



Department of Economics

M.A. Applied Economics

**CHOICE BASED CREDIT SYSTEM (CBCS) & LEARNING
OUTCOME BASED FRAMEWORK (LOCF)**

SYLLABUS (2025 Batch)

PROGRAMME LEARNING OUTCOMES: (PLOs)

On completion of the Programme students will be able to

PLO1: Demonstrate the knowledge of theories, policies, and empirical findings of Economics.

PLO2: Engage in scientific inquiry, critical thinking, using quantitative and qualitative methods.

PLO3: Access and extract data from multiple sources, analyse and interpret the results using quantitative and qualitative tools.

PLO4: Demonstrate competence in written and oral communication and convincingly present arguments with virtual tools.

PLO5: Apply knowledge of economics for team building and create entrepreneurial initiatives for livelihood and social development.

PROGRAMME SPECIFIC OUTCOMES (PSOs):

PSO1: Apply theories, models, and tools of Economics to analyze socio-economic issues and formulate viable solutions.

PSO2: Undertake scientific enquiry and research to resolve socio-economic problems

PSO3: Demonstrate professional competencies to investigate socio-economic issues, extracting qualitative and quantitative data, critically examining its impacts for resource allocation, distribution, and exchange.

PSO4: Engage in reflective thinking leading to self-learning and lifelong learning.

PSO5: Forge sustainable linkages with communities, thereby giving a boost to civic engagement

DEPARTMENT OF ECONOMICS

CHOICE BASED CREDIT SYSTEM (CBCS) & LEARNING

OUTCOMES - BASED CURRICULAR FRAMEWORK (LOCF)

M.A. Applied Economics (2025-2027 Batch) Semester I

SYLLABUS AND SCHEME OF EXAMINATION

Semester	Part	Course Code	Title of Course	Course Type	Instruction hours /Week	Contact hours	Tutorial Hrs	Duration of Examinations	Examination Marks			Credits
									CA	ESE	Total	
I	III	MAE2501	MicroeconomicsTheory & Application	CC	5	73	2	3	25	75	100	4
I	III	MAE2402	Macroeconomics Theory & Policies	CC	5	73	2	3	25	75	100	4
I	III	MAE2403	Statistics for Data Analysis	CC	6	88	2	3	25	75	100	5
I	III	MAE2504	Economics of Growthand Development	CC	5	73	2	3	25	75	100	4
I	III	MAE2505	Agricultural Economics	CC	5	73	2	3	25	75	100	4
I	III	MAE25P1	Business Analytics with Spread Sheets – Practical I	CC	4	58	2	3	25	75	100	2

CC-Core Courses; CA–Continuous Assessment ESE-End Semester Examination

Course Number	Course Name	Category	L	T	P	Credit
MAE2501	MICROECONOMICS THEORY AND APPLICATION	Theory	73	2	-	4

PREAMBLE

To make the students to understand consumer behavior with the theories of Demand and Production and elaborate various market structure and the theories of distribution.

COURSE LEARNING OUTCOMES

Upon Completion of this course, the Students will be able to

CLO Number	CLO Statement	Knowledge Level
CLO1	Define, explain, and compare the Theory of distribution.	K2
CLO2	Understand the theories of consumer behavior	K3
CLO3	Identify the choice under uncertainty and Economics of information.	K4
CLO4	Examine the alternative theories of firms.	K5
CLO5	Evaluate how price and output is determined in different market situations and the market structures	K6

MAPPING WITH PROGRAMME LEARNING OUTCOMES

CLOs	PLO1	PLO2	PLO3	PLO4	PLO5
CLO1	S	L	L	L	L
CLO2	S	M	L	L	L
CLO3	M	S	S	M	M
CLO4	M	M	M	S	M
CLO5	S	S	S	M	S

S-Strong; M-Medium; L-Low

SEMESTER I
CORE PAPER I - MICROECONOMICS THEORY AND APPLICATION

Unit- I: Consumer Choice

14 Hours

Cardinal and ordinal utility - Indifference curve approach – Slutsky’s Decomposition of price effect into substitution effect and income effect – Consumer surplus - Marshall’s and Hicksian measures – Compensatory Demand Curve- Revealed Preference Theorem

Unit- II: Economics of Information

14 Hours

Informational asymmetry – Choice under Uncertainty - N-M Index – Inter-temporal choice - Market for lemons- Adverse selection – Insurance market and adverse selection – Solution to principal agent problem- Hidden action (Moral Hazard) - Signaling and Screening.

Unit- III: Market Structure Models

16 Hours

Perfect competition – Price and output determination – Optimum Firm-Monopoly – Short run and long run equilibrium - Price discrimination monopoly control, and regulation – Contestable Market-Monopolistic competition–Chamberlin Model- selling costs - Excess capacity – Oligopoly – Duopoly Non-Collusive Models - Oligopoly - Collusive Models - Cartels and mergers -Price leadership - Monopsony –Workable competition.

Unit -IV: Alternative Theories of Firm

13 Hours

Full Cost Pricing Rule- Limits Pricing Theory- Bains Theory- Sylos-Labini Model-Modigliani’s Models- Peak Load Pricing – Administered Pricing- Purchasing Power Parity Price.

Unit -V: Distribution Theories

16 Hours

Neo-classical approach – Marginal productivity Theory; Clark’s marginal productivity theory- Marshall-Hicks marginal productivity theory- Wicksteed theory- Product exhaustion theorem; - Modern Theory of distribution – Factor Pricing in imperfect product and factor markets- Determination of Wages –Labour supply and wage determination – Role of trade unions and collective bargaining

Text Books:

S.No	Author Name	Title of the Book	Publication	Year and Edition
1	Koutsoyiannis.A	Modern Microeconomics	Bloomsbury Academic India	2023, 2 nd ed
2	Agarwal, H.S	Micro Economic Theory	Ane’s Books Pvt. Ltd., New Delhi	2010, 8 th ed

References Books:

S.No	Author Name	Title of the Book	Publication	Year and Edition
1	Hal R. Varian	Intermediate Micro Economics	East-West Press: New Delhi	2010, 8 th ed
2	Ahuja H.L	Advanced Economic Theory	Chand & co New Delhi	2019, 22 nd ed

Pedagogy: Lecture by chalk & talk, Power Point Presentation, Assignment, Quiz, Seminar

Course Designers:

1. Ms.Sobiya. R, Assistant Professor, Department of Economics
2. Dr.Dhanya. K.S, Assistant Professor, Department of Economics

COURSE NUMBER	COURSE NAME	Category	L	T	P	Credit
MAE2402	MACROECONOMICS THEORY AND POLICIES	Theory	73	2	-	4

PREAMBLE

To understand the theoretical foundation of macroeconomics and the contribution of different schools of thought to the further development of macroeconomics.

