Global Knowledge Course Name: Earned Value Management

Course Code: 2845

Course Overview: 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.

Course Length: Three Days

Who should Attend:

- Project managers
- IT Project managers
- Project Coordinators
- Project analysts
- Project leaders
- Senior project managers
- Team leaders
- Product managers
- Program managers

You will 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

Suggested Prerequisites:
Introduction to Project Management (course 2868), IT Project Management (course 2819), or Applied Project Management Boot Camp (course 2807)

Customizable Course: No

Course Content:

Introduction to Earned Value Management

- The need for EVM
  - 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