

**Autonomous Program Structure of
Final Year B. Tech. Seventh Semester
(Mechanical Engineering)
Academic Year: 2023-2024 Onwards**

Course Code	Course Title	Teaching Scheme Hours /Week			Examination Scheme				Total Marks	Credit
		Lecture	Tutorial	Practical	In Sem	End Sem	Practical	Oral		
20ME701	Internship/Project	0	0	30	200	0	0	100	300	15
20HS702	Economics and Personal Finance (EPF) (Online)	2	0	0	100	0	0	0	100	2
Grand Total		32							400	17

Credits	Marks	Teaching Hrs / week	Evaluation Mode
Internship / Project = 15	300	30	Presentations + Oral
HS- EPF (Online) = 3	100	2	ISE + ESE

Duration of Internship / Project :

1. Full Internship 6 Months
2. Full Project 6 Months
3. Combination : Internship 3 Months + Projects 3 Months
(June-Aug + Sep- Nov)

For Internship / Project:

In-Sem-Reviews =Two ; ESE = One Review with external (Final)

Final Year B. Tech. -- Semester-I

Course Name	Economics and Personal Finance	L	T	P
Course Code	20HS701	3	-	-
Pre-requisite	Engineering Mechanics, Strength of Materials, Engineering Metallurgy			
Course Objectives: To make students				
<ol style="list-style-type: none"> 1.To enable students to acquire knowledge and develop an understanding of basic concepts and principles of Economics & Finance 2. To make students acquaint with standard concepts and tools that they are likely to find useful in their profession when employed in the firm/industry/corporation in public or private sector 3. To sensitize students to the current economic issues of the nation 4. To develop an understanding of the role of institutions in the functioning of an economy 5. To understand Markets and behaviour of the firm 6. To enhance financial literacy of engineering students. 				
Course Outcomes: After successful completion of the course, student will be able to				
<p>CO1 Demonstrate the importance of National and International economy in ones economic life CO2 Analyse the behaviors of consumer, firms and market and its impact on corporate finance CO3 Apply financial techniques to evaluate companies and investments CO4 Develop Personal Financial strategies using various investment options and taxation</p>				
Unit/Module: 1	Macro Economics: Understanding Indian Economy- Domestic and International	3 hours		
Economics for Engineers, Definition and classification of Economics, Basic Economic Problems and Economic Systems, India Economy: Mixed economy, Sector-wise contributors Gross Domestic Product (GDP) of India, GDPs of other nations, Macroeconomics, Per Capita Income, Employment, Inflation calculation : Consumer Price Index (CPI), Wholesale Price Index (WPI), Fiscal Policy, Fiscal Deficit, Government expenditure and Taxation, Concept of Goods and Service Tax (GST), Monetary policy, Central Bank- Reserve Bank of India (RBI), Statutory Liquidity Ratio (SLR), Prime Lending Ratio (PLR), Cash Reserve Ratio (CRR).				
Unit/Module: 2	Microeconomics: Understanding behaviors of Consumers, Firms and Markets	5 hours		
Consumer Behaviour, Concept of Demand and Supply, Determinants of Demand and Supply, Price Elasticity of Demand and Supply, Market Equilibrium and it's applications, Market and Market Structures- Perfect Competition, Monopolistic Competition, Oligopoly and Monopoly Cost Concepts, Product Costing and Pricing strategy.				

Unit/Module: 3	Personal Finance and Taxation I: Personal Financial strategies Background Concepts	6 hours	
Financial analysis of a business firm: Statement of Profit and Loss, Balance Sheet, Analyzing various business firms through Ratio Analysis, Time value of money, Annuities. Calculations in Excel, International Trade and Comparative Advantage, International Financing : Foreign Exchange (FOREX) market and Exchange rates, Balance of Payment.			
Unit/Module: 4	Personal Finance and Taxation II: Personal Financial strategies Goal Setting and Tax, Credit and Risk Management	7 hours	
Understanding Personal Finance : Financial Goal, Importance, Opportunity Costs in Decision Making, The Time Value of Money, Basics of Financial Planning, Personal financial statements, Cash flow and debt management, Tax Management : Taxes, Direct and Indirect, Income Tax slabs and sections, Other taxes, Credit Management : Consumer Loans, Credit cards, Credit Rating, Credit Information Bureau (India) Limited (CIBIL), Interest Rates, Understanding Monetary Policy, Risk Management : Insurance- Life and General, Types of life Insurance, Unit Linked Insurance Plan (ULIPS), Health Insurance, Vehicle Insurance and other major types, Understanding Insurance riders and decision making while buying insurance.			
Unit/Module: 5	Personal Finance and Taxation III: Personal Financial strategies Investments in Bonds, Stocks and Mutual Funds, Retirement Planning	7 hours	
Investment in Government Securities : Bank Accounts, Government Securities, Bonds, Fixed Deposits, Gold Bonds, Investment in Stock Market : Introduction to Stock Market, Stock Exchange Sensitive Index (SENSEX), National Stock Exchange (NSE), Dematerialised account (Demat) Account, How to select stocks- Price per Earning (P/E) ratio, Fundamentals analysis, Investment in Mutual Funds : What is Mutual Fund, Types, Exchange Traded Funds, Net Asset Value (NAV), Factors for selection of Mutual Funds, Retirement Planning : Public Provident Fund (PPF), Employee Provident Fund (EPF) , National Pension Scheme (NPS) and other Pension Funds, Annuity calculations.			
Total Lab hours:		28 hours	
Text Books:			
<ol style="list-style-type: none"> 1. Paul A Samuelson, "Economics", Indian Adaptation, Sudip Chaudhari, Anindya Sen, <i>Mc Graw Hill</i> (2010), 19th edition 2. Lawrence J Gitman, "Principles of Managerial Finance", <i>Pearson</i>.(2016) 11th edition 3. Prasanna Chandra , "Finance Sense: Finance for Non-finance Executives", 5th edition, CFMTMH professional series in Finance 4. Monika Halan , "Let's Talk Money" Harper Business 2018 5. P V Subramanya, "Retire Rich" TV18 Broadcast Ltd., 2019 6. Abhishek Kumar, "The Richest Engineer", Manjul Publishing House, 2016 			
Reference Books:			
<ol style="list-style-type: none"> 1. Lipsey, R.G. & Chrystal, K.A., "Economics", 11th Edition, Oxford University Press, 2007 2. K.K.Dewett, "Modern Economic Theory", S.Chand, 2005 			