Bootcamps for Emerging Technologies and essential Skills

BETES
Discover Technologies, expand opportunities!

Internet of Things

WORKSHOP

developed by: ECECT

Co-funded by the European Union

Funded by the European Union. 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 Education and Culture Executive Agency (EACEA). Neither the European Union nor EACEA can be held responsible for them.
Project Number: 2022-1-CY01-KA210-VET-000082706

Introduction to ARDUINO

Class code:
1.Goto
https://www.tinkercad.com/joinclass

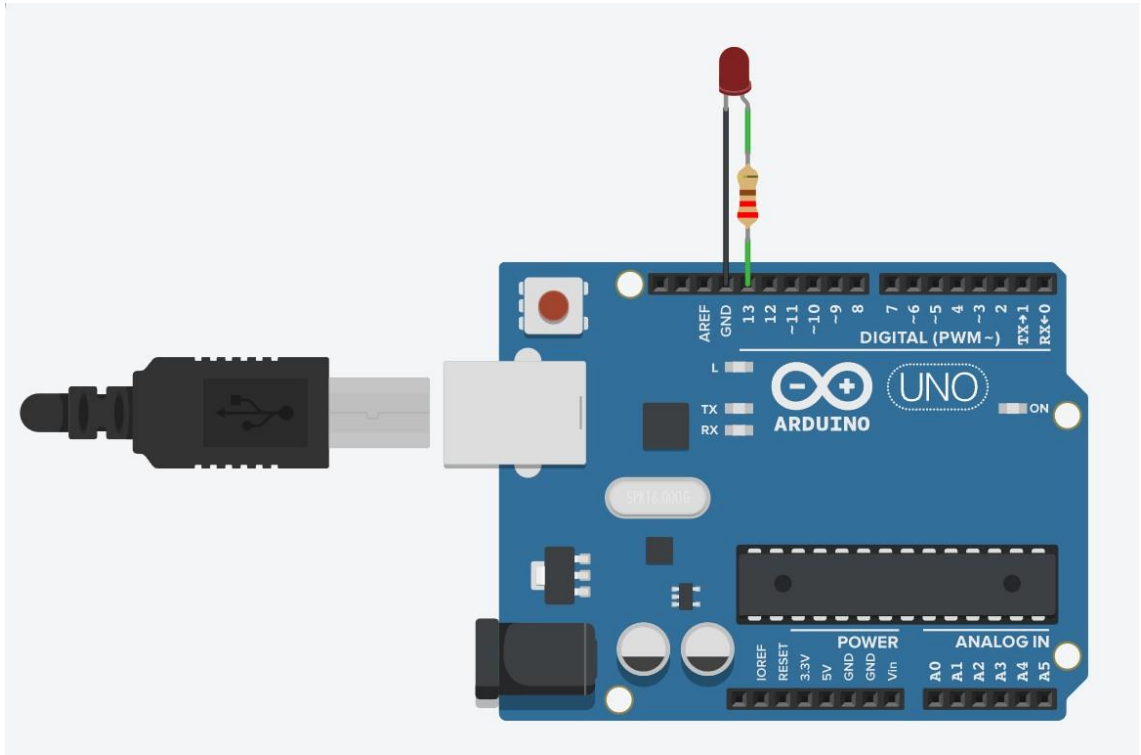
Enter the class code: U7QU48ZWB

https://www.tinkercad.com/joinclass/U7QU48ZWB

Co-funded by the European Union

Simple LED blink

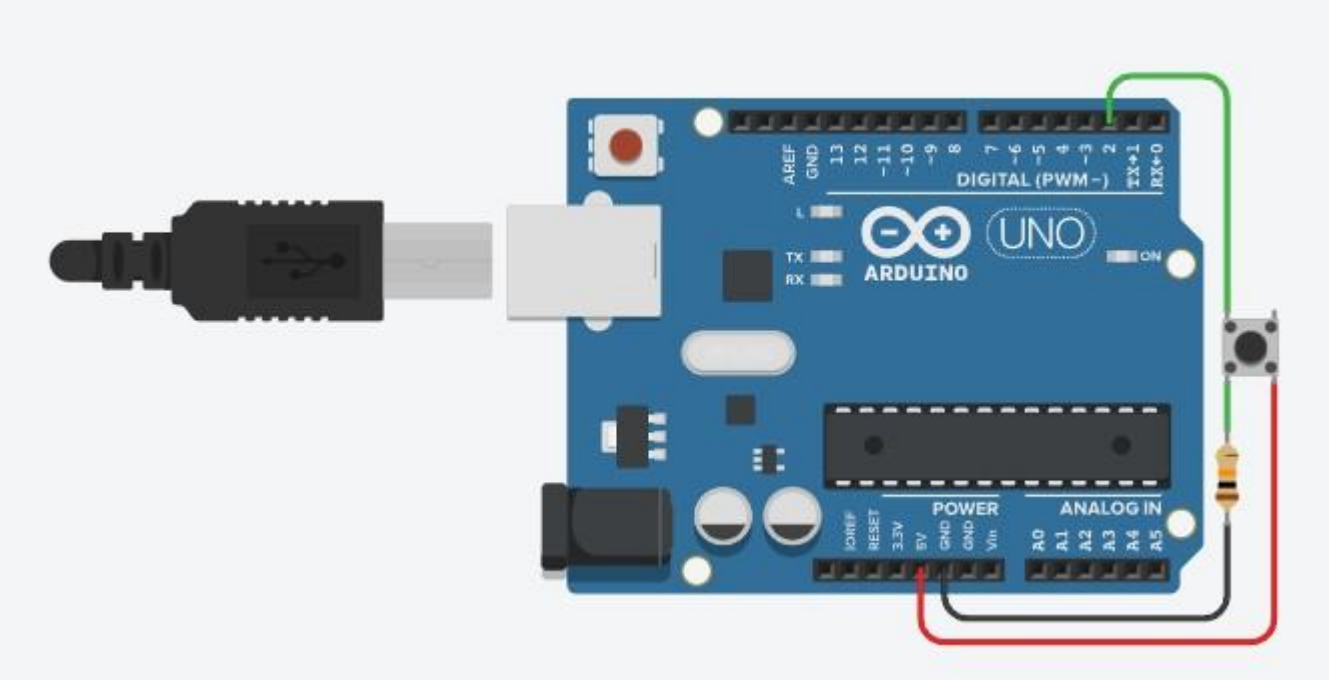
- Start simulation
- Check the code
  - PIN 13
  - HIGH
  - LOW
- Change the code
  - WAIT TIME
  - HIGH
  - LOW



