

PROJECT MANAGEMENT

Course Code	20ME7701B	Year	IV	Semester	I
Course Category	Humanities and Social Science Electives	Offering Branch	ME	Course Type	Theory
Credits	3	L-T-P	3-0-0	Prerequisites	Nil
Continuous Internal Evaluation	30	Semester End Evaluation	70	Total Marks	100

Course Outcomes		
Upon successful completion of the course, the student will be able to		BL
CO1	Understand the concepts of project management.	L2
CO2	Explain procedure for analyzing the project risk, market risk and firm risk.	L2
CO3	Apply social-cost benefit analysis on a project.	L3
CO4	Analyze a project by applying various network techniques for planning, scheduling and controlling of different activities of a project.	L4
CO5	Analyze various aspects to be considered for technical and financial analysis of the Project and the Environmental appraisal	L4

Contribution of Course outcomes towards achievement of Program outcomes & Strength of correlations (High:3, Medium: 2, Low:1)														
	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2
CO1	2	1							2		3	2	2	1
CO2	2	1							2		3	2	2	1
CO3	2	1							2		3	2	2	1
CO4	2	1							2		3	2	2	1
CO5	2	1							2		3	2	2	1

Syllabus		
UNIT NO	Contents	Mapped CO
I	MEANING, NATURE AND IMPORTANCE OF PROJECT: Introduction, Concept of project and project management, Characteristics of project, Project Family tree, Classification of Project, Project selection process, Project life cycle , Project report, Project appraisal, Tools and techniques for project management, Project manager's roles and responsibilities	CO1
II	ANALYSIS OF PROJECT RISK, MARKET RISK AND FIRM RISK: Introduction, Analysis of project risks- Projects with quantified benefits and not quantifiable benefits,	CO1 CO2

	Market risk- Security market risk, Interest rate risk, Purchasing Power Risk, Firm risk- Business risk, financial risk.	
III	COST-BENEFIT ANALYSIS: Introduction, need for social cost benefit analysis, Procedure of social cost benefit analysis, Main feature of social cost benefit analysis, COST-BENEFIT ANALYSIS APPROACHS: UNIDO approach, Little-Mirrless approach, SCBA in India, Public investment decision making in India, Limitation of SCBA.	CO1 CO3
IV	NETWORK TECHNIQUES FOR PROJECTMANAGEMENT: Introduction, Network modelling, Probabilistic model-various types of activity times estimation, Programme evaluation review techniques (PERT), probability of completing the project, Deterministic model- critical path method (CPM), critical path calculation, crashing of simple of networks	CO1 CO4
V	TECHNICAL AND FINANCIAL ANALYSIS OF PROJECT: Introduction, Technical Analysis-Materials and inputs, Production, Choice of technology, Product Mix, Plant capacity, Location and site, Structures and civil works, Project charts and layouts, financial analysis -Significance of financial analysis, Utility of financial and accounting statements, ENVIRONMENTAL APPRAISAL OF PROJECTS: Introduction, Types and Environmental Dimensions of a Project, Stresses on Environment, Environmental Impact Assessment Methodologies	CO1 CO5

Learning Resource

Text books:

1. Prasanna Chandra, Projects Planning, Implementation and Control, Tata McGraw Hill Publishing Company Limited, New Delhi, 1995.

Reference books

1. Project Management Institute (PMI), A Guide to the Project Management of Knowledge Newton Square, PA, 1996
2. J.R. Meredith and S.J. Mantel. Project Management: A Managerial Approach. John Wiley and Sons, New York, 1995.
3. L.S. Srinath, PERT & CPM Principles & Applications, 3rd edition, East west Press,2001.

e- Resources & other digital material

1. <https://nptel.ac.in/courses/105/106/105106149/>
2. <https://nptel.ac.in/courses/110/104/110104073/>