

NIRMA UNIVERSITY

Institute of Technology

B. Tech. - All Branches

Semester III/IV

L	T	P	C
2	0	0	2

Course Code	2HS342
Course Title	Principles of Economics

Course Learning Outcomes (CLO):

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

1. interpret the various basic economic principles
2. relate the economic fundamentals with engineering practices
3. infer the macro-economic aspects of engineering projects

Syllabus:

Teaching hours:

Unit I

3

Basic Economic Concepts: Needs, wants, means/resources – marginal principle and economic efficiency, trade - off, opportunity cost, rationality, externalities, differences between micro economics and macro economics

Unit II

3

Demand and Supply: Meaning and determinants of demand and supply, law of demand and law of supply equilibrium between demand and supply.. The concept of elasticity – meaning and types

Unit III

3

Production, Cost and Revenue: Production function, law of variable proportion and laws of returns to scale, different types of costs – variable cost, fixed cost, total cost, average cost, average fixed cost, average variable cost and marginal cost, Total revenue, average revenue and marginal revenue, profit function



Unit IV **6**

Market Structures & Pricing: Concept of market and equilibrium-characteristics of perfect competition, monopoly, monopolistic competition and oligopoly–price determinations

Unit V **7**

Macro-Economic Environment: Basic macro- economic concepts – aggregate demand aggregate supply, money, income employment consumption savings and investment.National Income Accounting-concepts and methods of national income – recent changes in the methodology of national income accounting

Unit VI

Banking: Meaning and functions of commercial banks and central bank **3**

Unit VII **2**

Inflation: Meaning, and types of inflation, Causes and effect of inflation on different sectors of the economy

Unit VIII **3**

International Trade: Meaning and significance of International Trade, Cases for and against globalization. World Trade Organization (WTO) – functions and recent deliberations in World Trade Organization (WTO)

Self -Study:

The self -study contents will be declared at the commencement of semester. Around 10% of the questions will be asked from self-study contents.

Suggested Readings[^]:

1. Mankiw, N. G. Principles of Economics. Mason. Mason,USA: South-Western Cengage Learning.
2. Samuelson P. A. &Nordhaus, W.D. Economics. India: Tata McGraw Hill Education.
3. Pindyck, R.S., Rubinfeld, D. L. & Mehta, P. L. Micro Economics. New Delhi, India: Pearson.
4. Ahuja H.L. Modern Economics. New Delhi,India: S. Chand & Company Ltd.
5. Dornbusch, R., Fisher, S, &Startz, R. Macro Economics. India: Tata McGraw Hill Education.
6. Gupta, G. S. Macro Economics Theory and Applications. India:Tata McGraw Hill.

L =Lecture, T =Tutorial, P= Practical, C–Credit ^ this is not an exhaustive list