Advanced Primavera P6 Scheduling and Resource Planning Training Course

21 - 25 Dec 2026

Cairo

3700 € (Per Person)

Ref: #PRM4650_280557

Course Introduction / Overview:

This advanced training course is designed to elevate participants' proficiency in Oracle Primavera P6 beyond the fundamentals, transforming them into expert schedulers and project controllers. The curriculum delves deep into the sophisticated functionalities required for managing large-scale, complex projects effectively. We will explore advanced scheduling techniques, comprehensive resource and cost management, and powerful project monitoring methodologies. As highlighted by project management authority Dr. Harold Kerzner in his seminal work, "Project Management: A Systems Approach to Planning, Scheduling, and Controlling," the integration of planning, scheduling, and control is paramount to project success. This course embodies that principle by teaching participants not just how to use the software, but how to apply its features strategically to drive project performance. Participants will master critical path analysis, resource leveling, earned value management, and what-if scenario modeling. BIG BEN Training Center provides a dynamic learning environment where theoretical knowledge is immediately applied through practical, hands-on exercises, ensuring that every participant can confidently manage intricate project timelines, resolve resource conflicts, and provide insightful performance reports to stakeholders upon completion.

Target Audience / This training course is suitable for:

- Project Managers.
- Project Schedulers.
- Planning Engineers.
- Project Control Officers.
- Cost Control Engineers.
- Program Managers.
- Construction Managers.
- Project Team Leaders.
- Individuals seeking to master advanced P6 functionalities.

Target Sectors and Industries:

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

Target Organizations Departments:

- Project Management Office (PMO).
- Planning and Scheduling Department.
- Project Controls Department.
- Engineering Department.
- Operations and Maintenance.
- Finance and Cost Control.
- Contract Management Department.

Course Offerings:

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

- Develop and manage complex project structures using EPS and OBS.
- Implement advanced scheduling techniques including various relationship types and constraints.
- Perform critical path method analysis on complex, multi-faceted schedules.
- Master resource leveling and allocation to resolve conflicts and optimize utilization.
- Integrate comprehensive cost loading and budget management within the project plan.
- Establish multiple performance measurement baselines and conduct what-if scenario analysis.
- Execute detailed project progress updates and apply earned value management (EVM) principles.
- Generate customized, advanced reports and dashboards for stakeholder communication.
- Utilize powerful features like global change and user-defined fields for enhanced efficiency.

Course Methodology:

The training methodology at BIG BEN Training Center is centered on immersive and practical learning to ensure deep comprehension and skill retention. This course moves beyond theoretical lectures to a hands-on, workshop-style environment where participants actively engage with Primavera P6 on real-world case studies. Each module is structured to build upon the last, creating a logical and progressive learning path. Our expert instructors facilitate interactive sessions, encouraging group discussions and collaborative problem-solving to explore different approaches to complex scheduling challenges. Participants will spend a significant portion of the training applying learned concepts directly within the software, from building intricate project schedules to performing advanced resource leveling and earned value analysis. This emphasis on practical application ensures that attendees not only understand the concepts but can also confidently implement them in their professional roles. Continuous feedback and personalized guidance from the instructor are integral parts of the process, helping to clarify doubts and solidify understanding throughout the course.

Course Agenda (Course Units):

Unit One Advanced Project Structuring and Data Setup

- Recap of Primavera P6 fundamentals.
- Designing the Enterprise Project Structure (EPS) and Organizational Breakdown Structure (OBS).
- Advanced Work Breakdown Structure (WBS) development techniques.
- Creating and managing sophisticated activity and resource codes.
- Developing and assigning complex project, resource, and work shift calendars.
- Establishing user-defined fields (UDFs) and project-level settings.
- Importing and exporting project data for integration and analysis.

Unit Two Mastering Advanced Scheduling Techniques

- In-depth review of activity relationships and lag types.
- Advanced constraint management and its impact on the critical path.
- Understanding and applying different critical path method (CPM) calculation options.
- Techniques for schedule compression including crashing and fast-tracking.
- Managing multiple projects and inter-project dependencies.
- Using reflection projects for what-if scenario analysis.
- Advanced filtering, grouping, and sorting for schedule analysis.

Unit Three In-Depth Resource and Cost Management

- Defining and managing resource and role pools.
- Advanced resource assignment techniques and analysis.
- Manual and automatic resource leveling to resolve overallocation.
- Resource usage profiling and S-curve generation.
- Implementing cost accounts and loading budgets into the schedule.
- Assigning costs to resources and activities for detailed tracking.
- Analyzing resource and cost distribution over the project lifecycle.

Unit Four Baselining, Tracking, and Project Control

- Creating and managing multiple project baselines.
- Techniques for updating project progress and recording actuals.
- Applying different percent complete types and their implications.
- Implementing Earned Value Management (EVM) for performance measurement.
- Analyzing schedule and cost variances (SV, CV) and performance indices (SPI, CPI).
- Forecasting project completion dates and costs (EAC, ETC).
- Identifying and managing project risks and issues within the schedule.

Unit Five Advanced Analysis, Reporting, and Customization

- Utilizing the Global Change feature for bulk updates.
- Advanced reporting with the P6 Report Wizard and BI Publisher.
- Creating and customizing graphical reports like Gantt charts and S-curves.
- Exporting data to other applications for further analysis.
- Managing user access, security profiles, and administrative settings.
- Best practices for schedule maintenance and health checks.
- Final course project applying all advanced concepts on a case study.

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 use Primavera P6's what-if analysis to influence executive decision-making and mitigate portfolio-level risks?

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 decision-making tool, rather than merely a software for data entry and reporting. While many courses teach the "how" of using P6 features, we emphasize the "why," enabling participants to think like senior project controllers. The curriculum is designed to bridge the gap between technical scheduling and strategic project management, teaching participants how to interpret schedule data to foresee risks, model potential solutions through what-if analysis, and communicate complex scenarios to stakeholders with clarity and confidence. We move beyond standard exercises to incorporate complex, multi-faceted case studies that mirror the challenges of large-scale engineering, construction, and IT projects. The learning experience is rooted in an academic understanding of project controls, focusing on the principles of earned value management and critical path analysis as strategic instruments. This approach ensures graduates are not just proficient P6 operators, but are also valuable strategic advisors who can leverage the software to drive project success and support organizational objectives.