

GUJARAT TECHNOLOGICAL UNIVERSITY

INDUSTRIAL ENGINEERING (15) FINANCE MANAGEMENT AND COST CONTROL SUBJECT CODE: 2161503 B.E. 6th SEMESTER

Type of course: Core

Prerequisite: None

Rationale: The focus of this course is in the area of financial management and cost control. This will show students how to estimate the cost for engineering production and help them to understand how firms meet their financial objectives utilizing financial decision-making. This course will also explain financial tools and techniques, which can be used to help firms maximize value by improving decisions relating to Finance accounting, budgetary control, and Sources of Finance.

Teaching and Examination Scheme:

Teaching Scheme			Credits C	Examination Marks						Total Marks
L	T	P		Theory Marks			Practical Marks			
			ESE (E)	PA (M)		ESE (V)		PA (I)		
				PA	ALA	ESE	OEP			
4	2	0	6	70	20	10	30	0	20	150

Content:

Sr. No.	Content	Total Hrs	% Weightage
1	Estimating for Engineering Production: Types of estimation, methods of estimate, data required for estimating, estimating material requirements, standard form of materials, estimating the time for operations, estimation for sample parts-cast, forged, formed, welded and machined parts.	24	32
2	Costing and Cost control : Cost elements, allocation of over heads, factory costs, administration and sales cost, cost accounting systems, standard costs, break even points, profit and volume relationship.	12	18
3	Finance Accounting : Double entry system, cash book, ledger, balancing the accounts, profit and loss account, Use of financial accounting balance sheets as a picture of sources and uses of funds, comparison of financial accounting reports through ratio analysis, profitability ratios, liquidity ratios, depreciation of fixed assets, valuation of current assets.	20	32
4	Budgetary control : Strategic decisions, evaluating investment alternatives, comprehensive budgeting, budgetary control systems.	4	9
5	Sources of Finance : Private or public, local, national or international factors affecting the selection of sources: capitalizing the reserves.	4	9

Suggested Specification table with Marks (Theory):

Distribution of Theory Marks					
R Level	U Level	A Level	N Level	E Level	C Level
30	35	15	10	5	5

Legends: R: Remembrance; U: Understanding; A: Application, N: Analyze and E: Evaluate C: Create and above Levels (Revised Bloom's Taxonomy)

Note: This specification table shall be treated as a general guideline for students and teachers. The actual distribution of marks in the question paper may vary slightly from above table.

Reference Books:

1. Financial management by I. M. Pandey– Vani Education book.
2. Financial management & cost control by NPC volume.
3. The VNR concise guide to financial management by Carl Heyel.
4. Mathematics of finance by Lloyd L. Smail.
5. Introduction to Business finances by Bion B.Howard & Miller Upton.
6. Financial decision making by John J. Hampton.
7. Financial management & Policy by James C. Van Horne.
8. Financial management by Chandra
9. Accounting and finance for manager by B.K.Chaudhary.

Course Outcome:

After learning the course the students should be able to:

Understand how to interface with accounting and finance departments, enable them to understand estimation and cost control in engineering production. This will enable to the student to understand basic financial topics that arise in financial management and cost control describes the financial environment of organization; and how the finances of a company work.

List of Tutorials:

1. Tutorial on cost estimation of cast parts.
2. Tutorial on cost estimation of forged parts.
3. Tutorial on cost estimation of formed parts.
4. Tutorial on cost estimation of welded parts.
5. Tutorial on cost estimation of machine parts.
6. Tutorial on cost control.
7. Tutorial on financial statements.
8. Tutorial on financial ratios.
9. Tutorial on balance sheet preparation.

List of Open Source Software/learning website: www.nptel.ac.in

ACTIVE LEARNING ASSIGNMENTS: Preparation of power-point slides, which include videos, animations, pictures, graphics for better understanding theory and practical work – The faculty will allocate chapters/ parts of chapters to groups of students so that the entire syllabus to be covered. The power-point slides should be put up on the web-site of the College/ Institute, along with the names of the students of the group, the name of the faculty, Department and College on the first slide. The best three works should submit to GTU.