

# The Latest Developments in Project Contracting & Site Management, Scheduling, Costing & Budgeting

Website: <u>www.btsconsultant.com</u>

Email: <u>info@btsconsultant.com</u>

Telephone: 00971-2-6452630

## The Latest Developments in Project Contracting & Site Management, Scheduling, Costing & Budgeting

## Introduction:

Scheduling project activities is one of the most important elements of project management, along with identifying project costs which are a function of its duration. Understanding and establishing such a relationship is very important to be able to calculate the cost impact of project acceleration and compression. Efficient resource management is also essential to control project costs, so it is very important to establish the resources needed and their profile, and perform resource leveling And allocation to meet the schedule needs.

This course is also designed to systematically cover the developmental subjects vital to training competent contract and field administrators to manage time, cost, documentation and disputes during this important phase. Field administration is a critical process in achieving successful facility construction. Most organizations cannot afford the personnel time to apprentice a field administrator- in- training. This course will focus on the legal, technical and personal responsibilities involved in observation, supervision, and coordination of on- site construction, as well as contract close- out, all of which are essential in administering the contacts required by to Module's complex projects.

Project Managers, Architects, Engineers, Construction Managers, Design and Construction Professionals, architects, engineers, contractors, owners and government agencies; construction inspectors, construction managers, project managers; and others responsible for effective field administration in building construction.

## Who Should Attend?

Project Managers, Architects, Engineers, Construction Managers, Design and Construction Professionals, architects, engineers, contractors, owners and government agencies; construction

inspectors, construction managers, project managers; and others responsible for effective field administration in building construction

## Course Objectives:

The aim of this course is to explain the techniques for scheduling a project, how to establish time cost relationships, resource management methods, different types of cost estimates, and expanding

One's cost estimating skills. Practical examples will be given to increase familiarity with the various methods and their components, with the goal of preparing cost estimates, budgets and project schedules as accurately as possible.

The course will also teach you how to identify management responsibilities, develop your communication skills, learn effective administrative responsibilities, understand legal requirements, structure effective record-keeping methods, and promote good organizational and contract closeout procedures.

#### After participating in this course, you will be able to:

- Understand scheduling techniques and cost estimation methods
- Differentiate between the various types of activities, floats and cost estimates
- Prepare a budget cost estimate, project schedule, and project cash flow
- Identify building system alternatives and critical activities in a project and the time- cost relationship
- Understand life cycle costing and resource management
- Expand your cost estimating understanding and project scheduling skills
- Perform project time analysis and cash flow, cost and schedule control, resource allocation and leveling
- Identify management responsibilities
- Use effective communication skills
- Understand effective administrative responsibilities
- Understand legal requirements
- Structure and use effective record- keeping methods
- Promote good organization procedures
- Avoid dispute and claims

## Course Outline:

#### Module 1

- The Art of Planning
- Fundamentals of Project Time Management
- Establishing the Project and Work Breakdown Structure
- Developing the Schedule
- Project Network Logic
- Arrow Diagram and Precedence Diagram
- Case Study
- The Latest Developments in Contracts & Site Management, Scheduling, Costing & Budgeting

#### Module 2

- Time Analysis
- Critical Path and Floats
- Bar Charts
- Time- Cost Relationship
- Project Compression and Acceleration
- Resource Planning, Leveling, and Allocation
- Project Controlling and Monitoring
- Case Study

#### Module 3

- Introduction to Estimating
- Types of Estimates
- Direct Costs
- Indirect Costs
- Cost Control Process
- Earned Value
- Case Study

#### Module 4

- Cost Management Process in Planning and Design
- Introduction to Project Budgeting and Concept Estimating
- Budget Estimating Approaches
- Parametric Systems Budget Estimate

- Concept Design Estimating Approaches
- Life Cycle Costing (LCC)
- Value Engineering
- Cash Flow Analysis
- Conclusion

#### Module 5

### **Project Documentation and Control Systems**

- Contract Administration in the Field
- Roles of the Parties
- Legal and Contractual Roles
- Pre- Construction Activities
- Keeping Good Records
- Definition of Records
- Hierarchy of Records
- Types of Records
- The Record as a Constructive Tool in Disputes
- Construction Documents as Pivotal Communication Records and Tools
- Keeping Conference and Meeting Records
- The Documentation Process

## Organization of Forms for the Field Administrator's Record System

- Designing the Record Forms:
  - Essential Elements: Lean and Effective
  - Processing the Form
- Standard Pre- printed Forms:
  - What's Available
  - Source
- Application of Forms for Specific Uses
- On- Site Coordination Meetings and Communication
- Measures to Minimize Disputes
- Documenting Possible Claim Activity
- Claim Protection and Mitigation
- Case Study

 The Latest Developments in Contracts & Site Management, Scheduling, Costing & Budgeting

#### Module 8

## The Legal and Contractual Role of the Field Administrator

- As the Employer's Representative: Centre for all Communications
- As an Observer: To Monitor the Progress of Work
- As a Certifier: Of Progress Payment, Substantial Completion
- As an Interpreter: Clarifier of Contract Documents
- As a Modifier: Changing Orders and Making Minor Change Orders
- As a Judge: Responsibility of Separate Primes
- As an Arbitrator: Disputes between Employer and Contractor
- As an Evaluator: Shop Drawings and Samples
- As an Inspector: Punch List Preparation

## Communications among the Participants during Construction Phase

- Basis for all Communication
- The "Chain of Command"
- The Formal vs. the Informal
- The Implied vs. the Explicit
- When Not to Communicate
- Extent of Distribution
- Other Means of Communicating

#### Module 9

## Substantial Completion and Project Hand- Over

- Commissioning and Handing- Over
- Substantial Completion
- Preparation of Punch List
- Starting of Systems
- Conclusion