

Course Roadmap

Introduction

GitHub Copilot Primer and Environment Set Up

Feature Walkthroughs, 1 Hour Every Day

Day 1

Foundations &
Inline Code

Day 2

Conversational
Workflows

Day 3

Project-Wide
Intelligence

Day 4

Developer
Collaboration

Day 5

Code Edits &
Personalization

Day 6

Agents, Tools, &
Extensions


Optional

Day 7

Apply all Features
into common
Developer Use
Cases

Conclusion & Certificate

Course Roadmap – Day by Day Detailed

| Day | Feature # | Feature Name | Feature Description |
|---------------------------------|-----------|---|--|
| 1 – Foundations and Inline Code | F-01 | AI Code Completion (Ghost text + alternatives) | Real-time inline suggestions that complete the current line, block, or whole function; cycle through alt proposals. |
| | F-02 | Inline Code Actions (Explain / Fix / Move / Rewrite + “sparkle” icon) | Context-menu actions on selected code or error messages. |
| | F-03 | Multi-Environment Support | Availability in VS Code, Visual Studio, JetBrains, Neovim, Xcode, GitHub Mobile, Windows. |
| | F-04 | Copilot “Ask Mode” | Lightweight single-prompt variant of Chat (pop-up input ) that answers questions without opening the full sidebar—great for quick queries. |
| 2 – Conversational Workflows | F-05 | Copilot Chat (sidebar + history) | Chat panel for conversational Q&A, code generation, explanations, refactors, with scroll-back memory. |
| | F-06 | Slash-Command Interface (/explain, /fix, etc.) | Quick command prefixes inside Chat for common tasks. |
| | F-07 | Chat Context Anchors (@file, #selection, #terminal...) | Inline selectors to focus Chat on specific code or terminal context. |
| | F-07.1 | Model Selection (GPT-4 / GPT-3.5) | Dropdown to switch LLMs per task; discuss cut-off dates & cost trade-offs. |

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| 3 – Project-Wide Intelligence | F-08 | Semantic Code Search / Indexing | Instant repo-wide index enabling Chat to answer project-specific questions. |
| | F-09 | Next Edit Suggestions (Smart Actions) | Proactive gutter hints for follow-up edits after code changes. |
| | F-10 | Copilot CLI & Terminal | Natural-language shell help via GitHub CLI or @terminal agent in VS Code. |
| | F-11 | Copilot Chat in GitHub | Use GitHub Copilot chat within GitHub.com |
| 4 – Developer Collaboration | F-12 | AI-Assisted Code Reviews and Commit-Message Generation | “Explain / Review selection” to analyze diffs, request review comments, suggest concise commit messages |
| | F-13 | Pull-Request Summaries (ENTERPRISE) | One-click AI “High-level summary” for any PR on GitHub, auto-generate full PR descriptions from the diff inside IDE or GitHub. |
| | F-14 | Copilot Workspaces (Cloud PR view) | Cloud dev env that pre-loads branches/PRs with Copilot-powered insights. |
| | F-15 | Copilot Knowledge Bases (ENTERPRISE) | Attach curated internal docs/runbooks so Chat answers with private knowledge. |
| | F-15.1 | Provide Rich Context | Open relevant files, paste snippets, attach prompt files. |
| | F-15.2 | GitHub.com PR Edits | Use GitHub Copilot to explain diffs |

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| 5 – Code Edits & Personalization | F-16 | Copilot Edits | Multi-file Chat-driven edits with preview/approval workflow. |
| | F-17 | Copilot Vision | Paste screenshots/images—Copilot interprets UI, errors, diagrams, and responds. |
| | F-23 | Custom Instructions | Persist personal or org-wide style & preference guidance for all Copilot output. |
| | F-24 | Prompt Files | Markdown templates stored in repo to preload domain-specific context into Chat. |
| 6 – Agents, Tools, & Extensions | F-19 | Copilot Agent Mode | Autonomous mode that plans steps, edits files, runs commands, iterates to finish a goal. |
| | F-20 | Copilot Chat Extensions | Plugin framework for connecting Copilot Chat to external / internal tools or APIs. |
| | F-21 | Tools in Agents | Adding custom tools to GitHub Copilot |
| | F-22 | MCP Servers | Adding MCP servers to interact with GitHub Copilot |