CHRIST (Deemed to be University)
School of Social Sciences
Department of Economics
Academic Year 2024-25

Programme Details

BA Dual Major with Economics as one of the Major Core

Programme Titles

BA (Economics, Political Science/Honours/Honours with Research) * **Delhi NCR Campus**
BA (Economics, Sociology/Honours/Honours with Research) * (Political Science as Minor) **Central Campus**
BA (Psychology, Economics/Honours/Honours with Research)* **(Central Campus and Yeshwanthpur Campus)**

Program Outcomes

- **PO 1**: Explain the fundamental and applied concepts from a pluralistic approach by examining new frontiers in knowledge that cuts across disciplinary boundaries
- **PO 2:** Critically evaluate economic theory, developmental policies and outcomes, political theories, ideas and ideology, social systems and interventions to promote a just and humane society.
- **PO 3:** Demonstrate ethical thinking by raising and encouraging normative questions and positions.
- **PO 4:** Demonstrate effective communication skills through group discussions, oral and written presentations.
- **PO 5**: Engage in problem solving from multidisciplinary perspectives by recognising and comprehending those economic problems are not only situated in an economy but also in society and polity.

Course Code	Title of the Course	Core/Elective/ Ability Enhancement Course/ Project	No of Hrs	Credits
SEMESTER – I				
ECO101-1	Microeconomic Analysis I	Major Core I	4	4
SOC101-1	Foundations of Sociology I	Major Core II	4	4

POL101-1C	Fundamentals of Political Science	Minor	3	3
		Multidisciplinary	3	3
ENG181-1	English	AEC	2	2
ECO161-1	Basic Data Analysis with Excel	SEC	3	3
HED181-2	Holistic Education and Development	Value Added	2	1
	Environmental Studies	Value Added		1
	Total			**20**
SEMESTER – II				
ECO101-2	Macroeconomic Analysis I	Major Core I	4	4
ECO104-2	Statistical Methods for Economics	Major Core I	4	4
SOC101-2	Foundations of Sociology II	Major Core II	4	4
SOC201-2	Classical Social Theories	Major Core II	4	4
POL102-2C	Government And Political Processes in India	Minor	3	3
		Multidisciplinary	3	3
ENG181-2	English	AEC	2	2
HED181-2	Holistic Education and Development	Value Added	1	1
	Total			**25**
ECO481-2	Internship*	Internship		4

	Total (in case of Exit)			**29**
*Summer Internship of 4 credits in case of Exit. (This is only for those who wish to exit with a Certificate in the first year)				
SEMESTER – III				
ECO201-3	Mathematical Methods for Economics	Major Core I	4	4
		Major Core II	4	4
		Multidisciplinary	3	3
		VAC	1	1
		AEC	2	2
		SEC	2	2
		SEC	2	2
ECO261-3	Introduction to Data analysis using R	SEC	3	3
	Total			**21**
SEMESTER – IV				
ECO201-4	Microeconomic Analysis II	Major Core I	4	4
ECO202-4	Macroeconomic Analysis II	Major Core I	4	4
		Major Core II	4	4
		Major Core II	4	4
		VAC	1	1
		VAC	1	1

		AEC	2	2
	Total			20
	Internship*			4
	Total (in case of Exit)			**24**
The requirement is that the student has to mandatorily complete 8 weeks of internship in their summer vacation. *This internship is applicable only to those students who are exiting in the 2nd year.				
SEMESTER – V				
ECO301-5	History of Economic Thought	Major Core I	4	4
ECO302-5	Public Economics	Major Core I	4	4
ECO303-5	Fundamentals of Economic Growth and Development	Major Core I	4	4
		Major Core II	4	4
		Major Core II	4	4
		Major Core II	4	4
	Total		**24**	7
SEMESTER – VI				
ECO301-6	Indian Economy	Major Core I	4	4
ECO302-6	Basic Econometric Methods	Major Core I	4	4
ECO303-6	International Economics	Major Core I	4	4

		Major Core II	4	4
		Major Core II	4	4
		Major Core II	4	4
	Total		**24**	7
BA HONORS IN ECONOMICS - 4 year				
SEMESTER – VII				
ECO401-7	Research Methodology in Economics	Major Core	4	4
ECO402-7	Behavioural Economics	Major Core	4	4
ECO403-7	Applied Econometrics	Major Core	4	4
ECO404-7	Financial Economics	Major Core	4	4
ECO405-7	Gender Economics	Major Core	4	4
ECO406-7	Urban Economics	Major Core	4	4
	Total			**24**
SEMESTER – VIII				
ECO401-8	Environmental Economics	Major Core	4	4
ECO402-8	Industrial Economics	Major Core	4	4

