Mastering Project Controls with Primavera P6 Training Course



23 - 27 Nov 2026

Cape town

4600 € (Per Person)

Ref: #PMP5229_279863

Course Introduction / Overview:

This course provides a comprehensive exploration of advanced project scheduling and control techniques using the industry-standard Oracle Primavera P6 software. In today's competitive landscape, merely creating a schedule is insufficient; professionals must master the art of dynamic planning, resource optimization, and performance measurement to ensure project success. This program moves beyond basic functionalities to delve into the strategic application of P6 for managing complex projects from initiation to closure. We will explore concepts championed by project management thought leaders like Harold Kerzner, whose work in "Project Management: A Systems Approach to Planning, Scheduling, and Controlling" emphasizes the integration of various project components for effective oversight. Participants will learn to build robust, resource-loaded schedules, implement earned value management for accurate progress tracking, and conduct sophisticated what-if scenario analysis to mitigate risks proactively. BIG BEN Training Center has designed this immersive experience to equip you with the practical skills and theoretical knowledge needed to transform project data into actionable intelligence, driving efficiency and delivering projects on time and within budget. This training is your gateway to becoming a proficient project controls specialist, capable of navigating the intricate challenges of modern project environments with confidence and precision.

Target Audience / This training course is suitable for:

- Project Managers.
- Project Planners.
- Schedulers.
- Project Control Officers.
- Cost Control Engineers.
- Civil Engineers.
- Construction Managers.
- Project Engineers.
- Program Managers.
- Planning Managers.
- Individuals aspiring to a career in project controls.

Target Sectors and Industries:

- Construction and Engineering.
- Oil and Gas.
- Power and Utilities.
- Information Technology.
- Manufacturing and Industrial.
- Aerospace and Defense.
- Governmental agencies and public sector undertakings.
- Telecommunications.
- Consulting Firms.

Target Organizations Departments:

- Project Management Office (PMO).
- Planning and Scheduling Department.
- Engineering Department.
- Operations Management.
- Construction Management.
- Contracts and Procurement.
- Finance and Cost Control.
- Information Technology Projects Department.

Course Offerings:

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

- Develop and manage complex, multi-level project schedules using advanced P6 features.
- Implement comprehensive resource and cost loading to create a time-phased budget.
- Perform advanced resource analysis, including resource leveling and smoothing.
- Master the principles and application of Earned Value Management (EVM) for performance measurement.
- Calculate and interpret key performance indicators like SPI, CPI, EAC, and ETC.
- Create and manage project baselines for effective change control and variance analysis.
- Generate customized, professional reports and dashboards for stakeholder communication.
- Utilize advanced tools like claim digger and what-if scenario analysis for risk assessment.
- Integrate multiple projects within an enterprise project structure for portfolio management.
- Apply best practices for updating and maintaining project schedules throughout the project lifecycle.

Course Methodology:

The training methodology at BIG BEN Training Center is designed to be highly interactive, practical, and engaging, ensuring that participants gain tangible skills they can apply immediately in their work environment. This course adopts a hands-on, workshop-style approach where theoretical concepts are immediately reinforced through practical exercises within the Primavera P6 software. We believe in learning by doing, so a significant portion of the course is dedicated to computer-based labs where participants will build, manage, and analyze project schedules based on real-world scenarios. The curriculum incorporates detailed case studies from various industries, allowing participants to tackle challenges they are likely to face professionally. Group discussions and collaborative problem-solving sessions are integral to the learning process, fostering an environment where participants can share experiences and learn from one another. Our expert instructors facilitate these sessions, providing personalized feedback and guidance. The methodology combines instructor-led presentations, interactive Q&A sessions, practical application labs, and peer-to-peer learning to create a comprehensive and effective educational experience that goes beyond simple software training to build true project controls expertise.

Course Agenda (Course Units):

Unit One: Foundations of Advanced Project Control in P6

- Introduction to the Enterprise Project Structure (EPS) and Organizational Breakdown Structure (OBS).
- Configuring advanced user preferences and admin settings.
- Developing and managing comprehensive project calendars (Global, Resource, Project).
- Creating the Work Breakdown Structure (WBS) with multiple levels.
- Defining activities and understanding different activity types.
- Establishing advanced activity relationships (FS, SS, FF, SF) and using lags/leads.
- Understanding and applying constraints effectively.

Unit Two: Advanced Scheduling and Resource Management

- Mastering the Critical Path Method (CPM) and analyzing network logic.
- Managing total float, free float, and identifying near-critical paths.
- Techniques for schedule compression (crashing and fast-tracking).
- Creating and assigning roles and resources.
- Advanced resource analysis, including viewing resource usage profiles and spreadsheets.
- Implementing resource leveling and smoothing techniques to resolve over-allocations.
- Analyzing resource allocation to optimize project timelines and costs.

Unit Three: Cost Management and Earned Value Analysis

- Developing a cost-loaded schedule and a time-phased budget.
- Assigning cost accounts and managing project expenses.
- Understanding and creating S-curves for performance tracking.
- Introduction to Earned Value Management (EVM) principles.
- Defining Planned Value (PV), Earned Value (EV), and Actual Cost (AC).
- Calculating and interpreting Schedule Performance Index (SPI) and Cost Performance Index (CPI).
- Forecasting project outcomes using Estimate to Complete (ETC) and Estimate at Completion (EAC).

Unit Four: Project Monitoring, Control, and Baselining

- Creating and managing multiple project baselines.
- The process of updating the project schedule with progress information.
- Analyzing performance against the baseline to identify variances.
- Using earned value thresholds and issue tracking.
- Implementing reflection projects for what-if analysis.
- Advanced filtering, grouping, and sorting techniques for data analysis.
- Understanding and using global change for bulk modifications.

Unit Five: Advanced Reporting, Risk, and Project Closure

- Designing and creating customized reports and dashboards in P6.
- Using the Report Wizard and modifying existing report layouts.
- Exporting and importing project data with other applications.
- Introduction to risk management concepts within a schedule.
- Utilizing Claim Digger (Schedule Comparison) for forensic analysis.
- Performing final project updates and archiving project data.
- Best practices for project closeout and lessons learned documentation.

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:

Beyond technical proficiency, how can a project scheduler strategically influence project outcomes and stakeholder decisions using the data-driven insights from Primavera P6?

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

This course distinguishes itself by focusing on the strategic application of Primavera P6 as a project controls instrument, rather than merely a scheduling tool. While many courses teach the software's functions, we emphasize the "why" behind the "how," enabling participants to think like seasoned project controls professionals. Our curriculum is built around complex, real-world case studies that challenge participants to solve practical problems in resource allocation, cost overruns, and schedule delays. We dedicate significant time to advanced, high-value topics often overlooked in introductory training, such as Earned Value Management (EVM), forensic schedule analysis using Claim Digger, and predictive forecasting. The methodology prioritizes hands-on mastery, ensuring participants spend the majority of their time within the P6 environment, building and analyzing schedules under expert guidance. Furthermore, the course content is rooted in established project management principles, connecting P6 functionalities to the broader framework of project control, which provides a deeper, more strategic understanding. This approach transforms attendees from software operators into analytical thinkers capable of providing critical, data-driven insights that guide successful project delivery.