

COURSE PM-01

TITLE: Project Planning and Control Concepts and Techniques

LENGTH: 3 half-day sessions + optional half-day or full-day team workshop

PREREQUISITES: None

DESIGNED FOR:

1. Project leaders of medium-sized or large projects, especially newly-designated project leaders who have not previously managed successful projects of comparable size.
2. Managers and sponsoring users who regularly work with or direct such project leaders.
3. Other project team members who will perform planning, administrative, or control roles for their project.

CLASS SIZE: up to 16

GENERAL DESCRIPTION:

This course examines the concepts and techniques of project management, including:

A. Planning concepts and techniques

- project definition
- task definition
- task estimating
- task network analysis
- budgeting and scheduling
- phased life cycles
- team organization and communication

B. Control concepts and techniques

- task assignment
- task status reporting
- project status reporting
- communication within the team
- communication with others
- plan-revision and other corrective actions

We emphasize essential concepts that apply to *all* types of project. The course is independent of any specific life-cycle methodology, project management software, proprietary methods, or other tools. In the optional workshop session small groups of participants apply these concepts to a sample project and then present their results to the whole class for discussion.

DETAILED OBJECTIVES:

Upon completing the course, the participant will be able:

1. To document the definition of a project, including its scope, its objectives, and its constraints.
2. Given such a project definition, to specify an appropriate sequence of *phases* into which the work can be divided.
3. Given the results of one project phase, to develop a complete task network for accomplishing the work of the following phase.
4. Given a task network and estimates of the resources and duration of each task, to compute the minimum duration (critical path) and the total cost.

5. Given a desired target date beyond the minimum duration, to determine the resources required to meet the date.
6. Given a set of available resources, to determine a realistic target date for a task network.
7. Given a task network, a set of resources, and a target date, to prepare a schedule for executing the tasks, with a preliminary assignment of tasks to project team members.
8. To establish appropriate communication mechanisms for communication of information among the team members.
9. To establish reporting and control mechanisms (or to use standard ones effectively) to monitor project performance, so as to obtain early warning of deviations from the plan.
10. To summarize the information from such detailed reporting into meaningful and accurate management-level status reports.
11. To choose an appropriate action in response to a deviation from the plan, and take all necessary follow-up action.
12. To keep a project team fully informed of what they need to know for doing their jobs well and for understanding how their individual assignments fit into the overall project structure.
13. To assign tasks to team members so as to make effective use of their individual skills.
14. To determine the usefulness of project-control tools, such as project management software, life-cycle methodologies, forms, and display facilities, and to make the most effective use of such tools for controlling projects.
15. To plan and control projects within the constraints and the spirit of any reasonable procedural and technical standards in an organization.