

## **Primaned Academy**

Training catalogue 2020



#### **Project Controls**

The Primaned Academy educates in Project Controls. Project Controls, in Dutch freely translated as project management, is a fairly recent field and is growing rapidly internationally. Organizations increasingly focus on the matrix organization and work on a project base. In other to be able to manage projects well, a strategy is required, and within this the proper training of employees is a part.

"Project Controls is part of project management that captures, models, monitors, analyses and visualises project data to generate insight into the project that results in improved decision making so that maximum value is created for the stakeholders."



### **Integrated approach**

Project Controls is more than just scheduling work within a time frame. In addition to planning and following up, we look at the classification of material and employees. When ther is a change, this must be able to be anticipated and, if necessary adjustments must be made.

Possible risks have an effect on the feasibility of the project objectives, and thus also on the planning and possible management.

Our courses have an integrated approach to planning and the surrounding knowledge areas as a starting point.

#### This training catalogue

Our courses can be followed separately or within a training programme. All our modules focus on the competencies that are necessary for a Project Controls Professional. All our courses are composed by academics, who also work as a consultant in collaboration with our own practice-oriented Project Controls Consultants and Engineers. In this way we have developed practical, theoretically based, pragmatic training.

If you have questions about the content of our courses and training modules, or do you have one specific learning wish? Please do not hesitate t contact us for a personal advice.

dr. Stefan Hollak Manager Primaned Academy





## Project Controls Programme

The Project Controls Programme starts several times per year and consits of different modules, that train an employee to a Project Controls Engineer. The programme is structured in such a way that the modules fit together well in order to achieve the integrated approach of Project Controls. Many modules can also be followed separately, with the right requirements.



#### **Step 1: Learn the foundation of Project Controls**

#### **Foundation**

Principles of Project Controls
Setting up an effective WBS
Netwerk Scheduling

Most important is the first step basics knowledge of project management, the **Foundation**. What is Project Controls and why is an integrated approach important? How do yo set up an effective Work Breakdown Structure? Then the participant learns the basics of network scheduling, the critical path method and Schedule Best Practices.

### **Step 2: Choose your scheduling tool**

#### **Tooling**

Project planning in Oracle Primavera P6 Professional and/or Microsoft Project To schedule a project you can use different scheduling tools, such as Oracle Primavera P6 and Micrsoft Project. This is step 2: **Tooling**. In these modules, much attention is paid to the application of Schedule Best Practices in the preparation of a good planning.

### Step 3: Specialize and learn more

Primaned Academy offers a flexible training programme in which you can opt for different specializations that together train a Project Controls Engineer.

This way someone can be trained for the integrated role of planning and risk with the *Risk* specialization. You can also opt for the *Cost* specialization, which emphasizes the integration of planning and costs with the Earned Value Management reporting and management method. At *Information*, the emphasis is on drafting integral planning, the collaboration between different disciplines and clients and contractors and the project communication between these different parties. *Claim* focuses on dealing well with changes in the project, in order to avoid claims and to stand strong if it comes to a claim.

#### Risk

Project Risk Management Schedule Risk Analysis

#### Cost

Project Cost Planning & Control Earned Value Management

#### **Information**

Integral Planning Management
Project Communication

#### Claim

Change Control & Claim Analysis



## Principles of Project Controls

What do we mean by Project Controls? How does Project Controls relate to Project Management? What are the benefits of Project Controls for a project organization? Which conditions a project organization must comply for a proper implementation of Project Controls? These are the key questions to the Principles of Project Controls module, the ideal kick-off for your training in Project Controls.



### **Subjects**

- Benefits of Project Controls
- Definitions and concepts of Project Controls
- Baseline and update cycle
- Knowledge areas of Project Controls
- Project Controls techniques
- Reporting and influencing



#### Requirements

For this module no requirements are needed. We advise you to follow this module in combination with the module "The Art of Setting up the WBS"



#### Certificate

After completing this module you will receive a Primaned Academy certificate.



#### Part of the Project Controls Programme

This module is part of the **Foundation**. Do you want to follow this module separately? Have a look at www.primanedacademy.com for the possibilities or contact.



## The Art of Setting up the WBS

The Work Breakdown Structure forms the backbone of an integrated schedule. How do you set up an effective WBS? Do you choose for an product or activitie WBS? In this module we explain the most important theoretical Project Controls. This module briefly discusses the most important theoretical background of the preparation of a WBS, in order to subsequently start working on translating a package of requirements into a suitable and decisive Work Breakdown Structure.