Co-funded by the European Union

Using Serial Monitor / Digital Input

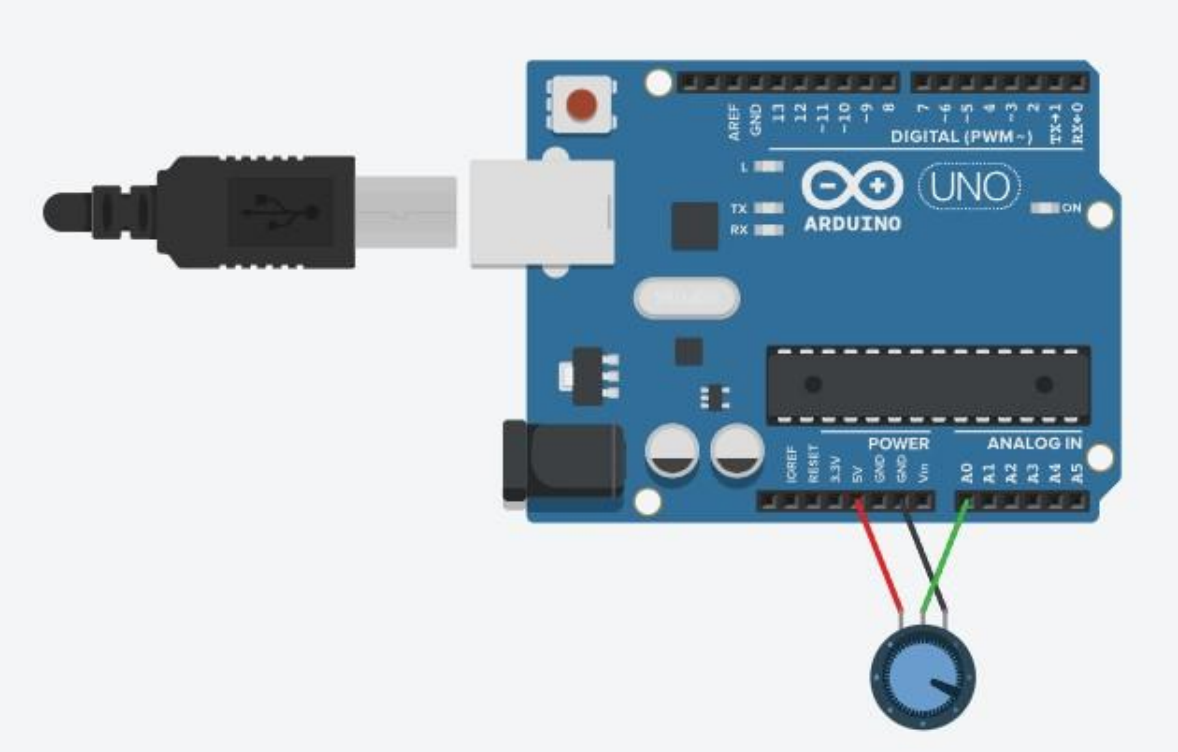
- Start simulation
- Check the code
  - Press the button
  - Check the Serial monitor
- Change the code
  - Check again



