

OILab

Full Stack Web Development Program

Course Overview

This comprehensive program is designed to transform beginners into industry-ready full stack developers. Students will learn modern web development technologies including HTML, CSS, JavaScript, PHP, Laravel, and MySQL while building real-world projects. The course focuses on practical coding, AI-assisted development tools, and deployment skills required in the modern tech industry.

By the end of the program, students will be able to design, develop, and deploy fully functional web applications.

Course Curriculum

Module 1: Introduction to Web Development

- How the Internet Works
- Client vs Server Architecture
- Introduction to Frontend & Backend
- Setting up Development Environment
- Code Editors (VS Code)
- Version Control Basics (Git & GitHub)

Module 2: HTML5 Fundamentals

- HTML Structure & Semantic Elements
- Headings, Paragraphs, Lists
- Images, Links & Media
- Tables & Forms
- Input Types and Form Validation
- SEO Basics with HTML

Module 3: CSS3 & Responsive Design

- CSS Selectors & Properties
- Box Model & Layout
- Flexbox & Grid
- Responsive Design
- Media Queries
- CSS Animations & Bootstrap

Module 4: JavaScript Essentials

- Variables & Data Types
- Operators & Conditions
- Loops & Functions
- DOM Manipulation
- Events Handling

- Form Validation

Module 5: Advanced JavaScript

- Arrow Functions
- Array Methods
- Promises & Async/Await
- Fetch API & AJAX
- JSON Handling
- API Integration

Module 6: PHP Fundamentals

- PHP Syntax & Variables
- Control Structures
- Functions
- Working with Forms
- Sessions & Cookies
- File Upload Handling

Module 7: MySQL Database

- Database Design Basics
- CRUD Operations
- SQL Queries
- Joins & Relationships
- Connecting PHP with MySQL

Module 8: Laravel Framework Basics

- MVC Architecture
- Laravel Installation
- Routing
- Controllers & Views
- Blade Template Engine

Module 9: Laravel Advanced Features

- Database Migrations
- Eloquent ORM
- CRUD Applications
- Authentication System
- Middleware
- RESTful APIs

Module 10: Frontend Integration

- Bootstrap with Laravel
- JavaScript Integration
- AJAX with Laravel

- Dynamic UI Development

Module 11: Security & Best Practices

- Web Security Basics
- CSRF Protection
- SQL Injection Prevention
- Authentication & Authorization
- Data Validation

Module 12: Deployment & Hosting

- Production Setup
- GitHub Project Management
- Shared Server / VPS Hosting
- Domain & SSL Setup
- Laravel Deployment

Capstone Projects

- Portfolio Website
- Blog Management System
- E-commerce Website
- Admin Dashboard System

Certification & Career Support

- Course Completion Certificate
- Resume Building Guidance
- GitHub Portfolio Creation
- Interview Preparation
- Freelancing Basics