

COURSE STRUCTURE OF B. TECH IN COMPUTER SCIENCE & ENGINEERING, HIT

Course Name : Economics for Engineers					
Course Code: HMTS3101					
Contact hrs per week:	L	T	P	Total	Credit points
	3	0	0	3	3

Module I:

Market: Meaning of Market, Types of Market, Perfect Competition, Monopoly, Monopolistic and Oligopoly market.

The basic concept of economics – needs, wants, utility.

National Income-GDP, GNP. Demand & Supply, Law of demand, Role of demand and supply in price determination, Price Elasticity.

Inflation: meaning, reasons, etc. **(6L)**

Module II:

Business: Types of business, Proprietorship, Partnership, Joint-stock company, and cooperative society – their characteristics.

Banking: role of commercial banks; credit and its importance in industrial functioning. Role of central bank: Reserve Bank of India.

International Business or Trade Environment. **(4L)**

Module III:

Financial Accounting-Journals. Ledgers, Trial Balance, Profit & Loss Account, Balance Sheet.

Financial Statement Analysis (Ratio and Cash Flow analysis). **(8L)**

Module IV:

Cost Accounting- Terminology, Fixed, Variable and Semi-variable costs.

Break Even Analysis. Cost Sheet. Budgeting and Variance Analysis.

Marginal Cost based decisions. **(6L)**

Module V:

Time Value of Money: Present and Future Value, Annuity, Perpetuity.

Equity and Debt, Cost of Capital. **(4L)**

Module VI:

Capital Budgeting: Methods of project appraisal - average rate of return - payback period - discounted cash flow method: net present value, benefit cost ratio, internal rate of return.

Depreciation and its types, Replacement Analysis, Sensitivity Analysis. **(8L)**

References:

1. R. Narayanswami, *Financial Accounting- A Managerial Perspective*. Prentice-Hall of India Private Limited. New Delhi
2. Horne, James C Van, *Fundamentals of Financial Management*. Prentice-Hall of India Private Limited, New Delhi
3. H. L. Ahuja., *Modern Economic Theory*. S. Chand. New Delhi.
4. Newman, Donald G., Eschenbach, Ted G., and Lavelle, Jerome P. *Engineering Economic Analysis*. New York: Oxford University Press. 2012.