervised Learning: Linear Regression- Ordinary Least Squares- Regularized Regression- Logistic Regression- K-Nearest Neighbors- Linear Discriminant Analysis-</p>		



Classification and Regression Trees- Unsupervised Learning: Dimensionality Reduction- Clustering Techniques- k-means Clustering.		
Module 4	Financial Analytics Applications using R	12 Hrs
Gauging the market Sentiment: Mark or Regime Switching model - Bayesian reasoning - Beta distribution. Stimulating Trading Strategies: Foreign exchange markets - Chart analytics - Initialization and finalization - Bayesian Reasoning within Positions. Prediction using fundamentals and binomial model for options: Best income statement Portfolio - obtaining Price Statistics - combining the income statement with Price statistics - Prediction using classification trees and Recursive Partitioning. Applying Computational finance - risk Neutral Pricing and No Arbitrage - High Risk - Free Rate Environment.		
Module 5	Financial Analytics and Development using Python	12 Hrs
Excel Integration- Basic Spreadsheet Interaction- Scripting Excel with Python- Object Orientation and Graphical User Interfaces- Object Orientation- Basics of Python Classes- Simple Short Rate Class- Cash Flow Series Class- Graphical User Interfaces- Short Rate Class with GUI- Updating of Values- Cash Flow Series Class with GUI- Web Integration- Web Basics- Web Plotting- Static Plots- Interactive Plots- Real-Time Plots- Rapid Web Applications- Web Services.		
Skill Development Activities		
<ol style="list-style-type: none"> 1. Hands-on Financial Modeling Workshop 2. Case Study on Investment Decision-Making 3. Simulated Portfolio Management Exercise 		
Books for References		
<ol style="list-style-type: none"> 1. Financial Analytics – Pitabas Mohanty, Wiley India (New Delhi). 2. Financial Analytics with R: Building a Laptop Laboratory for Data Science – Mark J. Bennett & Dirk L. Hugen, Cambridge University Press. 3. NSE Academy – “Data Analytics in Capital Markets” program materials (National Stock Exchange of India). 		
E-Resources		
<ul style="list-style-type: none"> • NPTEL (SWAYAM) – Courses on Financial Analytics, Corporate Finance, Econometrics, Python for Data Science. • Coursera – Financial Analytics, Investment Management, Python for Finance • edX – Data Analysis for Finance, Risk Management, Business Analytics. • Khan Academy – Basics of finance, accounting, valuation, and capital markets. • NSE India – Live & historical market data, derivatives, indices, reports. • BSE India – Company filings, financial statements, market statistics. 		



Name of the Course: Fundamental Analysis with Automation		
Course Code : 2.2	Course Credits: 4	No. of Hours per week: 4 Hrs.
T : 50 P: 50	Total Marks : 100	Total No. of Teaching Hours: 60 Hrs.
Course Description		
<p>This subject deepens students' understanding of how to judge the true worth of a company and then shows how to automate parts of that analysis using tools. Students learn to go beyond simple ratios and look at cash flows, quality of earnings, working capital cycles, and business model strength and industry structure. They also learn how to build integrated financial models (linking income statement, balance sheet and cash flow), test different scenarios (best case, worst case, stress tests), and apply valuation methods like Discounted Cash Flow (DCF) and relative valuation in Excel. On the automation side, the course introduces tools like Excel, SPSS and Chartink to create dashboards, screen stocks using customised filters, back-test strategies and apply basic machine learning ideas to forecasting and risk flags.</p>		
Course Objectives:		
<p>The main objectives of this course are to:</p> <ol style="list-style-type: none"> 1. Master sophisticated fundamental analysis methodologies beyond traditional financial metrics, including enterprise value analysis, quality scoring systems, and forward-looking indicators 2. Develop expertise in building enterprise-grade financial models with multi-scenario analysis, Monte Carlo simulations, and probabilistic forecasting techniques 3. Apply advanced valuation frameworks including absolute valuation (DCF with varying WACC scenarios), relative valuation (comparable companies analysis, precedent transactions), and sum-of-the-parts valuation. 4. Implement machine learning algorithms for predictive modelling in fundamental analysis, including financial distress prediction and earnings forecasting. 		
Course Outcomes:		
<p>On the successful completion of the course, student will be able to:</p> <ol style="list-style-type: none"> 1. Evaluate companies using comprehensive fundamental analysis frameworks incorporating quantitative metrics, qualitative factors, and macroeconomic variables 2. Develop sophisticated financial models with scenario analysis, sensitivity testing, and probabilistic forecasting for investment decision-making 3. Apply advanced valuation methodologies and determine intrinsic value across different company life cycles and business models 4. Develop institutional screening systems with customizable criteria, backtesting frameworks, and portfolio construction algorithms 5. Conduct advanced industry and competitive analysis using structural frameworks and proprietary data sources. 		
Module 1	Advanced Fundamental Analysis Framework	12 Hrs
<p>Evolution of Fundamental Analysis - Traditional vs. Modern fundamental analysis approaches, Market efficiency hypothesis and implications for fundamental analysts, ESG integration in fundamental analysis frameworks, Quality of earnings, EBITDA adjustments, operating leverage analysis, Free cash flow calculations, working capital optimization, cash conversion cycles, Forensic analysis techniques, red flags and anomalies, Dupont analysis, pyramid ratios, extended DuPont decomposition, Industry structure analysis using Porter's Five Forces framework, Strategic positioning and competitive dynamics</p>		
Module 2	Advanced Financial Modeling and Valuation	12 Hrs
<p>Enterprise Financial Modelling - Integrated income statement, balance sheet, and cash flow linkages, Inventory, receivables, payables management, Monte Carlo simulation for valuation uncertainty quantification, Scenario branching and decision tree analysis, Stress testing frameworks: Historical scenarios, hypothetical scenarios, reverse stress testing, Value at Risk (VaR) and Conditional Value at Risk (CVaR) calculation, Discounted Cash</p>		