#### Requirements

For this module no requirements are needed. We advise you to follow this module in combination with the module "Priciples of Project Controls"



#### Certificate

After completing this module you will receive a Primaned Academy certificate.



#### Part of the Project Controls Programme

This module is part of the **Foundation**. Do you want to follow this module separately? Have a look at www.primanedacademy.com for the possibilities or contact.



# Critical Path Method & Scheduling Best Practices

Critical Path Method & Scheduling Best Practices is the process of identifying the logical relationships between the different activities in your project and establishing their sequence. In other words, the process of scheduling. In this module, you learn the different types of activities and relationships and how to use smart relationships to set up a good schedule. You also learn how to master the calculation method for the critical path (Critical Path Method) and floats. Milestones, constraints, lags and other concepts of scheduling will be discussed here. This module prepares you to use properly a planning software, according to the best practices of scheduling.



1 day



- The different network relationships
- Calculation method of network planning
- Scheduling, floats and critical path
- Types of activities
- Resources and leveling
- Best Practice for network planning and progress cycle



#### Requirements

No specific requirements needed for this training module.



#### Certificate

After completing this module you will receive a Primaned Academy certificate.



#### Part of the Project Controls Programme

This module is part of the **Foundation**. Do you want to follow this module separately? Have a look at www.primanedacademy.com for the possibilities or contact.



## Project Cost Planning & Control

How does your cost estimate become your project budget? How do you control the costs of your work packages, using a Cost Breakdown
Structure and Control (Cost) Accounts? What can you do with Cash-flow statistics? The Project Cost Planning & Control module answers these questions.
In addition, attention is also paid to the basic financial knowledge required for Cost Control in integral planning. This module constitutes a prelude to the Earned Value Management one, providing you some appropriate foundations for it.



### **Subjects**

- Cost Breakdown Structure and Control Accounts
- Basic financial knowledge to Cost Control
- Cost estimates
- Budgeting
- Cash-Flow
- Cost Control (control and follow-up)



#### Requirements

No specific requirements are needed. A general background in project management (**Foundation**) and experience in a planning tool is recommended.



#### Certificate

After completing this module you will receive a Primaned Academy certificate.



#### Part of the Project Controls Programme

This module is part of the specialization **Cost**. Do you want to follow this module separately? Have a look at www.primanedacademy.com for the possibilities or contact.



## Earned Value Management

A powerful way to deliver insight into the actual progress within projects is the Earned Value Management (EVM) method. EVM is an international standard method combining both time and cost. Through this transparent method you can capture and evaluate your project progress and financial health. In this module, concepts, calculation methods and Best Practice reports of EVM will be discussed. This module is a follow-up to Project Cost Planning & Control, allowing you to further your competences and knowledge within this particular field.



1 day

### Subjects

- Advantages and rationale of EVM
- EVM definitions (planned value, actual costs, earned value etc.)
- EVM calculations and graphs
- Interpretation and use of the EVM indexes (CPI, SPI)
- EVM as a forecast tool for further project development
- Organizational processes required for EVM





No specific requirements are needed. A general background in project management (**Foundation**) and experience in a planning tool is recommended. This module is a follow-up to Project Cost Planning & Control.



#### Certificate

After completing this module you will receive a Primaned Academy certificate.



#### Part of the Project Controls Programme

This module is part of the specialization **Cost**. Do you want to follow this module separately? Have a look at www.primanedacademy.com for the possibilities or contact.



## Project Risk Management

Every project is subject to risks. Not only it is important to have an adequate response to unexpected events, but also that risks are identified and where possible mitigated. In this module, you learn as Project Controls Engineer the requirements of a good risk register. How do you act within the project team and how do you ask the right questions? How do you convert a risk register into a risk matrix in order to further prioritize the risks? What are the advantages and requirements for carrying out a probabilistic, quantitative, risk analysis?



### **Subjects**

- Advantages of project risk management
- Risk matrix and risk scoring, behavior and register concept
- Qualitative risk analysis
- The advantages of a probabilistic planning
- Prioritize and mitigate



#### Requirements

No specific requirements are needed. A general background in project management (**Foundation**) and experience in a planning tool is recommended.



#### Certificate

After completing this module you will receive a Primaned Academy certificate.



#### Part of the Project Controls Programme

This module is part of the specialization **Risk**. Do you want to follow this module separately? Have a look at www.primanedacademy.com for the possibilities or contact.



