

GitHub Copilot (GH-300T00)

Duration: 1 day

Audience: Professionnel TI

Who is this training for?

This course is intended for AI developers and engineers who design and deploy AI systems and need to understand ethical implications and governance frameworks; data scientists and analysts who work with data and AI models and focus on ensuring transparency, fairness, and accountability; business leaders and managers who oversee AI projects and must implement responsible AI practices within their organizations; and policy makers and regulators responsible for creating policies and regulations that ensure AI systems are developed and used ethically and safely.

Training objectives

By the end of this course, students will be able to:

- Understand and apply the principles of responsible AI usage.
- Configure and troubleshoot GitHub Copilot in various development environments.
- Utilize GitHub Copilot's features for code suggestions and completions.
- Craft effective prompts to optimize GitHub Copilot's performance.
- Integrate GitHub Copilot into different programming languages and workflows.
- Enhance coding efficiency and productivity with advanced GitHub Copilot techniques.

Summary

This course explores the use of AI in the context of GitHub Copilot, a generative AI tool for developers. It equips users with the knowledge and skills to use Copilot effectively while mitigating potential ethical and operational risks associated with AI usage.

Course outline

Learning Path: GitHub Copilot Fundamentals

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Module 1: Responsible AI with GitHub Copilot

- Module 2: Introduction to GitHub Copilot
- Module 3: Introduction to Prompt Engineering with GitHub Copilot
- Module 4: Using Advanced GitHub Copilot Features
- Module 5: GitHub Copilot Across Environments: IDE, Chat, and Command Line Techniques
- Module 6: Management and Customization Considerations with GitHub Copilot
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- Module 7: Developer Use Cases for AI with GitHub Copilot
- Module 8: Develop Unit Tests Using GitHub Copilot Tools
- Module 9: Introduction to GitHub Copilot Business
- Module 10: Introduction to GitHub Copilot Enterprise
- Module 11: Using GitHub Copilot with JavaScript

Approach and methodology

Practical and structured approach combining focused theory and guided workshops. Participants gradually discover GitHub Copilot through hands-on exercises inspired by real-world development scenarios, promoting the immediate application of learned concepts.

They learn how to leverage AI-assisted coding, craft effective prompts, and integrate GitHub Copilot into development workflows to enhance productivity and code quality.

Led by a Microsoft Certified Trainer (MCT), the training emphasizes interactivity and the development of directly transferable skills for effectively using GitHub Copilot in a professional software development environment.

Prerequisites

Students should have the following knowledge and experience before attending this course:

- Basic understanding of programming concepts and experience with at least one programming language.
- Familiarity with integrated development environments (IDEs) and version control systems like GitHub.

- Foundational knowledge of AI and machine learning principles.

Recommendations

- Programming basics (Python, JavaScript, C#, etc.)
- Understanding of software development concepts (functions, classes, logic)
- Knowledge of Git / GitHub
- Use of a development environment (e.g. Visual Studio Code)
- Interest in generative AI applied to code

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