

**Course Name** : PHP AND MYSQL WEB FRAMEWORK DEVELOPMENT  
**Duration** : 3 Days (Physical Classroom / Virtual Live Instructor)  
**Skill Level** : Intermediate

#### COURSE DESCRIPTION:

Our PHP Certified Trainer will guide you through the intermediate to advanced level concepts of PHP and MySQL in this "PHP and MySQL Advanced" course. You will receive a comprehensive overview of object-oriented programming, as well as advanced web development methodologies like web services, security, and framework development. The course outcomes include the ability to:

- Implement the latest PHP concepts and language constructs.
- Apply object-oriented programming (OOP) principles to your applications.
- Handle databases using OOP.
- Retrieve and process data from web services.
- Master best practices and security measures.
- Develop your own custom PHP framework, similar to Laravel.

#### WHAT WILL YOU LEARN?

In this "PHP and MySQL Advanced" course, you will learn intermediate to advanced level concepts of PHP and MySQL, including:

- New PHP concepts and language constructs.
- Object-oriented programming (OOP) concepts and their application in PHP.
- Object-oriented database handling techniques.
- How to request and process data from web services.
- Best practices and security measures in PHP and MySQL.
- How to build your own custom PHP framework, similar to Laravel.

The course will be taught by a PHP Certified Trainer, who will provide a comprehensive overview of object-oriented programming, advanced web development methodologies like web services, security, and framework development.

#### PREREQUISITE:

The prerequisites for this "PHP and MySQL Advanced" course will likely include a solid understanding of the basics of PHP and MySQL.

#### METHODOLOGY:

This program will be conducted with interactive lectures, PowerPoint presentations, discussions, and practical exercises. This course can be conducted as instructor-led (ILT) or virtual instructor-led training (VILT).

#### JOB SCOPE:

Upon completion of this course, candidates may pursue the following career paths:

- Web Developer (PHP & Laravel)
- Backend Developer
- Full Stack Developer
- PHP Developer
- Software Developer

## DAY 1

### **MODULE 1: INTRODUCTION**

- Welcome
- What is PHP
- Why use PHP
- Installation
- Setup Development Environment

### **MODULE 2: PHP SYNTAX REVIEW**

- Tags
- Comments
- Whitespace
- Code Blocks
- Language Constructs
- Data Types
- Variables & Constants
- Operators
- Control Structures & Loops
- Arrays
- Functions

## DAY 2

### **MODULE 3: OBJECT ORIENTED PROGRAMMING**

- Introduction to OOP
- Create a Class
- Class Constants, Properties and Methods
- Object Instances
- Member Visibility
- Static Properties and Methods
- Inheritance
- Overriding
- Magic Methods
- Class and Method Abstraction
- Object Interface
- Type Hinting
- Traits
- Namespace
- Object Cloning and Comparison
- Functions That Work with Classes
- Exceptions

## MODULE 4: OBJECT ORIENTED DATABASE HANDLING

- Type Casting
- Variable Variables
- Inspecting Variables
- Determining If a Variable Exists
- Determining If a Variable is Empty
- Constants

### DAY 3

## MODULE 5: WEB SERVICES

- Web Services
- Data Formats
- Parsing APIs
- Web Service Requests
- Soap Services
- RESTful Services

## MODULE 6: PROJECT: BUILD YOUR OWN PHP FRAMEWORK

- MySQL 101
- Classes 101
- Intro to PDO
- PDO Refactoring and Collaborators
- Hide your Secret Passwords
- Make a Router
- Dry Up your Views
- Array Filtering
- Forms, Request Types, and Routing
- Dynamic Inserts with PDO
- Composer Autoloading
- Our First DI Container
- Refactoring to Controller Classes
- Switch to Namespaces
- Final Touch

## CONCLUSION

- QA
- Useful References and Books
- Feedback