## Schedule Risk Analysis

More and more clients want their projects to be properly analyzed, regarding the risks associated to them. In this module, you will learn all aspects of a schedule risk analysis, with practical examples and cases, using Primavera Risk Analysis (PRA). In addition to importing and checking a schedule, you add uncertainties and risks to the planning. You learn how to interpret the outcomes of the risk analysis and to present them in a correct way and to communicate them to a project team by, among other things, using distribution graphs and tornado graphs and scatter plots. Some other topics are the calculation of buffers, scenario analyzes and weather calendars. This module fits in closely with the PPI (Project Planning Infrastructure) method of Rijkswaterstaat.

### **Subjects**

- Import schedule and perform schedule check by using Schedule Best Practices
- Add uncertainties
- Drafting and/or importing of a risk register
- Execution and options of the risk analysis
- Reporting with distribution, tornado and scatter plot graphs
- Probabilistic cash flows, modeling of weather delay
- Pre-and post-mitigation schedules and other reporting options of PRA



#### Software version

In this module, we work with Primavera Risk Analysis 8.7. The software will be made available during this module.



#### Requirements

For this module it's recommended that you have experience with Oracle Primavera P6 or Microsoft Project (**Tooling**). This module is a follow up to Project Risk Management



#### Certificate

After completing this module you will receive a Primaned Academy certificate.



#### Part of the Project Controls Programme

This module is part of the specialization **Risk**. Do you want to follow this module separately? Have a look at www.primanedacademy.com for the possibilities or contact.



## Integral Planning Management

Projects must deal with different stakeholders, both internal and external, e.g. contractors, subcontractors and customers. In addition, a project can include various departments, for example engineering, purchasing and construction. How do you work together with all these different entities and on all these different levels, coordinate and integrate all data to provide a good project planning? This module addresses the different interfaces of these various domains.



## **Subjects**

- Strategic design of a planning
- Organize the planning and planning department
- Integral and integrated planning
- Control of common data structures
- Prepare for execution
- Schedule Control and reporting



#### Requirements

No specific requirements are needed. A general background in project management (**Foundation**) and experience in a planning tool is recommended.



#### Certificate

After completing this module you will receive a Primaned Academy certificate.



#### Part of the Project Controls Programme

This module is part of the specialization **Information**. Do you want to follow this module separately? Have a look at www.primanedacademy.com for the possibilities or contact.



## Effective communication in Project Controls

Within a project environment strong communication skills are imperative. But what are actually these skills? And can we also control communication? When is a formal form of communication within a project desirable? What is a good frequency for meetings? What are strong reports to send to the different stakeholders? In the module Project Communication you will learn how to answer these questions within the analytical framework of Project Controls.



### **Subjects**

- Communication skills and pitfalls in a project organization
- Drawing up a communication plan
- Workflow for update and change cycle
- Communication (and document) Control
- Report to stakeholders



#### Requirements

No specific requirements are needed. A general background in project management (**Foundation**) and experience in a planning tool is recommended.



#### Certificate

After completing this module you will receive a Primaned Academy certificate.



#### Part of the Project Controls Programme

This module is part of the specialization **Information**. Do you want to follow this module separately? Have a look at www.primanedacademy.com for the possibilities or contact.



## Change Control & Claim Analysis

Projects planning are subject to changes during the execution. Changes within a project's original plan (the baseline) can take place, changes on the contract, or even on the original business case. In addition, an activity may have started later or some unexpected event may have occurred. How do you deal with these changes and still keep control over the project? How do you prevent a change from becoming a conflict between, for example, the contractor and the owner, and how do you strengthen your position if it comes to a conflict? These are the key questions addressed in the Change Control & Claim Analysis module.



### **Subjects**

- Contract & Baseline
- Project administration
- Change Control
- Claim Management
- Delay analysis techniques



#### Requirements

No specific requirements are needed. A general background in project management (**Foundation**) and experience in a planning tool is recommended.



#### Certificate

After completing this module you will receive a Primaned Academy certificate.



#### Part of the Project Controls Programme

This module is part of the specialization **Claim**. Do you want to follow this module separately? Have a look at www.primanedacademy.com for the possibilities or contact.



## Oracle Primavera P6 Professional

Primaned has decades of experience with the implementation and training in the use of Primavera. This training has been developed together with our planning engineers and technical consultants. Good planning is much more than just "bar racking". In this module you will learn how to properly handle the software, also what a planner needs to be able to make a good planning. You will learn how to create a project yourself, including activities, relationships, schedules, resources and progress, based on a case that is interwoven with the manual we have written.



