Murshidabad University



Syllabus

for

4-year Undergraduate Programme
(Honours/Honours with Research) with

Economics Major

Under Curriculum and Credit Framework for Undergraduate Programmes (CCFUP)
based on National Education Policy (NEP),2020

(To be effective from the academic session 2025-26)

Approved in the BOS meeting held on 21st June,2025

Structure of the 4-year Under Graduate (UG) Programme (Honours) with Major Economics: Semester-wise and Course category-wise distribution of credits

SEM	Major (Code) (Credit)	Minor (Code) (Credit)	MDC (Code) (Credit)	AEC (Code) (Credit)	SEC (Code) (Credit)	VAC (Credit)	Internship	Total Credit
I	Introductory Microeconomics (UG-ECO-M-101) (4)	Principles of Microeconomics (UG-ECO-Mi-101) (4)	Basic Economics (UG-ECO-MDC-101) (3)	(UG-AEC-101) (4)	Introductory Statistics -I (UG-ECO-SEC-101) (3)	UG-VAC-101 (2)	x	20
II	Introductory Macroeconomics (UG-ECO-M-201) (4)	Principles of Microeconomics (UG-ECO-Mi-201) (4)	Basic Economics (UG-ECO-MDC-201) (3)	(UG-AEC-201) (4)	Introductory Statistics -II (UG-ECO-SEC-201) (3)	UG-VAC-201 (2)	Summer Internship: 4 credits (additional for certificate)	20
Certificate	8	8	6	8	6	4		40
III	Mathematical Methods for Economics-I (UG-ECO-M-301) (4) Statistical Methods for Economics-I (UG-ECO-M-302) (4)	Principles of Macroeconomics (UG-ECO-Mi-301) (4)	Basic Economics UG-ECO-MDC-301) (3)	X	Data Analysis and Research Methodology (UG-ECO-SEC-301) (3)	UG-VAC-201 (2)	X	
IV	Intermediate Microeconomics-I (UG-ECO-M-401) (4) Intermediate Macroeconomics-I (UG-ECO-M-402) (4) Mathematical Methods for Economics-II (UG-ECO-M-402) (4) Statistical Methods for Economics-II (UG-ECO-M-402) (4)	Principles of Macroeconomics (UG-ECO-Mi-401) (4)	X	X	X	X	Summer Internship: 4 credits (additional for diploma certificate)	
Diploma	32	16	9	8	9	6		80
v	Intermediate Microeconomics-II (UG-ECO-M-501)	Development Economics-I (UG-ECO-Mi-501)	X	X	X	X	X	

	(4)	(4)						
	Intermediate Macroeconomics-II (UG-ECO-M-502) (4)	X	X	X	X	X	X	
	International Economics-I (UG-ECO-M-503) (4)							
	Development Economics- I (UG-ECO-M-504) (4)							
VI	International Economics-II (UG-ECO-M-601) (4)	Indian Economics-I (UG-ECO-Mi-601) (4)	X	X	X	X	Summer Internship: 4 credits (additional for degree course)	
	Development Economics-II (UG-ECO-M-602) (4)							
	Indian Economics-I (UG-ECO-M-603) (4)							
	Public Economics-I (UG-ECO-M-604) (4)							
UG Degree	64	24	9	8	9	6		120
VII	Introductory Econometrics (UG-ECO-M-701) (4)	Development Economics-II (UG-ECO-Mi-701) (4)	X	X	X	X	Research/Project/Dissertation 4 credits (Honours with research)	
	Indian Economy-II (UG-ECO-M-702) (4)							
	Public Economics-II (UG-ECO-M-703) (4)							
	Research Methodology (UG-ECO-M-704) (4)							
VIII	Financial Economics (UG-ECO-M-801) (4)	Indian Economics-II (UG-ECO-Mi-801) (4)	X	X	X	X	Research/Project/Dissertation 8 credits (Honours with research)	
	Resource Economics (UG-ECO-M-802) (4)							
	Computer Application for Data A (UG-ECO-M-803) (4)							

	History of Economic Thought (UG-ECO-M-804) (4)							
Honours Without Research	**96**	**32**	**9**	**8**	**9**	**6**		**160**
Honours With Research	**84** History of Economic Thought (UG-ECO-M-804) (4)	**32**	**9**	**8**	**9**	**6**	**12** Research/Project/Dissertation	**160**

Content of the papers (Economics Major, Minor, Multidisciplinary and Skill Enhancement courses)

Semester I

Economics Major Course I

Introductory Microeconomics
(UG-ECO-M-101)

