



TECHNOCATION FREELANCING TRAINING INSTITUTE & SOFTWARE HOUSE

Professional Drupal Course Outline

Module 1: Introduction to Drupal

- Overview of Drupal CMS & Its Ecosystem
- Drupal vs. Other CMS (WordPress, Joomla)
- Understanding Drupal's Core Architecture
- Installing Drupal (Localhost, Server, Cloud)

Module 2: Drupal Site Building & Content Management

- Exploring the Drupal Admin Interface
- Managing Content Types, Fields & Taxonomies
- Using Blocks & Custom Layouts
- Creating & Managing Menus & Navigation

Module 3: Drupal Theming & Frontend Development

- Drupal Theme Architecture & Twig Template Engine
- Creating Custom Themes from Scratch
- Using CSS, SASS, and JavaScript in Drupal
- Responsive Design & Mobile Optimization

Module 4: Drupal Module Development

- Introduction to Custom Module Development
- Understanding Hooks & Events in Drupal
- Working with Drupal API & Services
- Creating Custom Blocks & Forms

Module 5: User Management & Permissions

- Configuring User Roles & Permissions
- Managing Authentication & Access Control
- Implementing Single Sign-On (SSO) & OAuth
- Enhancing Security with Captcha & Two-Factor Authentication

Module 6: Drupal SEO & Performance Optimization

- URL Aliasing & Pathauto for SEO-Friendly URLs
- Metadata & Schema Markup for SEO
- Caching Strategies (Varnish, Memcache, Redis)
- Image Optimization & Lazy Loading

Module 7: Drupal Security Best Practices

- Understanding Drupal's Security Model
- Preventing SQL Injection & Cross-Site Scripting (XSS)
- Updating & Patching Drupal Core & Modules
- Implementing Secure File Permissions & Backups

Module 8: Drupal E-Commerce (Drupal Commerce)

- Introduction to Drupal Commerce & Features
- Configuring Product Types, Orders & Payments
- Payment Gateway Integration (PayPal, Stripe)
- Managing Taxes, Discounts, and Checkout Customization

Module 9: Headless Drupal & API Integrations

- Introduction to Decoupled Drupal & Headless CMS
- Working with JSON:API & GraphQL
- Integrating Drupal with React/Vue.js Frontends
- Using REST API for External Data Exchange

Module 10: Multisite & Multilingual Drupal

- Setting Up Drupal Multisite Architecture
- Managing Multiple Websites from One Installation
- Implementing Multilingual Features & Content Translation
- Configuring Language Switchers & Locale Settings

Module 11: DevOps & Deployment for Drupal

- Setting Up Drupal on AWS, Azure, or GCP

- Version Control with Git & CI/CD Pipelines
- Automated Testing & Quality Assurance
- Performance Monitoring & Load Testing

Module 12: Final Project & Certification Preparation

- Building a Complete Drupal Project from Scratch
- Debugging & Troubleshooting Common Issues
- Preparing for Acquia Drupal Certification
- Best Practices for Drupal Maintenance & Upgrades