COURSE LEARNING OUTCOMES

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

CLO Number	CLO Statement	Knowledge Level
CLO1	Understand nature of various macroeconomic variables such as output, unemployment, inflation, productivity, and the major challenges associated with the measurement of these aggregates.	K2
CLO2	Explain the difference between financial markets and there all economy, and how these linkages influence the impact of economic policies over different time horizons.	K3
CLO3	Examine macroeconomic theories of short-term fluctuations and long-term growth in the economy.	K4
CLO4	Evaluate the consequences of basic macroeconomic policy options under differing economic conditions within a business cycle.	K5
CLO5	Analyse balance of payment-wealth effect in the static model- expenditure changing policies- Effective demand accelerator principle	K6

MAPPING WITH PROGRAMME LEARNING OUTCOMES

CLOs	PLO1	PLO2	PLO3	PLO4	PLO5
CLO1	S	M	L	L	L
CLO2	S	M	M	L	M
CLO3	S	S	M	M	M
CLO4	M	S	S	S	S
CLO5	M	S	S	M	S

S-Strong; M-Medium; L-Low

SEMESTER – I

CORE PAPER -MACROECONOMICS THEORY AND POLICIES

Unit-I: Income and Output determination

13 Hours

The development of Macroeconomics-Government sector and foreign Sector-Classical theory of income and employment- The saving investment balance- The labour market equilibrium- Aggregate demand and supply, money and prices in classical model- Keynes' theory of employment- Consumption function, investment demand –Effective Demand-Determination of equilibrium Income-Theory of Multiplier-Derivation of the expenditure multiplier.

Unit-II: Demand side and Supply Side Equilibrium

15 Hours

Equilibrium income and the interest rate determination in the product market- Equilibrium income and the interest rate determination in the money market- Derivation of IS and LM curves-Shift in IS and LM curves-Simultaneous equilibrium- Fiscal and monetary policy effects on demand - Interaction of monetary and fiscal policies-Aggregate supply in the short run and long run – Supply side disturbances and reactions-Demand side disturbances and reactions- Determination of equilibrium income, employment, rate of interest and price level.

Unit-III: Consumption, Saving and Investment

16 Hours

Theories of aggregate consumption- Absolute income hypothesis- Relative income hypothesis- Life cycle hypothesis-Permanent income hypothesis-Robert Hal land Random Walk Hypothesis- Non-income factors affecting consumption-The MPS model-The wealth effect in the static model-The present value criterion for investment-The marginal efficiency of investment- Investment demand and output growth-The accelerator principle and stabilization policy-The rental cost of capital and investment-Tobin's q theory of investment.

Unit-IV: Monetary and Fiscal policy

15 Hours

The instruments of monetary policy-The mechanism of monetary expansion- money growth targeting and inflation targeting -The effects of fiscal policy Changes-Three ranges of LM curve- The effectiveness of monetary and fiscal policy: Monetarists and Fiscalists-Tax rate changes and the budget Deficit-Fiscal stimulus and deficit financing- crowding out and crowding in controversy- Quantitative easing policies-macroeconomic policies in advanced and emerging economies.

Unit-V: The External Sector equilibrium

14 Hours

The current account and product market equilibrium-The capital account and balance of payments Equilibrium-Balance of payment adjustment and the LM curve- The Classical approach: The automatic adjustment method- Balance of payment adjustment by policy measures: Mundell-Fleming model- The expenditure changing policies- The expenditure switching policy: Devaluation- Monetary approach to Balance of payment adjustments.

Text Books:

S.No	Author Name	Title of the Book	Publisher	Year and Edition
1	M.L.Jhingan	Macro Economics	Vrinda Publication	2017,42 nd ed
2	N.GregoryMankiw	Macro Economics	Worth Publication	2023,5 th ed

Reference Books:

S.No	Author Name	Title of the Book	Publisher	Year and Edition
1	D.N.Dwivedi.	Macro Economics: Theory and Policy	Tata Mc Graw Hill Education.	2018, 5 th ed
2	William.H. Branson	Macroeconomic Theory and Policy	All India Traveller Book Seller Publishers, NewDelhi	2005, 3 rd ed

Pedagogy: Lecture by chalk & talk, Power Point Presentation, Case study, Assignment, Quiz,Seminar

Course Designers:

1. Dr.K.Renuka, Associate Professor, Department of Economics..
2. Dr.S.PadmaAnnakamu, Assistant Professor, Department of Economics,

Course Number	Course Name	Category	L	T	P	Credit
MAE2403	STATISTICS FOR DATA ANALYSIS	Theory	88	2	-	5

PREAMBLE

To provide a strong foundation in statistical concepts and develop skills in data handling, research, model building and forecasting.

COURSE LEARNING OUTCOMES

Upon Completion of this course, the students will be able to

CLO Number	CLO Statement	Knowledge Level
CLO1	Summarize the basic Probability rules and understand theoretical distributions.	K2
CLO2	Acquire knowledge on the various sampling methods and testing of Hypothesis	K2, K3
CLO3	Use t test and chi square for data analysis	K4
CLO4	Understand the application of one- and two-way ANOVA	K5
CLO5	Apply various decision-making tools available	K6

MAPPING WITH PROGRAMME LEARNING OUTCOMES

CLOS	PLO1	PLO2	PLO3	PLO4	PLO5
CLO1	M	S	M	L	L
CLO2	M	S	S	M	M
CLO3	M	S	S	M	M
CLO4	M	S	S	M	M
CLO5	M	S	S	S	S

S-Strong; M-Medium; L-Low

SEMESTER – I

CORE PAPER III- STATISTICS FOR DATA ANALYSIS

Unit- I: Probability

18 Hours

Probability - Addition and Multiplication Theorems - Conditional Probability - Discrete and Continuous - Random Variables - Mathematical Expectations – Bayes Theorem - Theoretical Distributions - Binomial, Poisson and Normal.