Flow (DCF) Valuation, WACC, growth rates, margin assumptions, Reverse DCF analysis: Implied growth and profitability assumptions, Industry-specific metrics: P/E for tech, EV/EBITDA for industrial, P/S for e-commerce, Trading vs. intrinsic value analysis, Sensitivity to business cycle and industry dynamics		
Module 3	Coding and Automation for Financial Analysis	14 Hrs
Introduction to Excel for Financial Analysis, Building dynamic financial dashboards using Excel functions ,Financial Ratio Analysis using Excel, Liquidity ratios calculation , Profitability ratios , Leverage ratios , Efficiency ratios ,Introduction to SPSS for Financial Data Analysis, Creating professional financial reports using SPSS output		
Module 4	Advanced Fundamental Analysis and Screening with Chartink	14 Hrs
Sector and Industry Analysis , Company Analysis and Investment Decision Making , Portfolio Construction using Fundamental Analysis , Introduction to Chartink, Overview of Chartink features and capabilities, setting up and navigating the Chartink platform, Screening and Technical Analysis, Using Chartink to screen stocks based on Fundamental parameters,, Integrating fundamental analysis with external tools.		
Module 5	Machine Learning and Quantitative Analysis for Fundamental Analysis	8 Hrs
Feature Engineering for Financial Prediction – Financial ratio feature engineering: Momentum features, mean reversion features, Technical feature extraction from price data, Feature scaling and normalization for ML algorithms, Supervised Learning for Fundamental Analysis – Linear regression for valuation: Stock price prediction, multiple regression models, Logistic regression for classification: Outperformance prediction, distress detection, Unsupervised Learning Applications – Clustering for sector and peer classification: K-means, hierarchical clustering, Dimensionality reduction: PCA for factor analysis, t-SNE for visualization, Time Series Analysis and Forecasting for FA, Predictive Modeling Applications		
Skill Development Activities		
<ol style="list-style-type: none"> 1. Automated Financial Statement Analysis 2. Students develop skills in automating ratio and trend analysis using financial statements and analytical tools. 3. Financial Data Extraction and Processing 4. Learners acquire the ability to automatically collect and clean financial data from stock market and corporate data. 5. Python-Based Fundamental Analysis 6. Learners apply programming techniques to perform automated financial analysis and peer comparison. 7. Financial Dashboard and Visualization Development 		
Books for References		
<ol style="list-style-type: none"> 1. Fundamental Analysis for Investors – Raghu Palat (Indian context; widely cited in lists of Indian stock market books). 2. Equity Asset Valuation (4th Edition) – Jerald E. Pinto, Elaine Henry, Thomas R. Robinson, John D. Stowe (CFA Institute Investment Series, Wiley). 3. NSE Academy / NCFM – Fundamental Analysis Module official workbook / study material (National Stock Exchange of India). 		
E-Resources		
<ul style="list-style-type: none"> • https://www.classcentral.com/course/udemy-python-for-finance-and-trading-algorithms • https://www.udemy.com/course/python-for-finance-and-algorithmic-trading-with-quantconnect • https://www.classcentral.com/course/udemy-python-financial-analysis-investment-data-fundamentals • https://www.classcentral.com/course/skillshare-algorithmic-trading-quantitative-analysis-using-python 		



