Course : BPMN and SOA, modeling processes and designing services

a methodology that integrates business and IT
Practical course - 2d - 14h00 - Ref. BPM
Price : 1890 CHF E.T.

On the one hand, the process approach is a source of improvement for companies. On the other hand, service architectures promise control and agility for information systems. How do these two approaches fit together? The course answers this question, based on market standards.

Teaching objectives

At the end of the training, the participant will be able to:

- Discover best practices for business process representation and design
- Be aware of the requirements placed on business modeling, with a view to providing input for logical design
- Identify the skills needed to articulate the process approach and service design
- Gain awareness of process automation possibilities and the impact of SOA on information systems.

Intended audience

Project managers, business analysts and experts, project management assistants, urban planners, logic architects, IT designers

Prerequisites

Good knowledge of information system components.

Practical details

Hands-on work
One case study lets you experiment with the possibilities of a process execution engine; another explores BPMN notation.

Teaching methods
Objective-based teaching (sequences focused on the skills to be acquired)

PARTICIPANTS
Project managers, business analysts and experts, project management assistants, urban planners, logic architects, IT designers

PREREQUISITES
Good knowledge of information system components.

TRAINER QUALIFICATIONS
The experts leading the training are specialists in the covered subjects. They have been approved by our instructional teams for both their professional knowledge and their teaching ability, for each course they teach. They have at least five to ten years of experience in their field and hold (or have held) decision-making positions in companies.

ASSESSMENT TERMS
The trainer evaluates each participant's academic progress throughout the training using multiple choice, scenarios, hands-on work and more.
Participants also complete a placement test before and after the course to measure the skills they've developed.

Course schedule

1 Introduction: from business to IT

- The process approach and its challenges (state of the art, introduction of BPMN notation, transformation requirements)
- The SOA approach: definition and promise (overview of technology, Web Services, standards...)
- Linking processes and SOA: the general framework (Praxeme public method)
- What's changing in terms of the business and the IT system (qualities sought: agility, interoperability)

2 Business modeling

- Modeling processes with BPMN (complete discovery of the notation)
- The quality of process representation (requirement levels linked to scoring; realistic processes, etc.).
- What needs to be described in addition to processes? (business objects; introduction to semantic modeling)
- The two sources of service design

Hands-on work
Case study to discover BPMN notation based on representation needs

3 Service architecture design

- Logical architecture and major decisions for structuring the IT system (link with IS urbanization)
- How to find the "right" services (summary of derivation rules from business models)
- Logical design: service documentation (use of UML notation, algorithmic techniques, traceability)
- The three facets of logic: data, exchanges, components

Hands-on work
Case study using a UML tool to familiarize yourself with the representation of services in an SOA

4 Process execution

- Technical solutions: BPEL (Business Process Execution Language), execution engines
- The technical relationship between processes and services ("service task" in BPMN, service invocation)
- Process supervision: BAM (Business Actvity Management)

Demonstration
Execute a process, from its model, using an execution engine

Dates and locations

REMOTE CLASS
2026 : 25 June, 5 Oct.