



The PHP Company

Fall/Winter 2010-2011



Zend Course Catalog

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Introduction

If you are eager to learn PHP, go to those that know it best. Founded by the creators of PHP, Zend - the PHP Company - is the authority in PHP. Our expert PHP instructors were handpicked for their extensive knowledge in PHP and their ability to communicate and present the curriculum in an effective manner using practical examples.

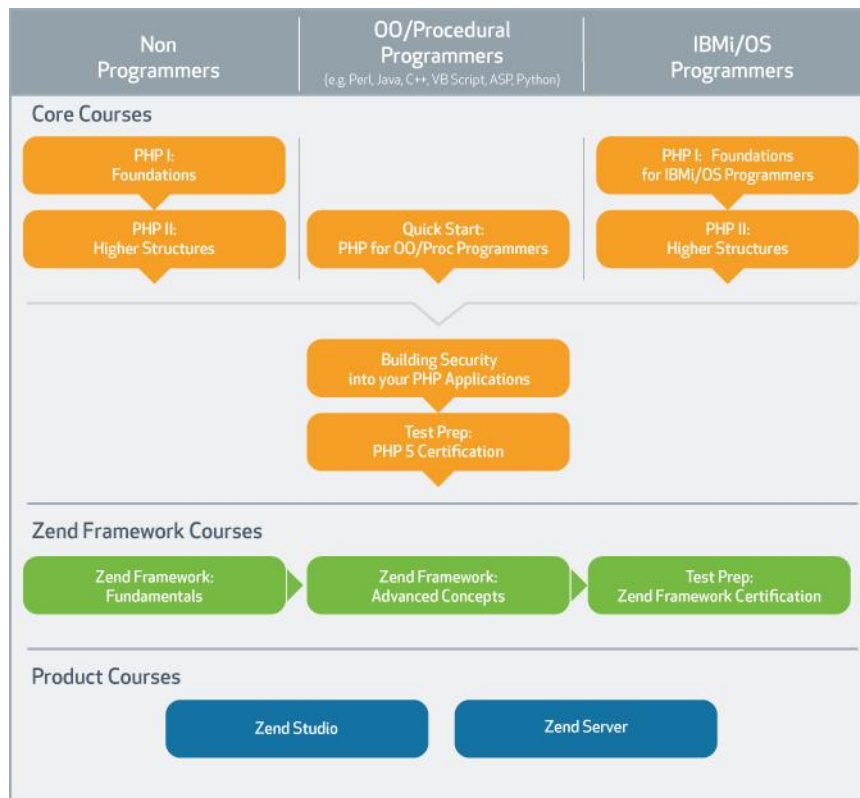
Mission Statement

Here at Zend’s Training Department, our mission is to provide relevant and engaging learning opportunities – from the basics, through cutting edge topics, and on to certification - advancing the knowledge and success of our PHP colleagues, and the wider Open Source community.

"You cannot teach a man anything; you can only help him find it within himself."

- Galileo Galilei

Curriculum Tracks



* This diagram is for illustration purposes only and is not intended to suggest the speed with which an individual can proceed through the courses, nor their level of expertise upon completion of any one course. That level of achievement depends on the individual’s own experience and ability to learn. For the PHP language sequence (Core Courses) we highly recommend that participants actively practice, for at least several months, what they have learned before attempting the next level.

Role-Based Curriculum Tracks

I am a(n)...

Non-Programmer	IBM i/OS Programmer
<p>Web Designers, who wants to be able to develop in PHP... I should take the following courses:</p> <ul style="list-style-type: none"> • PHP I: Foundations • PHP II: Higher Structures • Building Security into Your PHP Applications • Zend Studio • Test Prep: PHP 5.3 Certification 	<p>IBM i/OS Programmer, who wants to be able to retool my existing RPG applications for the web by combining them with PHP... I should take the following courses:</p> <ul style="list-style-type: none"> • Quick Start Course: PHP for RPG Programmers <p>IBM i/OS Programmer, who wants to be able to not only tie existing RPG applications to PHP, but also create new PHP applications... I should take the following courses:</p> <ul style="list-style-type: none"> • PHP I: Foundations (IBM i/OS Programmers) • PHP II: Higher Structures • Building Security into Your PHP Applications • Test Prep: PHP 5.3 Certification

Object-Oriented / Procedural Programmer	System Administrator
<p>Object-Oriented / Procedural Programmer*, who wants to learn the syntax and best practices of developing with PHP... I should take the following courses:</p> <ul style="list-style-type: none"> • Quick Start: PHP for OO/Proc Programmers • Building Security into Your PHP Applications • Zend Studio • Test Prep: PHP 5.3 Certification • Zend Framework: Fundamentals • Zend Framework: Advanced <p>*e.g., Perl, Java, C++, VB, JavaScript, Ruby</p>	<p>System Administrator, who wants to provide a more stable and efficient development and production environment by learning and using Zend Server... I should take the following courses:</p> <ul style="list-style-type: none"> • Zend Server • Building Security into Your PHP Applications

I want to become a Zend Certified Engineer in...