Name of the Course: Block chain Technology and Management		
Course Code : 2.3	Course Credits: 4	No. of Hours per week: 4 Hrs.
CIE : 30 SEE : 70	Total Marks : 100	Total No. of Teaching Hours: 60 Hrs.
Course Description		
<p>This subject explains what block chain really is beyond the buzzwords, and how it can change the way businesses record, share and secure information. Students begin with basic ideas of centralised Vs distributed systems and how a block chain stores data in “blocks” linked together so that nobody can easily tamper with records. They then learn how Bitcoin works as the first big use-case, and how newer platforms like Ethereum add “smart contracts” that can run business logic automatically. The course also covers different generations of block chain (1.0 currency, 2.0 smart contracts, 3.0 non-financial uses), real-world applications in finance and other industries, and management issues like regulation, scams, privacy, and business models.</p>		
Course Objectives:		
<p>The main objectives of this course are to:</p> <ol style="list-style-type: none"> To give an overview on block chain technology To gain knowledge on Bit coin and network structure Familiarize with crypto currencies. To learn the technical challenges in Block chain technology. To develop & integrate ideas from various domains and implement the technology in different perspectives 		
Course Outcomes:		
<p>On the successful completion of the course, student will be able to:</p> <ol style="list-style-type: none"> Learn the basic concepts of distributed systems and structure of Block chain Gain insights on Bitcoin and understand the mechanics of Bitcoin transactions Know the importance of various crypto currencies Understand Block chain Learning and its application for various Business Models Analyze the Block chain Solutions and understand the idea of Blockchain Society 		
Module 1	Overview of Block Chain	10 Hrs
<p>A Payment System- Two types of Software Architecture- Advantages of Distributed Systems- Disadvantages of Distributed Systems- Mixing Centralized and Distributed Systems- Purpose of Blockchain- Layers of Blockchain- Blockchain Uses and Use Cases- Laying the Blockchain Foundation- Cryptography- The Structure of Blockchains- Blockchain Applications- The Blockchain Life Cycle- Blockchains in Use.</p>		
Module 2	Overview of Bitcoins	12 Hrs
<p>History of Money- Dawn of Bitcoin- Bitcoin Definition- Working with Bitcoins- The Bitcoin Blockchain- Block Structure- Merkle Tree- The Genesis Block- The Bitcoin Network- Network Discovery for a New Node- Bitcoin Transactions- Consensus and Block Mining- Block Propagation- Bitcoin Scripts- Bitcoin Wallets.</p>		
Module 3	Block Chain 1.0, 2.0 and 3.0	14 Hrs
<p>Blockchain 1.0: Currency- How a Cryptocurrency Works- Blockchain 1.0 in Practical Use- Blockchain 2.0: Contracts- Financial Services- Crowd funding- Bitcoin Prediction Markets- Smart Property- Smart Contracts- Blockchain 2.0 Protocol Projects- Ethereum: Turing Complete Virtual Machine- Automatic Markets and Trade nets- The Blockchain as a Path to Artificial Intelligence- Blockchain 3.0: Applications Beyond Currency, Economics, and Markets- Blockchain Science: Grid coin, Folding coin.</p>		
Module 4	Impacts of Block Chain	12 Hrs
<p>Blockchain Learning: Bitcoin MOOCs and Smart Contract Literacy- Learn coin- Currency, Token, Tokenizing- Community coin- Campus coin- Currency Multiplicity-Demurrage Currencies- Technical Challenges- Business Model Challenges- Scandals and Public Perception- Government Regulation- Privacy Challenges for Personal Records- Blockchain Genomics- Blockchain Health.</p>		



Module 5	The Real Business of Blockchain	12 Hrs
<p>Blockchain Inspired Solution- Business Currencies with Blockchain Inspired Solution- Blockchain complete solution- Seeking Value Consorting with the Enemy- Game on for Tokenization- Embracing Consensus through Decentralization- Market Access and Participation- Enhanced Blockchain Solutions- Unleashing the Power of Smart Things- The Blockchain Organization- The Blockchain Society.</p>		
<p>Skill Development Activities</p> <ol style="list-style-type: none">1. Blockchain Transaction Simulation2. Smart Contract Demonstration3. Industry Whitepaper Review4. Security & Ethical Issues Discussion		
<p>Books for References</p> <ol style="list-style-type: none">1. Blockchain Technology: Concepts and Applications – Kumar Saurabh & Ashutosh Saxena, Wiley India.2. Blockchain for Business: IT Principles into Practice – Davide Comuzzi, Paul Grefen & Andrea Meroni, Routledge.3. NSE Academy / NSE India – “Blockchain Technologies” online course material (listed under NSE’s online interactive courses).		
<p>E-Resources</p> <ul style="list-style-type: none">• NPTEL (SWAYAM) – Blockchain Architecture, Cryptography, Distributed Systems.• Coursera – Blockchain Basics, Blockchain for Business, Smart Contracts.• edX – Blockchain Technology, FinTech and Blockchain applications.• Udemy (Academic reference) – Ethereum, Smart Contracts, Blockchain for Managers.• Ethereum.org – Smart contracts, decentralized applications (DApps).• Remix IDE – Online IDE for writing and testing smart contracts.		



