C) Level Up

MASTER YOUR DIGITAL SKILLS

Prototype your tech idea using Microcontrollers

Odysseas Economides

Managing Director @ Robo, ByteWorks, HardwareX | Hardware & Software Tech | Focus on IoT & TinyML | 20 Under 30 SEMICON Europa Winner



Co-funded by the European Union

COURSE OVERVIEW

This course introduces participants to microcontrollers (MCUs), covering basic concepts, architecture, and real-world applications.

Attendees will set up and explore a simulation environment for developing and testing MCU-based projects, then build a simple prototype that integrates sensors and output devices to collect data and control actuators.

The hands-on approach will give participants practical experience in creating embedded systems, making it ideal for beginners and those looking to expand their understanding of MCUs in IoT and automation.





OUR GOALS

- **1.** Introduction to the world of MCUs.
- 2. Setup and overview of a simulation environment.
- 3. Develop a simple prototype of a tech idea using an MCU.
- 4. Learn to integrate sensors and output devices to collect data and actuate controls.

COURSE DESCRIPTION

This course provides an introduction to microcontrollers (MCUs), guiding participants through basic concepts, simulation setup, and hands-on prototyping with sensors and actuators for real-world applications.

Main topics:

- Introduction to MCUs basics and architecture
- Overview of popular MCUs (e.g., Arduino, STM32)
- Setting up and using MCU simulation environments
- Prototyping with MCUs: Building a basic project
- Integrating sensors and output devices for data collection and control

COURSE INFO

Location	Zoom
Date	13 November 2024
Time	14:00-17:00 CET (15:00-18:00 Cyprus time)
Duration	3 hours
Cost	Participation is fully funded by the European Union, under the Level Up Project



Odysseas Economides

Odysseas Economides holds a B.Sc. in Electrical Engineering from the University of Cyprus and is the founder of two startups: **ROBO**, which focuses on innovative electronics and robotics for education and research, and **HardwareX**, providing hardware services for research-based and industrial embedded systems.

He is fully dedicated to his entrepreneurial ventures, with expertise in rapid prototyping, low power embedded systems, and edge AI.



C) Level Up

Enroll Now

CONNECT WITH US

M. christiana@grantxpert.eu T. +357 22669266

VISIT US AT

https://www.grantxpert.eu/

VISIT US AT levelup-skills.eu



.

Co-funded by the European Union

This document was produced in the course of the Level Up project, which received funding from the Digital Europe Programme (DIGITAL) of the European Union under Grant Agreement no 101100679.

Views and opinions expressed are however those of the author(s) only and do not necessarily reflect those of the European Union or the European Health and Digital Executive Agency (HADEA). Neither the European Union nor the granting authority can be held responsible for them.