ECO403-8	Labour Economics	Major Core	4	4
ECO404-8	Health Economics	Major Core	4	4
ECO405-8	Demography and Economics	Major Core	4	4
	Total			20
TOTAL CREDITS				**176**
BA HONORS WITH RESEARCH IN ECONOMICS - 4 YEAR				
SEMESTER – VII				
ECO401-7	Research Methodology in Economics	Major Core I	4	4
ECO402-7	Behavioural Economics	Major Core I	4	4
ECO403-7	Applied Econometrics	Major Core I	4	4
ECO404-7	Financial Economics	Major Core I	4	4
ECO481-7	Academic Writing for Economics	Research project	3	3
ECO482-7	Research Proposal in Economics	Research project	3	3
	Total			**22**
SEMESTER – VIII				
ECO411-8	Environmental Economics	Major Core	4	4

ECO412-8	Industrial Economics	Major Core	4	4
ECO413-8	Labour Economics	Major Core	4	4
ECO414-8	Health Economics	Major Core	4	4
ECO486-8	Seminar Presentation	Research project	2	2
ECO487-8	Research Manuscript in Economics	Research project	4	4
	Total			**22**
TOTAL CREDITS				**176**

V. Summary of the Programme Structure

Category of Course as per UGC	Minimum Credit requirement		
	3 Year UG	4 Year UG Honors	4 Year UG Honors with research
Major (Core)	88	88+44=132	88+24 = 112
Minor (Core)/Multidisciplinary	21	21	21
Ability Enhancement Course (AEC)	8	8	8
Skill Enhancement Courses (SEC)/Summer internship	7	7	7
Value Added Courses common for all UG	6	6	6

Research Project / Dissertation	-	-	12
Total	130	174	176

I SEMESTER
MICROECONOMIC ANALYSIS I (ECO101-1)

Total No. of Hours: 60 **Credits: 4**

Course Description

This course is designed to expose the students to the basic principles of microeconomic theory. The emphasis will be on thinking like an economist and the course will illustrate how microeconomic concepts can be applied to analyse real-life situations.

Course Objectives

The course has been conceptualized in order to help the students:

- to understand how decisions related to allocation of scarce resources and trade-offs are made.
- to analyse the market for goods & services and output-price determination.
- to understand the role of government policies regulating market outcome.
- to demonstrate understanding of how rational consumers make their choice to optimize utility.
- to analyse the dynamics of factors of the production market.

Course Outcome

CO1: Summarize how decisions related to allocation of scarce resources and trade-offs are made.
CO2: Understanding the role of demand and supply in allocating economic welfare
CO3: Explain the role of government policies in regulating the market outcomes
CO4: Illustrate how consumers optimize the utility given the limited resources
CO5: Illustrate and explain the market dynamics of factors of production and impact of policy regulation on allocation of such inputs in the market.

Unit 1: Introduction **8 hrs**
Nature and scope of economics, opportunity cost, scarcity, production possibility frontier, Market system, welfare state, Microeconomics Vs Macroeconomics, Ten principles of economics.

Unit 2: Demand, Supply and Market Equilibrium **15 hrs**
Demand and supply schedules, functions and curves, Law of demand, Exceptions to the law of demand, Law of supply, Exceptions to the law of supply, Market equilibrium, Movement along a

demand and supply curve, shifts in demand and supply curves, Types of elasticities and their applications, Relationship between price elasticity and total revenue, backward bending labour supply curve, Consumer and producer surplus and the efficiency of the markets.

Unit 3: Theory of Consumer Behaviour 15 hrs

Cardinal and Ordinal utility, Law of diminishing marginal utility, Water-diamond paradox, Indifference curves, indifference schedule, marginal rate of substitution, price line, consumer's equilibrium, and comparative statics, Samuelson's revealed preference theory, Income and substitution effects (Slutsky's and Hicks' equations)

Unit 4: Theory of Production and Cost 14 hrs

Production Function-One input model, law of diminishing marginal product, total, marginal, and average products, Two-input model: isoquants and isocost lines, producers' equilibrium, expansion path, Cost analysis: Types of total and unit costs, and relationships among unit costs in the short run, long run cost analysis: behaviour of long run average and marginal costs, Behaviour of long run average cost, economies and diseconomies of scale, Laws of returns to scale.

