

Design Projects on Topics in Electrical Engineering

Week	Topic / Content	Week	Topic / Content
9	Overview <ul style="list-style-type: none"> - Microcontroller ESP32s (8266) - IDE / Simulator: Set board, Set speed, Debug - Basic Program => Hello world 	13	Display & Sensor <ul style="list-style-type: none"> - Display: LCD 4 lines, LED - Sensor: DHT, Voltage/Current sensor
10	Output <ul style="list-style-type: none"> - LED, motor - State transition diagram map to code 	14	IoT Application: show results to users <ul style="list-style-type: none"> - Blynk - Web Server - Netpie - Line chatbot
11	Input <ul style="list-style-type: none"> - Switch - State transition diagram map to code 	15	Quiz
12	Input & Output <ul style="list-style-type: none"> - Analog Out: PWM - Analog In: Interrupt driven 		

Assessment methods	Assessment week	Assessment score
Homework	9-13	15%
Quiz	12	5%
Final Exam	15	20%

1. Main Text

- Rui Santos and Sara Santos, “Learn ESP32 with Arduino IDE”, eBook Version 1.4.

2. Course Materials

- <https://github.com/sommedosa/Microcontroller-Course>