Primavera

Course details

Description

Primavera P6 professional is the most powerful, robust, and easy-to-use solution for globally prioritizing, planning, managing, and executing projects, programs, and portfolios in asset-intensive industries.

Objectives

This course covers all the fundamentals of using Primavera P6 Professional Through a series of lectures, interactive sessions and hands-on exercises, participants will gain the knowledge and experience they need to use P6 Professional as an effective project management tool.

Course text books and reading material:

Web Resources:

- Oracle Blogging Community
- Oracle Discussion Forums
- Oracle Help Center

Prerequisites:

- Basic knowledge and skills about using computers.
- Engineering background is recommended

Certificates:

Certificate from CAD MASTERS

Grading:

Attendance	40%
Assignments	60%

To pass the course and receive CAD MASTERS certificate you should:

- Attend at least 80% of course hours
- Score more than 70% as a total score

This course including the following:

Lecture 1

Intro to Project management and primavera

- Introduction to Primavera Project management module
- Why Primavera is Required
- What the difference Between Planning and Scheduling
- Project Management Life Cycle

Opening and Navigating Primavera

- Open primavera, open existing project and Multi project
- Differentiate between Global data and project data
- Navigate menu bar, tool bar, directory bar, command bar and Layout
- Explain and Create Enterprise project structure EPS
- Explain and Create Organization project structure OBS
- Assign OBS to EPS

Lecture 2

Creating New Project

- Create new project
- Determine Planed start and must finish date and hour
- Set project defaults properties for project details
- View and discuss project details tabs

Creating Calendars

- Creating Calendar
- Determine working hours per day and time period
- Distinguish between global calendar, project and resource calendar

Creating Work breakdown structure (WBS)

- Define the Work break down Structure
- Reason for creating WBS
- WBS Creating Rules
- Create Multi Level of WBS and assign weight for each
- View and organize WBS data in Chart Box (Scope Baseline)
- View and Discuss WBS details tabs

Lecture 3

Creating Activities

- Describe activity (ID, Name, Type, Code)
- Add activities and Estimate duration (Activity List)
- Define activity types
- Copy and paste activities
- Add Steps to activities
- Change Calendar Assignment if needed
- Explain how to add notebook topic and description
- Explain how to attach document or drawing for activity
- View and discuss Activity details tabs
- Explain How to assign weights for activities

Lecture 4

Creating Relationships between activities

- Create Activity Network diagram
- Differentiate between the four relationship types
- Assign successor and predecessors (relationship)
- Assign Lag or lead
- View Relationship in Gantt Chart and Trace logic

Lecture 5

Scheduling

- Explain precedence diagraming Method
- Explain Critical Path Method
- Explain Activity internal calculation and forward and backward calculation
- Differentiate between early and late dates for activities
- Understand lag, lead, free float and total float
- More focuses on float and how to prevent negative float
- Identify loops and open ends
- Driving and non-Driving relationship
- Critical path and longest path
- Schedule and schedule option
- Analysis Schedule Log report
- Activity Network Diagram
- Dissolve activity
- Calculate Multiple float paths

Lecture 6

Assign Constrains

- Assign Constrain for Project (Must Finish by)
- Assign Constrains to activities
- Reason of Negative float
- Add a notebook topic for constrain reason if needed

Activity Code

- Add Activity Code Dictionary
- Difference between global and project activity codes
- Assign codes on activities
- Use Multi selection for activities to assign codes

Filter for activities

- Apply default calendars
- Create filters
- Multiple filters for activities
- Multiple conditions inside filters
- Explain group and sort tool and its option

Formatting project data

- Group and sort activities with different views
- Time scale format
- Bars format and bars options
- Multiple conditions inside filters

Lecture 7

Save Layouts

- Open Layout
- Save Layout
- Exporting layouts

Project document Library

- Explain work product and document
- Link description to project documents
- Assign project document to activity

Lecture 8

Resources and Roles

- Define Resource & Role and get your resource pool
- Determine Resource type labor, Non Labor, Material
- Explain Resource Details Tabs (price/unit, Man unit/time,)
- Assign Resource Code