Unit 5: Market Structure and Competitive strategies 8 hrs

Introduction to different market structure, Characteristics, price and output determination under perfect competition, The Supply Curve in a Competitive Market, Sources of monopoly, Production and Pricing Decisions of monopoly firm.

Core Textbooks:

Mankiw, G. N., "Principles of Microeconomics", Cengage Learning India Pvt Ltd,

Reference Books:

Varian, H. R., "Intermediate Microeconomics: A Modern Approach"
Pindyck, R. S. and Rubinfeld D. L., "Microeconomics", Pearson Edu Inc
Koutsoyiannis, A., "Modern Microeconomics", Palgrave Macmillan.

BASIC DATA ANALYSIS WITH EXCEL (ECO161-1)

Total No. of Hours: 45 Credits: 3

Course Description

Microsoft Excel is a tool for the statistical analysis of data. It allows to perform a wide variety of statistical procedures. Main purpose of the course is to provide students with a basic knowledge of managing and analyzing data.

Course Objectives

The aim of this course is to provide skills and knowledge which will allow the students to learn basics of MS Excel, perform basic calculations using formulas and functions, professionally format spreadsheets and create data visualizations using charts and graphs, perform advanced data operations using PivotTables.

Course Outcomes

The students will be able to

1. Examine spreadsheet concepts like create, open, view, enter and edit data
2. Learn to use functions and formulas
3. Create and edit charts and graphics
4. Understand the application VLOOKUP functions and PivotTables in Economics.

Unit 1: Getting to Know Excel **10 Hours**

The Ribbon, The Work Surface, Navigation, Creating File, Formatting, Basic mathematics including multiplication and division; Charting: Bar, Line, Pie, Column, Area, Scatter.

Unit 2: Essential Formula Knowledge **13 Hours**

Formula anatomy; Cell referencing theory and practice: absolute and relative; Function anatomy; Math functions: SUM, ROUND, AND SUBTOTAL; Basic statistics: COUNT, COUNTA, AVERAGE, MAX, MIN, MEDIAN AND MODE; Logic Functions: logical IF functions; Text functions: LEFT, RIGHT, MID, FIND AND SEARCH functions; Understanding dates: TODAY, YEAR, MONTH, DAY, and DATE functions; Understanding TIME.

Unit 3: Intermediate Formula Knowledge **12 Hours**

Conditional mathematics: SUMIF, COUNTIF, and SUMIFS; VLOOKUP with approximate match; VLOOKUP with exact match; Other Lookup methods: INDEX, MATCH and HLOOKUP as alternatives to the VLOOKUP function.

Unit 4: Data Analysis **10Hours**

Creating PivotTables; Formatting PivotTables; Calculated Fields in PivotTables; What-If Analysis.

Reference: Curtis frye (2015), Microsoft Excel 2016: Step by Step, Microsoft Press, Washington.

II SEMESTER
MACROECONOMIC ANALYSIS I (ECO101-2)

Total Number of Hours: 60 Hrs **Credits:** 4

Course Description:

This course is designed to give a systematic school-wise introduction to mainstream approaches to the study of macroeconomics. The course begins by introducing students to the historicity of economics, concepts of various important macroeconomic variables and its measurement technique. Then the course proceeds on a systematic introduction to the important macroeconomic theories adopting a chronological school-wise pattern. The introductory economics deals with detailed discussion of classical macroeconomics, in other words economics in the long run which

build the base of understanding macroeconomics. The course ends with basic open economy macroeconomics concepts with the exchange rate determination in an open economy.

Course Outcome:

At the end of the course, students will be able to-

1. Interpret the mainstream approaches to the study of macroeconomics.
2. Demonstrate the understanding of macroeconomic aggregates and measurement.
3. Explain classical theory to understand how the equilibrium level of output and employment is determined in an economy.
4. Analyse the dynamic interactions between macroeconomic variables and their impact on the economy

Unit I: Macroeconomics and Measurement of Macroeconomic Variables Hours: 15

Introduction of macroeconomics - a brief history of economics - Conceptualizing the macroeconomy: past and present -The macroeconomy as an embedded system. Concepts of National income, Measurement of GDP, Components of GDP, Real versus Nominal GDP, The GDP Deflator, The Consumer Price Index, Calculation of CPI, GDP deflator versus the CPI, Real and Nominal Interest rates; The limitations of national income statistics, Case studies.