Unit-II: Sampling and Hypothesis Testing

18 Hours

Sampling Theory - Types of Sampling - Sampling Distributions - Parameter and Statistic - Testing of Hypothesis - Level of Significance - Type I and Type II Errors - Standard Error - Properties of Estimator.

Unit- III: Test of Significance Large and Small Sample

18 Hours

Difference between Large and Small Samples - Test of Significance for Large Samples - Test for Two Means and Standard Deviations - Proportion and Confidence Interval - Small Sample Test – t-test - Paired t- test - Chi-square Test- Test of Goodness of Fit.

Unit- IV: Analysis of Variance:

16 Hours

F test: Assumptions in F test - Analysis of Variance: Assumptions – Test of Hypothesis about the variance of two population – One tailed test - Analysis of Variance (ANOVA) – Assumptions – Classifications - One-Way Classification - and Two-Way Classifications (Simple problems).

Unit- V: Statistical Decision Theory:

18 Hours

Definitions – Decisions under different environment - Maximin – Maximax - Minimax – Laplace Criterion - Expected Monetary Value, Expected Value of Perfect Information (EVPI) - Decision Tree – Rules of drawing a decision tree – Bayesian Decision Theory (Simple Problems).

Text Books:

S.No	Author Name	Title of the Book	Publisher	Year and Edition
1.	Arora P N, Sumeet Arora and Arora S	Comprehensive Statistical Methods	S. Chand Publications	2017, 3 rd ed
2.	Anderson, Sweeney and Williams	Statistics for Business and Economics	Cengage	2014, 12 th ed

Reference Books:

S.No	Author Name	Title of the Book	Publisher	Year and Edition
1	Aggarwal. Y.P	“Statistics Methods	Sterling Publishers Private Ltd., New Delhi	2017, 2 nd ed
2.	Pillai R.S.N. and Bagavathi V	Statistics	Sultan & Chand Sons, New Delhi	2019, 8 th ed

Pedagogy: Chalk and Talk, PPT, Pair and Share, Peer Learning

Course Designers:

1. Dr. C. Athena. Assistant Professor, Department of Economics
2. Dr. K. Renuka, Associate Professor, Department of Economics

Course Number	Course Name	Category	L	T	P	Credit
MAE2504	ECONOMICS OF GROWTH AND DEVELOPMENT	Theory	73	2	-	4

PREAMBLE

To enable the students to examine the challenges faced by developing countries; explore the factors that influence their economic growth and the role of policies in promoting sustainable development.

COURSE LEARNING OUTCOMES

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

CLO Number	CLO Statement	Knowledge Level
CLO 1	Understand the concepts of poverty and inequality and role of governance and institutions in the context of sustainable development, environmental issues, and globalization	K2
CLO 2	Apply the Growth Models and Theories to analyze economic growth, while also understanding the role of human capital, structural transformation, innovation, and technology in the context of economic growth.	K3
CLO 3	Analyse the merits and demerits of trade development strategies, understanding the dynamics of industrialization and structural transformation	K4
CLO 4	Analyze the distinctions between economic growth and development, and understand the historical perspectives	K4
CLO 5	Evaluate the theoretical frameworks, and measurement techniques in the field of growth and development economics	K5

MAPPING WITH PROGRAMME LEARNING OUTCOMES

CLOs	PLO1	PLO2	PLO3	PLO4	PLO5
CLO 1	S	M	L	M	S
CLO 2	S	S	M	M	S
CLO 3	S	S	S	M	S
CLO 4	S	M	M	M	M
CLO 5	S	S	S	S	S

S-Strong; M-Medium; L - Low

SEMESTER – I
CORE PAPER IV - ECONOMICS OF GROWTH AND DEVELOPMENT

Unit- I: Introduction to Growth and Development Economics

12 Hours

Definitions and distinctions between economic growth and Development-Historical perspectives on Development-Theoretical frameworks in growth and development Economics-Measuring economic development: income and non-income Indicators-Key challenges.

Unit- II: Theories of Economic Growth

17 Hours

Harrod- Domar Model-Solow Growth Model-Endogenous Growth Theories-Human Capital and Economic Growth-Structural Transformation and Growth-Innovation, Technology, and Growth- Critical minimum efforts thesis- Low level equilibrium Trap-Dualism and Dependency theory- Neo-classical Theories of Growth Preferences, Technology, and Demographics - Lewis Model,Ranis and Fei Model, Big push theory.

Unit- III: Economic Development Strategies

14 Hours

Industrialization and Structural Transformation-Rural and Agricultural Development-Human Capital Development-Technological progress and innovation policies- Trade and development strategies- Role of Foreign Aid and Foreign Direct Investment- Environmental sustainability in development- Economic reforms and liberalization- Case studies on development policies and their outcomes

Unit- IV: Inequality, Poverty, and Development

15 Hours

Concepts of poverty and inequality-Measurement of poverty and inequality-Multidimensional Poverty – HDI - The poverty-environment nexus-Policies for poverty reduction-Inclusive development and social safety nets- Urbanization and Income Inequality-Education Disparities and Human Capital Development-Gender Inequality and Economic Development-Rural Poverty and Agriculture-Healthcare Disparities and Access to Services-Wealth Inequality and Asset Accumulation-Inequality in Access to Technology and Digital Divide.

Unit- V: Development Policy and Challenges

15 Hours

Governance and Institutions-Political Economy of Growth Institutions, Political Economy and Growth: Impact of Institutions on Long-run development, Distributional conflict and economic growth in a simple society, Canonical Cobb-Douglas model of distributional conflict, Sustainable development and environmental issues-Globalization and trade-Macroeconomic stability and fiscal policy-Case studies on selected developing countries

Text Books:

S.No	Author Name	Title of the Book	Publisher	Year and Edition
1	Michael P. Todaro and Stephen C. Smith	Economic Development	Pearson	2022, 14 th ed
2	H.L.Ahuja	Development Economics	S.Chand	2016, 1st ed

Reference Books:

S.No	Author Name	Title of the Book	Publisher	Year and Edition
1	A.P.Thirlwall	Economics of Development Theory and Evidence	Agarwal	2022, 10 th ed
2	J.P.Mishra	Economics of Growth and Development	Sahitya Bhawan Publications	2022, Reprint

Pedagogy: Chalk & Talk, PPT, Peer Learning, Quizzalise

Course Designers:

1. Dr Kavitha N.V, Asst Professor, Department of Economics
2. Dr S.Padma Annakamu, Asst Professor, Department of Economics

Course Number	Course Name	Category	L	T	P	Credit
MAE2505	AGRICULTURAL ECONOMICS	Theory	73	2	-	4

PREAMBLE

The course is structured based on three stages of Agricultural Productions, namely Pre-production, Production and Post Production so that the students get an overall understanding of the agricultural issues and policy thereof.

