Advanced Earned Value Management and Performance Metrics Training Course



26 - 30 Oct 2026

Vienna

5800 € (Per Person)

Ref: #PRM3431_124720

Course Introduction / Overview:

This course provides a comprehensive and in-depth exploration of Earned Value Management (EVM), a powerful methodology for integrating a project's scope, schedule, and resources for objective performance measurement. Moving beyond basic formulas, this program delves into the practical application of EVM as a proactive project control and forecasting tool. Participants will learn to establish a robust Performance Measurement Baseline (PMB) and use it to track progress, identify variances, and predict future outcomes with greater accuracy. The curriculum is designed to align with industry best practices and standards, ensuring that the skills acquired are both relevant and immediately applicable. We will explore the concepts detailed by leading experts like Quentin W. Fleming in his seminal work, "Earned Value Project Management," to provide a solid theoretical and practical foundation. At BIG BEN Training Center, we believe that mastering EVM is not just about crunching numbers; it is about gaining critical insights into project health, enabling data-driven decision-making, and ultimately steering projects toward successful completion. This training will equip you with the advanced techniques needed to manage complex projects, control costs, and deliver value consistently.

Target Audience / This training course is suitable for:

- Project Managers and Program Managers.
- Project Control Officers and Specialists.
- Cost Controllers and Cost Engineers.
- Planners and Schedulers.
- Financial Analysts involved in projects.
- Government and Private Sector Contractors.
- Members of the Project Management Office (PMO).
- Team Leads and Project Supervisors.
- Quality Assurance Managers.

Target Sectors and Industries:

- Construction and Engineering.
- Aerospace and Defense.
- Information Technology and Software Development.
- Government Agencies and Public Sector Undertakings.
- Manufacturing and Industrial Operations.
- Energy, Oil, and Gas.
- Telecommunications.
- Pharmaceuticals and Healthcare.
- Consulting Services.

Target Organizations Departments:

- Project Management Office (PMO).
- Finance and Accounting.
- Planning and Scheduling.
- Operations Management.
- Engineering and Development.
- Contract and Procurement Management.
- Quality Assurance and Control.
- Strategic Planning.
- Information Technology.

Course Offerings:

By the end of this course, the participants will have able to:

- Master the fundamental principles and terminology of Earned Value Management.
- Develop and manage a comprehensive Performance Measurement Baseline (PMB).
- Calculate and interpret key performance indicators, including CPI and SPI.
- Conduct detailed schedule and cost variance analysis to identify root causes of deviations.
- Generate reliable project forecasts for cost and schedule using various EAC formulas.
- Integrate EVM with risk management and change control processes effectively.
- Apply EVM principles in various project environments, including agile and traditional.
- Prepare and present insightful project performance reports to stakeholders.
- Understand the requirements of the ANSI/EIA-748 standard for EVM Systems.

Course Methodology:

The training methodology at BIG BEN Training Center is designed to be highly interactive, engaging, and focused on practical application. We move beyond traditional lecture-based formats to create a dynamic learning environment where participants can actively build their skills. The course combines expert-led instruction with a variety of hands-on activities, including individual and group exercises, real-world case study analysis, and practical workshops. Participants will work with sample project data to practice calculating EVM metrics, performing variance analysis, and generating forecasts. This applied learning approach ensures a deep understanding of not just the "what" but the "why" and "how" of Earned Value Management. Interactive discussions and Q&A sessions are encouraged throughout the training to address specific challenges and share experiences. Our facilitators provide continuous feedback and guidance, helping participants connect theoretical concepts to their own professional contexts and ensuring they leave with the confidence and competence to implement EVM effectively in their organizations.

Course Agenda (Course Units):

Unit One: Fundamentals of Earned Value Management

- Introduction to Project Performance Measurement.
- The History and Evolution of EVM.
- Core Elements of EVM: Planned Value (PV), Earned Value (EV), and Actual Cost (AC).
- The Integrated Triangle: Scope, Schedule, and Cost.
- Benefits of Implementing an EVM System.
- Key Terminology and Acronyms in EVM.
- Understanding the Role of the Work Breakdown Structure (WBS) in EVM.

Unit Two: Planning and Establishing the Baseline

- Developing the Work Breakdown Structure (WBS) and WBS Dictionary.
- Defining Control Accounts and Work Packages.
- Integrating the Organizational Breakdown Structure (OBS).
- Developing the Project Schedule and Budget.
- Time-Phasing the Budget to Create the Planned Value.
- Establishing the Performance Measurement Baseline (PMB).
- The Importance of a Stable and Controlled Baseline.

Unit Three: Performance Data Analysis and Metrics

- Calculating Schedule Variance (SV) and Cost Variance (CV).
- Calculating the Schedule Performance Index (SPI) and Cost Performance Index (CPI).
- Interpreting the Meaning of Performance Indices.
- Analyzing Trends and Performance Patterns over Time.
- Conducting Root Cause Analysis for Variances.
- Using Variance Thresholds for Management by Exception.
- Practical Exercises in Calculating and Analyzing EVM Metrics.

Unit Four: Forecasting, Reporting, and Corrective Actions

- Introduction to Project Forecasting with EVM.
- Calculating Different Types of Estimates at Completion (EAC).
- Formulating the Estimate to Complete (ETC).
- Understanding the To-Complete Performance Index (TCPI).
- Developing Comprehensive Project Performance Reports.
- Visualizing EVM Data with S-Curves and other charts.
- Formulating Corrective Action Plans based on EVM data.

Unit Five: Advanced Topics and EVM Implementation

- Integrating EVM with Risk Management and Change Control.
- Applying EVM in Agile and Hybrid Project Environments.
- Overview of the ANSI/EIA-748 Standard for EVMS.
- Common Challenges and Best Practices for EVM Implementation.
- The Role of Software in Earned Value Management.
- Stakeholder Communication and Management using EVM data.
- Course Review and Final Capstone Exercise.

FAQ:

Qualifications required for registering to this course?

There are no requirements.

How long is each daily session, and what is the total number of training hours for the course?

This training course spans five days, with daily sessions ranging between 4 to 5 hours, including breaks and interactive activities, bringing the total duration to 20 - 25 training hours.

Something to think about:

How can the principles of Earned Value Management be adapted to effectively measure performance in highly uncertain or agile project environments?

What unique qualities does this course offer compared to other courses?

This course distinguishes itself by moving beyond mere formulaic calculations to instill a deep, strategic understanding of Earned Value Management as a comprehensive project control system. While other courses may focus on the mechanics of calculating CPI and SPI, we emphasize the analytical and decision-making aspects that follow. Our curriculum, curated by industry experts, focuses on the practical challenges of implementation, such as establishing a realistic Performance Measurement Baseline in a dynamic environment and integrating EVM with qualitative risk analysis. We utilize a case-study-driven approach that forces participants to interpret data, diagnose underlying project issues, and formulate credible corrective action plans, mirroring the complexities of real-world project management. The program offered by BIG BEN Training Center is designed not just to teach EVM, but to cultivate a proactive management mindset. Participants will learn to use EVM data to communicate project status with clarity and confidence, transforming them from passive reporters of information into strategic advisors who can guide projects to successful outcomes.