PHP 5	Zend Framework
<p>I should take the following courses:</p> <ul style="list-style-type: none"> • PHP I: Foundations • PHP II: Higher Structures • Building Security into Your PHP Applications • Test Prep: PHP 5.3 Certification 	<p>I should have a solid foundation in PHP and then I should take the following courses:</p> <ul style="list-style-type: none"> • Zend Framework: Fundamentals • Zend Framework: Advanced • Test Prep: Zend Framework Certification

Online Training

Zend's Instructor-led Online Training courses will help you learn PHP quickly and easily. The courses are built around the foundation that practice makes perfect. Relevant exercises are integrated throughout the curriculum, allowing students to apply their newly learned PHP skills. Each training class is delivered live using our state-of-the-art online training system, allowing for real-time interaction between instructor and participants. Each online course is delivered over multiple days. To view the current Online Training Schedule, please go to: <http://www.zend.com/en/services/training/course-schedule/>

Classroom Training

All online courses can also be delivered in a classroom setting based on geography, for more information, please contact sales at: <http://www.zend.com/en/contact>

Onsite Training

Onsite training services are a good fit for teams of 5 or more who need to be trained at once. In our onsite training, a highly experienced Zend professional will bring Zend's knowledge of PHP, PHP applications, and Zend products directly to you, providing individualized attention to your team. Facilities, equipment and resource requirements apply. Please contact sales for details and pricing: <http://www.zend.com/en/contact>

Available in Multiple Languages

Zend's Training courses are offered globally and currently available in English, French, German and Italian. Contact our local offices for more information about the courses offered:

- France: <http://www.zend.com/fr/services/training/> Email: fr-formation@zend.com
- Germany: <http://www.zend.com/de/services/training/> Email: gs-germany@zend.com
- Italy: <http://www.zend.com/it/services/training/> Email: infoitaly@zend.com

Core Courses

PHP I: Foundations (PHPI)

The Zend PHP I: Foundations course is designed to provide non-programmers with a solid foundation in the PHP language. This course guides you through the basics of PHP with an experiential approach and is filled with numerous examples and hands-on exercises, including substantial practice in coding a functional application. All of the exercises are designed to reinforce key learning.

You will also have the opportunity to use the Zend Studio IDE (Integrated Development Environment) to start your coding adventures the easy and correct way! The Zend Training Center will allow you to code exercises live during the course with your instructor able to both see and coach your progress.

Audience:

This course is designed for those who want to learn the basics of the PHP language, and assumes some familiarity with web sites – what they are and the very basics of how they work – but no programming experience. Web designers who want to become PHP Developers would certainly benefit from this course. If you are a programmer in a Procedural or OO language, we recommend you take the **Quick Start: PHP for OO/Proc Programmers course**. If you are an ILE programmer, we recommend you take the **PHP I: Foundations (i5/OS Programmers) course**.

Pre-requisite(s):

None

Objectives:

To learn the basics of the PHP programming language

Topics Include:

- Introduction to Programming Languages
- PHP Language Basics: Syntax, Quotes, Comments, Data types
- PHP Variable Basics: Numbers, Constants, Variables, Strings, Arrays
- PHP Control Flow Basics: Operators, Conditionals, Loops
- PHP Functional Basics: Functions, Libraries, Advanced Arrays, File Handling
- PHP Programming Basics: Best Practices, Debugging, Brief Introduction to HTML
- PHP Web Basics: Brief Introduction to Server Communication, Sessions, Security
- PHP Database Basics: Introduction to the MySQL/SQLite Database as it relates to Web Sites
- PHP Application Basics: Best Approaches to Creating Applications; Course project

Course Information:

Duration: 18 hours – Online; 3 days – Classroom

PHP I: Foundations (IBM i/OS Programmers) (PHPI_i5)

The Zend PHP I: Foundations (IBM i/OS Programmers) course is designed to provide ILE programmers with a solid foundation in the PHP language. This course guides you through the basics of PHP with an experiential approach, filled with numerous examples and hands-on exercises, and makes frequent reference to the similarities and differences between the PHP and RPG languages, for better comprehension. You will also learn about the 5250 Bridge for your legacy content, as well as tools for i5 system programmers, such as the PHP i5 Toolkit and DB2 extensions. A coding project at the end of the course serves to reinforce the concepts taught and your proficiency in working within PHP.

Audience:

This course is designed for experienced i5 system programmers who currently utilize RPG (or COBOL), and want to explore using PHP to create web-based application front ends for existing RPG applications or begin the track to become PHP programmers.

Pre-requisite(s):

Active IBMi/OS programming experience (ILE language DB2 experience). Basic knowledge of HTML, please see: Course Note.

Objectives:

To learn the basics of the PHP programming language and its relation to the IBM i system

Topics Include:

- Why use PHP : What is PHP, Why use it, Benefits for RPG programmers, Connecting to a DB2 data source & accessing data demonstration
- Zend Core Management: What an ILE programmer needs to know about Zend Core
- Development Tools: Increasing code efficiency & performance through Zend Studio for i5, including code completion, syntax highlighting, context sensitive templates for the PHP i5 Toolkit, DB2 extensions, 5250 bridge
- Language Basics: Syntax, Quotes, Comments, Data Types
- Variable Basics: Numbers, Constants, Variables, Strings, and Arrays
- Control Flow Basics: Operators, Conditionals, Loops
- Function Basics: Functions, Libraries, Array functions, File Handling functions
- Programming Basics: Best Practices, Debugging, Introduction to HTML
- Web Basics: Introduction to Server Communications, Sessions, Security
- Database Basics: Introduction focused on how databases relate to PHP and websites
- Application Basics: Course project

Course Note:

Basic knowledge of HTML is critical to understanding the conversion of RPG programs to web-based. However, this is outside of the focus of this course. For Participants without this pre-requisite knowledge, we strongly advise you to take advantage of free online tutorials (for example at: <http://www.w3courses.com>) or reference books such as “Sams Teach Yourself HTML in 10 Minutes”.

Course Information:

Duration: 18 hours – Online; 3 days – Classroom

PHP II: Higher Structures (PHPII)

The Zend PHP II: Higher Structures course is designed to expand a beginning programmer's understanding of the PHP language. This intermediate-level course builds upon knowledge gained in PHP I: Foundations. It utilizes a hands-on approach with numerous examples and practical exercises, as well as a key development project, to enhance learning. You will also have the opportunity to use the Zend Studio IDE (Integrated Development Environment) to continue honing your coding skills utilizing best practices and effective tools.