COURSE LEARNING OUTCOMES

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

CLO Number	CLO Statement	Knowledge Level
CLO1	Sensitize the overall development and engine of growth in agriculture	K2
CLO2	Explain Gain deep knowledge of the causes of regional variations in productivity and production, social and economic inequality,size of land holdings and lack of quality inputs etc.	K3
CLO3	Analyse the production and rural structure of the economy	K4
CLO4	Examine the post production and Pricing and marketing strategies	K5
CLO5	Describe the agriculture sector and emerging issues in an interdependent world	K6

MAPPING WITH PROGRAMME LEARNING OUTCOMES

CLOs	PLO1	PLO2	PLO3	PLO4	PLO5
CLO1	S	M	L	L	S
CLO2	S	S	M	M	S
CLO3	S	S	S	M	S
CLO4	M	S	M	S	M
CLO5	S	M	M	S	S

S - Strong; M-Medium; L-Low

SEMESTER – I
CORE PAPER V - AGRICULTURAL ECONOMICS

- UNIT-I: Introduction****14 Hours**
Agricultural Economics: meaning, nature and scope; History and Development; Contribution;Basic Theories; Hunger and Malnutrition; Food and Nutritional Security.
- UNIT- II: Production and Rural Structures****16 Hours**
Issues related to Land; Water; Energy; Seed; Fertilizers; Nexus issues; Credit; Indebtedness; Subsidies; Insurance and Capital formation. Crop Production and Productivity; Labour RelationsEmployment and Wage; Non-farm Sector; Role of Technologies; Livestock Management;Structural Transformation and Mobility
- UNIT-III: Post-Production, Marketing and Pricing Strategies****14Hours**
Cost of Cultivation and CACP; Pricing; Income; Issues in Marketing and its Channels; Minimum Support Price – Agricultural Price Policy, Contract Farming - Value Addition and Processing; Research: Education and Extension.
- UNIT-IV: Agriculture in an Interdependent World****13Hours**
WTO, Negotiations and Agreements; Trade and International Relations; Problems of Agricultural Subsidies; Patents; Agricultural Exports: Quantitative Restrictions (QRs) and Non-Tariff Barriers
- UNIT-V: Emerging Issues in Agriculture****16 Hours**
Sustainable Agriculture; Climate Change and issues; Organic, Zero Budget, Climate Smart and Precision Farming; Law and Policies, Best Practices in Agriculture from around the World.

Text Books:

S.No	Author Name	Title of the Book	Publisher	Year and Edition
1	Ray,D.,	Development Economics	Oxford Publisher	2012, 2 nd ed
2	von Braun, J, M.S. Swaminathan, and M W. Rosegrant,	Agriculture, Food Security, Nutrition, and the Millennium Development Goals	Essay, IFPRI, Washington. DC	2005, 2 nd ed

Reference Books:

S.No	Author Name	Title of the Book	Publisher	Year and Edition
1	Sadhu.A.M. & Singh	Fundamentals of AgriculturalEconomics	Himalyan Publishing House	2014, 11 th ed
2	Vaidyanathan,A	Performance of Indian Agriculture since Independence” in Kaushik Basu (ed.), Agrarian Questions	Oxford University Press	1994, Reprint

Pedagogy: Lecture by chalk & talk, Power Point Presentation, Assignment, Quiz, Seminar

Course Designers:

1. Dr.S.Padma Annakamu, Assistant Professor, Department of Economics
2. Dr.N.V.Kavitha, Assistant Professor, Department of Economics

Course Number	Course Name	Category	L	T	P	Credit
MAE25P1	BUSINESS ANALYTICS WITH SPREADSHEETS	Practical	-	2	58	2

PREAMBLE

The Course aim to have a proper understanding of analytical tools for data analysis, visualization and decision-making for real world economic and business applications.

COURSE LEARNING OUTCOMES

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

CLO Number	CLO Statement	Knowledge Level
CLO1	Understand basic functions and statistical tools for data analysis and visualization for decision-making	K2
CLO2	Demonstrate the descriptive and inferential statistical analysis and implement regression models to analyze economic data trends and market behaviour.	K3
CLO3	Develop forecasting models for business and economic predictions	K4
CLO4	Utilize functions for statement analysis, investment valuation and risk assessment in business environment.	K5
CLO5	Apply optimization techniques for resource allocation and interpret business analytics results and provide actionable insights	K6

MAPPING WITH PROGRAMME LEARNING OUTCOMES

CLOs	PLO1	PLO2	PLO3	PLO4	PLO5
CLO1	M	S	S	M	L
CLO2	M	S	S	M	M
CLO3	S	S	S	M	M
CLO4	S	S	S	M	S
CLO5	S	S	S	S	S

S-Strong;M-Medium; L-Low

BUSINESS ANALYTICS WITH SPREADSHEETS – PRACTICAL I

Introduction

- Basic Functions and Conditional formatting for data insights
- Data entry, sort, filter, remove duplicates and handle missing values

Data Visualization

- Creating Tables, Graphs and charts (Box Plot, Histogram, scatter diagram)
- Creating Pivot tables and Charts

Descriptive Statistics

- Measures of central tendency: Mean, Median, Mode
- Measures of dispersion: Range, Variance, Standard Deviation.

