

Devi Ahilya Vishwavidhyalaya, Indore, India Institute of Engineering & Technology				II Year B.Tech. (Electronics and Instrumentation Engineering)		
Course Code & Name	Instructions Hours per Semester and Credits					
4REHS1 ENGINEERING ECONOMICS AND FINANCIAL MANAGEMENT	Classroom Instruction (CI)		Lab Instruction (LI)	Term Work (TW) and Self Learning (SL)	Total no. of Hours Per semester	Total Credits (Total Hours/30)
	L	T	P	TW+SL	60	2
	20	0	0	40		

Course Learning Objectives:

- Understand major principles of economic analysis for decision making among alternative courses of action in engineering.
- Solve economic problems involving comparison and selection of alternatives by using analytical techniques including benefit-cost ratio and breakeven analysis.
- Apply the concepts of financial management for project appraisal

Prerequisites: NIL

COURSE CONTENTS

Unit I

Introduction to Engineering Economics: Definitions, Nature and Scope of Economics; Concepts of Engineering Economics- Engineering Efficiency and Economic Efficiency.

Consumer Demand Analysis: Meaning, Features and Determinants of demand; Law of Demand and its Exceptions; Reasons for Law of Demand; Importance of Law of Demand; Elasticity of Demand.

Supply Analysis: Meaning, Supply Function, Law of Supply, Determinants of Supply, and Fluctuation of supply; Elasticity of supply and its measurement; Price fixation – Pricing policies – Pricing methods.

Unit II

Cost Analysis: Actual cost and opportunity cost – Incremental cost and sunk cost, Fixed and variable cost – Marginal costing, Total cost – Elements of cost – Cost curve.

Concepts of Firm, Industry, Market, and Market Structure.

Revenue and Profit Analysis: Concept of Profit, Gross Profit and Net Profit; Break Even Point (BEP).

Unit III

National Income: Circular Flow of Income, Meaning and Concept of National Income: GNP/GNI, NNP/NNI, Personal Income and Disposable Income; Methods of Computing National Income -Production Method, Income Method, Expenditure Method.

Kinds of Money – Value of Money; Types of Bank – Functions of Banks

Unit IV

Economic Stabilization: Types of Inflation, Causes, Effects, Inflation and Unemployment; Monetary Policy- Meaning, Objectives, Tools; Fiscal Policy- Meaning, Objectives, Tools
Economic Liberalization, Privatization and globalization

Unit V

Financial Management: Scope and objectives; Time Value of Money; Methods of appraising project profitability; Sources of Finance; Working Capital

Course Outcomes:

CO.No.	CO
CO1	Analyze the basic concepts of economics and engineering economics, and explain consumer demand and supply theories, elasticity concepts, and pricing policies to understand market behavior and price fixation.
CO2	Differentiate and evaluate various cost concepts, market structures, and revenue–profit relationships, and apply break-even analysis for managerial decision-making.
CO3	Explain and compute national income using different methods, and understand the role of money and banking institutions in the functioning of the economy.
CO4	Analyze inflation, unemployment, and economic stabilization measures, and interpret the impact of monetary policy, fiscal policy, and economic reforms (LPG) on economic growth.
CO5	Apply financial management principles such as time value of money, project appraisal techniques, sources of finance, and working capital management for effective financial decision-making.

BOOKS RECOMMENDED:

- [1] C S Park, Contemporary Engineering Economics, Pearson Education, 2002
- [2] H. L. Ahuja, Principles of Microeconomics,
- [3] D. N. Dwivedi, Macroeconomics Theory and Policy, Tata McGraw-Hill Publishing Company,
- [4] S Damodaran, Managerial Economics.
- [5] Prasanna Chandra, — Financial Management
- [6] Weston & Brigham, — Essentials of Managerial Finance

CO-PO-PSO Relationship

CO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PSO1	PSO2	PSO3
4REHS1.CO1	-	3	2	2	-	-	-	-	-	-	-	2	2	2
4REHS1.CO2	3	2	3	-	-	-	-	-	-	-	-	1	1	1
4REHS1.CO3	-	3	-	-	-	-	-	-	-	-	-	1	1	1
4REHS1.CO4	-	2	-	1	2	-	-	-	-	-	-	2	2	2
4REHS1.CO5	-	3	3	-	-	-	-	-	-	-	3	1	1	1