Marks: 80 **Credits:4**

Unit 1: Exploring the subject matter of Economics **10 lecture hours**

Why study economics? Scope and method of economics; Wants, Scarcity, Competing Ends and Choice - Defining Economics, the economic themes: scarcity and efficiency; fundamental questions of Economics-what to produce, how to produce and how to distribute output; marginal benefits and marginal costs; opportunity cost (private and social); the basic competitive model. Microeconomics and Macroeconomics, Normative Economics and Positive Economics. Definition of market, Competitive vs Non-competitive markets (concepts only)

Unit 2: Utility Theory **20 lecture hours**

(Focus on intuitive explanation and diagrams. Learning to analyse without using calculus a must)

Cardinal and Ordinal Approach.
Utility in Cardinal Approach- Utility and choice, Total Utility and Marginal Utility, Utility and choice- maximization, marginal utility, theory of demand
Ordinal utility: Assumptions on preference ordering, Indifference curve (IC), Marginal rate of substitution and convexity of IC, Budget constraint, Consumers 'equilibrium-interior and corner.

Unit 3: Demand and Supply: How Markets Works **20 lecture hours**

Elementary theory of Demand: Factors influencing household demand and market demand, the demand curve, movement along and shift of the demand curve.
Elementary theory of Supply: factors influencing supply, the supply curve, movement along and shift of the supply curve
The Elementary theory of market price: Determination of equilibrium price in a competitive market. the effect of shifts in demand and supply; the excess demand function: Existence, uniqueness, and stability of equilibrium; consumer surplus and producer surplus.

Concepts of Elasticity, Method of Calculation- Arc Elasticity, Point Elasticity-definition, Demand and supply -types of elasticity and factors affecting elasticity, Demand Elasticity, Long run and short run elasticities of Demand and Supply, Income and Cross Price Elasticity.

Unit 4: Production and Costs **20 lecture hours**

Concept of production and input; returns to factor and returns to scale, isoquants and diminishing rate of factor substitution – elasticity of substitution –fixed proportion, perfect substitute; various types of production functions with general concept of homogeneous and homothetic production function and their properties; production with one and more variable inputs; isocost line and firm's equilibrium and expansion paths; short run and long run costs; cost curves in the short run and long run: relation between short run and long run costs.

Unit 5: Market Structure **12 lecture hours**

Different types of market structures- Perfect competition, Monopoly, Monopolistic Competition and Oligopoly (concepts only)

Texts/ References:

1. G. Mankiw. 2007, Economics: Principles and Applications, India edition by South Western, Cengage Learning
2. R.G. Lipsey. An Introduction to Positive Economics, ELBS (6th edition)
3. Lipsey, R. and Chrystal, A. 2007 Economics, OUP
4. Pindyck, Rubinfeld and Mehta, Microeconomics, Pearson
5. G.S. Maddala and E. Miller, 1989, Microeconomics, Prentice Hall, McGraw Hill International Editions
6. Karl e Case and Ray C Fair, Principles of Economics, Pearson Education, 8th Edition, 2007
7. P Samuelson and W. Nordhaus, Economics, McGraw hill International Edition (14th edition or later edition)
8. Koutsoyiannis-Modern Microeconomics.

Economics Minor Course I

Principles of Microeconomics
(UG-ECO-Mi-101)

Marks: 80 **Credits:4**

Unit 1: Introduction **12 lecture hours**

Problem of scarcity and choice: scarcity, choice and opportunity cost; production possibility frontier; economic systems.

Demand and supply: law of demand, determinants of demand, shifts of demand versus movements along a demand curve, market demand, law of supply, determinants of supply, shifts of supply versus movements along a supply curve, market supply, market equilibrium.

Consumer surplus-using demand curve to measure consumer surplus, producer surplus.

Elasticity: price elasticity of demand, calculating elasticity, determinants of price elasticity, income elasticity, elasticity of supply and its determinants

Unit 2: Consumer Theory **15 lecture hours**

Utility in Cardinal Approach- Utility and choice, Total Utility and Marginal Utility, Utility and choice-maximization, marginal utility, theory of demand reference; Ordinal utility: indifference curve, marginal rate of substitution and convexity of IC, budget constraint, income and substitution effects; derivation of demand curve from indifference curve and budget constraint.

Unit 3: Production and Cost: 15 lecture hours

Behaviour of profit maximizing firms, production process, production functions, law of variable proportions, choice of technology, isoquant and iso-cost lines, cost minimizing equilibrium condition.

