

## Laminas Framework Programming

### Audience Laminas Framework Programming Course

Experienced PHP developers who want to learn the capabilities of the Laminas Framework.

### Prerequisites Course Laminas Framework Programming

Extensive knowledge and experience with PHP development including object oriented programming is required.

### Realization Training Laminas Framework Programming

The concepts are treated on the basis of presentation slides and demos. The theory is interspersed with exercises. A modern PHP IDE is used for the demos and exercises. The focus is on the newest version of the Laminas Framework.

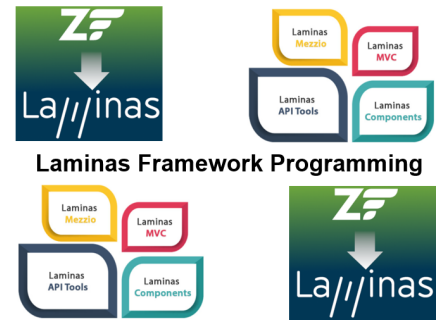
### Certification Course Laminas Framework Programming

After successful completion of the course participants receive an official certificate PHP Laminas Framework Programming.

Duration: 4 days

Price: € 2450

[Open Schedule](#)



## Content Course Laminas Framework Programming

The course Laminas Framework Programming covers this open source PHP class library which focusses on simplifying complex PHP applications through the use of standard components.

### Laminas Framework Architecture

The course starts with an overview of the development of PHP applications based on the Laminas Framework and discusses the architecture of the Laminas Framework. The focus is on the newest version of the Laminas Framework.

### MVC Pattern

The next subject is the Model View Controller (MVC) design pattern that is a central element for PHP applications based on the Laminas Framework.

### Controller Component

Attention is paid to the function of the Controller component for the routing of requests and the control flow. This will also include input validation, authentication, authorization and security best practices.

### Model Component

Furthermore, the function of the Model component is discussed, with attention being paid to accessing databases, caching of data and sending mail.

### View Component

Also the function of the View component is discussed and this includes the addressing of Rich User Interfaces and Ajax functionality.

### Internationalization and Web Services

Finally the subjects internationalization and Web Services are on the course schedule.

### Laminas Framework Certification Examen

The topics covered in the course are also the exam subjects for the Laminas Framework Certification exam. The course is not a direct exam preparation training, but a training to learn how to use the Laminas Framework in PHP Development.

## Modules Course Laminas Framework Programming

Module 1 : Laminas Intro	Module 2 : Laminas MVC	Module 3 : Event Managers
What is Laminas Project? Key Features Laminas Architecture Laminas and MVC Laminas Tool Namespaces Autoloading Project Structure Front Controller Rewrite Module Open Source Zend	Design Patterns MVC Elements and Implementation Event-Driven Architecture Key MVC Events Services in MVC Front_Controller Request Routing Action Controllers Modules Laminas_View Error Controller	Events Event Types Event Manager Trigger Events Available Methods Aggregates Shared Event Listeners Identifiers Shared Event Manager ModuleManager Events Control Flow
Module 4 : MVC and Models	Module 5 : Controllers	Module 6 : Routing
Application Structure Modules in MVC Structure of a Module Bootstrapping Modular Application MVC-related Module Configuration LaminasModuleManager ModuleManager Listeners Autoload Files for Modules Module Classes MVC 'bootstrap' Event ModuleAutoloader Module Best Practices	Laminas_Controller Components Request Object Accessing a Request and Response Request Handling Workflow Request Object Operations Request Type Checkers Laminas_Controller_Front Dispatch Loop Front Controller Parameters MVC Events and Controllers MVC-based Action Controllers Controller Plugins	Routing Basics Router Types HTTP Route Types Base Url Standard Router Using Rewrite Router Shipped Routes Dispatcher Using _forward Action Helpers Plugins View Scripts
Module 7 : View Layer	Module 8 : Forms and Validation	Module 9 : Database Access
Laminas View View Model Layouts Response Strategies What are Layouts? Typical Layout Two Step View Pattern Laminas_Layout Changing Layouts Partials Partials Parameters Partials and PartialLoop Place Holders PartialLoop Model View Helpers	InputFilter Laminas Input Filtering Laminas Form Validating Forms Rendering Forms Creating Forms Laminas_Form_Elements Base Classes Plugins Laminas Validator Validators Decorators Decorating Process Sub Forms	Connecting to a Database Laminas_DB Query Preparation Query Execution Running an SQL Query Laminas Db Adapter Creating an Adapter Creating Statements Laminas Db Sql Laminas Db TableGateway Fetching Results CRUD Operations Retrieving MetaData Prepared Statements Laminas_DB_Select
Module 10 : Laminas Services	Module 11 : Laminas Security	Module 12 : Laminas Components
Service Manager (SM) Service Types Kinds of Web Services Laminas Soap Services Laminas_Soap Server Laminas_Soap Client XML-RPC in Laminas JSON-RPC in Laminas REST in Laminas Laminas_Rest Server Laminas_Rest Client	Security Concerns Authenticating with Laminas_Auth Laminas_Auth Adapters Authenticating Results Database Table Authentication Laminas_Auth Adapter_DbTable Basic and Digest Authentication HTTP Authentication Adapter Laminas_ACL Access Control Lists Roles and Resources	Components Laminas Project Laminas Component Dependencies Laminas Core and Components Why Laminas Components Laminas_Paginator Laminas_Config_Ini Laminas_Registry Laminas_Pdf Laminas Mail Laminas_Log Laminas_Locale