TM102: Managerial Economics for Technology Leaders

Course Information

Particular	Details
Course Code	TM102
Course Title	Managerial Economics for Technology Leaders
Programme	MBA (Technology Management)
Category	Foundation/Core
Credits	4
L–T–P	3–1–0
Contact Hours	60
Semester	I
Prerequisite	Basic knowledge of Economics and Mathematics

Course Description

This course equips future technology managers with economic principles and analytical tools for strategic decision-making in technology-driven organizations. It focuses on demand analysis, production, cost, pricing strategies, market structures, macroeconomic environment, innovation economics, digital markets, and government policies affecting technology businesses.

Course Objectives (CO)

After completing this course, students will be able to:

1. Understand economic principles relevant to managerial decision-making.
2. Apply demand, production, and cost analysis for business decisions.
3. Analyse pricing strategies under different market structures.
4. Evaluate macroeconomic policies affecting technology enterprises.
5. Develop strategic economic decisions in technology-intensive industries.

Course Outcomes (COs)

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

CO	Course Outcome	Bloom's Level
CO1	Explain fundamental concepts of managerial economics and their application in technology-driven organizations.	K2 (Understand)
CO2	Apply demand analysis, forecasting techniques, production and cost concepts for managerial decision-making.	K3 (Apply)
CO3	Analyse pricing decisions and business strategies under different market structures.	K4 (Analyse)
CO4	Evaluate macroeconomic variables and government policies influencing technology industries and digital businesses.	K5 (Evaluate)
CO5	Assess investment, innovation, and competitive strategies using economic principles for sustainable technology management.	K5 (Evaluate)
CO6	Formulate economic solutions for managerial problems using analytical and quantitative tools.	K6 (Create)

Course Contents

Unit I: Introduction to Managerial Economics

Nature and Scope of Managerial Economics, Economic Decision Making, Opportunity Cost, Incremental Analysis, Time Perspective, Equi-marginal Principle, Demand and Supply Analysis, Elasticity of Demand, Applications in Technology Markets.

Tutorials

Case Study on Pricing of Digital Products, Demand Estimation Exercise

Unit II: Demand Forecasting and Production Analysis (12 Hours)

Demand Forecasting Methods, Qualitative and Quantitative Forecasting, Production Function, Law of Variable Proportions, Returns to Scale, Isoquants, Economies and Diseconomies of Scale, Learning Curve, Productivity Analysis.

Tutorials

Forecasting using Trend Analysis, Production Optimization Cases

Unit III: Cost Analysis and Pricing Decisions

Cost Concepts, Short-run and Long-run Costs, Break-even Analysis, Cost-Volume-Profit Analysis, Pricing Objectives, Pricing Methods, Product Life Cycle Pricing, Dynamic Pricing, Pricing in Digital Platforms, Transfer Pricing

Tutorials

Break-even Analysis, Pricing Strategy Case Study

Unit IV: Market Structure and Competitive Strategy

Perfect Competition, Monopoly, Monopolistic Competition, Oligopoly, Game Theory Basics, Strategic Behaviour, Market Entry Barriers, Innovation Competition, Network Effects, Platform Economy

Tutorials

- Competitive Strategy Simulation ,Digital Platform Case Discussion

Unit V: Macroeconomics and Technology Business Environment

National Income, Inflation, Business Cycles, Fiscal Policy, Monetary Policy, Exchange Rate, International Trade, Globalization, Economics of Innovation, Knowledge Economy, Digital Economy, Sustainable Development, Green Technology Economics

Tutorials

- Policy Analysis
- Technology Industry Economic Analysis

Text Books

1. **Salvatore, Dominick (2020).** *Managerial Economics in a Global Economy* (9th Edition). **Oxford University Press**.
2. **Dwivedi, D. N. (2021).** *Managerial Economics* (9th Edition). **Vikas Publishing House**.
3. **Thomas, Christopher R. & Maurice, S. Charles (2020).** *Managerial Economics* (13th Edition). **McGraw-Hill Education**.

Reference Books

1. **Samuelson, Paul A. & Nordhaus, William D. (2019).** *Economics* (20th Edition). **McGraw-Hill Education**.
2. **Varian, Hal R. (2014).** *Intermediate Microeconomics: A Modern Approach* (9th Edition). **W. W. Norton & Company**.
3. **Mankiw, N. Gregory (2021).** *Principles of Economics* (9th Edition). **Cengage Learning**.
4. **Pindyck, Robert S. & Rubinfeld, Daniel L. (2018).** *Microeconomics* (9th Edition). **Pearson Education**.
5. **Shapiro, Carl & Varian, Hal R. (1999).** *Information Rules: A Strategic Guide to the Network Economy* (1st Edition). **Harvard Business School Press**.

Course Articulation Matrix

COs	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
CO1	3	2	-	-	-	-	-	-	-	-	2	-
CO2	3	3	2	2	2	-	-	-	-	2	-	-
CO3	3	3	3	3	2	2	-	-	-	2	-	-
CO4	2	3	2	3	3	3	2	2	-	2	2	2
CO5	2	3	3	3	3	2	3	2	2	2	3	3
CO6	3	3	3	3	2	2	2	2	2	3	3	3