Inferential Statistics

- Hypothesis testing using t-tests
- Chi-square test for categorical data

Correlation and Regression Analysis

- Correlation (Karl Pearson, Spearman)
- Regression – Simple, Multiple and Interpretation

Time series Analysis and Forecasting

- Moving Averages
- Exponential smoothing and Forecasting economic trends

Financial and Economic Analysis

- Break-even analysis and Cost-benefit analysis
- Capital Budgeting techniques - NPV, IRR, PV

Optimization Techniques in Business Analytics

- Linear programming and Solver and Resource allocation and profit maximization
- What if Analysis - Sensitivity Analysis and Economic Order Quantity

Text Books:

S.No	Author Name	Title of the Book	Publisher	Year and Edition
1	Anderson, Sweeney, Williams	Essentials Of Modern Business Statistics with Microsoft Office Excel	Cengage Learning	2017, 7 th ed
2	Powell S.G. and Baker K.R.	Business Analytics: The Art of Modeling with spreadsheets	Wiley	2016

Reference Books:

S.No	Author Name	Title of the Book	Publisher	Year and Edition
1	Sima Alex	Excel Formulas and Functions: Cool Tips and Tricks With Formulas in Excel	Caprioru	2019, 2 nd ed
2	Leonardo L. Wright	Excel 2023: A Comprehensive Guide to become an Expert on Excel 2023 With All-in-One Approach	Eclectic Editions Limited	2023

Pedagogy: Lecture by chalk & talk, Power Point Presentation, Case study, Assignment, Quiz, Seminar

Course Designers:

1. Dr. S. Padma Annakamu, Assistant Professor, Department of Economics
2. Ms. Sobiya R, Assistant Professor, Department of Economics

M.A. APPLIED ECONOMICS

CHOICE BASED CREDIT SYSTEM (CBCS) &

LEARNING OUTCOMES - BASED CURRICULUM FRAMEWORK (LOCF)

SCHEME & SYLLABUS OF EXAMINATION

2025-2027 Batch

Semester II

Sem	Part	Course Code	Title of the Course	Course Type	Instruction Hours/Week	Contact Hours	Tutorial Hours	Duration of Examination	Examination Marks			Credits
									CA	ESE	Total	
II	III	MAE2506	Fiscal Economics	CC	5	73	2	3	25	75	100	4
II	III	MAE2407	International Trade & Finance	CC	5	73	2	3	25	75	100	4
II	III	MAE2408	Advanced Mathematical Economics	CC	5	73	2	3	25	75	100	4
II	III	MAE2509	IDC-Gender Economics	GC	5	73	2	3	25	75	100	4
II	III	MAE2410	Economics of Law	CC	3	43	2	3	25	75	100	3
	III	MAE24CE	Fintech Foundation and Computational Thinking	CC	3	45	-	-	100	-	100	3
II	III	MAE24P2	Data Analytics with R - Practical II	CC	4	60	-	3	25	75	100	2
II	III	17MONL1	Online Course	ACC	-	-		-	-	-	-	Gr

CC – Core Courses

GC – General Course

Gr – Grade

CA – Continuous Assessment

ESE–End Semester Examination

ACC – Additional Credit Course

COURSE CODE	COURSE TITLE	CATEGORY	L	T	P	CREDIT
MAE2506	FISCAL ECONOMICS	THEORY	73	2	-	4

Preamble

- To enable the students to understand fiscal economics, taxation policies, and their implications for India, comprehend the theoretical foundations, practical application, and international perspectives and analyse and contribute to fiscal policy discussions and decisions in the Indian context.

Prerequisite

- Basic Knowledge in Public Finance

Course Learning Outcomes

On the successful completion of the course, students will be able to

CLO Number	CLO Statement	Knowledge Level
CLO1	Explain fiscal economics, budgets, budget process in India, and deficit financing.	K1
CLO2	Analyze taxation principles, bases, rates, incidence, fiscal federalism, and GST reforms.	K2
CLO3	Apply public expenditure theories to government spending, welfare, and subsidy policies.	K3
CLO4	Evaluate fiscal–monetary policy links, fiscal deficits, inflation, and FRBM Act outcomes.	K4
CLO5	Assess external fiscal challenges, cross-border taxation, BEPS, DTAAAs, and WTO subsidy rules.	K5

Mapping with Programme Learning Outcomes

CLOs	PLO1	PLO2	PLO3	PLO4	PLO5
CLO1	S	S	S	S	S
CLO2	S	M	S	S	S
CLO3	S	S	S	M	M
CLO4	S	S	S	S	S
CLO5	S	S	S	S	S

S-Strong; M-Medium

FISCAL ECONOMICS – MAE2506- 73 HRS

UNIT I (14 Hrs)

Introduction to Fiscal Economics – Definition, Objectives, Significance and Scope of Fiscal Economics; Budget - Characteristics of a Good Budget - Preparation of a Budget - Budgeting in India- Types of Budgets; Deficit Financing - Objectives - Need - Effects - Limitations- Deficit Financing in India.

UNIT II (15 Hrs)

Principles of Taxation-Tax equity, efficiency, and simplicity-Tax bases, tax rates, and tax exemptions - Taxation and Economic Growth- Tax incidence and tax shifting – meaning- factors affecting incidence, Public Debt: Meaning, Effects and Redemption; Fiscal Federalism-Centre-State financial relations in India-Goods and Services Tax (GST) and recent reforms in GST.

UNIT – III (15 Hrs)

Public Expenditure Theories-Wagner’s law, Peacock-Wiseman hypothesis, Public Choice Theory, Colin Clerk's Critical Limit Hypothesis -Determinants of government spending, Types of public goods-Rationale for government provision, Subsidies and Welfare Programs-Analysis of subsidies in India-Poverty alleviation and social welfare schemes

UNIT – IV (14 Hrs)

Interaction of Fiscal and Monetary Policy-Complementary and conflicting aspects-Fiscal- monetary policy coordination, Deficits and Inflation-Fiscal deficits and inflation-The role of central bank in controlling inflation, Fiscal Responsibility and Budget Management Act (FRBM)-Provisions and objectives-Implementation and challenges

UNIT – V (15 Hrs)

Taxation of Multinational Corporations – Issues in taxing cross-border corporations – Base Erosion and Profit Shifting (BEPS) and Double Taxation Avoidance Agreements (DTAAs) in the Indian context; WTO and Fiscal Implications – WTO rules on subsidies and their impact on India – Selected case studies (agriculture and export subsidies).

Text Book

S.No	Authors	Title	Publishers	Year and Edition
1.	Rosen, H. S., & Gayer, T	Public Finance	McGraw-Hill Education	2017 and 10 th edn.
2.	Musgrave, R. A., & Musgrave, P. B.	Public Finance in Theory and Practice	McGraw-Hill Education	2017 and 4 th edn.

Books for Reference

S.No	Authors	Title	Publishers	Year and Edition
1.	Stiglitz, J. E., & Rosengard, J. K.	Economics of the Public Sector.	W. W. Norton &Company	2015 and 5 th Edn.
2.	Bird, R. M., & Vaillancourt, F.	Fiscal Decentralization in DevelopingCountries.	Cambridge University Press	2008 and 1 st edn.

