

GitHub Copilot for programmers

Duration: 2 Days

Pre-requisite : Basic knowledge of programming

1.How Coding Benefits from AI

- Automating repetitive tasks
- Getting help with syntax
- Testing your programs
- Enhance your learning with AI
- Pair programming with AI

2.Introduction to Github Copilot

- Create a GitHub Account
- Acquire a GitHub Copilot License
- Install an IDE Extension
- First Run: Test Copilot

3.Programming with Copilot

- Engineering Prompts
- Chatting with Copilot
- Understanding slash commands
- Keyboard shortcuts
- Writing first program

4.Improving your Code

- Using AI for code formatting
- Refactoring with AI
- Making it readable and clean code
- Coding conventions
- Basic programming constructs
- Declaring and calling methods

5.Object Oriented programming with Copilot

- Understanding classes and Objects
- Abstraction and Encapsulation
- Inheritance and Interfaces
- Polymorphism
- Blending your code with AI Generated Code
- Understanding Project requirements
- Coding a prototype with Prompts
- Making a NumberGuessing Game

6.Finding and Eliminating Bugs

- What are Exceptions
- Exception Handling
- Reading and Writing to Files
- Using AI to find Bugs

7.Testing and Documenting Code

- Making a test plan
- Automating tests
- Practicing test driven development with AI
- Getting AI help with documentation