Certificate Course in PHP Programming (CCPHP)

Duration: 2 Months (Part-Time/Regular)

Course Overview

The Certificate Course in PHP Programming (CCPHP) is designed to provide students with practical knowledge and skills in web development using PHP. This course covers fundamental and advanced concepts of PHP programming, database connectivity with MySQL, and integration of PHP with HTML, CSS, and JavaScript. Students will gain hands-on experience in building dynamic websites, form handling, user authentication, and basic

content management systems.

Course Objectives

1. To introduce students to the basics of PHP and server-side scripting.

2. To develop the ability to integrate PHP with HTML, CSS, and MySQL for dynamic web

applications.

3. To provide practical exposure in handling forms, sessions, and file uploads.

4. To familiarize students with error handling, security practices, and debugging

techniques in PHP.

5. To prepare learners for real-world project development using PHP.

Course Outcomes

After completing this course, students will be able to:

1. Understand PHP syntax, functions, and programming logic.

2. Build dynamic and interactive websites using PHP and MySQL.

3. Implement form handling, validation, and secure data storage.

4. Create session-based applications with authentication and authorization.

5. Develop a mini-project or basic web application as a capstone.

Course Syllabus

Module 1: Introduction to PHP

- What is PHP? Features and Advantages
- Installation & Setup (XAMPP/WAMP)
- PHP Syntax, Variables, Data Types, and Constants
- PHP Operators and Expressions

Module 2: Control Structures and Functions

- Conditional Statements (if, if-else, switch)
- Loops (for, while, do-while, foreach)
- PHP Functions (User-defined & Built-in)
- Scope of Variables (local, global, static)

Module 3: Working with Forms and Strings

- Creating and Handling HTML Forms with PHP
- \$_GET and \$_POST Superglobals
- Form Validation Techniques
- String Manipulation Functions

Module 4: Arrays and File Handling

- Indexed, Associative, and Multidimensional Arrays
- Array Functions in PHP
- File Handling (read, write, append, upload)
- Handling CSV and Text Files

Module 5: PHP and MySQL Database Connectivity

- Introduction to MySQL Database
- Connecting PHP with MySQL (MySQLi / PDO)
- CRUD Operations (Insert, Read, Update, Delete)
- Prepared Statements and SQL Injection Prevention

Module 6: Session, Cookies, and Authentication

- Understanding Sessions in PHP
- Working with Cookies
- User Authentication (Login/Logout)

• Password Hashing and Secure Authentication

Module 7: Error Handling and Security

- Error Types in PHP
- Try, Catch, and Exception Handling
- PHP Security Best Practices
- Data Sanitization and Validation