

**PROJECT MANAGEMENT**

<b>Course Code</b>	20HS7701G	<b>Year</b>	IV	<b>Semester</b>	I
<b>Course Category</b>	<i>Humanities and Social Science Elective</i>	<b>Branch</b>	ME	<b>Course Type</b>	Theory
<b>Credits</b>	3	<b>L-T-P</b>	3-0-0	<b>Prerequisites</b>	Nil
<b>Continuous Internal Evaluation</b>	30	<b>Semester End Evaluation</b>	70	<b>Total Marks</b>	100

**Course Outcomes:** Upon successful completion of the course, the student will be able to

	<b>Statement</b>	<b>Skill</b>	<b>BTL</b>	<b>Units</b>
<b>CO1</b>	Understand the concepts of project management.	Understand	L2	1,2,3,4,5
<b>CO2</b>	Explain procedure for analyzing the project risk, market risk and firm risk.	Understand	L2	2
<b>CO3</b>	Apply social-cost benefit analysis on a project.	Apply	L3	3
<b>CO4</b>	Analyze a project by applying various network techniques for planning, scheduling and controlling of different activities of a project.	Analyze	L4	4
<b>CO5</b>	Analyze various aspects to be considered for technical and financial analysis of the Project and the Environmental appraisal	Analyze	L4	5

**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
<b>CO1</b>	2	1							2		3	2	2	1
<b>CO2</b>	2	1							2		3	2	2	1
<b>CO3</b>	2	1							2		3	2	2	1
<b>CO4</b>	2	1							2		3	2	2	1
<b>CO5</b>	2	1							2		3	2	2	1

**Syllabus**

<b>UNIT</b>	<b>Contents</b>	<b>Mapped CO</b>
<b>I</b>	<b>MEANING, NATURE AND IMPORTANCE OF PROJECT:</b> Introduction, Concept of project and project management, Characteristics of project, Project Family tree, Classification of Project, Project selection process, <b>Project life cycle</b> , Project report, Project appraisal, Tools and techniques for project management, Project manager's roles and responsibilities	<b>CO1</b>
<b>II</b>	<b>ANALYSIS OF PROJECT RISK, MARKET RISK AND FIRM RISK:</b> Introduction, Analysis of project risks- Projects with quantified benefits and not quantifiable benefits, <b>Market risk</b> - Security market risk, Interest rate risk, Purchasing Power Risk, Firm risk- Business risk, financial risk.	<b>CO1</b> <b>CO2</b>
<b>III</b>	<b>COST-BENEFIT ANALYSIS:</b> Introduction, need for social cost benefit analysis, Procedure of social cost benefit analysis, Main feature of social cost benefit analysis, <b>COST-BENEFIT ANALYSIS APPROACHS:</b> UNIDO approach, Little-	<b>CO1</b> <b>CO3</b>

	Mirrless approach, SCBA in India, Public investment decision making in India, Limitation of SCBA.	
IV	<b>NETWORK TECHNIQUES FOR PROJECTMANAGEMENT:</b> Introduction, Network modelling, Probabilistic model-various types of activity times estimation, Programme evaluation review techniques (PERT), probability of completing the project, <b>Deterministic model-</b> critical path method (CPM), critical path calculation, crashing of simple of networks	CO1 CO4
V	<b>TECHNICAL AND FINANCIAL ANALYSIS OF PROJECT:</b> 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, <b>ENVIRONMENTAL APPRAISAL OF PROJECTS:</b> 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

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