4 days

### **Subjects**

- Create Enterprise Project Structure and Work Breakdown Structure (EPS and WBS)
- Create activities and relationships
- Scheduling
- Calendars and constraints
- Activity and project codes
- Filters and layout
- Roles, Resources and Levelling
- Cost
- Baselines
- Introduce and analyze progress



#### Software version

In this module, we work with Oracle Primavera P6 Professional R.18.8. This module is also suitable for newer releases and older versions from 8.X onwards.



#### Requirements

No specific requirements are needed. A general background in project management (**Foundation**) and experience in a planning tool is recommended.



#### Certificate

After completing this module you will receive a Primaned Academy certificate.

#### Part of the Project Controls Programme

This module can be followed as part of Tooling of the Project Controls Programme.



## Oracle Primavera P6 Professional - Expert

You have been already working for some time with Oracle Primavera P6
Professional and simple schedules with activities and relationships are no
longer a problem for you. But what about the different activity and duration
types? What should you pay attention to when importing or exporting data?
This module is an in-depth training, considering the Best Practices from Project
Controls, based on more than 30 years of practical experience with the implementation and training in Primavera, from Primaned.



In this two-days training, you can benefit from the lecturer's practical experience and expertise, learn from it and clarify specific doubts or questions you might have.

## **Subjects**

This module covers the following topics. There is also room for inputs from the participants:

- (Multi-) scheduling options
- Multiple float path analyse
- Activity, duration, resource types
- Driving resource assignments
- Resource leveling, analysis
- Smart use of UDFs
- Working with global changes
- Update baselines
- Update methodologies & progress

- The different % complete types
- Visualizing and progress
- Working with Thresholds & issues
- Store period performance
- Tabular reports
- Claim digger
- Import / Export files (MSP)
- Earned Value S-curve



#### **Software version**

In this module, we work with Oracle Primavera P6 Professional R.18.8. This module is also suitable for newer releases and older versions from 8.X onwards.



#### Requirements

For this training module we recommend the knowledge of Oracle Primavera P6 Professional as also (6 months) experience with this tool.



#### Certificate



## Oracle Primavera P6 EPPM - Functional Application Management

Primavera P6 is a very extensive and often business critical application.

Functional application managers of the Primavera P6 environment are often involved in the implementation process to configure the software to fit organization's operating environment. Functional application managers of the Primavera P6 environment are often involved already in the implementation process configuring the software to fit the organization's operating environment. This module has been developed to learn how company and project structures can be created. In this module, all necessary skills are learned, allowing an administrator to obtain the highest possible functionality from the software package.





### **Subjects**

In this module following topics will be discussed:

- Creating Enterprise Project Structure
- Define and adjust Project and activity codes
- Create security profiles for users and projects
- Create users and assign their rights
- Define notebook categories and other global settings



#### **Software version**

The module and comprehensive manual are tailored to Oracle Primavera P6 EPPM R8.4 and more recent versions.



#### Requirements

This training module requires knowledge of Oracle Primavera P6 (Professional)



#### Certificate



## Microsoft Project

Microsoft Project is a planning tool that is relatively simple to work with, from the MS Office suite experience most users have. But which options must be on or off to plan according to the Best Practices from Project Controls? How do you create and assign resources? How can you best track progress and reschedule? And what are the benefits of good use of baselines and the different Gantt chart visualizations?



2 days

This module is more than a computer course, based on a case, with the our self-developed manual, teaches you the schedule best practices.

### **Subjects**

- Create a project and WBS
- Create activities and relationships
- Calendars and constraints
- Custom fields
- Scheduling

- Filters and layout
- Resources and Leveling
- Baselines
- Introduce and analyze progress



#### Software version

The module and manual are geared to Project Professional 2013. This module is also suitable for the 2010 and 2016 versions, which do not differ significantly from 2013.



#### Requirements

No specific requirements are needed. A general background in project management (**Foundation**) and experience in a planning tool is recommended.



#### Certificate

After completing this module you will receive a Primaned Academy certificate.



#### Part of the Project Controls Programme

This module can be followed as part of **Tooling** of the Project Controls Programme.



## Microsoft Project- Expert

It is no longer a surprise to you that within Microsoft Project it is possible to make extensive (project) schedules. You are already working with Microsoft Project and are looking for the intricacies to, for example, check made schedules or create reports.



