



## Lesson Plan Application of microcontrollers – examples

### **Topic/Subject:**

**Topic** Application of microcontrollers – examples

**Subject** Computer science, Electrical Fundamentals, Microcontrollers

### **Target Group:**

Students from 1st to 4th grade, aged between 15 - 18.

Students are of different technical occupations:

- mechatronics,
- CNC operators,
- mechanical technicians and
- mechanical computer technicians.

### **Objectives:**

Obj1. Raising student motivation and awareness through usage of modern technology

Obj2. Boosting the development of STEM skills

Obj3. Encourage the application of new technologies in practical work environments.

### **Approach/Methodology used:**

dialogical,  
game,  
project learning,  
change the place of learning  
learning to solve problems

### **Means/Tools/Educational technology**

Computers, the Internet, technical books, mobile phones, applications, IDE Arduino, Arduino uno, electrical components: LED lights, seven-segment digital display, electric motors, thermal sensors ...soldering iron, acid



# ROBOSTEM Project

Agreement no: 2019-1-RO01-KA202-063965



## Plan for work

Time	Activities	Methods/ means
10min	Presented to them what the application of microcontrollers looks like for different areas of technical applications, and where a more complex device based on microcontroller technology would be applicable.	Presentation Dialogical
30min	Students were to recreate the presented examples of teachers on their own.	dialogical, game, project learning, change the place of learning learning to solve problems

## Assessment/Feedback:

The assessment was based according to their success to recreate the same model/project.

## Bibliography:

<https://croatianmakers.hr/hr/stvaralastvo/>

<https://www.arduino.cc/>

[https://issuu.com/paolozenzerovic/docs/arduino ii. izdanje - issue](https://issuu.com/paolozenzerovic/docs/arduino_ii_izdanje_-_issue)

<https://www.hztk.hr/media/Automatika/AUTOMATIKADIO2.pdf>