

Project Management - Video course

COURSE OUTLINE

Characteristics of projects, Definition and objectives of Project Management, Stages of Project Management, Project Planning Process, Establishing Project organization.

Work definition: Defining work content, Time Estimation Method, Project Cost Estimation and budgeting, Project Risk Management, Project scheduling and Planning Tools: Work Breakdown structure, LRC, Gantt charts, CPM/PERT Networks.

Developing Project Plan (Baseline), Project cash flow analysis, Project scheduling with resource Constraints: Resource Leveling and Resource Allocation. Time Cost Tradeoff: Crashing Heuristic.

Project Implementation: Project Monitoring and Control with PERT/Cost, Computers applications in Project Management, Contract Management, Project Procurement Management; Post Project Analysis.

The course is divided into seven modules. They are as follows.

Module 1: Overview of Project Management.

Module 2: Project Management Concepts and Techniques.

Module 3: Project Cost estimating.

Module 4: Project Planning and Scheduling.

Module 5: Project Monitoring and Control.

Module 6: Material management in Projects.

Module 7: Management of Special Projects.

COURSE DETAIL

(Each Session 3 hrs)

Module	Topics
Module 1: Overview of Project Management	<p>Session 1: Introduction to Project management</p> <p>Readings:</p> <ol style="list-style-type: none"> Chapter 1, Project Management: Engineering, Technology and Implementation, Shtub, Bard and Globerson, PH Inc. Chapter 1, Project Management Handbook, Lock, Gower. <p>Session 2: Project management Process and role of Project Manager</p> <p>Readings:</p> <ol style="list-style-type: none"> Chapter 1, Project Management: Engineering, Technology and Implementation, Shtub, Bard and Globerson, PH Inc. Chapter 1, Project Management Handbook, Lock, Gower.



NP-TEL

NPTEL

<http://nptel.iitm.ac.in>

Management

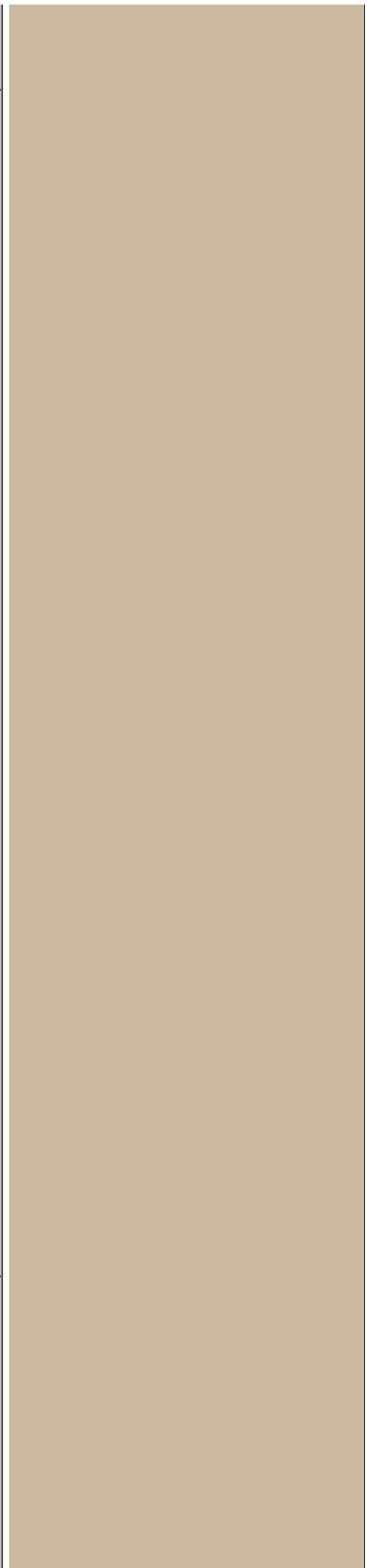
Additional Reading:

- John M Nicholas, Project Management for Business and Technology: Principles and Practice, Prentice Hall of India, 2002.
- N. J. Smith (Ed), Project Management, Blackwell Publishing, 2002.
- Robert K. Wysocki, Robert Back Jr. and David B. Crane, Effective Project Management, John Wiley, 2002.
- Jack R Meredith and Samuel J Mantel, Project Management: A Managerial Approach, John Wiley, 4th Edition, 2000.