Unit II: Classical and Keynesian Macroeconomics: Output and Employment Hours: 18

Wage, Employment and Production; Equilibrium Output and Employment, Saving, investment and the market for loanable funds- Keynesian Theory of Output and Employment

Unit III: Classical and Keynesian Macroeconomics: Money, Prices, and Interest

Hours: 18

Classical Dichotomy and Monetary Neutrality, Velocity and Quantity equation, Fisher Effect, The Classical Theory of the Interest Rate; The meaning and functions of money, banks and money supply, the money multiplier, Theories of money – exogenous and endogenous, Tools of monetary control, monetary transaction mechanism of RBI- The nature of inflation in India, Understanding inflation – two approaches.

Unit IV: Open Economy macroeconomics: Basic concepts Hours: 09

International flow of goods and capital, real and nominal exchange rates, the first theory of exchange rate determination: purchasing power parity, Open economy Macro dynamics (India's case), Money in the open economy (India's case).

Course Text:

Mankiw, N. G. (2015). *Macroeconomics* (9th ed.). USA: Worth Publishers.

Alex M. Thomas (2021). Macroeconomics: An Introduction, Cambridge University Press, Cambridge, United Kingdom

Essential Readings:

Froyen, R. (2014). *Macroeconomics: Theories and Policies* (10th ed.). Pearson Education

Dornbusch, R., Fischer, S., & Startz, R. (2015). *Macroeconomics.* (11th ed.). McGraw Hill Education.

.McConnell, C. R., & Brue, S. L. (2011). *Macroeconomics, Principles, Problems and Policies.* New York: McGraw Hill Inc.

Snowden, B. & Vane, H. R. (2005). *Modern Macroeconomics: Its Origins, Development and Current State*. United Kingdom: Edward Elgar Publishing.

STATISTICAL METHODS FOR ECONOMICS (ECO104-2)

Total no. of hours:60 Hrs **Credits: 4**

Course Description

This course emphasizes both the theoretical and the practical aspects of statistical analysis, focusing on techniques for estimating statistical models of various kinds. The goal is to help you develop a solid theoretical background in statistics, the ability to implement the techniques and to critique empirical studies in social sciences.

Course Outcomes

By the end of the course the student should be able to:

CO1: Understand the measures of central tendency and measure of dispersion.

CO2: Describe the classical, empirical, and subjective approaches to probability.

CO3: Calculate and interpret the coefficient of correlation, the coefficient of determination and the standard error of the estimate.

CO4: Evaluate price changes with the use of index numbers

UNIT 1 Introduction to Statistics and Measures of Central Tendency 15 Hrs

Introduction to Statistics-Meaning and Definition, Functions, Applications and Limitations, Collection of Data-Primary and Secondary Data, Classification and Tabulation of data, Diagrammatic and Graphic Presentation-types of diagrams, Measures of Central Tendency- Mean, Median and Mode-Geometric and Harmonic Means-Partition Values-Quartiles- Deciles-Percentiles.

Unit-2 Measures of Dispersion **Teaching Hours:10**

Measures of Dispersion: Range, interquartile range and quartile deviation, mean deviation, standard deviation and Lorenz curve Moments, Skewness and Kurtosis

UNIT 3 Correlation Analysis **10 Hrs**

Meaning - Types of correlation - Methods of correlation: Scatter diagram method, Graphic method, Karl Pearson's co-efficient of correlation, Rank method, Concurrent deviation method–The Coefficient of Determination

UNIT 4 Index Numbers **15 Hrs**

Index Numbers: meaning and importance – problems in the construction of index numbers – Types of index numbers: price index – quantity index – value index –chain index, construction of index numbers: tests of adequacy, Splicing, Base Shifting and Deflating; Consumer Price Index Number: Methods- aggregate expenditure and family budget methods; limitations of index numbers.

UNIT 5 Probability Distribution **10 Hrs**

Meaning- Set theory- Permutations and Combinations- Theorems of probability- Rules of Addition- Rules of Multiplication-Probability distribution- Random Variables- Discrete Random Variable- Continuous Random Variable- Binomial -Poisson and Normal distribution.

