

# Course : Information Systems, for project management

**Synthesis course - 3d - 21h00 - Ref. SIW**

**Price : 2790 CHF E.T.**

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Aimed at project managers and non-computer specialists alike, this course provides a comprehensive overview of the latest methods in information systems. In particular, it analyzes the issues, methods, techniques and roles associated with the development of today's information systems.

## Teaching objectives

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

- ✓ Clarify essential information systems concepts
- ✓ Understand the principles of information systems development
- ✓ Understanding the roles associated with IS development
- ✓ Discover the main IS development tools, methods and techniques

## Intended audience

Project managers, end-user project managers, technical sales staff who have to liaise with project managers.

## Prerequisites

No special knowledge required.

## Course schedule

### 1 Projects and information systems

- Information systems: data, files, databases, information exchange.
- Architecture, components, management, standards.
- The role of the project manager: expression of requirements, validation, acceptance, management...
- The project life cycle: definition, organization and results phases.
- Standards. Agile and iterative approaches.
- Risk management. How to identify, measure and anticipate risks?

### PARTICIPANTS

Project managers, end-user project managers, technical sales staff who have to liaise with project managers.

### PREREQUISITES

No special knowledge required.

### 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.

## 2 The process approach - UML - Modeling - BPMN

- Process urbanization. Assessing and improving. Architectures: business, functional, application.
- Unified modeling language. Use in the field. Use cases and other UML diagrams.
- Activity modeling "business". BPMN.
- Scenarios to refine problem analysis.

## 3 The architectures

- Internet developments. Evolutions.
- Protocols: messaging, file, forum, web, directory.
- 3-tier, n-tier, service-oriented architecture.
- Browsers. Current client technologies.
- Thin client and rich client.

## 4 IS management: portals, integration, software packages, SOA

- Gate features.
- Integration: EAI: utopia or axis of the future?
- SOA, XML service bus and web services.
- XML: data structuring, inter-application exchanges.

## 5 The world of free software

- Main software. Sectors covered.
- Safety. Durability. Impact on workstations.
- Linux. Apache. PHP, Eclipse, MySQL, Libre Office, Open Office, etc.

## 6 Development languages and platforms

- Development languages.
- Functioning and implementation techniques: frameworks, CMS...
- The Java Enterprise Edition (J2EE) platform.
- Microsoft's .Net platform.
- Java interfaces: JCA, JDBC, JMS, JNDI...
- Applet, servlet, EJB. SOAP.
- Application server offerings: IBM WebSphere, Weblogic, Oracle, JBoss-Wildfly, Tomcat...
- Component-oriented LGAs (Visual Studio, Eclipse, etc.).

## 7 Safety management

- Electronic signature. Encryption. Encryption. Firewalls. DMZ.
- Securing infrastructure protocols.
- Techniques: PKI, SSO, AD, LDAP.

## 8 Business intelligence, big data and trends

- BI at the service of users.
- Multidimensional storage principles (MOLAP, ROLAP, HOLAP).
- Business intelligence modeling. The tools.
- Big data.
- Trends: cloud, artificial intelligence, connected objects, blockchain...

## Dates and locations

### TEACHING AIDS AND TECHNICAL RESOURCES

- The main teaching aids and instructional methods used in the training are audiovisual aids, documentation and course material, hands-on application exercises and corrected exercises for practical training courses, case studies and coverage of real cases for training seminars.
- At the end of each course or seminar, ORSYS provides participants with a course evaluation questionnaire that is analysed by our instructional teams.
- A check-in sheet for each half-day of attendance is provided at the end of the training, along with a course completion certificate if the trainee attended the entire session.

### TERMS AND DEADLINES

Registration must be completed 24 hours before the start of the training.

### ACCESSIBILITY FOR PEOPLE WITH DISABILITIES

Do you need special accessibility accommodations? Contact Mrs. Fosse, Disability Manager, at [psh-accueil@orsys.fr](mailto:psh-accueil@orsys.fr) to review your request and its feasibility.

**REMOTE CLASS**

2026: 31 Mar., 23 June, 6 Oct., 15 Dec.