Audience:

This course continues where PHP I: Foundations leaves off, and is designed for novice PHP developers who want to further advance their skills in the PHP language and already know the basics of PHP syntax, language constructs, and web site functionality. Experienced programmers in Procedural and OO languages should refer to the Quick Start: PHP for Experienced Programmers course description.

Pre-requisite(s):

PHP I: Foundations, or PHP I: Foundations (IBM i/OS Programmers), or equivalent knowledge.**

Objectives:

To learn the essentials for creating web-based PHP applications

Topics Include:

- PHP Language Concepts: Scope, Globals, working with Files, Advanced Variable Usage / Array Manipulation and References
- Configuring PHP: PHP.INI configuration considerations
- Regular Expressions: Using Perl-Compatible Regular Expressions in PHP applications
- PHP and OOP Concepts: Principles of Object Oriented Programming and Design, Access Modifiers, Abstract Classes, Interfaces, Namespaces and more
- Building Applications: Debugging, Security and Validation
- PHP Web Fundamentals: Server Communication, Sessions & Cookies, Working with Forms and Form Validation, Email, HTTP Headers, Buffers & Caches
- PHP Database Basics: Introduction to manipulating database contents using PHP; PDO
- PHP Application Essentials: Best Approaches to Creating Applications; Course project

Course Notes:

**This course assumes a thorough grounding in the language and syntax of PHP and does not fully review those topics. It also assumes that students who completed the Foundations course have practiced applying the skills they learned before attempting this next level.

Course Information:

Duration: 18 hours – Online; 3 days – Classroom

Test Prep: PHP 5.3 Certification (PHP5)

The Test Prep: PHP 5.3 Certification course prepares experienced PHP programmers for the challenge of passing the PHP certification exam and achieving the status of Zend Certified Engineer (ZCE).

This is a test preparation and PHP review course – it does not teach PHP. The content discusses important information about the exam itself and strategies for answering the exam questions, while providing an in-depth review of the twelve certification topic areas. Participants are continually challenged to test their knowledge with focused quizzes. The course moves at a fast pace, and assumes at least an intermediate skill level in PHP programming.

Audience:

This course is designed for experienced PHP developers (intermediate-level +) who wish to gain information on how to take and pass the PHP 5.3 Certification exam while being guided through a quick, intense review of all of the major topics within the 12 certification areas.

Pre-requisite(s):

At least intermediate-level knowledge of the twelve topic areas

Objectives:

Preparation for the Zend PHP Certification Exam

Topics Include:

- PHP Certification: Why Certification; Exam Essentials; Questions and Strategies; Topic Areas
- PHP Basics: Syntax, Operators, Variables, Constants, Control Structures, Language Constructs and Functions, Constants, Namespaces, Extensions, Constants, Config, Performance/opcode caching
- Functions: Syntax, Arguments, Variables, References, Returns, Variable Scope, Anonymous Functions, closures
- Data Formats & Types: XML Basics, SimpleXML, XML Extension, Xpath, Webservices Basics, SOAP, REST, JSON & AJAX, DateTime, DOMDocument
- Web Features: Sessions, Forms, GET and POST data, Cookies, HTTP Headers, HTTP Authentication
- OOP: Instantiation, Modifiers/Inheritance, Interfaces, Exceptions, Static Methods & Properties, Autoload, Reflection, Type Hinting, Class Constants, Late Static Binding, Magic (**) Methods, Instance Methods & Properties, Class Definition, SPL
- Security: Configuration, Session Security, Cross-Site Scripting, Cross-Site Request Forgeries, SQL Injection, Remote Code Injection, Email Injection, Filter Input, Escape Output, Encryption, Hashing algorithms, File uploads, Data storage, SSL
- Strings & Patterns: Quoting, Matching, Extracting, Searching, Replacing, Formatting, PCRE, HEREDOC and NOWDOC, Encodings
- Databases: SQL, Joins, Analyzing Queries, Prepared Statements, Transactions, PDO
- Arrays: Enumerated Arrays, Associative Arrays, Array Iteration, Multi-Dimensional Arrays, Array Functions, SPL, Objects as arrays
- I/O: Files, Reading, Writing, File System Functions, Streams, Contexts

Course Information:

Duration: 18 hours – Online; 3 days – Classroom

Quick Start: PHP for OO/Procedural Programmers (EXP)

The Zend Quick Start: PHP for OO/Procedural Programmers course is designed to quickly build an experienced programmer's understanding of the PHP language. This course covers many of the same topics as both the PHP I: Foundations and PHP II: Higher Structures of PHP classes but at an accelerated rate with special emphasis on the differences between PHP and other commonly used languages. As with the other classes, it utilizes a hands-on approach with numerous examples and practical exercises, primarily related to the course project, to enhance learning. You will also have the opportunity to use the Zend Studio IDE (Integrated Development Environment) to continue honing your coding skills utilizing best practices and effective tools.

Audience:

This course is designed for experienced developers (2+ years) of other languages - Procedural & OO, such as C, Java, C++, C#, JavaScript, Python, Perl, Ruby - who want to transfer their skills to PHP and need to quickly learn the PHP-specific version of common features, such as syntax and language constructs. For ILE programmers without experience in these other programming families, we recommend taking the PHP I: Foundations (IBMi Programmers) & PHP II: Higher Structures courses.

