

Course Name : **MASTERING CODEIGNITER FRAMEWORK**
Duration : **4 Days (Physical Classroom / Virtual Live Instructor)**
Skill Level : **Beginner**

COURSE DESCRIPTION:

Embark on a transformative 4-day journey into CodeIgniter v3, a powerful PHP framework designed for the rapid development of web applications. Day 1 introduces you to the core concepts of CodeIgniter, from installation and directory structure exploration to configuring routes and URLs. You'll dive into creating dynamic views using the built-in templating engine and leveraging helpers and libraries for common tasks, setting a solid foundation for your journey ahead. Day 2 delves into Controllers and Routing, empowering you to handle HTTP requests, implement RESTful APIs, and master CodeIgniter's routing system for seamless navigation. As the course progresses, Day 3 deepens your understanding of Models and Database Interaction, covering database configuration, CRUD operations, validation, and transactions, ensuring robust data management within your applications.

Finally, Day 4 ventures into Advanced Topics and Libraries, equipping you with essential skills in form handling, file management, caching, and security measures. You'll also learn to integrate third-party libraries, write unit tests, set up continuous integration, and deploy your CodeIgniter applications to various hosting environments, ensuring they are both efficient and secure. By the end of this comprehensive course, you'll emerge with the expertise and confidence to architect, deploy, and maintain dynamic web applications with CodeIgniter v3, ready to tackle real-world development challenges head-on.

WHAT WILL YOU LEARN?

In this intensive 4-day course on CodeIgniter v3, you'll gain a comprehensive skill set essential for proficient web development. Starting with fundamental concepts, you'll grasp the framework's intricacies, install and configure it, and navigate the application directory structure. Progressing, you'll learn to create dynamic views, configure routes, and utilize helpers and libraries efficiently. As the course advances, you'll delve into controllers, routing, and RESTful API implementation, alongside authentication and authorization mechanisms. You'll then master models, database interactions, and advanced topics such as form handling, file management, caching, and security measures.

PREREQUISITE:

Beginners. Knowing PHP is an added advantage.

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:

- CodeIgniter Developer
- Backend Developer
- Full Stack Web Developer
- Web Developer

DAY 1: INTRODUCTION TO CODEIGNITER 3

- Welcome
- Understanding the CodeIgniter framework and its features
- Installing and setting up CodeIgniter v3
- Exploring the application directory structure
- Configuring routes and URLs
- Creating and rendering views using the built-in templating engine
- Using helpers and libraries for common tasks

DAY 2: CONTROLLERS AND ROUTING

- Creating controllers and actions
- Handling HTTP requests and responses
- Implementing RESTful APIs
- Utilizing CodeIgniter's routing system
- Working with request data and parameters
- Implementing authentication and authorization

DAY 3: MODELS AND DATABASE INTEGRATION

- Configuring database connections in CodeIgniter
- Creating models and defining relationships
- Performing CRUD operations using CodeIgniter's Active Record
- Implementing validation rules and callbacks
- Utilizing CodeIgniter's query builder for complex queries
- Understanding transactions and database migrations

DAY 4: ADVANCED FEATURES, TESTING & DEPLOYMENT

- Implementing form handling and validation
- Working with sessions and cookies
- Uploading files and handling file management
- Utilizing caching for improved performance
- Integrating third-party libraries into CodeIgniter
- Implementing security measures against common vulnerabilities
- Writing unit tests with PHPUnit and CodeIgniter's testing framework
- Testing controllers, models, and views
- Setting up continuous integration for automated testing
- Preparing your CodeIgniter application for deployment
- Deploying to a hosting environment (e.g., shared hosting or cloud platforms)

CONCLUSION

- QA
- Useful References and Books
- Feedback