Name of the Course: Quantitative Techniques for Finance		
Course Code : 2.4	Course Credits: 4	No. of Hours per week: 4 Hrs.
CIE : 30 SEE : 70	Total Marks : 100	Total No. of Teaching Hours: 60 Hrs.
Course Description		
<p>This course introduces quantitative and analytical techniques used in financial decision-making. It covers statistical, mathematical, and optimization tools applied to financial problems. The course emphasizes data analysis, probability, regression, and forecasting models relevant to finance. Students are trained to apply quantitative methods for risk analysis, portfolio management, and financial planning. Upon completion, learners will be able to analyze financial data and support evidence-based financial decisions</p>		
Course Objectives:		
<p>The main objectives of this course are to:</p> <ol style="list-style-type: none"> 1. To understand the fundamental concepts and importance of quantitative methods in financial analysis and decision-making. 2. To develop proficiency in statistical tools and techniques applicable to finance and investment analysis. 3. To master probability distributions and their applications in financial modeling and risk assessment. 4. To gain expertise in correlation and regression analysis for understanding relationships between financial variables. 5. To learn time series analysis techniques for forecasting stock prices, exchange rates, and market trends. 6. To prepare students for professional roles in equity research, portfolio management, and financial analysis. 		
Course Outcomes:		
<p>On the successful completion of the course, student will be able to:</p> <ol style="list-style-type: none"> 1. Understand and explain fundamental concepts of statistics and probability in financial context. 2. Apply descriptive and inferential statistics to analyze financial data 3. Calculate and interpret probability distributions used in finance 4. Perform correlation and regression analysis to understand financial relationships 5. Conduct hypothesis testing for financial decision-making 		
Module 1	Foundations of statistics and probability in finance	10 Hrs
<p>Introduction to Quantitative Methods in Finance - Importance of quantitative techniques in modern finance, Applications in investment analysis, risk management, and trading, Role of data and analytics in financial decision-making, Overview of tools and technologies used in financial analysis, Descriptive Statistics - Types of data: Nominal, ordinal, interval, and ratio data, Measures of central tendency: Mean, median, mode, weighted average, Measures of dispersion: Range, variance, standard deviation, coefficient of variation, Measures of shape: Skewness, kurtosis, and their financial interpretations, Practical applications: Stock return analysis, volatility analysis, portfolio risk measurement</p>		
Module 2	Advanced foundations of statistics and probability in finance	12 Hrs
<p>Data Visualization for Financial Analysis - Histograms and frequency distributions, Box plots for outlier detection, Scatter plots and correlation visualization, Time series plots for trend analysis, Financial charts: Candlestick charts, bar charts, line charts, Probability Concepts - Basic probability rules and definitions, Conditional probability and independence, Bayes' theorem and its applications in financial forecasting, Probability distributions: Discrete and continuous, Normal Distribution in Finance - Properties of normal distribution, Standard normal distribution (Z-distribution), Z-score calculation and interpretation, Applications: Probability of returns, risk thresholds, confidence intervals, Limitations of normal distribution in financial modelling</p>		
Module 3	Probability distributions and financial applications	14 Hrs
<p>Discrete Probability Distributions - Binomial distribution: Properties and applications in option pricing, Poisson distribution: Applications in event frequency modeling, Hypergeometric distribution: Sampling without replacement, Calculation of probabilities, mean, and variance, Practical examples: Default probability, portfolio default scenarios, Distribution Analysis and Selection - Goodness-of-fit tests: Chi-square test, Kolmogorov-Smirnov test, Identifying appropriate distributions for financial data, Tail risk and extreme value theory introduction, Distribution parameter estimation (Method of moments, Maximum likelihood), Monte Carlo Simulation Basics - Generating random samples from distributions, Simple Monte Carlo applications in finance</p>		