Pre-requisite(s):

Experience developing applications, 2+ years

Objectives:

Upon completion of this course, participants should be able to:

- Apply their existing programming skills to the PHP language
- Define and utilize the components of PHP syntax, language, and structure
- Set up a development environment using php.ini
- Apply fundamental concepts around web application design and implementation to PHP, including Forms and Form validation, other security aspects, sessions/ cookies / buffers

Topics Include:

- PHP Syntax Essentials: Data types, Syntax, Quotes, Comments, Constants, Variables, Strings, Arrays, Operators, Conditionals, Loops, Functions
- PHP Language: Scope, Globals, Files, Advanced Variable Usage / Array Manipulation and References, Callback Functions, Dynamic Function Invocation, Recursive Transversals, and Variable Variables
- Configuring PHP: PHP.INI configuration considerations
- Regular Expressions: Using Perl-Compatible Regular Expressions in PHP applications
- PHP and OOP Concepts: Principles of Object-Oriented Programming and Design, Access Modifiers, Abstract Classes, Interfaces, Namespaces, and more
- PHP Web Essentials: Sessions & Cookies, Working with Forms & Form Validation, Email, HTTP Headers, Buffers
- PHP Database Essentials: Introduction to Manipulating DB Contents using PHP
- Building Applications: Debugging, Security and Validation
- PHP Application Essentials: Best Approaches to Creating Applications; Course Project

Course Information:

Duration: 18 hours – Online; 3 days Classroom

Building Security into your PHP Applications (SEC)

Security is one of the most important things to keep in mind when developing web applications. Unfortunately, it is also one of the things often overlooked. Reviewing hundreds or thousands of lines of code is a daunting task, one that can be avoided if an application is developed with security in mind.

This PHP class presents a comprehensive overview of security and has been designed to equip PHP developers with the knowledge they need to build more secure web applications. Participants apply what they have learned by identifying and correcting security flaws within a practice application.

Audience:

This course is designed for experienced PHP application developers who want to learn or be reminded of security best practices. New PHP developers can also benefit from taking this course, to learn best practices for building security into the applications they are learning to create, although some of the material may seem a little advanced.

Pre-requisites:

Basic knowledge of PHP 5

Course Objectives:

Upon completing the course, participants will be prepared to:

- Incorporate standard, best practice security measures into their PHP applications
- Identify the most common types of vector attacks and how best to monitor and guard against them.

Topics Include:

- What is Security
- The Defense in Depth Concept
- Security's Basic Rules
- Guidelines for Building Secure Web Applications
- Injection Attacks (SQL, XSS, Command, Remote Code)
- XSRF Attacks
- Session Security
- Secure File Uploads
- Creating Secure Configurations
- Password Security
- Sandboxes & Tarpits
- Security through Obscurity
- Security Implications for AJAX
- Filtering for Charsets

Course Information:

- Duration: 6 hours – Online; 1 day – Classroom

Zend Framework Courses

Zend Framework: Fundamentals (ZFF)

The Zend Framework: Fundamentals course is designed for experienced PHP programmers who want to learn to combine ZF concepts and structural elements to utilize the full power of this software development kit for PHP 5 applications.

Zend Framework is an open-source class library with a central theme of “extreme simplicity”. ZF helps you to reduce the tedious details of coding and instead allows developers to be more productive as they focus on the big picture. Utilizing a collection of customizable PHP classes, ZF provides robust functionality suitable for both large and small tasks.

This course combines teaching ZF with the introduction of the Model-View-Component (MVC) design pattern, to ensure you learn current best practices in PHP development.

The Zend Framework: Fundamentals course helps you to learn by doing. Each discussion of related components is presented with examples of how best to utilize them in your applications, Hands-on exercises and the mini-projects you develop during the course reinforce the concepts you have learned. The online Zend Training Center allows participants to develop code during the course with your instructor able to see and coach your progress.

Audience:

This course is designed for people who have a solid foundation in the PHP language and OOP, and have successfully created complex PHP web applications.

Pre-requisite(s):

Solid understanding of PHP at an intermediate to advanced level and OOP experience

Objectives:

Upon completing the course, active PHP developers should be equipped to best utilize the Zend Framework, along with the Model-View-Component design pattern, to create robust web applications with more ease and less time.

Topics Include:

- Rapid Application Design (Introduction to Zend_Tool and Zend_Application)
- Authentication and Authorization (Zend_Acl, Zend_Auth, ...)
- Core Infrastructure (Zend_Config, Zend_Log, ...)
- Databases (Zend_Db, Zend_Db_Table, ...)
- Model-View-Controller (Zend_Controller, Zend_Controller_Action, ...)
- Web Form (Zend_Form, ...)
- View and Layout (Zend_View, Zend_Layout, ...)

Course Note:

While this is a fundamental level course on Zend Framework, it requires more than a fundamental level understanding of PHP. Participants are assumed to be proficient enough in the language to understand intermediate-level code examples and to perform coding exercises. This is an introductory course and assumes no previous Zend Framework experience.

Course Information:

Duration: 18 hours – Online; 3 day – Classroom

Zend Framework: Advanced Concepts (ZFA)

The Zend Framework: Advanced Concepts course is designed to take PHP developers already working with Zend Framework to the next level by teaching them how to apply best practices when configuring and building applications for scalability, interactivity, and high performance.

- Learn how modularizing the MVC structure can increase efficiency in coding and facilitate team development when using Zend Framework (ZF)
- Produce Rich Internet Applications based on ZF that can incorporate valuable resources from other languages, such as support for the Dojo Toolkit
Design applications that improve your user's experience, both by providing an enhanced GUI presentation (reflecting ZF's internationalization and navigation components), and by providing faster-performing applications (utilizing ZF's caching, queuing, and Search Lucene components)

The course utilizes a hands-on approach with numerous examples and practical exercises, as well as a key development project, to enhance learning.

Audience:

Intermediate to advanced PHP developer who has used Zend Framework to complete at least 1 major web application.

Pre-requisite(s):

Participants must be proficient in:

- Object-Oriented Programming
- Model-View_Controller design pattern

Participants must be comfortable creating:

- Basic web applications based on Zend Framework
- Simple web forms, simple database interactions

Participants must be familiar with:

- Web Services
- Client - Server interaction
- Session Management
- Authentication and Access Control Mechanisms
- Plus all the other topics presented in the Zend Framework Fundamentals course

Objectives:

Upon completing the course, active PHP developers should be equipped to apply best practices when building and configuring applications for scalability, interactivity, and high performance.

