

Introduction to IoT

Presentation

2. Setup Development Environment

- [Install Arduino IDE](#), for more information see the [Official documentation](#)
 - [Installing ESP8266 NodeMCU Board in Arduino IDE 2.0](#)
- [How to install CH340 driver - Driver Download Section](#)

3. Hardware Review

- Dev Board: Wemos D1 Mini
- Microcontroller: ESP8266 12-E Chip [ESP8266 hardware review](#)

4. Soldering

Here it gets practical! You need to solder the microcontroller and some of the sensors, which you will need in the next session.



Fig. 1: In Action at UNICAES

5. Coding Warm-up

Now let's check if your Microcontroller works. Also, you will learn how to upload your first sketch. Basic Blink example:

Blink.ino

```
void setup() {  
  // initialize digital pin LED_BUILTIN as an output.  
  pinMode(LED_BUILTIN, OUTPUT);  
}  
  
// the loop function runs over and over again forever  
void loop() {  
  digitalWrite(LED_BUILTIN, HIGH); // turn the LED on (HIGH is the  
  voltage level)  
  delay(1000); // wait for a second  
  digitalWrite(LED_BUILTIN, LOW); // turn the LED off by making the  
  voltage LOW  
  delay(1000); // wait for a second  
}
```

From:

<https://wiki.eolab.de/> - HSRW EOLab Wiki

Permanent link:

<https://wiki.eolab.de/doku.php?id=c4ta:iot-workshop:intro&rev=1725814433>

Last update: **2024/09/08 18:53**