Module 4	Hypothesis Testing, Time Series Analysis and Forecasting	14 Hrs
<p>Hypothesis Testing in Finance -Null and alternative hypotheses formulation, Type I and Type II errors, significance level, One-tailed and two-tailed tests, Testing means: z-test, t-test for single and paired samples, Testing variances: F-test for equality of variances, Practical applications: Market anomaly testing, strategy validation, Time Series Fundamentals - Components of time series: Trend, seasonality, cyclical, irregularity, Stationarity concept and importance in financial analysis, Autocorrelation and Partial Autocorrelation functions (ACF, PACF), Trend identification and decomposition methods, Seasonal adjustment techniques, Volatility Forecasting Models - ARCH (Autoregressive Conditional Heteroscedasticity) models, GARCH models: Specification and properties, Estimating and forecasting volatility using GARCH</p>		
Module 5	Financial Modelling, Valuation, and Risk Measurement	10 Hrs
<p>Financial Modelling Fundamentals –Model building blocks: Inputs, calculations, outputs, Projection methodologies: Historical averages, regression-based, expert judgment, Building financial statement models (income statement, balance sheet, cash flow), Scenario analysis: Base, bull, bear cases, Sensitivity analysis and tornado diagrams, Two-way sensitivity tables, Valuation Using Quantitative Techniques – Discounted Cash Flow (DCF) approach, Terminal value calculation: Perpetuity growth, exit multiple methods, Sensitivity of valuation to key assumptions, Relative valuation multiples: P/E, P/B, EV/EBITDA, Comparable company analysis, Precedent transactions analysis</p>		
<p>Skill Development Activities</p> <ol style="list-style-type: none"> 1. Numerical problem-solving sessions on time value of money, probability, and statistical measures using financial data. 2. Case-based application of regression and correlation to analyze relationships between financial variables. 3. Portfolio risk and return calculation exercise using hypothetical or historical market data. 4. Forecasting activity applying trend analysis and moving averages for financial decision-making. 5. Interpretation of quantitative outputs (tables, charts, and results) for managerial and investment decisions. 		
<p>Books Recommended:</p> <ol style="list-style-type: none"> 1. Quantitative Methods for Business, Management and Finance – Louise Swift & Sally Piff — comprehensive intro to quantitative techniques with business/finance applications. 2. Essential Quantitative Methods for Business, Management and Finance – Les Oakshott — clear and accessible coverage of statistics and decision tools. 3. Quantitative Techniques in Business, Management and Finance: A Case-Study Approach – Umesh Kumar B. Dubey, D. P. Kothari, G. K. Awari — interdisciplinary methods with examples. 4. Quantitative Techniques: Theory & Problems – Tulsian — Indian textbook for practice and theory (Pearson). 5. Quantitative Methods for Banking & Finance – IIBF — banking-oriented quantitative methods. 		
<p>E-Resources</p> <ul style="list-style-type: none"> • SWAYAM (UGC–CEC), Indirect Tax Law, Dr. Shankar S. Sodha • SWAYAM (NPTEL), Valuation and Creating Sustainable Value, Dr. Padmini Srinivasan • SWAYAM (UGC–CEC), Quantitative Techniques for Management, Dr. Manharlala N. Patel 		



Name of the Course: GST & Custom Duty		
Course Code : 2.5	Course Credits: 4	No. of Hours per week: 4 Hrs.
CIE : 30 SEE : 70	Total Marks : 100	Total No. of Teaching Hours: 60 Hrs.
Course Description		
<p>This course aims to develop a systematic understanding of the conceptual, legal, and procedural aspects of Goods and Services Tax (GST) and Customs Duty in India. It examines the structure of GST, including levy, supply, valuation, input tax credit, and statutory compliance. The course also analyses customs law with respect to classification, valuation, and assessment of import and export duties. Emphasis is placed on interpreting tax provisions and applying them to practical business situations. On completion, students will be able to comply with indirect tax regulations and support decision-making in taxation and trade practices</p>		
Course Objectives:		
<p>The main objectives of this course are to:</p> <ol style="list-style-type: none"> 1. Understanding the basic concepts of indirect taxation and provide comprehensive knowledge of Goods and Services Tax (GST) and Customs Duty Laws in India. 2. Understand the legal and procedural aspects of GST and Customs laws. 3. Analyze the practical aspects of GST compliance and Customs procedures. 4. Equip students with the skills to interpret and apply GST and Customs legislation for business decision-making. 		
Course Outcomes:		
<p>Students will be able to:</p> <ol style="list-style-type: none"> 1. Understand the framework of GST and its implications on business transactions 2. Identify and analyze the provisions related to Supply, Input Tax Credit, and GST Registration. 3. Comprehend the calculation and payment of GST, returns filing, and GST compliance. 4. Understand Customs laws and procedures, including the valuation and classification of goods. 5. Handle practical issues related to GST refunds, audits, appeals, and Customs duty exemptions and apply the knowledge of GST and Customs for business advisory, consultancy, and litigation matters 		
Module 1	INTRODUCTION TO GST, LEVY AND COLLECTION	08 Hrs
<p>Evolution of GST in India; Structure of GST; Key Definitions; Principles and Scope of GST; GST Council and its Role; Levy and Chargeability of GST; Concept of Supply (Section 7 of CGST Act); Taxable, Non-Taxable, Exempted, Deemed Supplies, Exemptions under GST, Reverse Charge Mechanism (RCM), features and changes in GST 2.0.</p>		
Module 2	TIME, PLACE & VALUATION OF SUPPLY	14 Hrs
<p>Time of Supply (TOS) – Introduction – TOS of Goods and Services; TOS in case of Reverse Charge; Domestic Transactions; International Transactions. Place of Supply (POS) – Introduction; POS of Domestic Supply of Goods, Import – Export of Goods, Domestic Supply of Services & Cross-Border Supply of Services Value of Supply (VOS) – Introduction; Transaction Value; Inclusions & Exclusions; Valuation rules & Methods</p>		
Module 3	INPUT TAX CREDIT & GST LIABILITY	14 Hrs
<p>Conditions for Availing ITC; Blocked Credits; Matching of ITC; ITC on Capital Goods and Input Services; Reversal & Reclaim of ITC; Computation of GST Liability</p>		
Module 4	PROCEDURES UNDER GST	10 Hrs
<p>Registration Process under GST (Regular and Composition Scheme); Returns under GST: GSTR 1, GSTR 3B, GSTR 9, etc.; Annual Return and GST Audit; Payment of Tax and Refunds; Assessment, Audit, and Appeals under GST; GST Administration, Offenses, and Penalties; Anti-profiteering Measures</p>		
Module 5	CUSTOMS DUTY	14 Hrs
<p>Concept of Customs Duty and its Constitutional Authority; Types of Customs Duty; Valuation of Goods under Customs; Import - Export Documentation & Procedure; Warehousing under Customs; Duty Drawback Scheme and Export Promotion Schemes.</p>		