Topics Include:

- **Review and Expansion of Core Concepts:** MVC design pattern, Zend_Db, Zend_Form, plugins
- **Development and Testing:** Zend_Application, Zend_Tool, Zend_Test
- **Rich Internet Applications:** Zend_Dojo, Zend_Soap_Server
- **Interactive Systems:** Zend_Mail, Zend_Feed, Internationalization, Zend_Pdf, Zend_Search_Lucene
- **Scalable, Flexible, and High Performance Systems:** Zend_Cache, MVC Modules, Zend_Navigation, Zend_Queue

Course Note:

There are some broad topics included within the scope of this course, such as Rich Internet Applications. Participants should note, however that these topics are discussed in terms of the related Zend Framework components and PHP, and therefore will not be covered in every aspect.

Course Information:

Duration: 20 hours – Online; 3 day – Classroom

Test Prep: Zend Framework Certification (ZFC)

The Test Prep: Zend Framework (ZF) Certification course prepares experienced developers who design and build PHP applications using ZF for the challenge of passing the certification exam and achieving the status of Zend Certified Engineer in Zend Framework (ZCE-ZF). **Please Note:** This is a Test Preparation course it does not teach ZF or PHP. It utilizes a special review format for presenting the material that mimics the exam experience.

The content is delivered at a fast pace through a series of quick reviews and corresponding quiz questions focused on the fourteen exam topic areas. The course also provides important information about the exam itself and strategies for answering the questions. This course is offered online - with a live instructor - for 16 hours (eight 2-hour sessions) or can be adapted for the classroom setting (3 days).

Audience:

This course is designed for experienced Zend Framework developers (intermediate-level +) who wish to gain information on how to take and pass the Zend Framework Certification exam while being guided through a quick, intense review of all of the major topics within the 14 certification areas.

Pre-requisite(s):

At least intermediate-level knowledge of the fourteen topic areas.

Objectives:

Preparation for the Zend Framework Certification Exam

Topics Include:

- **Introduction:** Why Certification; Exam Essentials; Questions and Strategies; Certification Topic Areas
- **MVC:** Components, Pattern Basics, Bootstrap, Zend_Controller, Zend_Layout
- **Forms:** Zend_Form, Validation/Filtering, Decorators, Elements, Forms, Display Groups & Sub Form, Configuration, Internationalization
- **Database:** Zend_Db, Zend_Db_Statement, Zend_Db_Table, Zend_Db_Profiler, Zend_Db_Select, Table Data Gateway Pattern, Row Data Gateway Pattern
- **Authentication and Access:** Zend_Acl, Zend_Auth, Zend_Auth Adapters
- **Filtering and Validation:** Filtering Chains, Custom Filters, Standard Validation Classes, Validator Chains, Custom Validators
- **Web Services:** XML-RPC Client, XML-RPC Server, REST Client, REST Server, Zend_Service Web Services
- **Infrastructure:** Zend_Config, Zend_Session, Zend_Registry, Zend_Loader
- **Search:** Zend_Search_Lucene, Indexing, Querying, Performance
- **Mail:** Constructing, Storage, Message retrieval, Storage providers, Message sending
- **Internationalization:** Zend_Date, Zend_Translate, Zend_Locale, Zend_Currency, Zend_View_Helper_Translate, Internationalization Performance
- **Security:** Cross Site Request Forgery, Secure Authentication, Escaping for output, Cross Site Scripting, Security Best Practices
- **Coding Standards:** Coding conventions, Zend_Loader
- **Performance:** Zend_Cache, Script inclusion, Optimization, Zend_Memory
- **Diagnosis and Maintainability:** Zend_Debug, Zend_Log

Course Information:

Duration: 16 hours – Online; 3 day – Classroom

Zend Product Courses

Zend Server (ZSR)

The Zend Server Training Course provides an in-depth look at Zend Server, the complete, enterprise-ready Web Application server for running and managing PHP applications that require a high level of reliability, performance, and security. This course is designed to provide System Administrators or Operators (or individuals who fulfill similar functions) with the knowledge and confidence to successfully utilize Zend Server in their critical role of providing a stable, secure, and robust server environment to both internal and external users.

Audience:

System Administrators or equivalent; individuals responsible for setting up and managing PHP runtime environments and applications; for developers who also perform system administration functions; Development Managers and Professionals.

Pre-requisites:

Experience as a functioning System Administrator, or equivalent

Objectives:

After completing the course, participants will be prepared to:

- Maximize the availability and performance of their production environment
- Rapidly respond to any issues, and shorten the time to resolution
- Setup and provide their development staff with a Business-grade PHP environment

Topics Include:

- Administration
- Server Setup
- Rule Management
- Monitor
- Controller
- Optimizer+
- Caching
- Debugging
- Guard Loader
- Zend Download Server
- phpMyAdmin
- Zend Studio & Zend Framework
- Code Tracing
- Job Queue

Course Information:

Duration: 10 hours Online; 2 days – Classroom

Zend Studio (ZST)

The Zend Studio course is designed to provide PHP programmers with a practical, in-depth knowledge of the next generation tool in the Zend Studio IDE family. Zend Studio combines professional PHP development capabilities with the Eclipse plug-in extension technology, to create the world's most powerful PHP IDE.

This course simulates many of the major processes and challenges faced when developing an application, utilizing the Test-Driven Development approach as a best practice. In this context, the course presents an extensive treatment of the features offered by this leading IDE, many of which revolve around (require knowledge of) PHP, OO programming, and the MVC design pattern. The benefit of utilizing Zend Studio with the integrated Zend Framework and Zend Server is also discussed.

