

Project Scheduling and Control

Length: 1 Day

Course Description: Develop effective measures for scheduling and controlling projects as you put the tools of project management to work. In this course you'll focus on managing the constraints you face in any project: limits on time, human resources, materials, budget and specifications. Discover proven ways to work within your identified constraints, without letting predefined limits curtail creativity or innovation.

You will get hands-on experience, practicing your skills in building project requirements and the work breakdown structure. You'll learn a sound, logical framework for scheduling and controlling project activities. And you'll master techniques for estimating, forecasting, budgeting, monitoring, controlling, analyzing and reporting costs and interpreting the meaning of earned-value data.

COURSE CONTENT

Essential Background

- Overview of the project management life cycle
- The triple constraint
- Planning tools
- Project requirements—a review

The Work Breakdown Structure—a Review

- Resource Allocation and Estimating
- Using estimates for scheduling and cost control
- The basic rules of estimating
- Levels of estimating and estimate types
- Top-down vs. bottom-up
- Order of magnitude
- Budget
- Definitive
- Four estimating methodologies

Identifying Controllable Costs

- Resource
- Material
- Direct
- Indirect
- Planning for risk with contingency

Building the Project Resource Pool

- Using resources to build estimates
- The responsibility matrix
- Time-controlled estimates
- Resource-limited estimates

Scheduling

- Network scheduling
- Validating schedules
- Arrow diagrams and precedence diagrams
- Basic scheduling and network calculations
- Advanced precedence relationships and the critical path
- Alternative constraints
- Gantt and milestone charts

The Baseline

- Establishing baselines
- Understanding types of baselines
- Time-phased distribution of costs
- Cumulative cost curves

Managing Change Within the Project

- The process of control
- Identifying sources of change
- Screening change
- Updating the project plan
- Communicating change

Evaluation and Forecasting

- Causes of variances
- Establishing the "data date" for evaluation
- Controlling costs and schedule late in the project
- Components of the project audit
- Considerations in establishing a monitoring system
- Earned value management
- Advanced earned value management forecasting tools

The Exit Strategy

- Steps in completing the project
- Scope verification
- Contract closeout
- Administrative closure