

Course Code	Course Name	Credits
26EC513	Industrial Economics and AI	04

Course Objectives

- To understand the basic concepts and evolution of industrial economics
- To study the factors influencing industrial location and related theories
- To analyze how firms behave, set prices, and how technology and innovation affect industries
- To examine market structures, trends, and methods used in industrial organization
- To understand AI basics, productivity impacts, policy changes, and evaluate ethics, competition, and governance challenges

Learning Outcomes

Upon successful completion of this course it is intended that a student will be able to:

- Understand the basic ideas, scope, and types of industrial economics
- Apply Weber's and Florence's theories to analyze industrial location decisions and site selection effectively
- Analyze how firms make decisions about pricing, investment, and innovation
- Study industrial trends and relationships using data and empirical methods
- Understand AI's impact on growth, productivity, policy, governance, privacy, and competition in modern industries

Unit 1 – Introduction to Industrial Economics (12Hrs)

Meaning, scope and historical development of industrial economics, overview of major industries, classification of industries, industrial organization, behavioral industrial economics.

Unit 2 –Industrial Location (12Hrs)

General determinants of industrial location, approaches to industrial location analysis, factors affecting location, Alfred Weber's theory, Sergeant Florence's theory of industrial location, causes and remedies industrial imbalances.

Unit 3 – Firm Behavior, Technological Change and Innovation (12Hrs)

Pricing strategies and price discrimination, investment decisions and capital budgeting, role of innovation in industrial development, intellectual property and its impact on competition, technological disruption.

Unit 4 – Industrial Organization (12Hrs)

Meaning and trends in industrial growth, emerging trends in industrial organization, causal inference in empirical industrial organization. nature, scope, and importance of industrial organization.

Unit 5 –AI and Industrial Policy – The Future Landscape (12Hrs)

Concepts of industrial policy and fundamentals of Artificial Intelligence (AI), role of AI in productivity, growth, and structural change, strategic sectors, digital platforms, automation, data economy, and global value chains, data privacy, ethics, competition policy, and AI governance frameworks.

Reference Books:

1. Barthwal, R. R (1992), Industrial Economics: An Introductory Text Book, Wiley Eastern Ltd. New Delhi.
2. Cherunilam, F. (1994), Industrial Economics: Indian Perspective, (3rd Edition), Himalaya Publishing House, Mumbai.
3. Desai, B. (1999), Industrial Economy in India, (3rd Edition), Himalaya Publishing House, Mumbai.
4. Kuchhal, S.C. (1980), Industrial Economics, Himalaya Publishing House, Mumbai.
5. Ranjana Seth. (2010), Industrial Economics, Ane Books Pvt. Ltd. New Delhi.

Websites and eLearning Sources:

1. <https://www.cambridge.org/core/browse-subjects/economics/industrial-economics>
2. https://www.acecollege.in/CITS_Upload/Downloads/Books/1081_File.pdf
3. https://sde.uoc.ac.in/sites/default/files/sde_videos/ECO3E02.pdf
4. <https://chicago.universitypressscholarship.com/view/10.7208/chicago/9780226613475.001.0001/upso-9780226613338-chapter-016>

COs and Bloom's Taxonomy Mapping – 26EC513

Course Outcomes	On successful completion of this course, students will be able to	BTL
CO1	Explain concepts, scope, and evolution of industrial economics and AI basics.	K2
CO2	Apply industrial location theories (Weber, Florence) in decision-making.	K3
CO3	Analyze firm behavior, pricing, innovation, and technological change.	K4
CO4	Examine industrial organization trends using empirical methods.	K5
CO5	Evaluate AI's impact on industry, policy, ethics, and governance.	K5

BTL (Bloom's Taxonomy Level) - K1 – Remembering, K2 – Understanding, K3- Applying, K4 – Analyse, K5- Evaluate and K6 - Create

Relationship Matrix – 26EC513

Course Outcomes	Programme Outcomes (POs)						Programme Specific Outcomes (PSOs)					Mean Score of Cos
	PO1	PO2	PO3	PO4	PO5	PO6	PSO1	PSO2	PSO3	PSO4	PSO5	
CO1	3	2	1	–	–	–	2	1	–	–	–	1.5
CO2	3	3	2	2	–	–	3	2	1	–	–	2.1
CO3	3	3	3	2	1	–	3	2	2	1	–	2.3
CO4	3	3	2	3	2	1	3	3	2	1	–	2.3
CO5	3	3	2	3	3	2	3	3	2	2	1	2.4
Total												2.12

Mean Score: 3- High, 2- Medium/Moderate, 1-Low