Books for References:

1. Goods and Services Tax (GST) by V.S. Datey
2. GST Law and Practice by Vandana Bangar and Yogendra Bangar
3. Customs Law Practice and Procedure by R.K. Jain
4. Indirect Taxes Law and Practice by V.S. Datey
5. GST Manual with GST Law Guide & Digest of Landmark Rulings by R.K. Jain

E – Resources

1. **SWAYAM – UGC (CEC)**, Indirect Tax Law, Dr. Shankar S. Sodha
2. **SWAYAM – UGC**, GST – The Basics of Goods and Services Tax, Dr. Alice Mani
3. **SWAYAM – IGNOU**, Introduction to GST, Prof. Anirban Ghosh
4. **SWAYAM – UGC (CEC)**, Indirect Taxes and Customs Duty, Prof. Subrata Kumar Dey
5. **SWAYAM – IGNOU**, GST and Customs Procedures



Name of the Course: DIGITAL MARKETING			
Course Code : 2.6	Course Credits: 4	No. of Hours per week: 4 Hrs.	
CIE : 30	SEE : 70	Total Marks : 100	Total No. of Teaching Hours: 60 Hrs.
<u>Course Description</u>			
<p>This course provides a comprehensive understanding of digital marketing concepts and tools relevant to contemporary business environments. It covers key areas such as search engine optimization, social media marketing, content marketing, and online advertising. The course emphasizes data-driven decision-making through web analytics and performance measurement. Students gain practical exposure to digital platforms and digital consumer behavior. On completion, learners will be able to design, implement, and evaluate digital marketing strategies for business organizations.</p>			
Course Objectives			
<ol style="list-style-type: none"> 1. To provide conceptual knowledge of digital marketing principles and the digital business environment. 2. To familiarize students with major digital marketing tools such as SEO, SEM, social media, and content marketing. 3. To develop the ability to analyze digital consumer behavior and online market trends. 4. To enable students to use web analytics and performance metrics for evaluating digital marketing campaigns. 5. To equip students with practical skills to design and implement effective digital marketing strategies for business organizations. 			
Course Outcomes			
<p>After completing the course, the students will be able to:</p> <ol style="list-style-type: none"> 1. Explain core concepts and frameworks of digital marketing and their role in modern business. 2. Apply digital marketing tools such as SEO, social media, email, and online advertising in business contexts. 3. Analyze digital consumer behavior and online market data to support marketing decisions. 4. Evaluate digital marketing campaign performance using web analytics and key performance indicators. 5. Design and present an integrated digital marketing strategy for a business or brand. 			
Module 1	Introduction to Digital Marketing		12 Hrs
<p>Introduction, Meaning & Definition, History, Objectives, Features, Scope, Benefits and Problems, Techniques, Digital Marketing v/s Real Marketing. Landscape – Past – Today – Future; Internet Infrastructure Stack Business Models & Strategies: Strategic Planning – Strategy to Electronic Planning – Strategic Drivers of the Internet Economy – Business Models to Digital Business Models – E-Business Models– Performance Metrics – The Balanced Scorecard.</p>			
Module 2	Digital Marketing Environment		14 Hrs
<p>Product – Products on Internet – Creating Customer Value Online – Product Benefits – E-Marketing Enhanced Product Development – Price – Change in Pricing Strategies – Buyer and Seller Perspectives – Payment Options – Pricing Strategies – Distribution– Online Channel Intermediaries – Distribution Channel Length and Functions – Channel Management and Power – Distribution Channel Metrics – Promotion – Integrated Marketing Communication (IMC) – Internet Advertising – Marketing Public Relations – Sales Promotion Offers – Direct Marketing – Personal Selling – IMC Metrics. Search Engine Optimization (SEO) – Contents, Tools & Optimization. Content Management – SWOC.</p>			
Module 3	Research & Environment		12 Hrs
<p>Data Drive Strategy – Marketing Knowledge Management – Monitoring Social Media – Technology-Enabled Approaches – Real-Space Approaches – Marketing Databases and Data Warehouses – Data Analysis and Distribution – Knowledge Management Metrics - Consumer Behaviour Online – Segmentation – Targeting – Differentiation – Positioning Strategies, Online Marketing Research Tools, Affiliated Marketing – Concept. Overview of Global E-Marketing Issues – Country and Market Opportunity Analysis – Technological Readiness Influences Marketing – Wireless Internet.</p>			



