

# Course : Web Development, Fundamentals

*Practical course - 4d - 28h00 - Ref. DSW*

*Price : 2580 CHF E.T.*

This highly practical course will introduce you to all the Internet technologies. It will explain how Web services and related languages, HTML, XML, etc, operate, as well as graphics techniques, database interrogations, and administration. The exercises will allow you to learn all the phases of designing and developing a Web site in a practical way.

## Intended audience

This hands-on course is aimed at IT staff who wish to design a client Internet application.

## Prerequisites

A base knowledge in Technical architecture.

## Practical details

### Hands-on work

During each step of the course, the learners will perform practical exercises allowing them to construct a Web client.

## Course schedule

### 1 Website technologies

- Web servers (Apache, IIS). Protocols: TCP/IP, PPP, HTTP, FTP, URLs. Additional network services (DNS, DHCP, etc).
- Domain name management. Choosing the Internet hoster. Technical architecture. Organisation. Web services.

### 2 Making access to the Web pages secure

- HTTPS, SSL protocols.
- Certificates, the firewall, the proxy.
- Secured payment.

## PARTICIPANTS

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## PREREQUISITES

A base knowledge in Technical architecture.

## 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.

### 3 Creating Web pages: HTML, XML, XHTML

- Presentation of HTML, XHTML languages.
- Structure, links, hypertext.
- Images, frames, style sheets. Vector formats.
- Techniques for successful listing on the search engines. Metatags.

#### Hands-on work

Producing complex HTML pages with Frontpage or Dreamweaver. Creating style sheets, preparing the page for listing.

### 4 Forms

- Constraints and advantages. Syntax, structure, entry fields, buttons, check boxes, lists, text areas, file selections.

#### Hands-on work

Producing a form sending data to the message service and a database.

### 5 Graphic and multi-media design

- Utilising graphics tools (Fireworks) to design an enhanced interface. Developing animated images with Flash.
- Graphics resources: GIF, JPEG, PNG, shockwave.

#### Hands-on work

Developing a model HTML page with Fireworks, Flash components. Integrating multi-media plug-ins to display Flash, shockwave components.

### 6 Accessibility and ADAE

- Standard. Impact on development. Making the site comply with accessibility standards. Test tools. Accessiweb labels.

#### Hands-on work

Utilising test and audit tools.

### 7 Ergonomics of a Web application

- Graphics chart. Usability rules. Graphics pitfalls to avoid in order to have an effective site (navigation, lay-out, tec

#### Hands-on work

Defining the specifications for the graphics chart.

### 8 Dynamic pages: CGIs

- Method of operation, security. GET and POST methods. Server variables.
- The configuration of the server.
- Server-side scripts: ASP, JSP, PHP.
- Implementing VBSCRIPT.
- Calling Web services.

#### Hands-on work

Developing dynamic pages in ASP, interrogating a database, Web services.

### 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.

## 9 Database interface

- Technologies for access from ASP, ODBC scripts. SQL, the request language.
- Integrating SQL requests in the page for adding, deleting and modifying database data.

### Hands-on work

Managing a database through ASP pages.

## 10 The Javascript language and DHTML

- Syntax of the language. Data entry controls for a form. Rollover effects on the images. Managing cookies. Utilising DHTML
- DOM and Ajax. Towards Web 2.0.
- Retrieving and integrating a script in a page.

### Hands-on work

Using JavaScript to add DHTML effects and controls to the form, managing events in JavaScript, integrating existing scripts. Managing cookies.

## 11 Additional client-side technologies

### Dates and locations

#### REMOTE CLASS

2026 : 30 June, 3 Nov.