Costs: costs in the short run, costs in the long run, relation between short run and long run costs.

Unit 4: Perfect Competition **6 lecture hours**

Assumptions: theory of a firm under perfect competition, demand and revenue; marginal cost curve and supply decision of the firm, equilibrium of the firm in the short run and long run; long run industry supply curve: increasing, decreasing and constant cost industries

Texts/ References:

1. G. Mankiw. 2007, Economics: Principles and Applications, India edition by South Western, Cengage Learning

2. Case, Karl E. & Ray C. Fair, Principles of Economics, Pearson Education, Inc., 8th edition, 2007.

3. Samuelson, P. & Nordhaus, Economics,

4. Lipsey, R. and Chrystal, A. 2007 Economics, OUP

MDC (Multidisciplinary Course 1)
Basic Economics
(UG-ECO-MDC-101)

Marks: 60 **Credits:3**

Unit 1: Introduction to Micro and Macro Economics **2 lecture hours**

1.1` Problem of scarcity and choice: scarcity, choice and opportunity cost

1.2 Meaning of microeconomics and macroeconomics; positive and normative economics

1.3. What is an economy? Central problems of an economy: what, how and for whom to Produce.

Unit 2: Utility, Demand and Supply: How Markets Work. **8 lecture hours**

2.1 Meaning of Utility, Marginal Utility, Law of Diminishing Marginal Utility

2.2. Elementary theory of demand: determinants of household demand, market demand, and shifts in the market demand curve

2.3. Elementary theory of supply: factors influencing supply, derivation of the supply curve, and shifts in the supply curve

2.4. The elementary theory of market price: determination of equilibrium price in a competitive market;

Unit 3: Producer Behaviour and Supply **5 lecture hours**

3.1. Meaning of Production Function – Short-Run and Long-Run Total Product, Average Product and Marginal Product - meaning and their relationships. Returns to a Factor

3.2. Meaning of Cost function – Short run costs - Total Cost, Total Fixed Cost, Total Variable Cost; Average Cost; Average Fixed Cost, Average Variable Cost and Marginal Cost - meaning and their relationships.

Unit 4: National Income and Related Aggregates 12 lecture hours

4.1. Circular flow of income (two sector model); Methods of calculating National Income -Value Added or Product method, Expenditure method, Income method.

4.2. Aggregates related to National Income: Gross National Product (GNP), Net National Product (NNP), Gross Domestic Product (GDP) and Net Domestic Product (NDP) - at market price, at factor cost; Real and Nominal GDP, GDP Deflator, GDP and Welfare

Unit 5: Money and Banking **8 lecture hours**

5.1 Money – Different definitions of Money
5.2 Commercial Bank and its function
5.3. Central bank and its functions (example of the Reserve Bank of India): Bank of issue, Govt. Bank, Banker's Bank, Control of Credit through Bank Rate, Cash Reserve Ratio (CRR), Statutory Liquidity Ratio (SLR), Repo Rate and Reverse Repo Rate, Open Market Operations, Margin requirement.

5.3 Concept of inflation; Types of inflation; Reasons of Inflation, Methods of combating Inflation

5.4 Concept of Unemployment, different types of unemployment, Relation between inflation and unemployment

Texts/ References:

1. Karl E. Case and Ray C. Fair, Principles of Economics, Pearson Education Inc., 8th Edition, 2007.
2. N. Gregory Mankiw, Economics: Principles and Applications, Indian edition by South Western, a part of Cengage Learning, Cengage Learning India Private Limited, 4th Edition, 2007
3. Samuelson and Nordhaus, Economics, Mc-Graw Hill
4. Soumyen Sikdar, Principles of Macroeconomics, Oxford University Press.
5. L. M. Bhole and J. Mahukud, Financial Institutions and Markets, Tata McGraw Hill, 5th edition, 2011.
6 Suraj.B. Gupta-Monetary Economics, Institution, Theory and Policy, S.Chand Publishers.