Module 4	Customer Acquisition and Retention	10 Hrs
<p>Profile of Consumers – Browsing Behaviour Model – Elements of Social Media – Social Media Strategies – Social Media Performance Metrics – Building Customer Relationships – Relationship Marketing – Stakeholders – Three Pillars of Relationship Marketing – Customer Relationship Management (CRM) – CRM Building Blocks – Ten rules for CRM Success – CRM Platforms, Strategies & Models. E-CRM System: Why & Uses, Website Solution Method, Web Analytics & Use of Google Analytics – Reports.</p>		
Module 5	Emerging Issues	12 Hrs
<p>Online Governance and ICANN – Jurisdiction – Fraud – Consumer Loyalty of Website-Services – The Quadratic Effect of Flow – Role of Technology Readiness in Developing Trust and Loyalty for E-Services in Developing. Access – The Digital Divide Ethical and Legal Issues – Privacy – Digital Property – Online Expression – Cyber Security –Cyber Crime. Email, Facebook, Instagram, LinkedIn and other Social Applications Marketing - Concept</p>		
<p>Skill Development Activities:</p> <ol style="list-style-type: none"> 1. Digital Marketing Strategy Design Exercise 2. Case Study Discussion on Digital Campaigns 3. Influencer Marketing Role Play 		
<p>Suggested Books:</p> <ol style="list-style-type: none"> 1. KAUSHIK, A. (2010). Web Analytics 2.0 (1st ed.). Wiley Publishing, Inc. TK 5105.88817 K38i 2. KRUG, S. (2014). Don't make me think, Revisited (3rd ed.). New Riders Press TK 5105.888 K78 2014 3. HUNT, B. (2011). Convert! Designing websites to increase traffic and conversion (1st ed.). Wiley Publishing. TK 5105.888 H85 4. BAILEY, M (2011). Internet Marketing: An Hour a Day (1st ed.). Wiley Publishing. HF 5415.1265 B29 5. KERPEN, D. (2011). Likeable Social Media (1st ed.). McGraw-Hill HF 5415.1265 K47 6. RYAN, D. & JONES, C. (2012). Understanding Digital Marketing (2nd ed.). Kogan Page Publishers. HF 5415.1265 R93 2012 7. STOKES, R. (2014). EMarketing. The essential guide to marketing in a digital world (5th. Ed.). Retrieved from http://www.redandyellow.co.za/product/textbook-digital/ 8. P E-Marketing, Judy Strauss and Raymond Frost, Prentice Hall, 6th Edition, 2013 9. Internet Marketing: Integrating Online and Offline Strategies. M. L. Roberts and Debra Zahay, 3rd edition, Cengage Publishing, 2013 10. Digital Marketing: Strategy, Implementation and Practice, Chaffey D., Ellis-Chadwick, 5th Edition, F., Pearson, 2012. 11. E Marketing – The essential guide to online marketing, Rob Stokes, Flat world knowledge, 2010. 12. E-marketing in Developed and Developing Countries: Emerging Practices, Hatem El- Gohary and Riyadh Eid, IGI Global, 2013 13. The Essential Guide to Online Marketing, Rob Stokes, Quirk, ISBN: 9781936126323 14. The New Rules of Marketing and PR: How to Use Social Media, Blogs, News Releases, Online Video, and Viral Marketing to Reach Buyers Directly, David Meerman Scott, 2nd Edition, Jan 2010 15. E-Commerce: An Indian Perspective, P. T. Joseph, Prentice Hall, 4th Edition, 2013 16. Electronic Commerce: A Simplified Approach, Munesh Chandra Trivedi, Jaico Publishing House, 2011. 17. Online Display Advertising: Targeting and Obtrusiveness, Marketing Science, Gold farband Tucker, May-June 2011. 		
<p>E-Resources:</p> <ul style="list-style-type: none"> • SWAYAM – UGC (CEC), Digital Marketing, Dr. Tejinderpal Singh • SWAYAM – UGC (CEC), Introduction to Digital Marketing, Dr. S. Sangeetha • SWAYAM – IGNOU, Digital Marketing and Social Media Marketing • SWAYAM – IGNOU, Entrepreneurship Skills and Digital Marketing Strategies, Dr. Gagan Singh & Dr. Gopal Datt • SWAYAM – UGC, AI in Digital and Social Media Marketing, Dr. Mahalakshmi S 		



