# SciOx Project Notes

## Setting up the ESP32

### 1 Connect the ESP32 to your computer

This is physically simple – use a USB-USB micro data cable.

### 2 Start Thonny, point it at the ESP32, and install Micropython on it

1. Click on “Thonny” in the menu bar
2. Select “Preferences…”
3. Click on the “Interpreter” tab
4. You’ll see a dropdown “Which kind of interpreter…”; click on it, and select “Micropython ESP32”. This tells Thonny that you want to use Micropython running on an ESP32 instead of Python running on your computer
5. Below that you will see Port or WebREPL – drop the list and select the correct port – we’ll tell you which one to use
6. Click on “Install or update Micropython (esptool)”
7. Wait until it’s done, then click “OK” to close the config window
8. The ESP32 will restart and you should see a prompt in the lower Shell window, something like

MicroPython v1.23.0 on 2024-06-02; Generic ESP32 module with ESP32

Type "help()" for more information.

>>>

1. You’re done with this step – try typing print(“hello!”) at the >>> prompt

### 3 Loading the libraries onto the ESP32

The ESP32 is a full-blown “proper” computer, with storage and files etc. on it. To make the code work, it has to have all the Python code that you want to use on it, or the Python interpreter will not be able to run it. This is a Bad Thing…

1. You will need the logging module, which is part of MicroPython but has to be loaded separately. At the >>> prompt, type

>>> import mip

>>> mip.install(“logging”)

That should just show you the prompt again. Check it has loaded by typing

>>> import logging

That should just show you the prompt again.

1. Now you need to load all the modules that are part of this project