

Earned Value Management

Length: 3 Days

Accurately understand project progress. This course teaches you the fundamentals of EVM so you can understand how to establish an effective project baseline and monitor project progress against known expectations.

Learn how EVM is integrated throughout the project life cycle. Practice the activities you go through to establish an effective baseline. Identify the critical data points that must be collected to analyze project progress. Learn to conduct trend analysis, calculate actual cost, and accurately project final cost, schedule, and performance variances. Understand how change impacts EVM and how approved changes can impact your original baseline. Identify the stakeholders who would benefit from EVM data and learn effective communication methods. Finally, review the differences of EVM in a corporate and federal environment.

What You'll Learn

- Why EVM is important
- Establishing and managing scope, schedule, and budget
- Creating a reasonable baseline
- Integrating project planning and EVM
- Monitoring and controlling the baseline
- Monitoring and controlling scope, schedule, and cost
- Collecting and analyzing data
- Forecasting final variances
- Managing change and the impact to EVM
- The difference between EVM in corporations and in the federal environment

Who Needs to Attend: Project managers, IT project managers, project coordinators, project analysts, project leaders, senior project managers, team leaders, product managers, and program managers

COURSE CONTENT

INTRODUCTION TO EARNED VALUE MANAGEMENT

Project dilemma

The role of EVM: Monitoring projects

Project controls

Management by milestones

Characteristics of EVM

Milestones

Milestones as measures

EVM project planning

EVM terminology

EVM statistics

EVM data

Basic EVM terminology illustrated

Performance statistics

Forecasting

Management by exception

The value of earned value

HISTORY OF EVM

A hundred years of evolution
Cost control for government
Limited adoption in private sector
A simpler version: EVMS
Back to basic earned value principles

INGREDIENTS NECESSARY FOR EVM

EVM planning overview
Management questions answered by EVM
EVM stages
Precision and rigor
Three-dimensional view of a project

DEFINING SCOPE

Defining the work to be done
What's in and what's out
Work breakdown structure
Decomposition to work packages
Decomposition to task and activity
WBS terminology
WBS principles

SCHEDULING THE PROJECT

Scope and then schedule
EVM scheduling requirements
Master schedule
Vertical integration
Horizontal integration
Example schedule

INTEGRATING SCOPE, SCHEDULE, AND COSTS THROUGH CAPS

Control account plans
The role of CAPs
CAP ingredients
CAP size and number
The CAP rule
CAP example
What is left to complete a project plan?

ESTABLISHING AN EV MEASUREMENT

BASELINE

EV measurement baseline
Questions answered by the baseline
Planning and measuring earned value
Establishing an EV measurement system
Considerations for choosing a measurement method
Methods used to plan and measure EV
Example CAP with EV measures
Project cost baseline
PMB components
Managing change

MONITORING PERFORMANCE AGAINST BASELINE

Monitoring starts at the task level
Trend indicator
Management by exception
Cost performance index
Using the CPI
Schedule performance index
Using the SPI
Cumulative vs. periodic data

FORECASTING FINAL COST AND SCHEDULE RESULTS

Management with the headlights on

Factors determining project results

Statistical forecasts

Estimate at complete

To complete performance index

Schedule forecasting - EACt

EVM CRITERIA REVIEW

EVM overview

Implementing EVM

Hands-On Exercises

Identify contract negotiation parameter

Create milestones and a performance measurement baseline

Measure progress

End-of-project reporting with scope changes

Scope analysis: prepare a work breakdown structure

Create a project schedule

Create CAPs for the project and prepare a budget estimate

Complete an earned value baseline

Monitor project performance

Prepare a status report