Name of the Course: BUSINESS MODELS FOR STARTUPS		
Course Code : 2.7	Course Credits: 3	No. of Hours per week: 3 Hrs.
CIE : 30 SEE : 70	Total Marks : 100	Total No. of Teaching Hours: 45 Hrs.
Course Description		
<p>This course introduces students to the concept and design of business models in startup ventures. It examines various business model frameworks, revenue models, and value creation mechanisms. The course emphasizes opportunity identification, customer discovery, and validation of business ideas. Students learn to analyze scalability, sustainability, and risk in start-up business models. On completion, learners will be able to design and evaluate viable business models for start-up enterprises.</p>		
Course Objectives		
<ol style="list-style-type: none"> 1. To develop an understanding of the concept and significance of business models in startup ventures. 2. To familiarize students with various business model frameworks, revenue models, and value propositions. 3. To enable students to identify and evaluate startup opportunities using customer and market insights. 4. To analyze the scalability, sustainability, and risk factors associated with startup business models. 5. To equip students with the ability to design, test, and present viable business models for startup enterprises. 		
Course Outcome		
<p>After completing the course, students will be able to:</p> <ol style="list-style-type: none"> 1. Explain the concepts, components, and types of business models relevant to startup ventures. 2. Apply business model frameworks such as the Business Model Canvas to startup ideas. 3. Analyze customer needs, value propositions, and revenue models for startup feasibility. 4. Evaluate the scalability, sustainability, and risk associated with different startup business models. 5. Design and present a viable and innovative business model for a startup enterprise. 		
Module 1	Introduction to Startup	12 Hrs
<p>Introduction, Meaning & Definition, Characteristics, Types, Objectives, Scope of Start ups, Functions, Eligibility Criteria for Start-ups, List of recent successful Start-ups in India and their stories. Pradhan Mantri MUDRA Yojana, Venture Capital Scheme, Support for International Patent Protection in Electronics & Information Technology (SIP-EIT), Stand up India, Single Point Registration Scheme (SPRS), Extra Mural Research Funding, High Risk – High Reward Research and other schemes.</p>		
Module 2	Startup India	08 Hrs
<p>Introduction, Overview of Indian Startup Ecosystem, Government Initiatives – Handholding, Funding / Incentives, Incubation centres, Credit Guarantee Scheme for Startups, Tax Exemptions & Legal support by government, Benefits to Start-ups by Indian Government, Other State Initiatives to support Start-ups, Challenges for Start-ups in India.</p>		
Module 3	Business Plan	08 Hrs
<p>Business Plan, Importance of BP, Preparation of BP, Typical BP format – Financial aspects of the BP – Marketing aspects of the BP – Human Resource aspects of the BP – Technical aspects of the BP – Social aspects of the BP – Preparation of BP – Common pitfalls to be avoided in preparation of a BP.</p>		
Module 4	Business Models	10 Hrs
<p>Introduction to Business Models, Meaning & Definition, change in business models, impact of technology on business models, Case Studies: Swiggy Business Model, Paytm Business Model, Ola Business Model, Oyo Rooms Business Model, Byju’s Business Model, Flipkart Business Model, iD Fresh Food Business Model and other International Business Models. Successful Business Models in India and abroad.</p>		
Module 5	Risks in Business Models	07 Hrs
<p>What is Risk, Types of Risks in Business Models, Risk Mitigation Strategies. Introduction to Risk Management, Meaning & Definition, Steps, Risk management practices adopted by promoters of business, Recent trends in business models.</p>		



Skill Development Activities

1. Preparation of a Business Model Canvas for a startup idea through group activity.
2. Customer problem–solution mapping exercise using real or hypothetical startup cases.
3. Revenue model design activity comparing different monetization strategies for startups.
4. Pitching and peer evaluation of startup business models in the classroom.
5. Case analysis of successful and failed startup business models to identify key learning points.

Books for References:

1. Adam J. Bock, Gerard George, “The Business Model Book”, Pearson Education Limited, 2017.
2. Alexander Chernev, “The Business Model: How to Develop New Products, Create Market Value and Make the Competition Irrelevant”, Cerebellum Press, 2017
3. P. Kanagasabapathi, “Indian Models of Economy, Business & Management”, PHI Learning, 2013.
4. <https://timesnext.com/business-models-of-most-successful-startups-in-india/>
5. <https://www.startupindia.gov.in/content/sih/en/government-schemes.html>
6. <https://www.marketingmind.in/10-biggest-challenges-faced-by-startups-in-india/>
7. Respective Business Models by Companies.
8. <https://www.cloudways.com/blog/best-startup-books-for-new-entrepreneurs/>

E-Resources

- **SWAYAM – NPTEL**, Entrepreneurship, Prof. Sunil Mishra
- **SWAYAM – NPTEL**, Developing Soft Skills and Personality (Entrepreneurial Perspective), Prof. T. Ravichandran
- **SWAYAM – UGC (CEC)**, Innovation, Business Models and Entrepreneurship, Prof. Neharika Vohra
- **SWAYAM – IGNOU**, Entrepreneurship Development
- **SWAYAM – UGC**, Business Model and Funding, Dr. P. S. Aithal
