



Marwadi University

Master of Science (Information Technology)

Semester III

Subject Code: 02MS0304

Subject Name: (Elective-II) Advanced PHP

Learning Objectives:

Understanding the Model View Controller Architecture and developing efficient and optimized websites using is the recent need from IT and IT enabled industry. The course enables the student to master such skills of web programming using CodeIgniter (CI) Framework and satisfy the requirements of industry. Aim of the course is to enable students to

1. Clear understanding of MVC.
2. Understand and learn CodeIgniter Framework and its various features.
3. Learn MVC, develop web applications using CI framework for real life

Prerequisites:

1. Knowledge of web page and web programming
2. Object oriented programming concepts
3. RDBMS

Unit	Course Content	Hours
1	Model View Controller (MVC) What is MVC?, MVC architecture for web developers, benefits of MVC, MVC Design Patterns Case Study : Comparative analysis of popular MVC frameworks for PHP website development CodeIgniter Framework Overview, Installation Introduction to CI framework, Installing CI, Folders overview, "Hello World" Example, Passing the complex parameters to view, the database query by a model rendering results to a view, interactive contact forms	08
2	Application Architecture, CI-MVC Framework Directory structure, CI as MVC framework Code Igniter Basic Concepts Controllers - Creating Controllers, calling a controller, Views - Loading the view Models- crating model class, loading model, auto-loading models Helpers- loading helper, Routing, customize routing rules, WildCards, regular expressions CodeIgniter Configuration CI directory tree - config.php, database.php, routes.php Defining and using your own configurations, Understanding and using CI naming conventions - The main resource type naming rules, Controller definition naming rules, Miscellaneous naming conventions	08
3	Controller Usage and Scope Scope of the CI controller, The user-defined CI controller, CI controller use cases, the default homepage controller, sending e-mails with attachments, admin and regular user log in	06
4	Libraries	12



Marwadi University

Master of Science (Information Technology)

Semester III

Subject Code: 02MS0304

Subject Name: (Elective-II) Advanced PHP

	<p>The CI libraries' scope and usage, using the built-in libraries, using third-party libraries such as the Google Maps CI library wrapper, – building a library such as the Flickr API wrapper, the LinkedIn API wrapper</p> <p>Helpers CI helpers' scope and usage, using built-in helpers, – SSL helper, building your own helper</p> <p>Models Scope of the CI model, Object Relational Mapping (ORM), CRUD example, business logic example, retrieving data from Facebook</p> <p>Views Scope of the CI view, Accessing the libraries/helpers, HTML5 location powered by Google Maps, user feedback powered by AJAX and the jQuery UI</p>	
5	<p>Working with Databases Connecting with database, manipulating database using CI, examples</p> <p>Addon Programming with CI Error handling, sending email, form validation, session management,flashdata, tempdata, Cookie Management, Page caching, Page redirection, Application profiling, benchmarking, adding JS and CSS</p> <p>Internationalization and Security Creating language files, loading language file, fetching language text, autoload languages, XSS prevention, SQL Injection prevention, Hiding PHP errors, CSRF Prevention, Password handling</p>	14

Text Book(s):

1. "Pro PHP MVC"; Chris Pitt; Apress
2. "Programming with CodeIgniter MVC"; Eli Orr, Yehuda Zadik; PACKT publishing

Online References:

1. <http://www.tutorialspoint.com>

Accomplishment of the student after completing the course :

Students should be able to

- Understand and learn the MVC based approach of web programming
- Aware about working and architectural model of CodeIgniter Framework
- Develop real life web applications using CodeIgniter with keeping balance between efficiency and flexibility with optimization of websites.