Audience:

Active web application developers. Please note that this course does not teach PHP or web application development. Rather, it focuses on how to fully exploit the features of Zend Studio to let you excel with your development projects.

Pre-requisites:

A working knowledge of PHP 5 and the basic tenets of Object-Oriented design.

Objectives:

At the conclusion of the course, participants will have:

- Explored the overall design and feature set of Zend Studio
- Utilized various IDE Perspectives and best practice approaches (Test-Driven Development, Task-Centric) to complete their development tasks more efficiently

Topics Include:

- Framework for Development: Model - View - Controller
- Coding the Application, including use of Templates, Bookmarks, PHPDoc
- Testing and Debugging Techniques
- Source Control
- Web Services (IDE-based)
- Instant and Server Debugging
- Database Integration

Course Information:

Duration: 10 hours - Online; 2 days – Classroom

Training Bundles

All A-to-Zend Online Training bundles are designed to help you learn PHP, depending on your current level of programming experience.

A-to-Zend for Non-Programmers

This package is designed for the novice programmers that want to acquire a solid foundation in the PHP programming language culminating in the PHP 5.3 Certification. It includes the following:

- PHP I: Foundations
- PHP II: Higher Structures
- Test Prep: PHP 5.3 Certification
- Zend PHP Certification Voucher
- Zend PHP 5.3 Certification Study Guide (PDF Version only)

A-to-Zend for IBMi Programmers

This package is designed for i5/OS programmers that not only want to learn to tie existing RPG applications to PHP, but also want to acquire a solid foundation in PHP culminating in the PHP 5.3 Certification. It includes the following:

- PHP I: Foundations (i5/OS Programmers)
- PHP II: Higher Structures
- Test Prep: PHP 5.3 Certification
- Zend PHP Certification Voucher
- Zend PHP 5.3 Certification Study Guide (PDF Version only)

A-to-Zend for OO/Proc Programmers

This package is designed for experienced OO/Procedural programmers who want to acquire a solid foundation in PHP and PHP best practices. It includes the following:

- Quick Start: PHP for OO/Procedural Programmers
- Building Security into your PHP Applications
- Test Prep: PHP 5.3 Certification
- Zend Framework: Fundamentals
- Zend PHP Certification Voucher
- Zend PHP 5.3 Certification Study Guide (PDF Version only)

A-to-Zend Framework

This package is designed for PHP programmers that want to acquire a solid foundation in utilizing Zend Framework culminating in the Zend Framework certification. It includes the following:

- Zend Framework: Fundamentals
- Zend Framework: Advanced Concepts
- Test Prep: Zend Framework Certification
- Zend Framework Certification Voucher (includes Zend Framework Certification Study Guide)

Additional Information

For all A-to-Zend online training bundles, we highly recommend that participants actively practice, for at least several months, what they have learned before attempting the next level.

You will need to register for each course separately and you will have one year to take all courses and the certification.

Training Units

Zend Training Units allows you (or your employees) the flexibility to take Zend training courses when and how you want it.

Consider Zend training units for you and your employees' if you need to plan for training in advance and are uncertain about the how many employees will need the training. Zend training units offer you the opportunity to build out a full learning plan for many employees and implement it over time. Save time and effort by getting approval for your training plan in advance instead of course by course.

Each training unit can be applied to any Zend Training course, including open-enrollment or private online and classroom courses, as well as onsite training classes.

Examples of Courses and corresponding Value for Online Training:

Online Training Course	Total Hours	Sessions	Value in Units (per student)
PHP I: Foundations	18	9	5
PHP II: Higher Structures	18	9	5
Test Prep: PHP 5.3 Certification	18	9	5
Quick Start: PHP for OO/Procedural Programmers	18	9	5
Zend Framework: Fundamentals	18	9	5
Zend Framework: Advanced	20	10	6
Building Security into your PHP Applications	6	3	3
Zend Server	10	5	4
Zend Studio	10	5	4

In the case of onsite training, travel & expenses are not covered by training units and billed separately at cost. You have up to one year to use your training units.

By Request

The following courses can be made available on special request:

Migrating Your Web Applications from PHP 4 to PHP 5 (MIG)

Quick Start: PHP for RPG Programmers (RPG)

Terms and Conditions

When enrolling in a Zend Technologies, Inc. (“Zend”) training course, the participant agrees to accept the following general Terms and Conditions as set out by Zend:

Registration

Registrations for a training course can be made by completing an online registration form available on the Zend website (www.zend.com), or available from a Zend representative or a Zend training partner. If a registration request cannot be filled, alternative dates and/or locations will be provided.

Zend limits class sizes to allow for the optimal training environment for the individuals taking the class. This ensures sufficient individual attention. Students may be interviewed prior to the class commencement to ensure that the level of the students are roughly the same to maintain the high quality of the training.

Course Fees and Payment Options

The course fee for public classes will be charged per participant for the entire course. Fees vary in accordance with the course level, duration, and delivery method. A listing of the course schedule and related fees are available on the Zend website. Onsite fees will be quoted by a Zend sales representative via a Zend quote.

Unless otherwise noted, course fees permit attendance at all the class sessions specifically designated for that course topic, date, and time period and any materials that have been created for all participants with the express purpose of facilitating the learning within the course. Any classes missed by the participant, through no negligence or technical issues caused by Zend, remain the responsibility of the participant, and “make-up” sessions are not available as part of the original fee paid. For on-site classes, fees do not include the cost of travel, accommodation, food, or any other extra services. Travel expenses will be charged to customer at cost.

Any discounts that may apply as part of an agreement or special promotion cannot be combined, unless specifically granted by Zend. Zend reserves the right to review and change course fees without notification. However, course dates that were booked prior to the price change, and for which Zend has received valid payment, will be honored at that fee that was applicable at the time of booking.

