

SETUP GUIDE

Hands-on AI-Assisted Development Advance setup guide

Common to the IT track and the Mechanical and Electrical track

Prepared for TechnoPro, Inc. / Givery, Inc.

The items to prepare are sorted into 3 levels: Required, Recommended and Nice to have.

The training PCs this time are **loaned and have no administrator rights**, and the IT department's workload is already high, so we assume that installing software is difficult. This course therefore uses one setup, **write code in VS Code and run it in the browser**, to keep extra installation on the OS to a minimum. The libraries for data processing and chart drawing are bundled in the handout materials, so **no separate installation is needed**.

Level	Meaning	Installation on the OS
Required	Without this, the course cannot even start.	Practically zero
Recommended	With this, the hands-on course delivers the effect it aims for.	Not needed (VS Code extensions)
Nice to have	Not used in the course, but often used in real work.	Needed (can be skipped this time)

Required level

Without these, the course cannot even start. None of them needs a new installation on the OS.

The required level is covered by **VS Code itself (preinstalled) and VS Code extensions alone**. Installing extensions needs no administrator rights. So the course works with **practically zero new installations at the OS level**.

Item	Why it is required	Administrator rights	Arrangement (how to prepare it)
VS Code (application)	The base for writing code, and the place where GitHub Copilot runs. Without it, the course itself cannot begin.	Not needed	We recommend that your company preinstalls it on the training PCs. If that is difficult, the User Installer (under %LOCALAPPDATA%) installs it without administrator rights.
GitHub Copilot (sign-in)	The core tool of this course. VS Code 1.116 and later include Copilot Chat as standard , so no extra extension is needed (only for earlier versions, install <code>GitHub.copilot-chat</code>). Installing extensions needs no administrator rights.	Not needed	We issue the accounts and send the invitations. Participants only sign in on the day. We recommend VS Code 1.116 or later.
Modern browser (Edge / Chrome)	The environment that runs the apps and analysis tools (HTML) you generate. Required because the course uses a "write in VS Code, run in the browser" setup.	Not needed	The Microsoft Edge that comes with Windows is fine. No extra installation is needed.
Handout materials (ZIP)	Besides sample data and templates, the libraries for data processing and chart drawing are bundled . They run on the spot without installation.	Not needed	We distribute it in advance. Please make sure it can be extracted (unzipped).

Item	Why it is required	Administrator rights	Arrangement (how to prepare it)
Network access for Copilot	Copilot always communicates with the cloud. If a proxy or firewall blocks it, nobody can sign in and the course cannot take place . This is the most important item to check.	Not needed	Please register the hosts on the next page in your company's allowlist. See the "Network" section for details.

Recommended

These make the hands-on course more effective (all are VS Code extensions and need no administrator rights)

Japanese Language Pack No administrator rights

Not needed for the English course. Keep the VS Code display in English; the slides and guides use the English menu names.

If you already installed **japanese language pack** (publisher **Microsoft**), set the display language back to English with Configure Display Language.



Markdown PDF extension

No administrator rights

Turns analysis results and reports **into PDF with one click**. It makes the documentation work on Day 2 and Day 3 smoother. PDF conversion uses a browser, so **we provide a setting that makes it use the Edge already on the PC** (without the setting, it tries to download a browser for conversion, which may fail on a company network).

In Extensions, search for **markdown pdf** and select the publisher **yzane**

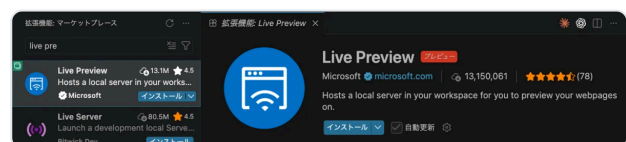


Live Preview extension (official Microsoft extension)

No administrator rights

Instant HTML preview inside VS Code. Fewer round trips to the browser speed up building mini apps and analysis tools.