2 days

This module goes into depth to familiarize students with the advanced components of Microsoft Project such as multi-project management and the use of macros. The added value of Primaned is not only the expertise and experience, but also that it takes into account the Best Practices of Project Controls.

### **Subjects**

- Multi-project management
- Resource pool
- Custom fields
- Using the organizer
- Templates

- Report
- Macros
- Tips & tricks
- Version of Microsoft Project



#### **Software version**

The module and manual are geared to Project Professional 2013. This module is also suitable for the 2010 and 2016 versions, which do not differ significantly from 2013.



#### Requirements

This module requires a good basic knowledge of Microsoft Project as well as practical experience with this software package.



#### Certificate



## PMWeb End-user

PMWeb is a web-based Capital Project Management Software solution to handle the entire Plan, Build and Operate lifecycle of projects / assets in your project portfolio.

Classroom



PMWeb is a modular solution consisting of Portfolio Planning, Cost Management, Asset Management, Visual Workflow, Scheduling, Document Manager and many other features.

The content of the training is highly dependent on the client's configuration because of the modular structure of the tool. The End-user training also has a modular set-up for that reason, to match the design and wishes of the client. The duration of the training will be between 1 – 5 days dependent on the number of subjects. Contact the Primaned Academy for a tailor-made end-user training for you or your employees.

### **Subjects**

- Portfolio Planning
- **Engineering Forms**
- Site Management
- Cost Management
- Asset/ Facility Management
- Collaboration

- Visual workflow
- **Document Manager**
- **Custom Forms & Reporting**
- Scheduling
- **Timesheets**



#### Software version

In this module, we work with PMWeb version 6.0.03. This module is also suitable for newer releases and older versions.



#### Requirements

No specific requirements are needed. A general background in the PMWeb supported business processes is recommended.



#### Certificate



## PMWeb Functional Admin

PMWeb is a web-based Capital Project Management Software solution to handle the entire Plan, Build and Operate lifecycle of projects / assets in your project portfolio.

Classroom



PMWeb is a modular solution consisting of Portfolio Planning, Cost Management, Asset Management, Visual Workflow, Scheduling, Document Manager and many other features.

The modules, fields, lists, forms, codes, currencies, forms and reports can be set-up to fully support the clients business processes. It is therefore very important for a functional admin to, besides user management, learn how these configured fields can be properly managed. During this training you get to know the structure and configuration of PMWeb and you will learn how to manage it effectively.

The structure and length of the training is partly dependent on the client's configuration (1-2 days). Contact the Primaned Academy so that we can set up a tailor-made functional management training for you or your employees.

## Subjects

- PMWeb basics
- User Management
- Document Manager
- Lists
- Periods

- User Defined Fields
- Stage gates
- Workflows
- Cost codes
- Currencies

for newer releases and older versions

- Admin Page
- Portfolio Settings
- PMWeb reports
- Integration Manager
- Custom Forms & PMWeb Word doc.





Software version

It is recommended that functional admins followed the PMWeb end-user training to have knowledge about the end-user configuration and functionalities.

In this module, we work with PMWeb version 6.0.03. This module is also suitable



#### Certificate

Education in Project Controls

### **Primaned Academy**

#### **Training courses**

**Principles of Project Controls** 

Setting up an Effective WBS

Critical Path Method & Scheduling Best Practices

Project Risk Management

Scheduling Risk Analysis (with Primavera Risk Analysis)

Project Cost Planning & Control

**Earned Value Management** 

**Integral Planning Management** 

**Effective communication in Project Controls** 

Change Control & Claim Analysis

Oracle Primavera P6 Professional

Oracle Primavera P6 Professional - Expert

Oracle Primavera P6 EPPM - Functional Admin

Microsoft Project

Microsoft Project - Expert

PMWeb End- User

PMWeb Functional Admin

Project Scheduling game

#### **InCompany**

Primaned Academy offers tailor made solutions for companies who want to educate their team of professionals within Project Controls. In addition to the above training modules, we also provide customization in the use of the software packages Oracle Primavera P6, Microsoft Project, PMWeb, ScheduleReader and Primavera Risk Analysis.

#### **Primaned Academy LinkedIn University Page**

Follow us on LinkedIn for the latest news and blogs about Project Controls and add us to your Education on your LinkedIn profile.

**Primaned Academy** 

**T:** +31 10 4425177

E: academy@primaned.com W: primanedacademy.com