

Gautam Buddha University, Greater Noida

School of Engineering (Mechanical Engineering)

Degree	Course Name	Course Code	Marks:100
M. Tech.	Financial Engineering	MEI 520	SM+MT+ET 25+25+50
Semester	Credits	L-T-P	Exam.
II	3	3-0-0	3 Hours

Unit - I

Introduction: Financial Engineering – An overview, Time value of money, Introduction to the concept of risk and return of a single asset and of a portfolio, Valuation of bonds and shares, Option valuation. **(07 Hours)**

Unit - II

Capital Budgeting and Evaluation Techniques: Capital Budgeting: Principles and techniques, Nature of capital budgeting, identifying relevant cash flows. Evaluation Techniques: Payback, Accounting rate of return, Net Present Value, Internal Rate of Return, Profitability Index, Project selection under capital rationing, Inflation and capital budgeting, Concept and measurement of cost of capital, Specific cost and overall cost of capital. **(10 Hours)**

Unit - III

Dividend Policy: Financial and operating leverage - capital structure - Cost of capital and valuation - designing capital structure. Dividend policy - Aspects of dividend policy - practical consideration - forms of dividend policy - forms of dividends - share splits. **(07 Hours)**

Unit - IV

Working Capital: Principles of working capital: Concepts, Needs, Determinants, issues and estimation of working capital, Accounts Receivables Management and factoring, Cash management.

Working capital finance: Trade credit, Bank finance and Commercial paper. **(07 Hours)**

Unit - V

Cost Concepts: Supply: Meaning and determinants, production function, Cobb Douglas function, Cost concepts, Cost output relationship, Economies and diseconomies of scale, Cost functions, Determination of cost, Estimation of cost.

(07 Hours)

Unit – VI

Capital and Stock Market: Capital and stock market, Long term finance: Shares, debentures and term loans, lease, hire purchase, venture capital financing, Private Equity.

(07 Hours)

Recommended Books:

1. Financial Management, Text, Problems and cases, M. Y. Khan and P. K. Jain, Tata McGraw Hill.
2. Corporate Finance Theory and practice, Aswat Damodaran, John Wiley & Sons.
3. Fundamentals of Financial Management, James C. Vanhorne, PHI Learning.
4. Financial Management Theory and Practice, Brigham, Ehrhardt, Cengage Learning.
5. Financial Management, I. M. Pandey, Vikas Publishing House Pvt. Ltd.