SEC (Skill Enhancement Course 1)

Introductory Statistics -I
(UG-ECO-SEC-101)

Marks: 60 **Credits:3**

Unit 1. Basics of Statistics – Collection, Presentation and Analysis of Data **10 lecture hours**

1.1. Collection of Data – Primary and Secondary sources – their comparison, methods of Collection of data.
1.2. Concepts – Variable and Attribute (categorical variable) – Discrete, Continuous and Categorical Variables, Complete Enumeration Survey and Sample Survey, Population and Sample.
1.3. Presentation of data – Textual, Tabular, Diagrammatic.
1.4. Frequency Distribution – Construction of Ogives, Column diagram, Frequency Polygon, Histogram, Frequency Curve.
1.5. Analysis of Data – Univariate and Bivariate Analysis (Concepts only)

[**References**: Gun, A. M., M.K. Gupta and B. Dasgupta (2022), Fundamentals of Statistics, Volume One, World Press Private Limited Kolkata – Chapter on 'Collection and Presentation of Data'; Chapter on 'Frequency Distributions']

Unit 2: Descriptive Statistics

2.1 Central Tendency **10 lecture hours**

2.1.1 Measures of central tendency for ungrouped and grouped data – arithmetic mean, geometric mean, harmonic mean, median and mode–Composite measures; Comparison of different measures, Quartiles, Deciles and Percentiles.

2.1.2 Index numbers – Price Index Numbers – problems of construction, methods of construction – aggregative (simple and weighted) and averaging price-relatives (simple and weighted), Laspayre's, Paasche's index numbers, Fisher's Index Number, Quantity Index Numbers, Tests of Index Numbers, Fixed Base and Chain Base, Wholesale price index and cost of living index, Uses of index numbers.

2.2 Dispersion **10 lecture hours**

2.2.1 Absolute measures of dispersion for ungrouped and grouped data – range, quartile deviation, mean deviation, standard deviation –Composite SD; Comparison of different measures.

2.2.2 Relative measures - coefficient of variation, coefficient of mean deviation, coefficient of quartile deviation.

2.2.3 Distribution of income and wealth – Lorenz curve, Gini Coefficient, Theil's Index.

2.3 Skewness and Kurtosis **5 lecture hours**

2.2.1 Moments – central and non-central – computation, conversion.
2.3.2 Measures of skewness – Bowley's measure, coefficient of quartile deviation, measure based on moments.
2.3.3 Measure of kurtosis – measure based on moments.

2.4 Bivariate Analysis **10 lecture hours**

2.4.1 Bivariate data – scatter diagram, Simple correlation coefficient – computation, limitations, and properties.
2.4.2 Simple linear regression – Least squares technique – Properties

[**Ref:** Gun, A. M., M.K. Gupta and B. Dasgupta (2022), Volume One – Chapter on 'Measures of Central Tendency', Chapter on 'Measures of Dispersion', Chapter on 'Moments and Measures of Skewness & Kurtosis', Chapter on 'Bivariate Frequency Distributions', Volume Two – Chapter on 'Index Numbers'; Sen, A. On Economic Inequality – Chapter on 'Measures of Inequality', OUP 1973]

Additional References for Group A

1. Freund, John E., Mathematical Statistics, Prentice Hall,1992.
2. Mood, A. M., F. A. Graybill and D. C. Boes, Introduction to the Theory of Statistics, McGraw Hill, 1974.

Semester II

Economics Major Course 2

Introductory Macroeconomics
(UG-ECO-M-201)

Marks: 80 **Credits:4**

Unit 1: National Income Accounting **12 lecture hours**

What is Macroeconomics? Circular flow of income, closed economy. GDP deflator. Macroeconomic data- National Income accounting and cost of living; Concept of Growth- role of savings, investment; Open Economy.

Unit 2: Income Determination in the short-run **20 lecture hours**

Simple Keynesian System: Multipliers; equilibrium in both closed and open economy and stability condition; autonomous expenditure, balanced budget, and net exports; paradox of thrift.

Unit 3: Money **20 lecture hours**

Money demand function; different motives of demand for money; Quantity Theory of Money

Monetary system- definition and functions of money and determinants of money supply; high- powered money; money multiplier, Commercial bank; credit and deposit multiplier.

Unit 4: Inflation **8 lecture hours**

What is inflation? types and causes of inflation; cost of Inflation; inflationary gap; measures to combat inflation

Unit 5: Unemployment **5 lecture hours**

Concepts of unemployment (including labour force, labour force participation rate, unemployment rate); different types of unemployment; labour demand curve: labour supply curve (preliminary idea)

Texts/ References:

1.Dornbusch, Fischer and Startz: Macroeconomics; Tata McGraw Hill Publication. Mankiw, N.
2. Gregory: Principles of Macroeconomics; Indian imprint of South Western Cengage India.
3. Richard T. Froyen; Macroeconomics; Pearson Education Asia.
4. J.R. Hicks: The Social Framework: An Introduction to Economics; Ciarendon Press William
5. Branson: Macroeconomic Theory and Policy; Indian Reprint, East West Press
6. Soumyen Sikdar: Principles of Macroeconomics; Oxford University Press

