

**Economics for Engineers**

**Hours/week: 3:1:0**

**Total Hours: 45**

**Credits: 3**

**Course Code: 18HSS03**

**Course Learning Objectives: (CLO) and Syllabus (2019 onwards)**

**The students will able:**

1. To demonstrate the knowledge of the fundamental and technical concepts of economics.
2. To identify and use economics terminologies in oral and written communications.
3. To make decisions wisely using cost-benefit analysis.
4. To demonstrate a sense of responsibility and a capacity for service.
5. To recognize when change is appropriate, to adapt to change as it occurs, and to take the lead in creating change as the country's economic environment changes.

**UNIT – 1 : Basic Principles and Methodology of Economics: (10hrs)**

**Nature and Scope of Economics- Basic Economic Problems: Scarcity and choices, resource allocation, marginal analysis, opportunity costs, production possibility curve, Externalities, Welfare Economics. Basics of microeconomics - Demand and Supply Analysis, equilibrium, elasticity; Markets – Perfect competition, Monopoly, Monopolistic, Oligopoly. Basics of macroeconomics - the circular flow models, national income analysis (GDP/GNP/NI/Disposable Income, Green GDP), and inflation trade cycles.**

## **UNIT-II: Public Sector Economics: (7hrs)**

**Public economics, Role of Public and private sectors in economic development, Public Expenditure and Public Debt, Monetary and Fiscal Policy Tools & their impact on the economy**

## **UNIT-III: Monetary Economics: (7hrs)**

**Components of Monetary and Financial System, Capital and Debt Markets, Central Bank, Commercial Banks & their functions, Price Indices (WPI/CPI), Direct and Indirect Taxes. Budget,**

## **UNIT-IV: Elements of Business and forms of organizations: (10hrs)**

**Theory of the Firm: production and production function -Cost & Cost Control Techniques - Types of Costs, Budgets, Break even Analysis, Capital Budgeting, Application of Linear Programming.**

**Investment Analysis: NPV, ROI, IRR, Payback Period, Depreciation, Time value of money. Business Forecasting - Elementary techniques. Statements - Cash flow, Financial. Case Study Method**

## **UNIT-V: (11hrs)**

**(a) Indian economy: Brief overview of post-independence period**

**5 year plans. Industrial policy in India; Recent trends in Indian industrial growth; MNCs and transfer of technology; Liberalization and privatization; Regional industrial growth in India; Post reform Growth, Structure of productive activity.**

**(b) Employment, Migration and Urbanization**

**Migration and Urbanization, Labour Market and Employment- Informal, Organized, Unorganized, Public, Private.**

### Reference books:

1. Mankiw Gregory N.(2002), *Principles of Economics*, Thompson Asia
2. V. Mote, S. Paul, G. Gupta(2004), *Managerial Economics*, Tata McGraw Hill
3. Misra, S.K. and Puri (2009), *Indian Economy*, Himalaya
4. PareekSaroj (2003), *Textbook of Business Economics*, Sunrise Publishers
5. Ahluwalia, I.J. (1985), *Industrial Growth in India*, Oxford University Press, New Delhi

### Course Outcomes:

At the end of the course the student should be able to:

1. To identify and explain economic concepts and theories related to the behavior of economic agents, markets, industry and firm structures, legal institutions, social norms, and government policies.
2. To demonstrate an awareness of the role in the global economics environment.
3. To integrate theoretical knowledge with quantitative and qualitative evidence in order to explain past economic events and to formulate predictions on future ones.
4. To evaluate the consequences of economic activities and institutions for individual and social welfare.
5. To apply the basic theories of economics in critical thinking and problem solving.

Faculty

HoD

Director