Pedagogy

- PowerPoint Presentations, Group Discussion, Seminar, Quiz Assignment, Experience Discussion

COURSE CODE	COURSE TITLE	Category	L	T	P	Credit
MAE2407	INTERNATIONAL TRADE AND FINANCE	THEORY	73	2	-	4

Preamble

- To enable the students to acquire a comprehensive understanding of the theory and practice ofinternational trade and finance.

Prerequisite

- Basic understanding of economics, finance, and trade

Course Learning Outcomes

On the successful completion of the course, students will be able to

CLO Number	CLO Statement	Knowledge Level
CLO 1	Demonstrate a comprehensive understanding of international trade, including classical and modern trade theories	K2
CLO 2	Comprehend the historical evolution of the international monetarysystem, including the Bretton Woods era and the post-Bretton Woods period.	K2
CLO 3	Analyze the pivotal role of trade and finance in shaping economic policy-making,	K3, K4
CLO 4	Analyze the components of the Balance of Payments (BoP), comprehend foreign exchange markets and assess the implicationsof exchange rate movements on international trade and capital flows.	K4
CLO 5	Evaluate contemporary trade issues such as trade wars and regional trade agreements and their impact on the global economy	K5

Mapping with Programme Learning Outcomes

CLOs	PLO1	PLO2	PLO3	PLO4	PLO5
CLO1	S	S	S	S	S
CLO 2	M	S	S	S	S
CLO 3	S	S	S	S	S
CLO 4	S	M	S	S	S
CLO 5	S	S	S	S	S

S-Strong; M-Medium

INTERNATIONAL TRADE AND FINANCE- MAE2407-73 HRS

Unit I (14 Hrs)

Introduction to international trade and its importance in the global economy-Classical and modern trade theories (Comparative Advantage, Heckscher-Ohlin, New Trade Theory)-Global trade organizations (WTO, UNCTAD) and their functions-Trade policies, trade liberalization,and the impact on economic growth-Trade barriers and tariff analysis

Unit II (14 Hrs)

Balance of Payments (BoP) framework and its components-Foreign exchange markets andexchange rate determination-Exchange rate systems and exchange rate regimes-Exchange raterisk management and currency hedging strategies-Implications of exchange rate movements ontrade and capital flows

Unit III (15 Hrs)

Trade finance instruments -Export and import financing methods and services-Internationalinvestment and capital flows-Foreign Direct Investment (FDI) and its determinants-Portfolio investment, diversification, and risk assessment

Unit IV (15 Hrs)

International monetary system evolution (Bretton Woods, Post-Bretton Woods)-Role ofinternational financial institutions (IMF, World Bank)-Multinational corporations and theirimpact on global finance- Capital flows and international portfolio investment-Financial crisesand contagion, with a focus on emerging markets

Unit V (15 Hrs)

The role of trade and finance in economic policy-Making-Contemporary trade issues (e.g., trade wars, regional trade agreements)-Global financial regulations, Basel Accords, and international financial stability-Sovereign debt and debt crisis management-Emerging market opportunities and challenges

Text Book

S.No	Author Name	Title of theBook	Publisher	Year of Publication
1.	Paul Krugman and Maurice Obstfeld	International Trade	Pearson.	2022 and 12 th edn.
2.	Maurice D. Levi	International Finance	Routledge	2023 and 6 th edn.

Books for Reference

S.No	Author Name	Title of the Book	Publisher	Year of Publication
1.	Francis Cherunilam	International Economics	McGraw-Hill	2020 and 6 th edn.
2.	Paul Krugman and Maurice Obstfeld	International Economics-Theory and Policy	Pearson	2017 and 10 th edn.

Pedagogy

- Chalk & Talk, PPT, Peer Learning, Quizzalise

COURSE CODE	COURSE TITLE	Category	L	T	P	Credit
MAE2408	ADVANCED MATHEMATICAL ECONOMICS	Theory	73	2	-	4

Preamble

To enable the students to apply the conceptual principles and to develop an expertise in handling accounts of business entities and the consolidation of accounts through appropriate accounting techniques and policies

Prerequisite

Basic understanding about mathematical tools and economics concepts

Course Learning Outcomes

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

CLO Number	CLO Statement	Knowledge Level
CLO1	Describe the mathematical structure of the standard economic theoretical framework	K2
CLO2	Understand and apply mathematical tools to solve optimisation problems in economic theory	K2, K3
CLO3	Examine and solve mathematical models in the theory of Consumer Behaviour. Firm and market structure.	K3, K4
CLO4	Evaluate the mathematical models to analyze strategic interactions among economic agents by exploring the dynamics of Consumer Behaviour, Firm’s Behaviour market equilibrium in an economy	K5
CLO5	Mathematically estimate economic growth dynamics and synthesize mathematical tools with economic theory to build advanced models for decision-making and policy analysis.	K5, K6

Mapping with Programme Learning Outcomes

CLOs	PLO1	PLO2	PLO3	PLO4	PLO5
CLO1	S	S	M	S	S
CLO2	S	S	S	S	S
CLO3	S	S	S	S	M
CLO4	S	S	S	S	S
CLO5	S	S	S	S	S

S - Strong; M-Medium

ADVANCED MATHEMATICAL ECONOMICS - MAE2408 – 73 HRS

UNIT 1

(15 Hours)

Differentiation: Meaning – Basic Rules - Successive Differentiation of the functions up to Second Order - Partial Differentiation - Total Differentiation. Optimization: Maxima & Minima of a function with two variables – Hessian Determinant – Lagrangian Method

UNIT 2

(15 Hours)

Indifference curve analysis: Indifference curves - properties, Rate of commodity substitution (MRS) – Maximisation of utility – Slutsky Equation – Income and Substitution Effect – Important results from Slutsky Equation – Elasticity form of Slutsky equation.

UNIT 3

(15 Hours)

Production function - Equal Product Curves (Isoquants) - Shape of Isoquants - Isoquants and Ridge Lines – Least Cost Combination (Constrained Cost Minimisation) – Constrained profit Maximisation – Homogeneous Function – Properties of Linearly Homogeneous Function - Cobb Douglas Production Function - Properties.

