

# € TRAINING

Advanced Earned Value Management for  
Project Performance Measurement





# Advanced Earned Value Management for Project Performance Measurement

## Introduction:

Earned Value Management EVM is a project planning and control approach that provides cost and schedule performance measurements. This training program will help participants compare the actual accomplishment of scheduled work and associated costs against an integrated schedule and budget plan. EVM is considered one of the most potent and productive concepts utilized in managing today's complex projects in private, commercial, or government environments.

## Program Objectives:

At the end of this program, the participants will be able to:

- Obtain knowledge in understanding and using an effective performance management system in managing technical projects effectively.
- Manage projects using a proven, effective performance measurement technique.
- Work with clients to define project objectives and develop a project plan and put it into action.
- Make project decisions concerning scope, cost, and schedule parameters faster, more effectively, and more confidently.
- Stay on top of schedules, budgets, workloads, and human resources issues and delegate practically and fairly.
- Learn to avoid the pitfalls of project management by quickly identifying potential project risks and mitigating them as early as possible.

## Targeted Audience:

- Project Managers and Controllers.
- Cost Controllers.
- Finance Professionals.
- Team Leaders.
- Project Technical.
- Project Sponsors / Owners.

## Program Outlines:

## Unit 1:

### Introduction to Earned Value Management EVM:

- Management Criteria versus Engineering Criteria.
- Evolution of the Earned Value Management EVM Concept.
- The Cost/Schedule Control System Criteria C/SCSC.
- The EVM System Criteria.
- Performance Measurement- An Effective EVM Technique.
- EVM in Project Management.

## Unit 2:

### Scope, Plan, and Schedule of the Project:

- Understand the project work scope and its boundaries.
- Create a work breakdown structure WBS to organize project tasks.
- Make informed decisions regarding the make-or-buy choice for project components.
- Gain a clear understanding of the project objective and its significance.
- Plan the project effectively to ensure successful execution.
- Schedule the project tasks and integrate earned value management techniques for performance tracking.

## Unit 3:

### Estimate and Budget Project Resources to Form Control Account Plans CAPs:

- Integrating the Project Work Scope with Cost and Schedule.
- Earned Value CAPs.
- Cost Estimates and Budgets.
- Management Reserves.

## Unit 4:

### Establish The Earned Value Project Baseline:

- Methods Used to Plan and Measure Earned Value.

- Control Account Plans CAPs.
- The Performance Measurement Baseline PMB.
- Maintaining the Baseline: Managing Changes in Scope.

## Unit 5:

### Monitoring Performance Against the Baseline:

- CAPs Performance Measurement.
- Presentations to Project Management.
- Earned Value Cost and Schedule Variances.
- Materials and Subcontracts in EVM.

## Unit 6:

### Final Cost and Schedule Forecasting:

- Determining Factors.
- Cost and Schedule Results Methodology.
- Management Reserve or Contingency Reserve.
- Estimate At Completion EAC.
- The Over Target Baseline OTB Process.
- Predicting the Project's Time Duration.

### EVM Reporting:

- Subcontractors' Reporting.
- Preparing and Interpreting the Integrated Cost/Schedule Report.
- The EVM Reporting Formats.

## Unit 7:

### Cost Performance Index CPI and Schedule Performance Index SPI:

- Calculating CPI and SPI.

- Using CPI and SPI to Identify Project Performance Trends.
- Incorporating CPI and SPI into Project Forecasting.

## Unit 18:

### Variance Analysis and Corrective Action:

- Identifying Cost and Schedule Variances.
- Analyzing the Causes of Cost and Schedule Variances.
- Developing and Implementing Corrective Actions.

## Unit 19:

### Earned Value Project Control and Managing Project Risks:

- Continuous Monitoring and Control.
- Performance Reviews and Status Meetings.
- Implementing Earned Value Project Control Techniques.
- Identifying and Assessing Project Risks.
- Developing and Implementing Risk Management Strategies.
- Using EVM to Monitor and Control Project Risks.

## Unit 10:

### EVM in Agile Project Management, International and Multi-Cultural Projects:

- Integrating EVM into Agile Project Management Approaches.
- Managing Cost, Schedule, and Performance in Agile Projects.
- Considerations for Applying EVM in Global Projects.
- Managing Cost, Schedule, and Performance in Multi-Cultural Projects.