

# Teaching online electronics, microcontrollers and programming in Higher Education

# Output 2: Online Course for Microcontrollers: syllabus, open educational resources

Open project leaflet: Module\_2-5 Keypad 4x4

Lead Partner: International Hellenic University (IHU)

**Authors:** Theodosios Sapounidis [IHU], Aristotelis Kazakopoulos [IHU], Aggelos Giakoumis [IHU], Sokratis Tselegkaridis [IHU]



#### **Declaration**

This report has been prepared in the context of the ENGINE project. Where other published and unpublished source materials have been used, these have been acknowledged.

#### Copyright

© Copyright 2021 - 2023 the **ENGINE** Consortium

Warsaw University of Technology (Poland)

International Hellenic University (IHU) (Greece)

European Lab for Educational Technology- EDUMOTIVA (Greece)

University of Padova (Italy)

University of Applied Sciences in Tarnow (Poland)

All rights reserved.



This document is licensed to the public under a Creative Commons Attribution-NonCommercial-NoDerivatives 4.0 International License.

#### **Funding Disclaimer**

This project has been funded with support from the European Commission. This report reflects the views only of the author, and the Commission cannot be held responsible for any use which may be made of the information contained therein.

### **Table of Contents**

Executive su	mmary	4
Chapter 1:	Open project 1	5

# **Executive summary**

This file contains open project.

# Chapter 1: Open project 1

Draw a circuit in the Proteus Design Suite and write a suitable program that the PIC18F4550 functions as a simple calculator that can perform the 4 basic operations between 2 two-digit numbers. The PIC18F4550 is connected with a LCD 16x2 and a keypad 4x4.