

Agentic Software Engineering using GitHub Copilot (GHAGENTS)

ID GHAGENTS Price CHF 1,990.—(excl. VAT) Duration 3 days

Who should attend

- Software Engineers interested in leveraging AI agents to enhance their coding productivity and capabilities
- Software Architects looking to understand how to integrate and manage AI agents within software development lifecycles
- Team Leads and Managers aiming to explore how AI agents can be utilized to optimize team workflows and project outcomes

Prerequisites

Experience with software development at a professional level

Course Content

Module 1: GitHub Copilot Fundamentals

- GitHub Codespaces / Dev Containers
- GitHub Copilot Introduction
- Selecting Models
- AI Assisted Coding
- Slash Commands & Agent Controls
- Context Variables
- Pull Requests & Code Reviews
- Management and Settings

Module 2: GitHub Copilot Artifacts & Tools

- Copilot Instructions
- Prompt Files
- Model Context Protocol
- Custom Agents
- Agents Overview
- Repository Agents
- Claude Agents
- Agent Skills
- Copilot Memory
- Understanding and Shaping GitHub Copilot's Context Window
- GitHub Copilot Hooks
- Agent Plugins
- Agent Debug Panel
- Creating Customizations from Chat

Module 3: Implementing Agentic Coding

- Using Local Agents and Agent Mode
- Delegating Tasks to Cloud Agents
- Using Background Agents
- Multi Agent Orchestration
- Using Anthropic Claude Code Agents
- Agentic Browser Automation

Module 4: GitHub Copilot CLI, SDK and Advanced Topics

- GitHub Copilot CLI
- Business Case: HR Document Updates Automation
- GitHub Agentic Workflows
- GitHub Copilot SDK
- Copilot SDK Demos
- Implementing & Using MCP Apps

Module 5: Agentic DevOps

- Automation using Azure CLI
- Azure Developer CLI (azd) Agentic Mode
- Infrastructure as Code (IaC) – Bicep & Terraform
- Azure DevOps Pipelines & GitHub Actions

Module 6: Spec-Driven Development Foundations

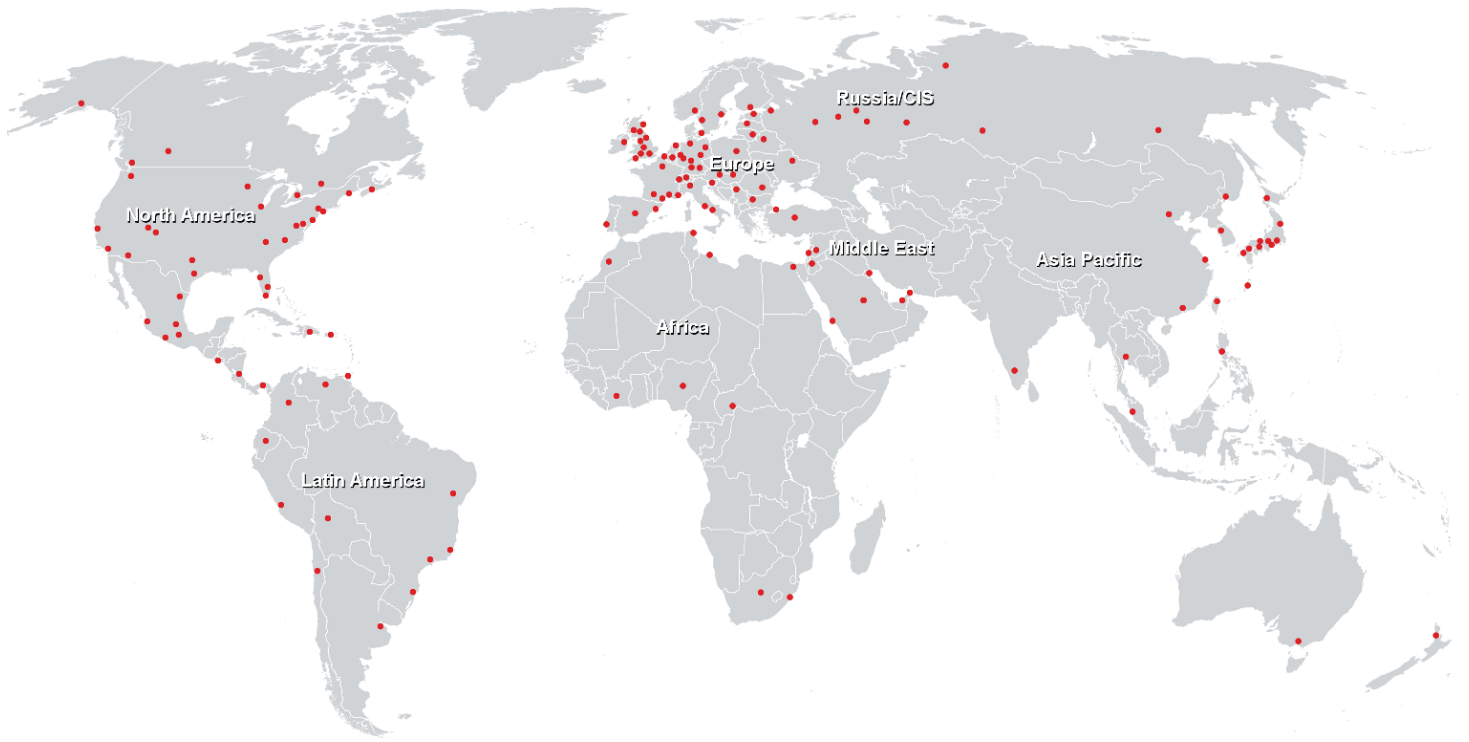
- Spec Driven Development
- Spec-driven workflow
- Constitution, Specification and Technical Plan
- Tasks & Implementation
- Getting Started with GitHub Spec Kit
- Exercise: Implement a product feature using GitHub Spec Kit

Module 7: Capstone Project: End-to-End Agentic Development

- Planning & Proof of Concept
- Orchestrating & Implementation
- Upgrading & Modernization
- Testing using Copilot
- Using Copilot for Documentation

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Training Centres worldwide



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