CODE: HU301 **Title:** Engineering Economics										
L	**T**	**P**	Credit	Area		**CWS**	**PRS**	**MTE**	**ETE**	**PRE**
3	0	0	3	HMC		25		25	50	-

Objectives: To enable the students to understand the economic theories which may be applied to maximize return and economic environment in which they have to operate

Syllabus		**Contact Hours**
Unit-1	**Introduction:** Nature and significance of economics, Goods and Utility, Basic Concept of Demand and Supply, Elasticity of Demand- Price elasticity of Demand, Cross elasticity of Demand, Production - Production Function, Production Process and Factors of Production, Market – Introduction to Monopoly, Perfect Competition, Oligopoly and Monopolistic Competition, Cost Concepts- Opportunity Cost, Total Cost, Average Cost; Marginal Cost; Life Cycle cost, Sunk Cost; Preparation of Cost Sheet Profit Maximisation- numerical problem	**7**
Unit-2	**Money**- its evaluation and function, Bank- Commercial Bank and Central Bank and brief idea about function of banking system: Tax and Subsidy, Type of Tax- Direct and Indirect,	**4**
Unit-3	.Monetary and fiscal policy, Inflation and Business cycle, International trade, terms of Trade, Gain from International Trade, Free Trade vs. Protection, Dumping, Balance of Payment	**4**
Unit-4	**Role of Science, Engineering and Technology in Economic Development:** Seven salient Feature of the Indian Economy;Inclusive Growth; relevance for the Indian Economy; lobalisation & opening up of the Indian Economy; GDP- definition and Its measurement; How knowledge of engineering and technology may be used to improve life at slum	**6**
Unit-5	Green Revolution and White revolution. Reasons for their success and can we replicate them. Appropriate Technology & Sustainable Development. Entrepreneurship: Macro environment for promotion of entrepreneurship: How environment has changed after advent of IT and Globalisation	**6**
Unit-6	**Elementary Economic Analysis:** Interest formulas and their Applications, Calculations of economic equivalence, Bases for Comparison of Alternatives: Present Worth Method, Future worth method, Annual equivalent, Internal Rate of Return; Business Risk; Factors which should be taken care while deciding price of the product in the market.	**5**
	Total	**32**

Reference Books:	
1	G.J. Thuesen, & W.J. Fabrycky, Engineering Economy, Pearson Education, 2007, ISBN 013028128X
2	William G. Sullivan, Elin M. Wicks, C. Patrick Koelling, Engineering Economy,Prentice Hall,(First Indian reprint). 2009, ISBN 0131486497
3	Donald G. Newman, Jerome P. Lavelle & Ted G. Eschenbach, Engineering Economic Analysis, Oxford University Press, USA , 2004, ISBN 0195168070
4	Seema Singh, Economics for Engineering Students, IK International Publishing House Pvt. Ltd, 2014, ISBN 8190777041
5	

Course Outcomes

CO1	To understand the basic concept of demand and supply, different cost conceps and preparation of cost sheet
CO2	To understand the concept of money, , bank and taxation.
CO3	To understand Monetary and fiscal policy,tradings and dumping concepts
CO4	To knoew the Role of Science, Engineering and Technology in Economic Development **in indian economy**
CO5	To understand about GDP, GREEN & WHITE revolution.
CO6	To analyze the data to calculate risk, important factor by different methods of economics

CO-PO/PSOMatrix

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
CO1	3	3	3	2	2	0	0	0	0	0	0	2	2	1	1
CO2	3	3	2	3	1	0	0	0	0	0	0	1	2	1	1
CO3	3	3	3	3	1	0	0	0	0	0	0	2	3	3	2
CO4	3	3	3	3	1	0	0	0	0	0	0	1	3	3	2
CO5	2	2	2	2	2	0	0	0	0	0	0	1	2	2	2