



# GUJARAT TECHNOLOGICAL UNIVERSITY

Program Name: Master of Engineering

Level: PG

Branch: Construction Engineering and Management

Subject Code: ME02014021

Subject Name: Project Formulation, Accounting and Appraisal

w.e.f. Academic Year:	2024-25
Semester:	2
Category of the Course:	Professional Core Course

<b>Prerequisite:</b>	NIL
<b>Rationale:</b>	The rationale for project formulation, appraisal, and finance is to determine if a project is a good investment and aligns with an organization's goals: A detailed evaluation assesses the project's economical, financial, technical, social, management, and environmental factors. Project formulation involves creative thinking, costing and pricing, and design thinking. Project finance involves determining the conditions under which money will be made available for the project.

### Course Outcome:

After Completion of the Course, Student will able to:

No.	Course Outcomes
01	Learn the basics of measurement of project performance.
02	Understand the various criteria for discounting and compounding.
03	Familiarize with fundamentals of accounting.
04	Study the theories of working capital management.
05	Apply financial methods in making capital investment decisions in projects.

### Teaching and Examination Scheme:

Teaching Scheme(in Hours)			Total Credits L+T+(PR/2)	Assessment Pattern and Marks				Total Marks
L	T	PR	C	Theory		Tutorial/Practical		
				ESE (E)	PA/ CA (M)	PA/CA(I)	ESE (V)	
3	0	2	4	70	30	20	30	150



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## Course Content:

Unit No.	Content	No. of Hours	% of Weightage
1	<b>PROJECT FORMULATION</b> Generation and screening of project ideas, project identification, preliminary analysis, market, technical, financial, economic and ecological-pre-feasibility report and its clearance, project estimates and techno-economic feasibility report, detailed project report, different project clearances required.	10	22
2	<b>PROJECT APPRAISAL</b> NPV, BCR, IRR, ARR : matrices used to evaluate project investments, urgency-payback period, assessment of various methods, Indian practice of investment appraisal, international practice of appraisal, analysis of risk, different methods for selection of a project and risk analysis in practice, ownership structures; BOT, BOLT, BOOT models.	10	22
3	<b>PROJECT ACCOUNTING</b> Profit and loss, balance sheet, income statement, ratio analysis, depreciation and amortization, preparation of financial statements, inflation accounting and corporate practices in India.	09	20
4	<b>WORKING CAPITAL MANAGEMENT</b> Policy for working capital, estimating working capital need, inventory management, account receivable, credit and cash management, managing payments to supplies and outstanding, capital investment decisions, techniques of capital budgeting, cost of capital. Cash flow analysis.	08	18
5	<b>LONG TERM FINANCING AND BUDGETING</b> Working of financial institutes in India and abroad, self-financing, stock exchanges, types of securities, borrowings, debentures, types of budgeting, procedure for master budget, key factor, budget manual, and new approach to budgeting, cash flow forecast.	08	18
	<b>Total</b>	<b>45</b>	<b>100</b>



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## Suggested Specification Table with Marks (Theory):

Distribution of Theory Marks					
R Level	U Level	A Level	N Level	E Level	C Level
20	30	30	10	10	0

Where R:Remember; U:Understanding; A:Application, N:Analyze and E:Evaluate C:Create(as per Revised Bloom's Taxonomy)

## References/Suggested Learning Resources:

1. Prasanna Chandra (1995) Projects Preparation, Appraisals, Budgeting and Implementation, 3rd Edition, Tata Mc Graw Hill Publishing Co. Ltd.
2. Van Horne, J C (1990). Fundamentals of Financial Management, Prentice-Hall of India Ltd.
3. Kolb, R W and Rodriguez, R J (1992) Financial Management D C Heath & Co.
4. Maheshwari, S N (2002) Cost and Management Accounting, Sultan Chand & Sons.
5. McCarthy, J F (2010) Construction project management - A managerial approach, Pareto publishers.
6. Desai, Vasant (2011) The Dynamics of Entrepreneurial Development and Management, 6th edition, Himalaya Publishing House.
7. Desai, Vasant and Kaur Kulveen (2015) Entrepreneurship: Development and Management, Himalaya Publishing House.
8. Pandey, I M (2021) Financial Management, 12th edition, Pearson.
9. Khan, M Y and Jain P K (2018) Financial Management, 8th edition, McGraw Hill Education.

## Suggested Tutorials / Students Activities :

1. Discussion and Report on Stages of Project Formulation
2. Enlist and Discuss Problems in Project Formulations
3. Numericals on Appraisal and Financial Management

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