Agentic AI for Embedded C/C++ Engineering with GitHub Copilot

Apply Copilot agent mode, custom agents and MCP across the embedded C/C++ lifecycle, from legacy code to tested firmware.

DURATION	FORMAT	LEVEL	LABS
36 hours	Onsite, online or hybrid	Advanced	Cloud sandbox included

About this programme

A 36-hour live programme for experienced developers that applies GitHub Copilot to every stage of embedded software work: understanding and refactoring legacy C modules, coding to MISRA C and AUTOSAR guidelines, generating unit tests and documentation, and automating firmware builds. It covers the current Copilot toolset, from agent mode, custom instructions and custom agents to MCP servers and the cloud coding agent, and the review discipline that keeps AI output safe on constrained hardware.

Who it is for: Experienced embedded and systems developers, senior engineers and team leads working in C and C++

What your team will be able to do

- Configure Copilot with repository instructions, prompt files and custom agents that encode your coding standards
- Refactor and document legacy embedded modules with AI while checking memory, pointer and timing safety
- Generate unit tests, mocks and static-analysis fixes, and review every suggestion before it merges
- Connect Copilot to design tools, test runners and internal APIs through MCP servers
- Automate CMake builds, tests and release notes in GitHub Actions

Before you start

- Several years of professional C or C++ development
- A GitHub account with a Copilot Business or Enterprise licence, VS Code, Git and Docker installed

Course outline

We send the module-by-module outline with your proposal, adapted to your team's tools and goals.

Assessment and certification

How learning is checked

- A short knowledge check on day one and again at the end, so you can see each person's progress
- Graded hands-on labs in every module, reviewed by the trainer
- A final exercise that applies the programme to a problem like your team's own

Certificate and exams

- Participants who complete the programme receive a Cognitive Networks AI certificate of completion.

Formats and cohort size

- Onsite: At your office or a venue you choose, in full days.
- Online, live: Instructor-led over video, usually in half-day sessions so people can keep up with work.
- Hybrid: Some days in a room together, the rest online. Useful when a team works across cities.

Cohort size: 15 to 25 people per trainer. Larger teams run as parallel cohorts on the same outline, so everyone learns the same thing.

Pricing: We quote per cohort, based on duration, format and number of cohorts. There is no per-seat price list: tell us your team and we send a proposal within one business day.

Bring this programme to your team

Request a proposal at cognitivenetworks.ai/contact?programme=copilot-embedded-c-cpp

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