In Extensions, search for **live preview** and select the publisher **Microsoft**



Nice to have

Not used in the course, but often used in real work

Item	How it is used in real work	Handling this time
Python 3.12+ (pandas, etc.)	A standard for data analysis and backends in real work. The Mechanical and Electrical track uses it for data analysis with pandas, and the IT track for backends such as FastAPI.	The course substitutes JavaScript in the browser . Installing it often needs administrator rights, so it can be skipped this time.
Node.js 20 LTS	A standard for web development and test automation (Jest / Playwright). Used mainly in the IT track when tests are run with a real test runner.	The course substitutes running in the browser . It can be skipped this time.

Network (details of the required items)

If there is a company proxy or firewall, allow HTTPS(443) traffic to the hosts below.

If even one of them is blocked, sign-in and Copilot responses fail. This directly means the course cannot take place, so please check connectivity in advance.

Hosts to allow	Purpose
github.com/login/*	Sign-in and authentication
api.github.com/user api.github.com/copilot_internal/*	Account and license check
copilot-proxy.githubusercontent.com origin-tracker.githubusercontent.com	Relay for inline suggestions and chat
.githubcopilot.com/	Copilot itself (inline suggestions, chat, agent)
*.individual.githubcopilot.com *.business.githubcopilot.com *.enterprise.githubcopilot.com	Hosts by plan
default.exp-tas.com	Feature flags
collector.github.com/* copilot- telemetry.githubusercontent.com/telemetry	Telemetry
*.githubassets.com / *.githubusercontent.com	Needed to show the sign-in screen (mentioned as a supplement in the official documentation)

Source: GitHub official "Copilot allowlist reference" (checked on July 30, 2026). In addition to the above, an environment with an authenticating proxy may need a proxy setting on the VS Code side (`http.proxy`).

Requests to your company (IT department), minimum 3 items

If these 3 are in place, the course works without extra installation.

- **Preinstall VS Code on the training PCs** (if that is difficult, installing it without administrator rights with the User Installer is also fine)
- **Register the hosts above in the allowlist** and check connectivity on 1 PC in advance
- Make sure **the handout ZIP can be extracted** (unblock unzipping and running)

Python and Node.js are kept at "Nice to have". **This curriculum is designed to work without them.**

Handouts

We provide 1 ZIP per course day, and it works on both Windows and Mac. Give this ZIP to every participant.

Extracting it creates a folder named `tpro-work`. If you put it on the desktop, it matches what is projected on the day.

Course day	Contents
Mechanical and Electrical track, Session 1	Sample inspection record, comprehension test, finished sample for Exercise 5, README
Mechanical and Electrical track, Session 2	Equipment data (Excel), data loader HTML, 3 libraries, README
Mechanical and Electrical track, Session 3	Equipment data (Excel), prompt collection, action plan sheet, 3 libraries, README
IT track, Session 1	Worklog app, sample specification, finished app, 3 libraries, README
IT track, Session 2	Worklog app, README
IT track, Session 3	Worklog app, judging script, code to review, sample CSV, template HTML, 2 libraries, README

If you can also extract the ZIP in advance, the day goes faster. If the ZIP is handed out as it is, part of the morning's working time goes to extracting it. If advance distribution is possible, we would appreciate it if you could extract it onto the desktop beforehand.

How the day runs

Each day is 8 hours: 3 hours in the morning and 5 hours in the afternoon, with two 10-minute breaks in between.

In the morning of Session 1, 110 minutes go to setting up the environment. The course is designed so that everyone can talk to Copilot before moving on. The afternoon is mostly hands-on, and you open what you built in the browser to check it.

What to tell participants

- Do not bring real work data, work files or screenshots of work screens. We provide the data for the exercises.
- Generalize client names, product names, project names and partner names to the level of industry and process.
- If you plan to use a personal device in addition to the training PC, let us know in advance.

The course conditions that are not yet fixed (lunch, how breaks are taken, how materials are distributed, how deliverables are collected, the format of the Certificate of Completion) are listed in the separate sheet "Items to confirm before the course". Please check it as well.
