

# Web Services – Basics and Architectures («XWS»)

Learn how to use XML Web Services in terms of architecture, fundamentals and communication.

**Duration:** 2 days

**Price:** 1'500.–

**Course documents:** Digicomp courseware

## Content

### 1. Introduction

- What are Web Services?
- Why Web Services?
- Web Services Technology

### 2. Architecture

- Web Architectures
- Service architectures, SOA
- Web Services Architectures

### 3. Communication protocols

- HTTP GET, POST
- SMTP, MIME

### 4. Data formats

- XML, XML scheme
- JSON, JSON scheme
- Serialization

### 5. Transcription

- SOAP and XML-RPC
- SOAP Standard and versions, SOAP Fault
- REST
- OData
- gRPC

### 6. Description

- Web Services Description Language (WSDL)
- WSDL Document, Metadata Exchange
- WS Policies
- WADL
- Swagger

### 7. Advanced Features

- MTOM
- Addressing and Routing
- Discovery and Announcement
- Reliability

### 8. Safety and security

- Requirements and Standards
- WS Security, WS Trust, WS SecureConversation
- SAML, OAuth

### 9. Transactions and Processes

- Basics
- Standards

### 10. Web Services Implementation

- Interoperability
- Testing
- Design references

- Experiences
- Practical examples

## Key Learnings

This course enables you to understand and assess the possible uses and application areas of Web Services and to plan and analyse their use in your own applications.

## Target audience

Decision-makers, project managers, software developers and employees in IT projects, as well as specialists who perform IT interface support functions.

## Any questions?

We are happy to advise you on +41 44 447 21 21 or [info@digicomp.ch](mailto:info@digicomp.ch). You can find detailed information about dates on [www.digicomp.ch/courses-software-engineering/programming/web-programming/course-web-services-basics-and-architectures](https://www.digicomp.ch/courses-software-engineering/programming/web-programming/course-web-services-basics-and-architectures)