Economics Minor Course 2

Principles of Microeconomics
(UG-ECO-Mi-201)

Marks: 80 **Credits:4**

Contents are the same as that of paper UG-ECO-Mi-101

MDC (Multidisciplinary Course 2)

Basic Economics
(UG-ECO-MDC-201)

Marks: 60 **Credits:3**

Contents are the same as that of paper UG-ECO-MDC-101

SEC (Skill Enhancement Course 2)

Introductory Statistics -II
(UG-ECO-SEC-201)

Marks: 60 **Credits:3**

Group A (Theory)

1. Basic ideas of economic data **15 lecture hours**

1.1 Types of data-cross section, time series, pooled data, panel data etc.
1.2 Nature of field survey data – types of cross section data
1.3 Advantages and disadvantages of field survey data
1.4 Importance of field survey data for economic analysis
1.5 Role of pilot survey

Group B (Practical)

2. Topics under worksheet Program: (Microsoft Excel) **45 lecture hours**

2.1 Concept on Data Frame: 13 lecture hours
(Understanding the purpose and benefits of using worksheets in data management and analysis - Familiarizing students with Microsoft Excel, and their user interface)

2.1.1 Data Entry and Formatting
2.1.2 Variables & Observations
(Inputting data into cells accurately and efficiently - Applying formatting options to enhance data presentation (e.g., number formatting, date formatting, cell borders).
2.1.3 Data Validation and Conditional Formatting (Setting validation rules to ensure data accuracy and Consistency- Applying conditional formatting to highlight specific data patterns or trends.)
2.1.4 Data Sorting and Filtering (Sorting data in ascending or descending order based on specific criteria - Filtering data to display only relevant information).
2.1.5 Basic Formulas and Functions
(Understanding the concept of formulas and their role in performing calculations - Using basic mathematical operators (+, -, *, /) to create formulas - Utilizing built-in functions (e.g., SUM, AVERAGE, MAX, MIN, AND, IF, OR, COUNTIF, VLOOKUP, HLOOKUP) to perform common calculations)
2.1.5 Importing and Exporting Data (Importing data from external sources (e.g., CSV files, databases) into spreadsheets - Exporting spreadsheet data to different file formats (e.g., CSV, PDF) for sharing or further analysis).

2.2 Frequency Analysis and Data Visualization: **12 lecture hours**

(Creating charts and graphs to visually represent data - Selecting appropriate chart types based on data characteristics - Customizing chart elements (e.g., titles, axes, legends) to improve readability)

2.2.1 Raw Data to Group Data
2.2.2 Different type so Frequency Table
2.2.3 Different Types of Tabulation (e.g.: Two Way, Three Way, Pivot Table etc.)
2.2.4 Different Types of Frequency Graphs (Bar Chart, Column Charts, Frequency Polygon, Histogram, Pie Diagram)
2.2.5 Customization of Graphs Frame

2.3 Descriptive Statistics: **20 lecture hours**

(Applying descriptive statistics functions to analyze data - Calculating measures of central tendency and dispersion - Bivariate Analysis).

2.3.1 Calculation of Mean, Median & Mode (Un-Grouped & Grouped Data)
2.3.2 Dispersion & Inequality Measures (Un-Grouped & Grouped Data)
2.3.3 Findings the Observations from different Descriptive Statistical Measures with Graphics (e.g.: Box Plot, Histogram, Lorenz Curve etc.)
2.3.4 Starter Diagram - Correlation Coefficient
2.3.5 Simple Regression (Two Variables) - Estimation of Predicted Value & Regression Residuals
2.3.6 Random Number Generation

Texts/ References:

Microsoft Excel

1. "Mastering Data Analysis with Excel" by Michael Alexander. "Data Analysis Using Excel" by Michael Middleton; Wiley, 2020
2. "Excel Bible" by John Walkenbach; Wiley, 2019
3. "Excel Charts and Graphs: Master Data Visualization Techniques" by Paul McFedries; Wiley, 2016
4. "Excel Formulas and Functions for Dummies" by Ken Bluttman; For Dummies, 2015
5. "Microsoft Excel 2016 Step by Step" by Curtis Frye; Microsoft Press, 2015

Weblinks:

1.MS Excel: https://www.w3schools.com/EXCEL/index.php
2. MSExcel:https://support.microsoft.com/en-au/office/excel-video-training-9bc05390-e94c-46af-a5b3-d7c22f6990bb

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