



Project Management Course Outline

Course Coordinator: Professor Tapan P Bagchi

Course Co-Coordinator: Professor J Maiti

Venue: IEM, IIT Kharagpur

Date: November 24-27. 2010

Short Course for Professionals in Project Management

All details appear on the Course website on the IIT Kharagpur Institute webpage.

This course will be particularly useful for practicing professionals who manage, plan, execute or sponsor construction, R&D, IT, facilities upgradation or Six Sigma projects. Some prior experience in having managed or acted as a resource in projects would be most helpful. If you are planning to learn about project management with the desire to write the PMP/PMI test, you will learn all the basics in this course.

The faculty are top rated and internationally recognized for their expertise in project management.

Course Objective:

This **4-Day focused course** in Project Management will cover methods beyond topics covered in Operations Management for MBAs and M Techs—in the planning and implementation of projects. This is a major knowledge upgrade for project managers and practitioners. Specifically, learning will include:

- Project Life Cycle, CPM and PERT
- How to allocate resources to different activities while planning a project; “crashing” (expedite) certain project activities to speed up a project; you will experience the dynamic effects of crashing by simulating a real life project using CPSIM
- How to identify, quantify and mitigate risks; Monte Carlo in PERT
- Project performance evaluation by EVM; Critical Chain PM
- Developing working competence in the use of MS Project®

Course Deliverables: At the end of the course the attendee would be skilled in expediting projects by prudently crashing certain activities, conducting Risk analysis, Resource allocation, use MS Project® and Critical Chains; Six Sigma case application.

Pedagogy: Group work and simulation exercises; hands-on work with MS Project® to build realistic project plans and optimize them; classroom discussions and case analyses will be used to reinforce concepts taught.

Text (will be provided to each attendee):

Project Management: A Managerial Approach, Jack Meredith and Samuel Mantel Jr, 6th ed., Wiley.

Course Fee: Rupees 15,000.00 per participant payable by draft to **CEP-STC, IIT Kharagpur**; Fee covers four days’ room and board on campus, all course materials, and a textbook.



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Session Plan

Day	Theme	Topics/Cases/Articles
1	Overview of <u>Project Management</u>	<ul style="list-style-type: none"> • Sponsor, Charter, Scope, Project Life Cycle • WBS (Work Breakdown Structure) and CPM • LP formulation
1	Using MS Project® to plan a real project	<p>Before the class...</p> <ul style="list-style-type: none"> • Install MS Project® on your laptop/Lab PC • Go through MS Project® on-line Audio-visual lessons available at • http://www.vtc.com/products/project2003.htm
1	Resource Allocation	<ul style="list-style-type: none"> • Review slides pdf on resource allocation • Case study
2	Resource Leveling by MS Project®	<p>Group work 1 Constrain the resources available. Find resource use profile</p>
2	Crashing a project	<ul style="list-style-type: none"> • Crashing a project • Crashing illustration • Simulation of crashing on laptop
2	<u>Simulation of crashing by CPSIM</u>	<p>Complete crashing exercise on CPSIM</p> <ul style="list-style-type: none"> • LP Formulation for optimum crashing
3	Managing Project Risks	<ul style="list-style-type: none"> • Overview of Risk and its mitigation • Risk Exposure • Time overrun risk estimation by Monte Carlo Simulation
3	Using Decision trees in risk analysis	<ul style="list-style-type: none"> • Basics of Managing Risk • Identifying Risk • Decision Tree Analysis
3	Quality Management	<ul style="list-style-type: none"> • Quality Management in Project Management
4	Earned value concept	<ul style="list-style-type: none"> • Read Chapter 13, PM by Gray & Larson, 3rd ed. • Group work 2
4	Critical Chain	<ul style="list-style-type: none"> • Identifying the Critical Chain • Sizing and Managing by Buffers
4	Closing a project	<ul style="list-style-type: none"> • Master's Touch in Project Success • 35 Objectives in PM
4	Review and Case Presentations by Participants	<ul style="list-style-type: none"> • Submit Questions in advance • See instructor for presentation of your case



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Application Form

A SHORT TERM COURSE ON PROJECT MANAGEMENT

Mailing address: Professor Tapan P Bagchi, IEM, IIT Kharagpur 721 302 WB;
bagchi@vgsom.iitkgp.ernet.in

1 Name: _____

2 Designation: _____

3 Name of the Organization/Institution: _____

4 Address for communication: _____

5 Highest academic qualification: _____

6 Phone : _____ (O) _____ (R)

7 Mobile : _____

8 Fax : _____

9 Email : _____

10 Details of the demand draft: **Bank name, Draft number and Date and Amount**

Signature of Applicant _____ Date _____

“We approve the above applicant attending the short-term course –**Project Management**”

Signature of Approving/Sponsoring Authority _____