Essential Reference

S. P. Gupta, Statistical Methods (2021), Sultan Chand& Sons; 46th Edition.
J.K.Sharma, Business Statistics Problems and Solutions (2014), Vikas Publishing House Ltd. 1st Edition.

Recommended Readings

1. Clark, Megan J. and John A. Randal (2010) A First Course in Applied Statistics, 2nd edition, Pearson Education.
2. Lewis, Margaret (2011) Applied Statistics for Economists, Routledge
3. Ott, Lyman R and Longnecker, Michael (2008) An Introduction to Statistical Methods and Data Analysis, Sixth Edition, Brooks/Cole, USA
4. Moore, D. S. and McCabe, G.P. (2003) Introduction to the Practice of Statistics, W.H. Freeman & Company, New York.

SEMESTER III
MATHEMATICAL METHODS FOR ECONOMICS (ECO201-3)

Course Description

This course gives students a working knowledge of mathematical techniques applied in economics. Topics include functions, metrics, optimization, differentiation and integration. All techniques introduced are illustrated with mainstream applications such as consumer theory, production theory and on different market structures.

Course Outcomes

CO1: Demonstrate knowledge of understanding mathematical tools like basic functional forms, matrix algebra techniques, rules of differentiation, rules of integration, constrained optimization etc. for analysing economic theories

CO2: Identify the mathematical tools required to address economic problems, solve the numerical problems by applying mathematical methods and interpret the results

CO3: Develop both independent learning and group work skills.

UNIT 1: INTRODUCTION & FUNCTIONS 15 Hrs

Introduction-The changing scenario in economic science - Advantages and Disadvantages of using mathematics in economics.
Functions- Meaning - Distinction between a relation and a function - Functional notations: general, exact and specific forms - Explicit and Implicit forms - Inverse from - Types of functions: Linear, quadratic, cubic, exponential and logarithmic functions - Their simple uses in Economics- Market equilibrium: - Effects of taxes and subsidy on equilibrium price and quantity - Simple macro model (Keynesian macro equilibrium model).

UNIT 2: MATRICES 10 Hrs

Meaning - Types of matrices - Elementary operations on matrices - Inverse matrix - Methods of solving simultaneous equations using matrices - Determinants and their uses in solving simultaneous equations - Crammer's rule.

UNIT 3: DIFFERENTIAL CALCULUS 15 Hrs

Meaning - Simple derivative rules (one independent variable) - Application of derivatives in Economics. Partial Derivatives (Two independent variables) - Rules - Uses of partial derivatives in economics, Elasticity - Definition - Elasticity theorems - Methods of measuring elasticity- Applications of elasticity in Economics: Price elasticity - Substitutes and complements - Income elasticity - Engel's Law.

Unit 4: OPTIMIZATION **15 Hrs**

Concepts of convexity and concavity of function, Maxima and Minima of functions (one independent variable)- Simple applications from Micro Economics, Maxima and Minima of functions (two independent variables)- Unconstrained optimization, Applications of maxima and minima in Economics: Theory of consumption (numerical problems of utility maximization) - Theory of production: production function, Producer's equilibrium: output, revenue and profit maximization and cost minimization problems under perfect competition, monopoly

Unit 5: INTEGRAL CALCULUS **05 Hrs**

Simple rules of integration - Infinite and definite integral - Calculation of TR and TC functions from their respective MR and MC. Consumer's surplus and Producer's surplus.

Core Textbooks:

1. Edward T. Dowling: Schaumn's Series: Introduction to Mathematical Economics, 3rd Edition
2. R. Veerachamy: *"Quantitative Methods for Economists"*New Age International Publishers.

Recommended Books

1. Mike Rosser: Basic Mathematics For Economist
2. Chiang, A. C: *"Fundamental Methods of Mathematical Economics"*
3. Allen, R.G.D*: "Mathematical Analysis for Economists"*
4. Yamane: *"Mathematics for Economists - An Elementary Survey"*

INTRODUCTION TO DATA ANALYSIS USING R (ECO261-3)

Teaching Hours: 45 **Credits: 03**

Course Description and Course Objectives:

This course provides an introduction to the R programming language and its applications in data analysis. Students will learn the fundamentals of R programming, data manipulation, visualization, and basic statistical analysis techniques.

Course Outcomes: After successful completion of this course the students will be able to:

1. Transform and manipulate data to adapt it for various types of statistical analyses.
2. Make publication quality graphs and visualizations using the data.
3. Create applications that can handle multivariate data.

