

# € TRAINING

PHP Language





# PHP Language

## Introduction:

The "PHP Language" course is designed to cater to experienced developers who want to enhance their skills in PHP programming. This advanced-level course will dive into sophisticated PHP concepts and best practices, empowering senior programmers to build robust, scalable, and secure web applications. Participants will gain insights into advanced PHP features, design patterns, and modern development techniques to elevate their expertise.

## Course Objectives:

- Master advanced PHP concepts and features.
- Understand design patterns and architectural principles for PHP applications.
- Learn modern PHP development techniques and tools.
- Enhance security measures to build more resilient applications.
- Gain hands-on experience through real-world projects and exercises.

## Targeted Audience:

This course is specifically designed for senior programmers with substantial experience in PHP programming. Participants should be familiar with basic PHP syntax, object-oriented programming, and have prior experience in building web applications.

## Course Outline:

### Unit 1: Advanced PHP Concepts

- Advanced array manipulation and functions
- Iterators and generators
- Namespaces and autoloaders
- Traits and their practical applications

### Unit 2: Design Patterns in PHP

- Understanding design patterns and their benefits
- Singleton, Factory, and Observer patterns
- Dependency Injection and Inversion of Control IoC
- Implementing design patterns in real-world scenarios

### Unit 3: Modern PHP Development Techniques

- Introduction to Composer and package management
- Using PHP Standards Recommendations PSR
- Building RESTful APIs with PHP
- Asynchronous programming with PHP e.g., ReactPHP

### Unit 4: Security Best Practices

- Common PHP security vulnerabilities
- Secure authentication and authorization techniques
- Data sanitization and input validation
- Protecting against Cross-Site Scripting XSS and SQL injection attacks

## Unit 5: Real-World Projects and Best Practices

- Building a dynamic web application from scratch
- Implementing a modular architecture for maintainability
- Performance optimization and caching strategies
- Deployment and server configuration best practices