UNIT 4

(13 Hours)

Revenue function: Average, Marginal Revenue - Total Revenue – Cost function: Average, Marginal Cost – Total Cost – Multiple Production by Monopolist – Discriminating Monopoly.

UNIT 5

(15 Hours)

Concepts of Games in economics: Player, Payoff, Outcome and Types – Different forms of representing Games – Equilibriums in Games and Simple Problems (Pure and Mixed Strategies) – Idea of Nash Equilibrium.

Text Book

S.No	Author Name	Title of the Book	Publisher	Year of Publication
1.	Metha B.C.& Madnani G.M.K	Mathematics for Economists	S. Chand Publications, New Delhi,	2020 and 1 st edn.
2.	Henderson and Quant	Micro Economic Theory	McGraw-Hill International Edition	2017 and 1 st edn.

Books for Reference

S.No	Author Name	Title of the Book	Publisher	Year of Publication
1	Allen, R.G.D.	Mathematical Analysis for Economists	Andesite Press, Berlin Germany	2015 and 1 st edn.
2.	Despande. V.D	Elementary Mathematical Techniques for Economics	S. Chand, New Delhi	2017 and 4 th edn.

Pedagogy

Chalk and Talk, PPT, Pair and Share, Peer Learning

COURSE CODE	COURSE TITLE	CATEGORY	L	T	P	CREDIT
MAE2509	GENDER ECONOMICS	THEORY	73	2	-	4

Preamble

To enable the students to apply the conceptual principles and to develop an expertise in the intersection of gender and economics. It examine how gender relations affect economic decision-making, access to resources, and power structures.

Prerequisite

Basic Knowledge in Gender Economics

Course Learning Outcomes

On the successful completion of the course, students will be able to

CLO Number	CLO Statement	Knowledge Level
CLO1	Understand the global perspectives on gender and development	K2
CLO2	Describes the gender segregation in labor markets and women participation in organized and unorganized sector	K3
CLO3	Explain the Gender issues in Environment, Family welfare Measures	K4
CLO4	Evaluate the Impact of Globalization on achieving gender equality	K5
CLO5	Assess the Initiatives towards recognition of women as agents of development	K6

Mapping with Programme Learning Outcomes

CLOs	PLO1	PLO2	PLO3	PLO4	PLO5
CLO1	S	S	S	S	S
CLO2	S	S	S	S	S
CLO3	S	S	S	S	S
CLO4	S	S	M	S	S
CLO5	S	S	S	M	M

S-Strong; M-Medium; L-Low

GENDER ECONOMICS - MAE2509-73 HRS

Unit I (13 Hrs)

Defining Gender and Economics- Key concepts: Inter sectionality,social structures, patriarchy- The role of women in economic growth- Theories of gender inequality in economic contexts, overview of feminist policies,Global perspectives on gender and development

Unit II (15 Hrs)

Gender segregation in labor markets- Women's participation in organised and unorganized sector- The role of unions and collective bargaining in promoting gender equality. Unpaid Care Work and Household Economics: The economic value of unpaid labor (care work, domestic labor)- Policies addressing unpaid labor (e.g., paid family leave, childcare). The gender pay gap: causes, consequences and impacts.

Unit III (15 Hrs)

Family structures and their economic Implications-Gender, marriage, and property rights. Women’s economic empowerment within families-Gender-based violence and its economic costs - Role of Women in Economic Development –women Entrepreneurs- Gender and Climate Change: women’s role in environmental sustainability and green economies-Climate justice from a gender perspective.

Unit IV (15 Hrs)

Gender and Digital Economy: The gender digital divide- Women in tech and digital entrepreneurship- role of AI in women empowerment-Women and access to finance-Financial literacy, banking and credit access-Gender-responsive financial systems and Policies-Women’s participation in global economies-The role of international organizations (e.g., World Bank, UN Women)-Microfinance and its impact on gender equality.

Unit V (15 Hrs)

Female Poverty and Poverty alleviation programme, Gender mainstreaming in economic policy-Social protection and gender-Gender quotas in politics and business-Evaluating gender sensitive economic policies (e.g., affirmative action, equal pay legislation), participatory approaches, gender budgeting, Impact of Feminist Economics on Policies.

Text Book				
S.No	Authors	Title	Publishers	Year and Edition
1	Eswaran, M.	Why gender matters in economics	Princeton University Press	2014 and 2 nd edn.
2	Becchio, G	A History of Feminist and Gender Economics	Routledge	2019 and 1st edn.

Books for Reference				
S.No	Authors	Title	Publishers	Year and Edition
1	Humphries. J	Gender and economics	Edward Elgar Publishing	1995 and 1st edn.
2	Negra,D &Tasker, Y.	Introduction. Gender and recessionary culture. In Gendering the Recession	Duke University Press	2014 and 1st edn.

Pedagogy				
<ul style="list-style-type: none">Lecture by chalk & talk, Power Point Presentation, Assignment, Quiz, Seminar				

COURSE CODE	COURSE TITLE	CATEGORY	L	T	P	CREDIT
MAE2410	ECONOMICS OF LAW	Theory	43	2	-	4

Preamble

- To enable the students to understand how economic theory can be applied to policy problems of the economy

Prerequisite

- Basic Knowledge in Microeconomics

Course Learning Outcomes

On the successful completion of the course, students will be able to

CLO Number	CLO Statement	Knowledge Level
CLO1	Understand the relationship between law and Economics, gain knowledge about the Indian Legal System.	K2
CLO2	Explain the Competition Act and learn the overview of the New Labour Code.	K3
CLO3	Learn about the law of contracts and Right to Information Act	K4
CLO4	Demonstrate the objectives of Consumer Protection Act and familiarize with dispute resolution processes adopted in India.	K5
CLO5	Implement knowledge about IPR and IT Act	K6

Mapping with Programme Learning Outcomes

CLOs	PLO1	PLO2	PLO3	PLO4	PLO5
CLO1	S	S	M	S	S
CLO2	S	S	S	S	S
CLO3	S	S	S	S	M
CLO4	S	S	S	S	S
CLO5	S	S	S	S	S

S-Strong; M-Medium

ECONOMICS OF LAW- MAE2410-43 HRS

UNIT I (8 Hours)

Classification of Legal System – Judicial system in India – Relationship between Economics and Law – Importance of law and Economics - Economic approach to legal rules – Law as a tool to encourage Economic Efficiency – Arrow's Impossibility Theorem.