Unit 1: An Introduction to R **20 Hrs**

Introduction to R and R Studio, Basic operations and data types in R, Variables, vectors, and matrices in R, Installing and managing packages in R, importing data from various file formats

(CSV, Excel, etc.), Data cleaning and handling missing values, Subsetting and indexing data in R, Data aggregation and merging, writing functions in R, applying control structures and functions to solve problems

Unit 2: Data Visualisation, exploration, transformation and manipulation 15Hrs

Introduction to data visualization principles, creating basic plots (scatter plots, bar plots, etc.) in R, Customizing plot aesthetics (labels, colors, etc.), Advanced plotting techniques (multiple plots, facets, etc.)

Unit 3: Exploratory Data Analysis 10 Hrs

Descriptive statistics with R, Data summarization and cross-tabulation, Exploring data distributions and outliers, Visualizing distributions and relationships.

Evaluation Pattern: (CIA Only)

CIA-I	CIA-II	CIA-III	Total
30%	40%	30%	100%

References

1. John V Guttag, ―Introduction to Computation and Programming Using Python ‘‘, Revisedand expanded Edition, MIT Press, 2013

2. Robert Sedgewick, Kevin Wayne, Robert Dondero, ―Introduction to Programming in

3. Python: An Interdisciplinary Approach, Pearson India Education Services Pvt. Ltd., 2016.

4. Timothy A. Budd, ―Exploring Python‖, Mc-Graw Hill Education (India) Private Ltd 2015.

5. Kenneth A. Lambert, ―Fundamentals of Python: First Programs‖, CENGAGE Learning, 2012.

6. Charles Dierbach, ―Introduction to Computer Science using Python: A Computational Problem-Solving Focus, Wiley India Edition, 2013

SEMESTER IV

MICROECONOMIC ANALYSIS II (ECO201-4)

Course Description

The course is designed to provide a sound training in microeconomic theory to formally analyze the behaviour of individual agents. This course looks at the behaviour of a competitive firm, general equilibrium, imperfect markets and topics under information economics.

Course Objectives:

The course aims to help students to:

- Understand various aspects of consumer behaviour and demand analysis, production theory and behaviour of costs, market structure and equilibrium and efficiency of the firm.
- Examine various concepts related to optimizing behaviour of economic agents

Course Outcome

At the end of the course, the student will be able to:

CO1: Build a strong foundation in applications of microeconomic theory and to explain the dynamic relationship of microeconomic variables/aspects.

CO2: Evaluate the pros and cons of different microeconomic relations in real situations.

CO3: Examine the implication of microeconomic foundations on the macroeconomic policies

Unit 1: Pricing with Market Power **10 Hrs**

Capturing Consumer Surplus, Price Discrimination, First-Degree Price Discrimination, Second-Degree Price Discrimination, Third-Degree Price Discrimination, Intertemporal Price Discrimination and Peak-Load Pricing, The Two-Part Tariff, Bundling, Advertising

Unit 2: Monopolistic Competition and Oligopoly **20 Hrs**

Monopolistic Competition-Equilibrium in the Short Run and the Long Run, Monopolistic Competition and Economic Efficiency; Oligopoly- Equilibrium in an Oligopolistic Market, The Cournot Model, The Stackelberg Model, The Bertrand Model, Competition versus Collusion: The Prisoners' Dilemma, Implications of the Prisoners' Dilemma for Oligopolistic Pricing, Price Rigidity, Price Signaling and Price Leadership, The Dominant Firm Model, Cartels, Analysis of Cartel.

Unit 3: Markets for Factor Inputs **10 Hrs**

Competitive Factor Markets, Equilibrium in a Competitive Factor, Factor Markets with Monopsony Power, Monopsony Power: Marginal and Average Expenditure, Purchasing Decisions with Monopsony Power, Bargaining Power, Factor Markets with Monopoly Power

Unit 4: General equilibrium, efficiency and welfare **20 Hrs**

General Equilibrium Analysis, Economic Efficiency, Efficiency in Exchange, The Edgeworth Box Diagram, Efficient Allocations, The Contract Curve, Consumer Equilibrium in a Competitive Market, Equity and Efficiency, The Utility Possibilities Frontier, Equity and Perfect Competition, Efficiency in Production, The Production Possibilities Frontier, Efficiency in Output Markets, Overall efficiency and welfare economics, Market failure- Externalities; Market Power, Incomplete Information, Externalities.

