Raspberry Pi Pico with Arduino IDE

If you prefer C/C++ over Micro Python, you can program the Pico using the Arduino IDE.

1. **Install the Arduino IDE**:
    - Download and install the Arduino IDE from arduino.cc.
2. **Install Raspberry Pi Pico Board Support**:
    - Open Arduino IDE, go to File > Preferences.
    - In the **Additional Board Manager URLs** field, add this URL

      https://github.com/earlephilhower/arduino-pico/releases/download/global/package_rp2040_index.json
3. Go to Tools > Board > Boards Manager, search for "Raspberry Pi Pico" and install the **Arduino Mbed OS RP2040** package.
4. **Select the Raspberry Pi Pico Board**:
5. Go to Tools > Board, and select **Raspberry Pi Pico/RP2040**.
6. Choose the correct port under Tools > Port.
7. **Upload Code**:
8. Write your code in C/C++ in the Arduino IDE.
9. Click **Upload** to compile and upload the code to the Pico.
10. The Arduino IDE will handle flashing the code onto the Pico.

Raspberry Pi Pico with Thonny IDE

Install Thonny:

- **Download Thonny from thonny.org and install it.**

Set up Thonny for MicroPython:

- **Open Thonny.**
- **Go to Tools > Options.**
- **In the Interpreter tab, select MicroPython (Raspberry Pi Pico) as the interpreter.**
- **Choose the appropriate port for your Raspberry Pi Pico (it should detect automatically if the Pico is connected).**

Run Code on the Pico:

- **Write your MicroPython code in Thonny's editor.**
- **Click Run to execute the code directly on the Pico.**
- **To save a script to the Pico, go to File > Save As and select MicroPython device.**

IF NO MICROPYTHON SELECTED DURING THONNY PLEASE DOWNLAOD IT AS BELOW.

Download **MicroPython** firmware:

- **Go to the MicroPython downloads page for the Raspberry Pi Pico.**
- **Download the .uf2 firmware file for your model of Raspberry Pi Pico.**

Flash MicroPython onto the Pico:

- **Press and hold the BOOTSEL button on your Raspberry Pi Pico, then connect it to your computer via USB.**
- **Release the BOOTSEL button once it's connected. The Pico should appear as a mass storage device (like a USB drive).**
- **Drag and drop the MicroPython .uf2 file onto the Pico drive. After copying, the drive will automatically eject, and the Raspberry Pi Pico will reboot into MicroPython.**