

Course Code	MA501
Course Title	Accounting and Finance for Engineers
No. of Credits	3
Pre-Requisites	None
Compulsory / Optional	Compulsory for Mechanical Engineering with Business Track of Mechanical Engineering / Optional for Others
Aim (s): To provide basic concepts of financial accounting, financial management and management accounting to students, so that they can function effectively as professional engineers in future.	
Intended Learning Outcomes: On completion of the course, students should be able to: <ol style="list-style-type: none"> 1. Describe the role and goals of Accounting and Finance for a business. 2. Apply suitable capital budgeting techniques to make long-term investment decisions. 3. Examine suitable financing options for different requirements and stages of a business. 4. Analyse financial performance of a business using financial statements and ratios. 5. Apply costing and budgeting techniques appropriate to different activities and decisions. 	
Time Allocation (Hrs): Lectures 22, Tutorials/Small Group Discussions 15, Practicals 6, Assignments 10	
Course content / Course descriptions: <ul style="list-style-type: none"> • Introduction: Branches of finance and accounting; why Engineers need finance and accounting; goals of a firm. • Important Financial Concepts: Time value of money; risk and return • Capital Budgeting Techniques and Working Capital Management: Process of capital budgeting; capital budgeting techniques – ARR, Payback, NPV, IRR; effect of risk; inflation and tax on investment decisions; spread sheet analysis on capital budgeting; working capital management - profitability vs. liquidity • Financing Decision: Financing requirements of a business; sources of finance and different classifications; life cycle financing; capital structure and cost of capital • Financial Statements and Analysis: Basic accounting concepts; accounting statements - balance sheet; income statement; cash-flow statement; statement of retained earnings; key financial ratios; ratio analysis • Costing and Budgeting Techniques for Decision Making: Types and nature of costs; activity based costing vs. traditional costing; cost-volume-profit (Break-even) analysis and decision making; operating budgets and cash budgets • Reports and Presentations 	
Recommended Texts: <ol style="list-style-type: none"> 1. Lawrence J. Gitman. (2006). <i>Managerial Finance</i> (11th Edition). Pearson Education 2. Weetman, Pauline (2016). <i>Financial and management accounting: an introduction</i> (7th edition). Harlow, Pearson Education, England, New York. 	

Assessment	Percentage Mark
In Course Small Group Activities/ Case Studies/ Assignments/Presentation	60
End Semester	40