Core Textbook:

Pindyck, R. S. and Rubinfeld D. L., "Microeconomics", Pearson Edu Inc

Reference Books:

Varian, H. R., "Intermediate Microeconomics: A Modern Approach" Mankiw, G. N., "Principles of Microeconomics", Cengage Learning India Pvt Ltd,
Koutsoyiannis, A., "Modern Microeconomics", Palgrave Macmillan.

MACROECONOMIC ANALYSIS II (ECO202-4)

Total Number of Hours: 60 Hrs **Credits:** 4

Course Description:

In continuation to the Introductory Macroeconomics wherein the students were given a systematic and sequential school-wise introduction to mainstream approaches in Macroeconomics, this course introduces the dynamic relationship that exists between various important macroeconomic variables in the short-run as well as in the long-run. The course begins with an in-depth discussion of the IS-LM framework which forms the foundation of the Keynesian approach. Then it proceeds to the derivation of aggregate demand and supply, followed by discussions on output, unemployment and inflation nexus and the post Keynesian development of macroeconomics.

Course Learning Outcomes:

By the end of the course the learner will be able to:

1. explain the macroeconomic dynamics in the short-run closed economy as well as open economy.
2. compare and contrast the theoretical differences between the Keynesians and the Classicals related to Aggregate Demand and Aggregate Supply.
3. test and discover the nexus between output, inflation and unemployment in both the short-run and in the long-run.
4. understand and critically evaluate contemporary macroeconomic policies, create reports and deliver presentations.

Unit I: The Keynesian System **Hours: 12**

The Simple Keynesian Model: Equilibrium Output, the role of Fiscal Policy and Multiplier; Keynesian Theory of the Interest Rate; Money supply and Money demand in Keynesian framework- The applicability to India.

Unit II: The IS-LM model **Hours: 13**

The goods market and derivation of IS curve; real influences and Shift in IS schedule; the money market and derivation of LM curve; monetary influences and the shift in LM curve; determination of equilibrium income and interest rates; the relative efficacy of fiscal and monetary policy under IS-LM framework; Critiques of IS-LM.

Unit III: The Aggregate Demand and Supply **Hours: 15**

The derivation of aggregate demand and supply curves; influence of monetary and fiscal policy on AD-AS, The Keynesian aggregate demand with vertical aggregate supply curve; sources of wage rigidity and unemployment; the flexible price with fixed money wage model; labour supply and money wage; the shift in aggregate supply; Keynes vs. Classicals**.**

Unit IV: Output, Inflation and Unemployment Hours: **Hours: 12**

Links between output and unemployment: Okun's law; Estimates of potential GDP and their limitations; Natural rate of unemployment; Factors affecting natural rate of unemployment; Links between inflation and unemployment: Phillips curve; Friedman-Phelp's expectations augmented Phillips curve; Output-inflation trade-off: Keynesian vs. Monetarists view, The nature of inflation and unemployment in India.

Unit V: Six Debates over Macroeconomic Policy **Hours: 8**

Monetary and Fiscal Policy – Pros and Cons, Handling Recession: higher spending vs. tax cuts, Monetary Policy: rule vs. discretion, Central Bank: zero inflation, Balanced Budget Debate, Tax Law Reformation for Savings: debate.

Essential Readings:

Alex M. Thomas (2021). Macroeconomics: An Introduction, Cambridge University Press, Cambridge, United Kingdom

Dornbusch, R., Fischer, S., & Startz, R. (2015). *Macroeconomics* (11th ed.). New Delhi: Tata McGraw.

Froyen, R. (2014). *Macroeconomics: Theories and Policies* (10th ed.). New Delhi: Pearson Education.

Mankiw, N. G. (2015). *Macroeconomics* (9th ed.). London: Worth Publishers.

Recommended Readings:

Abel, A. B. & Bernanke, B. S. (2011). *Macroeconomics* (7th ed.) New Delhi: Pearson Education.

Blanchard, O. (2009). *Macroeconomics* (5th ed.). New Delhi: Pearson Education.

Krugman, P. R., Obstfeld, M. & Melitz, M. (2012). *International Economics* (9th ed.). New Delhi: Pearson Education.

Moorthy, V. (2017). *Applied Macroeconomics*. New Delhi: I. K. International Publishing House.

Sheffrin, S. M. (1996). *Rational Expectations* (2nd ed.). Cambridge: Cambridge University Press.