

# Course : Drupal, developer

preparation for Drupal developer certification (current version)

*Practical course - 3d - 21h00 - Ref. UPD*

*Price : 2020 CHF E.T.*

You'll use the Drupal CMS to accelerate your developments by leveraging its APIs (Entity API, Schema API...). Learn how to create modules capable of interacting with Drupal. You'll be able to adapt the way it works or its community modules without touching the source code.

## Teaching objectives

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

- ✓ Install and configure Drupal and its development environment
- ✓ Installing and creating modules
- ✓ Creating and managing blocks
- ✓ Creating and modifying forms
- ✓ Secure access to resources

## Intended audience

Developers, project managers.

## Prerequisites

Good knowledge of PHP object, HTML and CSS. Knowledge equivalent to that acquired in the course "Drupal, creating and administering a content management site" (ref. UPA).

## Practical details

### Hands-on work

Practical exercises on installing Drupal, creating, modifying and securing a module.

## Course schedule

### PARTICIPANTS

Developers, project managers.

### PREREQUISITES

Good knowledge of PHP object, HTML and CSS. Knowledge equivalent to that acquired in the course "Drupal, creating and administering a content management site" (ref. UPA).

### 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.

## 1 Introduction

- Introduction to Drupal (node, taxonomy...).
- Presentation and installation of development tools.
- Drupal installation.
- Developer tools: firebug, module "devel".
- Object concepts (classes, interfaces, dependency injection, PSR-4...).

### Hands-on work

Installation of Drupal and WAMP or DDEV.

## 2 Creating a module

- Necessary files.
- File structures (autoloading).
- PSR-0 and PSR-4.
- Containers, services and dependency injection.

### Hands-on work

Install and create modules.

## 3 The routing system

- Routing management.
- Match a URL to a page.
- Use of create() and \_construct() methods.
- Create dynamic URLs.
- Add menu, contextual, action and tab links.

### Hands-on work

Display a page with arguments.

## 4 The block system

- Block management with Drupal current version.
- Introduction to block types.
- How do I create a block with a plug-in block?

### Hands-on work

set a block cache.

## 5 The cache system

- Drupal cache modules.
- Contexts, tags and max-age.
- Add cache metadata to a display.

### Hands-on work

Set block cache.

### 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 to review your request and its feasibility.

## 6 Users

- What is a node? Create a "node module".
- Manipulate nodes programmatically.
- Intercept actions performed on users.
- Addition of tabs on each user page.

### Hands-on work

Create an update history.

## 7 The forms

- Create forms programmatically (form API).
- Manage form validation and submission.
- AJAX forms.
- Change the layout of a form.
- Modify a Drupal form without touching its source code (hook\_form\_alter).

### Hands-on work

Create a form.

## 8 Config API

- Configuration management: YAML files, import/export.
- Create a form in the Drupal back-office.
- Add your own configuration: the Config.
- Configuration translation.

### Hands-on work

set up a configuration form.

## 9 Security

- Protect access to a block.
- Protect access to a page.
- Create your own access control system.

### Hands-on work

Set up an access control system.

## 10 Template Twig

- Theming system.
- Template declaration.
- Pass variables to a template.

### Hands-on work

Set up a new type of rendering using a template.

## Options

### Certification : 320€ HT

On completion of this course, you will be able to take the Trained People Developer Drupal Certification within one year. We advise you to take this certification 3 to 6 months after your training.

## Dates and locations

### REMOTE CLASS

2026 : 3 June, 14 Oct.