UNIT II (9 Hours)

Meaning – Bargaining Theory – Coase Theorem and transaction costs – Intellectual Property Rights – Patents – Copyright – Trademark – Internalizing Externalities

UNIT III (8 Hours)

Economic Theory of Tort Liability – Minimizing social costs of accident – Learned Hand rule – Pricing Life or Pricing Risk - Consumer Protection Law – Breach of warranty - Insurance

UNIT IV (9 Hours)

Meaning – Economic theory of contract – spillovers – Asymmetric information - Remedies - Efficient Breach theory of contract and Performance – Discharge of contracts: Agreement - Operation of law

UNIT V (9 Hours)

Corporate restructuring: Mergers, amalgamation and Acquisition - Securities and Exchange Board of India Act - MRTP Act - Competition Act - Predatory pricing – Foreign Exchange Management Act - Information Technology Act 2000- Corporate Social Responsibility

Text Book

S.No	Authors	Title	Publishers	Year and Edition
1.	Robert D Cooter and Thomas Ulen	Law and Economics	Addison Wesley-Pearson	2012 and 6 th edn.
2.	S R Myneni	Law and Economics	New Era Law Publication	2020 and 1 st edn.

Books for Reference

S.No	Authors	Title	Publishers	Year and Edition
1.	Robin Malloy	Law and Economics: An introductory toolkit	Carolina Academic press	2019 and 1 st edn.
2.	A. Mitchell Polinsky	An introduction to law and Economics	Aspen Publication	2018 and 5 th edn

Pedagogy

- Lecture by chalk & talk, Power Point Presentation, Assignment, Quiz, Seminar

COURSE CODE	COURSE TITLE	CATEGORY	L	T	P	CREDIT
MAE24P2	DATA ANALYTICS WITH R	Practical	-	2	58	2

Preamble

- To enable the student to develop and apply skills in R software and learn procedures to formulated statistical operations in Research to enrich knowledge in data analytics.

Prerequisite

Basic Knowledge in data analysis

Course Learning Outcomes

On the successful completion of the course, students will be able to

CLO Number	CLO Statement	Knowledge Level
CLO1	Identify the core concepts of the R programming language for data analytics	K2
CLO2	Design and produce statistical graphics in R	K3
CLO3	Apply statistical tools in R platform	K4
CLO4	Formulate and organize complex data into categorical data	K5

Mapping with Programme Learning Outcomes

CLOs	PLO1	PLO2	PLO3	PLO4	PLO5
CLO1	S	S	M	S	S
CLO2	S	S	S	S	S
CLO3	S	S	S	S	M
CLO4	S	S	S	S	S

S-Strong; M-Medium; L-Low

DATA ANALYTICS WITH R - MAE24P2- 58 HRS

Introduction to R

- Introduction to R programming language
- Data types and structures in R (vectors, matrices, data frames)
- Data import and export (CSV- Excel)
- R operators: Arithmetic, assignment, comparison, and logical operators
- Working with different data types; Vector creation and manipulation
- Miscellaneous functions: Sequence, repetition, sorting, generate random numbers,
- user-defined functions

Data Visualization with R

- Basic Plotting types: Bar chart, Pie Chart, Histogram, Density plot, Boxplot
- Plot customization: Adding legend, Adding color in plots, Adding axis labels and chart title, Modifying axis and scales

Descriptive Statistics with R

- Measures of central tendency: Mean, Median, Mode
- Measures of Variability: Standard deviation, Variance, Range

Advanced Inferential Statistics with R

- Test with Proportion: T statistics, Z statistics, Chi Square
- Test with variances: ANOVA: one way and two ways

Regression Modelling

- Linearity and normality
- Fitting SLRM,MLRM
- Storing and printing the regression results
- Interpretation of the regression results
- Maximum Likelihood Estimation, and Goodness-of-Fit measures

Text Book

S.No	Authors	Title	Publishers	Year and Edition
1	Seema Acharya	Data Analytics using R	McGraw Hill Education(India) Pvt. ltd	2018 and 1 st edn.
2	Dr.Bhuvaneshwari V	Data Analytics with R programming	Scitech Publications (India) Pvt.Ltd.	2018 and 1 st edn.

Books for Reference

S.No	Authors	Title	Publishers	Year and Edition
1	Dr.Mark Gardener	Beginning R: The Statistical Programming Language	Wiley India Pvt.Ltd	2012 and 1 st edn.
2	Robert I. Kabaoff	R in Action	Himal Impressions Delhi	2015 and 2 nd edn.

Course Content and Presentation Schedule

Module No.	Topic	CLO Level	No.of Hours	Content Delivery Methods	Learning Methods
1	Open RStudio and create a new project, Run basic R commands	CLO1	2	Demo	Participatory learning
2	Create vectors and matrices, Create data frames	CLO1	2	Demo	Participatory learning
3	Import and export data from CSV file	CLO2	3	Demo	Participatory learning
4	Arithmetic Operators-Addition, Multiplication,Division,Substraction	CLO2	3	Demo	Participatory learning
5	Assignment operators, Comparison operators, Logical operators	CLO2	3	Demo	Participatory learning
6	Bar chart, Pie chart	CLO3	2	Demo	Participatory learning
7	Density plot, Boxplot, Histogram	CLO3	3	Demo	Participatory learning
8	Plot customization- Adding legend, Adding color, Adding axis labels and chart title, Modifying axis and scales	CLO3	3	Demo	Participatory learning
9	Measures of central tendency	CLO3	3	Demo	Participatory learning
10	Measures of Variability	CLO4	3	Demo	Participatory learning
11	T-statistics	CLO4	3	Demo	Participatory learning

12	Z-statistics	CLO4	3	Demo	Participatory learning
13	Chi Square	CLO3	3	Demo	Participatory learning
14	ANOVA: one way	CLO4	3	Demo	Participatory learning
15	ANOVA: two way	CLO2 CLO3	3	Demo	Participatory learning
16	Linearity and normality- Plotting residuals, Checking normality	CLO4	3	Demo	Participatory learning
17	Fitting SLRM	CLO3	3	Demo	Participatory learning
18	Fitting MLRM	CLO4	3	Demo	Participatory learning
19	Interpretation of the regression results	CLO4	3	Demo	Participatory learning
20	Leverage Input: Various Cost Functions to be used:	CLO4	3	Demo	Participatory learning

Course Designer

1.Ms. Sobiya.R