

VSCODE SYLLABUS

Module 1: Introduction to VS Code

- What is VS Code and its features
- Installing Visual Studio Code
- Overview of interface (Explorer, Editor, Terminal, Extensions)
- Opening folders and workspace setup

Module 2: Editor Basics

- Creating and editing files
- Tabs and split editor
- Basic keyboard shortcuts
- File navigation and search

Module 3: Extensions & Marketplace

- Installing extensions
- Popular extensions (Prettier, Live Server, ESLint)
- Managing extensions
- Customizing development environment

Module 4: Integrated Terminal

- Using terminal in VS Code
- Running commands
- Managing multiple terminals
- Shell configuration

Module 5: Debugging

- Introduction to debugging
- Setting breakpoints
- Debug console
- Step-by-step execution
- Debugging JavaScript applications

Module 6: Version Control (Git Integration)

- Git basics in VS Code
- Cloning repositories
- Committing changes
- Branching and merging
- Resolving conflicts

Module 7: Code Formatting & Linting

- Using Prettier for formatting
- ESLint for code quality
- Auto-formatting setup
- Code consistency practices

Module 8: Customization & Settings

- User vs workspace settings
- Themes and icons
- Keybindings customization
- Settings JSON configuration

Module 9: Snippets & Productivity

- Creating custom snippets
- Emmet shortcuts
- Multi-cursor editing

- Command palette usage

Module 10: Working with Projects

- Folder structure management
- Multi-root workspaces
- Project navigation
- Managing large projects

Module 11: Remote Development

- Remote SSH
- Working with containers
- Remote repositories
- Cloud-based development

Module 12: Language Support

- JavaScript/Node.js support
- Python support
- PHP support
- C/C++ support
- Installing language-specific extensions

Module 13: Testing & Task Automation

- Running scripts
- Task runner configuration
- Automating workflows
- Build tools integration

Module 14: Performance Optimization

- Improving VS Code performance
- Managing extensions efficiently

- Reducing memory usage

Module 15: Real-World Usage

- Setting up web development environment
- Debugging real projects
- Using VS Code with frameworks (React, Laravel)
- Productivity workflows