

# Raspberry Pi Pico - Template for Python

**Note:** Once you have downloaded/cloned this repository, open it in Visual Studio Code and run > MicroPico > Configure Project command via Ctrl+Shift+P (or the equivalent on your platform) VS Code command palette to initialize MicroPico.

### Required Software (Windows/Mac-OS/Linux)

Name	Description	Link
Python	Python is an easy to learn, powerful programming language. It has efficient high-level data structures and a simple but effective approach to object-oriented programming. Python's elegant syntax and dynamic typing, together with its interpreted nature, make it an ideal language for scripting and rapid application development in many areas on most platforms.	https://www.python.org/
Visual Studio Code	Visual Studio Code is a lightweight but powerful source code editor which runs on your desktop and is available for Windows, macOS and Linux. It comes with built-in support for JavaScript, TypeScript and Node.js and has a rich ecosystem of extensions for other languages and runtimes (such as C++, C#, Java, Python, PHP, Go, .NET).	https://code.visualstudio.com/
Git	Git is a free and open source distributed version control system designed to handle everything from small to very large projects with speed and efficiency.	https://git-scm.com/

### **Required Visual Studio Code Plugins**

Name	Description	Link
Python	A Visual Studio Code extension with rich support for the Python language (for all actively supported versions of the language: >=3.7), including features such as IntelliSense (Pylance),linting, debugging, code navigation, code formatting refactoring, variable explorer, test explorer, and more!	https://marketplace.visualstudio.com/items? itemName=ms-python.python
Pylance	Pylance is an extension that works alongside Python in Visual Studio Code to provide performant language support. Under the hood, Pylance is powered by Pyright, Microsoft's static type checking tool. Using Pyright, Pylance has the ability to supercharge your Python IntelliSense experience with rich type information, helping you write better code faster.	https://marketplace.visualstudio.com/items? itemName=ms-python.vscode-pylance
IntelliCode	The Visual Studio IntelliCode extension provides AI-assisted development features for Python, TypeScript/JavaScript and Java developers in Visual Studio Code, with insights based on understanding your code context combined with machine learning.	https://marketplace.visualstudio.com/items? itemName=VisualStudioExptTeam.vscodeintellicode
MicroPico	"MicroPico" is a Visual Studio Code extension designed to simplify and accelerate the development of MicroPython projects for the Raspberry Pi Pico and Pico W boards. This tool streamlines the coding process, providing code highlighting, auto-completion, code snippets, and project management features, all tailored for the	https://marketplace.visualstudio.com/items? itemName=paulober.pico-w-go

Name	Description	Link
	seamless development	
	experience with MicroPython on	
	Raspberry Pi Pico and Pico W	
	microcontrollers.	

## Recommended Visual Studio Code Plugins

\_

Name	Description	Link
VSCode PDF	Display pdf in VSCode.	https://marketplace.visualstudio.com/items? itemName=tomoki1207.pdf
Python Indent	Correct Python indentation in Visual Studio Code.	https://marketplace.visualstudio.com/items? itemName=KevinRose.vsc-python-indent
Python Docstring Generator doc	Visual Studio Code extension to quickly generate docstrings for python functions.	https://marketplace.visualstudio.com/items? itemName=njpwerner.autodocstring
German Language Pack for Visual Studio Code	Das deutsche Sprachpaket bietet eine lokalisierte Benutzeroberfläche für VS Code.	https://marketplace.visualstudio.com/items? itemName=MS-CEINTL.vscode-language-pack-de

### **Optional Visual Studio Code Themes**

Name	Description	Link
Material Theme	Color Theme	https://marketplace.visualstudio.com/items? itemName=Equinusocio.vsc-material-theme
Material Icon Theme	lcon Theme	https://marketplace.visualstudio.com/items? itemName=PKief.material-icon-theme

#### Hochschule Anhalt | Anhalt University of Applied Sciences | Fachbereich 6 EMW

Prof. Dr.-Ing. Ingo Chmielewski Ingo.Chmielewski@HS-Anhalt.de

Tobias Müller, M. Eng. Tobias.Mueller@HS-Anhalt.de

© es-lab.de, 05.09.2023