Zend accepts the following forms of payment:

- Purchase Order (net 30)
- Credit Card (Visa, MasterCard, American Express)
- Training Credits
- Bank Transfer

Payment terms for all invoices are 30 days from invoice date unless an alternative formal and approved arrangement has been made with Zend in writing. Zend reserves the right to remove any applicable discounts if a purchase order or equivalent has not been received 4 calendar weeks before a training delivery is due to begin.

For volume discounts applied to a specific customer, or large pre-payments made by a specific customer, the total purchase order amount will be invoiced by Zend upon receipt of the purchase order, or equivalent, and will be independent of when the training is delivered.

All pre-paid training credits must be used within 12 months of the purchase order date. If any credits are unused after 12 months of the purchase order date, Zend reserves the right to expire these credits and offer no refund of the training credits or their attributed financial value.

All fees will be considered earned as the work is completed unless courses are not taken within timelines specified.

Confirmation

For public courses, Zend will send a confirmation email, fax or letter to the participant and/or participant's company training contact once the completed registration and a valid form of payment have been received. Registrations for which a valid form of payment has not been received at least 3 days prior to the start of the course will not be confirmed and Zend reserves the right to release any unconfirmed seats, at any time, without notice.

Cancellation or Rescheduling Request by the Customer

For public courses, cancellations and rescheduling notifications must be made in writing at least 10 working days prior to the start of the course date. When requesting a rescheduled registration, the customer shall endeavor to reschedule the course for a mutually acceptable date no later than 12 weeks from the original requested start date of the course(s). There are no refunds for training course(s).

If a cancellation or rescheduling request is received less than 10 working days before the event, or in the case of absence without any notice, the stipulated training fee will be fully charged without further notification. The customer has the right to send another participant as a substitute, provided that any applicable prerequisites have been completed. This change in booking is free of charge. There are no refunds for partial use of services or partial attendance.

There are no refunds for training courses, training bundles or training units.

Cancellation or Rescheduling By Zend

For public courses, Zend may cancel or reschedule a training course if the number of participants is less than that specified for the relevant event with 7 days notice, or if an instructor is incapacitated through illness, or for other reasons of a serious nature.

If a participant is unable to attend as a result, any payment already made will be applied to the customer's account. All further claims are excluded. For on-site or classroom trainings, Zend shall not be liable for non-refundable travel arrangements if a course is cancelled or rescheduled.

Copyright / Intellectual Property Rights

The copyright in and all other intellectual property rights relating to the course documentation, and any other training materials provided to the course participants, are solely owned by and hereby reserved to Zend. Under no circumstances may the whole or any part of the course documentation be produced or copied in any form or by any means or translated into another language without the prior written permission of Zend. Training materials are defined to also include all electronic knowledge products or learning systems, which have been given to the participant on a storage device or made accessible via the Internet. Offenders are liable for payment of damages.

Waivers

For courses that have mandatory prerequisites, participants may apply for a waiver if they believe their existing knowledge and experience are sufficient to attend a Zend training course without having completed its prerequisites. Upon receipt of a waiver request, a Zend instructor will contact the participant to verbally assess his/her knowledge and experience in order to determine whether or not it is appropriate to provide the participant with a prerequisite waiver.

If the requested waiver is issued, it is the full responsibility of the participant to ensure that the knowledge and/or experience that s/he may lack does not disturb the other participants in the class. By accepting a prerequisite waiver, the participant accepts that any topics that would have been

part of one or more of the prerequisite course(s) will not be covered during or after the course for which s/he registered.

Course Content

Zend reserves the right to amend the content of any course without notice to the participants where, at the sole discretion of Zend, such amendment is deemed not to fundamentally change the content of such course.

All course content including: instructor presentations, supplemental materials and participant materials are only available in English. Although the instructor may use another language when verbally delivering the training, all course materials are only available in English.

Rules of Participation

Each student attending Zend courses shall comply with all regulations and procedures established and communicated for the course.

Software made available by Zend for training purposes must not be removed, nor may it be copied either wholly or in part or rendered useable in any other form for which consent has not been obtained.

Course materials provided by Zend and are intended for training purposes only.

Zend reserves the right to exclude (a) participant(s) from attending any course due to disorderly conduct, failure to observe any of Zend's rules of participation or failure to attend the prerequisite class(es) for a particular course without having obtained a valid prerequisite waiver. No refund of fees shall be paid to the participant or his/her employer in such circumstances.

Online Sessions:

Zend's online courses are delivered via the Zend Webex Training Center, using your internet connection and VOIP.

- Any Operating System with a browser, including Windows 9x/2000/XP, Mac OS 10.3.x or later, or go to: http://support.webex.com/support/system-requirements.html?_nfpb=true&_pageLabel=SystemRequirementsHome to check your system
- An Internet connection (56k and above)
- Speakers and microphone or a headset (if you want to be able to talk with the instructor via voice).
- For some courses, we have created a Virtual Machine using VMWare to provide you with a full, hands-on experience. The instructions for the VMWare information will be sent a few days prior to the start of the course and will require that you have it ready for the first day of the class.
- Participants are requested to login to the class 30 minutes before the start of class on the first day.

Classroom Sessions:

Participants are requested to come to the training site 30 minutes before the start of class on the first day. Participants and/or their supervisors are requested not to make return travel arrangements that may affect or disrupt the duration of the course.

The customer shall remain responsible for the activities and behavior of its participants while on Zend premises. The customer is liable to pay for any damage that is caused by their participant to any property belonging to Zend.

Equipment may not be used at any time for other reasons, and are not intended to provide Internet access.

Participants must not access or attempt to access any Zend computer-based data that is not specifically part of the training course.

Zend will not accept liability for any damage that may result from possible viruses on copied file disks or other external file storage devices. Disks, mobile hard disks, or any other external file storage devices brought in by participants must not be used on Zend's computers. Mobile phones must be switched off during class, and calls may only be made or received during class breaks so as to not disturb the instructor(s) and/or other participants.

