Course Syllabi: UHU081 Engineering Economics (L:T:P::3:1:0)

- 1. Course number and name: UHU081; Engineering Economics
- 2. Credits and contact hours: Credits: 3.5; Hours: 4
- 3. Text book, title, author, and year
 - Salvatore, D. and Srivastav, R., Managerial Economics: Principles and Worldwide Applications, Oxford University Press, Sixth Edition. (2008) 6thed.
 - Peterson, H. Craig & Lewis, W. Chis. & Jain, Sudhir K Managerial Economics, Prentice Hall of India (2008) 4th ed.
 - Dwivedi, D.N., Managerial Economics, Vikas Publishing House Pvt. Ltd (2008) 7thed.
 - Sikdar, S., Principles Macro Economics, Oxford University Press (2006).
 - Bhole, L.M., Financial Institutions and Markets, Tata McGraw Hill (2007) 6thed.
 - Pindyck, R.S. and Rubinfeld, D.I, Microeconomics, MacMillan (2007).
 - Dutt, R. and Sundaram, K.P.M., Indian Economy, S. Chand & Company Ltd. (2009).
 - a. Other supplemental materials
 - Nil

4. Specific course information

a. Brief description of the content of the course (catalog description)

Introduction and Scope of Engineering Economics.

Demand and Supply: Meaning of Demand and supply, Determinants of demand and Supply. **Demand Forecasting**: Purpose of Forecasting Demand, Determinants of demand forecasting, Methods of Demand Forecasting, Criteria for the good forecasting method.

Cost of Production: Explicit and Implicit costs, Marginal, Incremental and Sunk costs, Opportunity cost, Short-run cost function, Total Average and Marginal costs, Long-run costs, Break-even analysis.

Theory of Production: Law of Variable Proportions and Laws of returns to scale. Depreciation: Definite and characteristics of term Depreciation, causes of Depreciation, computation of Depreciation.

Markets Structures and Pricing Theory: Perfect competition, Monopoly, Monopolistic competition, and Oligopoly.

Investment Decision: Capital Budgeting, Methods of Project Appraisal (Payback Period, IRR, NPV, BCR).

Overview of Financial Markets: Money Market, Stock Market, Mutual Fund.

National Accounting: Meaning, Methods and Current Trends.

Inflation &Deflation: Meaning, Measures and Impact on Indian economy.

5. Specific goals for the course

After the completion of the course, the students will be able to:

- Explain elasticity of demand and demand forecasting.
- Describe market structure and pricing theory.
- Do estimation, cost accounting and depreciation calculation.
- Do breakeven analysis and take investment decisions.

6. Brief list of topics to be covered

- Demand and Supply
- Cost of Production
- Theory of Production
- Markets Structures and Pricing Theory
- Investment Decision
- National Accounting
- Inflation & Deflation