

<b>INMDM1001 : Microeconomics</b>		
<b>Teaching Scheme</b>	<b>Examination Scheme</b>	
<b>Lectures: 03 Hrs/ week</b>	<b>ISE I</b>	<b>15</b>
	<b>ISE II</b>	<b>15</b>
<b>Credits: 03</b>	<b>ISE III</b>	<b>10</b>
	<b>End Semester Examination</b>	<b>60</b>

### **Course description:**

This course introduces engineering students to the fundamental principles of microeconomics, focusing on practical applications in engineering contexts. It covers concepts such as supply and demand, market structures, consumer behavior, production and costs, and the role of government in the economy. Practical aspects include case studies, simulations, and projects related to engineering fields.

### **Course Outcomes**

After completing the course, students will be able to:

CO1	Understand and apply the basic principles of microeconomics to real-world engineering problems.
CO2	Analyze market dynamics and the behavior of consumers and firms.
CO3	Evaluate the impact of different market structures on economic outcomes.
CO4	Assess the role of government regulations and policies on market performance.

### **Detailed Syllabus:**

<b>Unit 1</b>	Introduction to Microeconomics - Definition and scope of microeconomics - Importance of microeconomics in engineering - Basic economic problems and resource allocation - Concepts of opportunity cost and marginal analysis
<b>Unit 2</b>	Supply and Demand - Law of demand and determinants - Law of supply and determinants - Market equilibrium and price formation - Elasticity of demand and supply - Practical: Case studies on market changes and their impact on supply and demand
<b>Unit 3</b>	Consumer Behavior - Utility theory: Total and marginal utility - Budget constraints and consumer choices - Indifference curves and consumer equilibrium - Practical: Simulation of consumer choice scenarios using software tools
<b>Unit 4</b>	Production and Costs - Production functions and the law of diminishing returns - Short-run and long-run costs - Economies of scale and scope - Practical: Analysis of production processes in engineering firms

<b>Unit 5</b>	Market Structures - Characteristics of perfect competition, monopoly, monopolistic competition, and oligopoly - Pricing and output decisions in different market structures - Game theory and strategic behavior in oligopolistic markets - Practical: Projects on analyzing market structures within the engineering sector
<b>Unit 6</b>	Government and Market Failure - Reasons for government intervention in the market - Types of market failures: Public goods, externalities, and information asymmetry - Government policies: Taxes, subsidies, and regulations - Practical: Case studies on government interventions in engineering markets

### Text and Reference Books

1. Mankiw, N. Gregory. 'Principles of Microeconomics.' Cengage Learning, 2014.
2. Pindyck, Robert S., and Daniel L. Rubinfeld. 'Microeconomics.' Pearson Education, 2018.
3. Varian, Hal R. 'Intermediate Microeconomics: A Modern Approach.' W.W. Norton & Company, 2014.
4. Case, Karl E., Fair, Ray C., and Oster, Sharon E. 'Principles of Microeconomics.' Pearson Education, 2016.

### Mapping of Course outcome with Program Outcomes

C O	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
CO1															
CO2															
CO3															
CO4															

**3 – High**

**2 – Medium**

**1 - Low**

### Assessment:

<b>ISE I:</b>	Shall be on the basis of Class Tests/ Assignments/ Quizzes/ Field visits/ Presentations/ Course Projects
<b>ISE II:</b>	Shall be based on class test
<b>ISE III:</b>	Shall be on the basis of Class Tests/ Assignments/ Quizzes/ Field visits/ Presentations/ Course Projects

### Assessment Pattern

Assessment Pattern	Level No.	Knowledge Level	ISE 1	ISE II	ISE III
K1		Remember	05	05	-
K2		Understand	10	05	-
K3		Apply	-	05	05
K4		Analyze	-	-	05
K5		Evaluate	-	-	-
K6		Create	-	-	-
<b>Total Marks</b>	<b>40</b>		15	15	10

**Assessment table**

<b>Assessment Tool</b>	<b>K1</b>	<b>K2</b>	<b>K3</b>	<b>K3</b>
	<b>C01</b>	<b>C02</b>	<b>C03</b>	<b>CO4</b>
<b>ISE I (15 Marks)</b>	05	10	-	-
<b>ISE II (15 Marks)</b>	05	05	05	-
<b>ISE-III (10 Marks)</b>	-	-	05	05