

IS Architect certification cycle

**SII-301 12 Days (84 Hours)**

Description

This training program provides the skills necessary to practice the profession of information systems (IS) architect. It presents the technical-functional standards of new architectures and emphasizes the urbanization of IS and the implementation of a service-oriented architecture (SOA). Finally, this cycle ends with a specialized module in the use of the TOGAF® standard.

Who is this training for ?

For whom

IS architect, project manager, project director, IS manager and anyone wishing to discover how to develop and manage the architecture of an information system.

Prerequisites

- Good knowledge of technical infrastructures (operating systems, databases, networks, etc.) and basic knowledge of architectures (services, servers, connections, flows, etc.)

Training objectives

- Understand key concepts and the basics of IS architectures
- Evaluate the challenges of urbanization the generic model and general approaches
- Understand the components and layers of a SOA architecture
- Develop an IS architecture with TOGAF
- Know how to manage an IS architecture

Training program

Principes fondateurs des architectures SI

- Web technologies, Web 2.
- O and the new HMI.
- Architectures: from centralized server to n-tier architectures.
- Presentation of JEE and .
- NET.
- The Open Source alternative.
- Principles of IS urbanization.
- Integration-oriented architectures and Web Services.
- Principles of an EAI (Enterprise Application Integration).
- Traditional integration application interfaces.
- Management content and documents (WCM, GED, WDM).
- Mobility: decryption of actors, technologies and uses.
- Web infrastructure and operation: Cloud, performance, SEO, SEM.
- E-Business standards.
- History.
- Standardization attempts (BPSS, cXML, xCBL, Pharma ML.
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- Principles of service-oriented architectures.

Urbanisation, modèle générique et approches générales

- The challenges of urbanization.
- Mastery and increasing complexity of information systems, the company in an ecosystem.
- The emergence of best practices , the example of ITIL® and TOGAF®, contribution to IT governance.
- General presentation of the generic model and general approaches
- The layered organization of the IS.
- IS urbanization approaches.
- Managing the complexity of existing heritage.
- Urban planner, architect, expert.
- What role, what positioning, what know-how?
- Metaphor of the city, cartography and modeling.
- The four layers of IS: Business, Functional, Application and Infrastructure.
- Manage the company's urbanization project.
- Roles and responsibilities of the actors (MOA/MOE).
- Modeling tools.
- Synthesis of market tools.
- Examples of tools.

SOA, architecture orientée services

- Presentation of a SOA architecture.
- Components and layers of a SOA architecture.
- Services and processes.
- The service concept.
- Service exposure, loose coupling, synchronism vs asynchronism.
- Technical aspects of a SOA architecture.
- Implementation of Web Services (JEE, .NET, PHP, etc.
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- XML Foundations.
- XML Schema for Interoperability and the description of application data.
- Description of services with WSDL.
- Invocation with SOAP.
- SOA design methodological approach.
- The links between SOA and the object approach.
- The different approaches and metamodels (RUP, PRAXEME, etc.
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- Conceptual model of an SOA.
- The modeling of services within the application architecture with UML.
- SOA: market players and products.
- Platforms EAI.
- SOA orchestrators.
- Platform providers.

Développer l'architecture SI avec TOGAF®

- TOGAF®: essential concepts and method for developing an IS architecture.
- The business continuum and TOGAF® tools.
- Governance of the enterprise architecture.
- TOGAF® and the ISO 42010 standard.
- The reformulation of the enterprise strategy and the business architecture.
- Reference business models and business processes.
- Business objects and data architecture.
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Gérer l'architecture SI avec TOGAF®

- Technical architecture and its stakeholders.
- Technical architecture and its meta-model.
- Applications/services, functions and components.
- Use architecture, organize IS governance.
- IT architecture and project/service portfolio management.
- Architecture and information system security.
- Architecture and outsourcing strategy.
- Corporate architecture and strategy.