Lecture 9

Assign Resource Roles

- Assign Role to activity or Assign Resource to activities
- Explain performance rates and calculate resource unit
- Differentiate between self-work and subcontractor resource
- Replace role by resource
- Explain the rule controlling replacing role by resource
- How to change price /unit for resource after assignment
- Explain re-calculate assignment cost
- Explain Duration Types and its effect
- Add Expenses to Activities
- Use Multi selection resource assigning and removing
- Replace resource by another
- Get activity total cost

Lecture 10

Project cost accounts for controlling

- Assign resource curve
- Make new resource curve
- Define cost account for cost loading
- Assign cost account to resources

Project cash flow and S- Curve

- Explain Activity Usage Spread Sheet (Project Cash Flow)
- Select or Multi Select Spread Sheet Fields
- Use average calculation if needed
- Export data to excel to draw curves if needed and make it by Sch. %
- Explain Activity Usage Profile (Project S-Curve)
- Explain the aim of the S-curve and its use
- Explain profile option and the criteria of selecting data

Lecture 11

Project resource distribution plan and leveling

- Explain Resource assignment
- Select the required columns and fields
- Understand how to summaries the data
- Explain grouping the resource by cost account
- Understand manual distribution for resources and consequences
- Get project resource plan for each labor, equipment, material and subcontractor
- Save Layout
- Explain resource assignment spread sheet placed in activity page
- Understand how to show all resources or current resources
- Explain single select or Multi selection and how to specific data
- Modify or change in budget unit manually and its consequences
- How to show the available units

Lecture 12

Project resource leveling

- Explain Resource usage profile
- Explain display options for curve
- Understand resource usage profile option
- Show max limit, remaining unit and over location units
- Use resource leveling tool for leveling and smoothing
- Navigate the reason of resource allocation
- Explain resource leveling options
- Level critical activities
- Plot resource histogram

Lecture 13

Printing Planning Package

- Explain printing tool on primavera
- Print WBS chart box with estimated cost and weight
- Print WBS description
- Print activity list and duration with relation ship
- Print schedule and Gantt char
- Print activity Network
- Print Schedule and Gantt chart with different grouping codes

Print Project budget cost (Activities and cost account)

- Print S-Curve and Cash Flow
- Print Resource distribution plan and Histograms
- Explain Repot tools
- Make new report and modify existing reports
- Create batch reports
- Print dictionaries (codes, resource, cost account)
- Print Resource loading on activities
- Print work product and document, project expenses

Lecture 14

Project Baseline and update schedule

- Create project baseline
- Assign the baseline to the current schedule
- Assign Must finish by date
- Explain the data date function

- Add the required columns and bars option need for update
- Save update layout
- Explain how schedule progress is being calculated for WBS and activities
- Use progress spotlight and progress line
- Apply actual start and finish for complete activities
- Apply actual performance percent complete for in progress activities
- Explain the different types of updating progress
- Understand the relation of remaining duration and performance percent complete
- How to remove progress form activities
- Explain the difference between retain logic, progress override and actual dates
- Get project estimated project Finish and show variance from baseline
- Understand crashing or fast tracking for activities

Lecture 15

Update project Resources and cost

- Apply actual unit to resources
- Adapt project setting to prevent changing data through progress
- Update actual prices for resources
- Understand the relation between actual, remaining and at completion units and cost
- Plot the budget vs. actual on spread sheets and curves
- Save period performance and use actual this period
- Apply overtime units for resources

Lecture 16

Project controlling and analysis

- Explain earned value analysis technique
- Get planed, earned and actual cost
- Calculate SV, SPI, CV, CPI
- Estimate project cost using ETC techniques
- Plot EV Curves

Optimizing data

- Add user define fields
- Use global change on different pages
- Calculate the price for each activity
- Calculate total Man-hour for each activity
- Understand Importing and exporting from primavera options
- Export and import data using excel sheets
- Use reflection for projects
- Use claim and digger

Risk and thresholds

- Over view on risk project management
- Apply risk analysis on primavera
- Add a contingency cost to the schedule
- Define threshold limits
- Apply and navigate issues
- Print Issue