On-Site Training:

The price of on-site and/or customized training shall be negotiated prior to the offering. For training at the customer's requested location, all travel, accommodation and living expenses for the instructor(s) must be paid for by the customer in addition to daily course cost, unless specifically agreed differently by the customer and the Zend Training Manager.

Quotes for on-site training delivery as issued by Zend shall be valid for 1 month, unless specifically agreed differently by the customer and the Zend Training Manager. The validity period applies to the price offered in the quote. A quote does not guarantee that Zend will have the necessary resources available to deliver the specified training at the requested time. Lead time is approximately 4 weeks.

In case of cancellation, notification must be received in writing. Zend charges a 50% cancellation fee for classes cancelled 10 or fewer business days prior to the start date of the course. Cancellations with less than 10 days notice are 100% non-refundable. In addition, any chargeable work already undertaken by Zend will also be charged to the customer. Any non-refundable expenses already incurred by Zend will be charged at cost to the customer.

In order to successfully deliver the onsite training, it is important that roles and expectations are clear to both Customer and Zend staff. These expectations are outlined below. Where appropriate, a single individual may fill several of the roles listed below. Zend reserves the right to use subcontractors in those roles it deems appropriate.

Customer is expected to provide prior to the commencement of the class:

- Someone readily available (Project Sponsor or Project Manager) to Zend who is familiar with the project, this proposal, and Zend's agreement with the customer, in order to resolve issues and facilitate communication expeditiously.

Training Room Requirements

- Instructor's workspace should be in front of the classroom
 - Students must utilize their own laptops for instructional purposes; some Zend training courses require specific software to be loaded for use during the training course.
 - Internet access for students and instructor (a hard-wired connection for the instructor is preferred)
 - Adequate power outlets & extension cords for all computers, monitors, and peripheral devices
 - A projector, and projection screen for the instructor's use, with video output connection
 - Training room must be set up before the start of the class and ready for instruction prior to beginning of class
 - Additional set up fee is charged at \$250.00 per hour to customer if the adequate setup has not been done prior to class commencement date and time.

If any classroom, classroom equipment, hardware or software provided by the customer for use by Zend in the delivery of training to the customer is not provided as agreed, Zend will not be

responsible for any associated inconvenience or disruption caused to the training delivery and reserves the right to invoice for the training delivery in full.

Warranties and Liabilities

While every effort is made by Zend to ensure that its course instructors are appropriately qualified and trained, Zend shall not be liable for any loss, cost or expense or for any special or indirect or consequential damages arising from negligence, misconduct or lack of skill in delivering the course(s). ZEND'S TOTAL LIABILITY TO CUSTOMER ARISING DIRECTLY OR INDIRECTLY FROM THE DELIVERY OF COURSES REGARDLESS OF THE FORM OF ACTION GIVING RISE TO SUCH LIABILITY (WHETHER IN CONTRACT, TORT OR OTHERWISE) SHALL NOT EXCEED THE AMOUNT ACTUALLY PAID BY A CUSTOMER FOR A COURSE. THE COURSES ARE DELIVERED "AS IS" WITHOUT ANY WARRANTY, WHETHER EXPRESS OR IMPLIED AND ZEND SPECIFICALLY DISCLAIMS ANY WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE.

Miscellaneous

Zend shall not be liable for any delay or failure to perform under this agreement if caused by conditions beyond its reasonable control. This agreement is governed by the laws of the State of California without regard to principles of conflicts of laws. Any proceedings under or in connection with this agreement shall be brought exclusively in state or federal courts sitting in the Santa Clara County, California. This agreement may not be assigned or transferred by the customer without Zend's prior written consent. Zend is permitted to assign its rights under this agreement. The relationship of Zend and the customer shall be that of independent contractors. Neither party has the authority to bind the other or to incur any obligation on behalf of the other party or to represent itself as the other's agent or in any way that might result in confusion as to the fact that the parties are separate and distinct entities. A waiver by either party of any provision of this agreement shall not be construed as a waiver of such provision. Each party shall retain the right to enforce any such provision in any subsequent breach. If any provision of this agreement is held to be invalid or unenforceable, the remainder of the provisions shall remain in full force and effect. The parties shall comply with the provisions of all applicable federal, state, county and local laws, ordinances, regulations and codes. This agreement constitutes the entire, complete and exclusive statement of the agreement between the parties pertaining to the subject matter hereof, and supersedes and cancels all prior oral and written agreements between the parties with respect to this subject matter. This agreement may not be changed in any way except by an instrument in writing signed by both parties. Any provisions of this agreement that, in order to fulfill the purposes of such provisions, need to survive the termination or expiration of this agreement, shall be deemed to survive for as long as necessary to fulfill such purposes.

Contact Information

Email: education@zend.com

Corporate Headquarters: Zend Technologies, Inc. 19200 Stevens Creek Blvd. Cupertino, CA 95014, USA • Tel 1-888-PHP-ZEND, 1-888-747-9363 • Fax 1-408-253-8801
Central Europe: (Germany, Austria, Switzerland) Zend Technologies GmbH Rosenheimer Strasse 145 b-c, 81671 Munich, Germany • Tel +49-89-516199-0 • Fax +49-89-516199-20
International: Zend Technologies Ltd. 12 Abba Hillel Street, Ramat Gan, Israel 52506 • Tel +972-3-753-9500 • Fax +972-3-613-9671
France: Zend Technologies SARL, 5 Rue de Rome, ZAC de Nanteuil, 93110 Rosny-sous-Bois, France • Tel +33 1 4855 0200 • Fax +33 1 4812 3132
Italy: Zend Technologies, Largo Richini 6, 20122 Milano, Italy • Tel +39 02 5821 5832 • Fax +39 02 5821 5400

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