Coordinators:

Prof. (Ms) Karuna Jain
Shailesh J. Mehta School of
Management IIT Bombay

	<p>3. Chapter 2, Project Management Handbook, Cleland and King, VNR.</p>
<p>Module 2: Project Management concepts and techniques</p>	<p>Session 3: Project screening and Selection Techniques</p> <p>Readings:</p> <ol style="list-style-type: none"> 1. Chapter 3, Project Management: Engineering, Technology and Implementation, Shtub, Bard and Globerson, PH Inc. 2. Chapter 4, Project Management: Engineering, Technology and Implementation, Shtub, Bard and Globerson, PH Inc. 3. Chapter 7, Project Management Handbook, Cleland and King, VNR. <p>Session 4: Structuring concepts and Tools (WBS, OBS, and LRC)</p> <p>Readings:</p> <ol style="list-style-type: none"> 1. Chapter 5, Project Management: Engineering, Technology and Implementation, Shtub, Bard and Globerson, PH Inc. 2. Chapter 2 & 3 Project Management Handbook, Lock, Gower. 3. Chapter 16, Project Management Handbook, Cleland and King, VNR. <p>Session 5: Project Planning Tools (Bar charts, LOB, CPM, and PERT)</p> <p>Readings:</p> <ol style="list-style-type: none"> 1. Chapter 7, Project Management: Engineering, Technology and Implementation, Shtub, Bard and Globerson, PH Inc. 2. Chapter 15, Project Management Handbook, Cleland and King, VNR. 3. Chapter 2 & 3 Management guide to PERT/CPM, Wiest and Levy, PHI. <p>Session 6: Risk Analysis and Management</p> <p>Readings:</p> <ol style="list-style-type: none"> 1. Chapter 3, Project Management: Engineering, Technology and Implementation, Shtub, Bard and Globerson, PH Inc. 2. Chapter 17, Risk Management.
<p>Module 3: Project Cost Estimating</p>	<p>Session 7: Types of Estimates and Estimating Methods</p> <p>Readings:</p> <ol style="list-style-type: none"> 1. Capital Cost Estimating. 2. Chapter 10, Project Management Handbook, Dock, Gower. <p>Session 8: Project Budgeting.</p> <p>Readings:</p>



	<ol style="list-style-type: none"> Chapter 8, Project Management: Engineering, Technology and Implementation, Shtub, Bard and Globerson, PH Inc.
Module 4: Project Planning and Scheduling	<p>Session 9: Dynamic Project Planning and Scheduling</p> <p>Readings:</p> <ol style="list-style-type: none"> Chapter 7, Project Management: Engineering, Technology and Implementation, Shtub, Bard and Globerson, PH Inc. Chapter 3 & 4 Management guide to PERT/CPM, Wiest and Levy, PHI. Chapter 16, Project Management Handbook, Cleland and King, VNR. Chapter 11, Project Management: Systems approach to Planning Scheduling and Controlling, H. Kerzner. <p>Session 10: Project Scheduling with Resource Constraints</p> <p>Readings:</p> <ol style="list-style-type: none"> Chapter 7, Project Management: Engineering, Technology and Implementation, Shtub, Bard and Globerson, PH Inc. Chapter 7, Management guide to PERT/CPM, Wiest and Levy, PHI. Chapter 16, Project Management Handbook, Cleland and King, VNR.
Module 5: Project Monitoring and Control	<p>Session 11: Monitoring Techniques and time control System</p> <p>Readings:</p> <ol style="list-style-type: none"> Chapter 11, Project Management: Engineering, Technology and Implementation, Shtub, Bard and Globerson, PH Inc. Chapter 4, Project Scheduling and Monitoring in Practice, S. Choudhury, SAP. Chapter 16, Project Management Handbook, Cleland and King, VNR. <p>Session 12: Project Cost Control and Time cost Tradeoff</p> <p>Readings:</p> <ol style="list-style-type: none"> Chapter 11, Project Management: Engineering, Technology and Implementation, Shtub, Bard and Globerson, PH Inc. Chapter 16, Project Management Handbook, Cleland and King, VNR.
Module 6: Project procurement Management	<p>Session 13: Project Procurement and Materials Management</p> <p>Readings:</p> <ol style="list-style-type: none"> Chapter 11, Total Project Management: The Indian Context, P. K. Joy, Macmillan India Ltd.

References:

1. Shtub, Bard and Globerson, Project Management: Engineering, Technology, and Implementation, PH Inc.
2. Lock, Gower, Project Management Handbook.
3. Cleland and King, VNR Project Management Handbook.
4. Wiest and Levy, Management guide to PERT/CPM, PHI.
5. Horald Kerzner, Project Management: A Systemic Approach to Planning, Scheduling and Controlling, CBS Publishers, 2002.
6. S. Choudhury, Project Scheduling and Monitoring in Practice.
7. P. K. Joy, Total Project Management: The Indian Context, Macmillan India Ltd.