Co-funded by the European Union

Using Serial Monitor / Analog Input

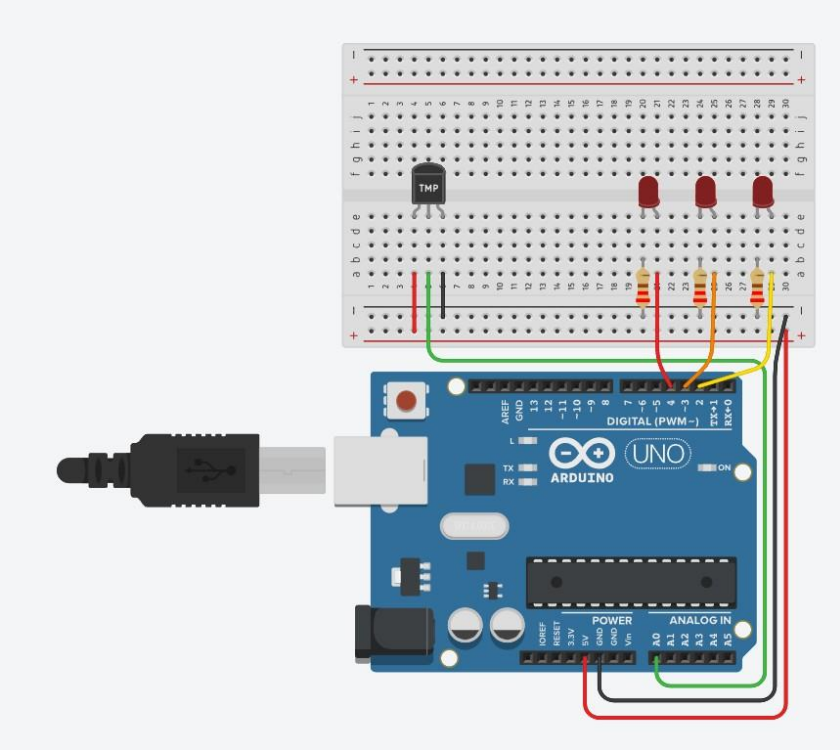
- Start simulation
- Check the code
  - Click on the potentiometer
  - Change the resistance
- Change the code



Co-funded by the European Union

Temperature Sensor / Analog input

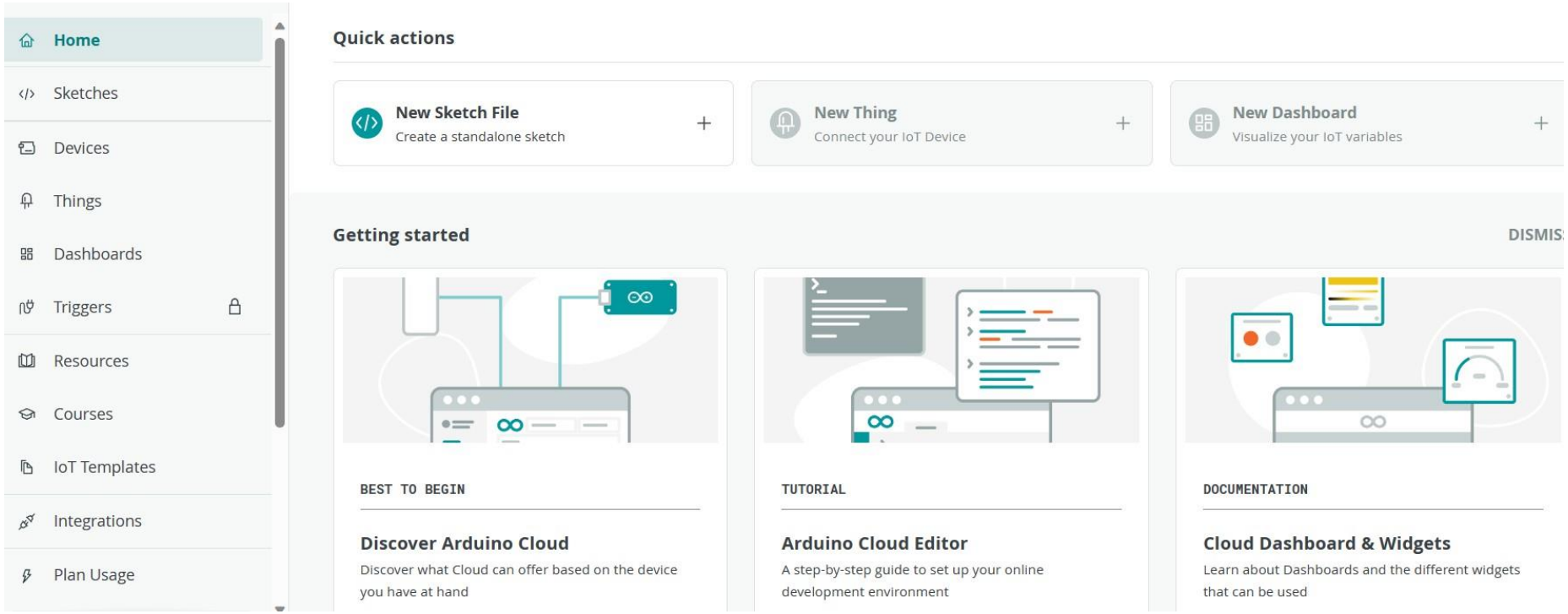
- Start simulation
- Check the code
  - Click on the TMP sensor
  - Change the temperature
- Change the code
  - Temp 10,20,30→change
  - Check again



Co-funded by the European Union

ARDUINO CLOUD

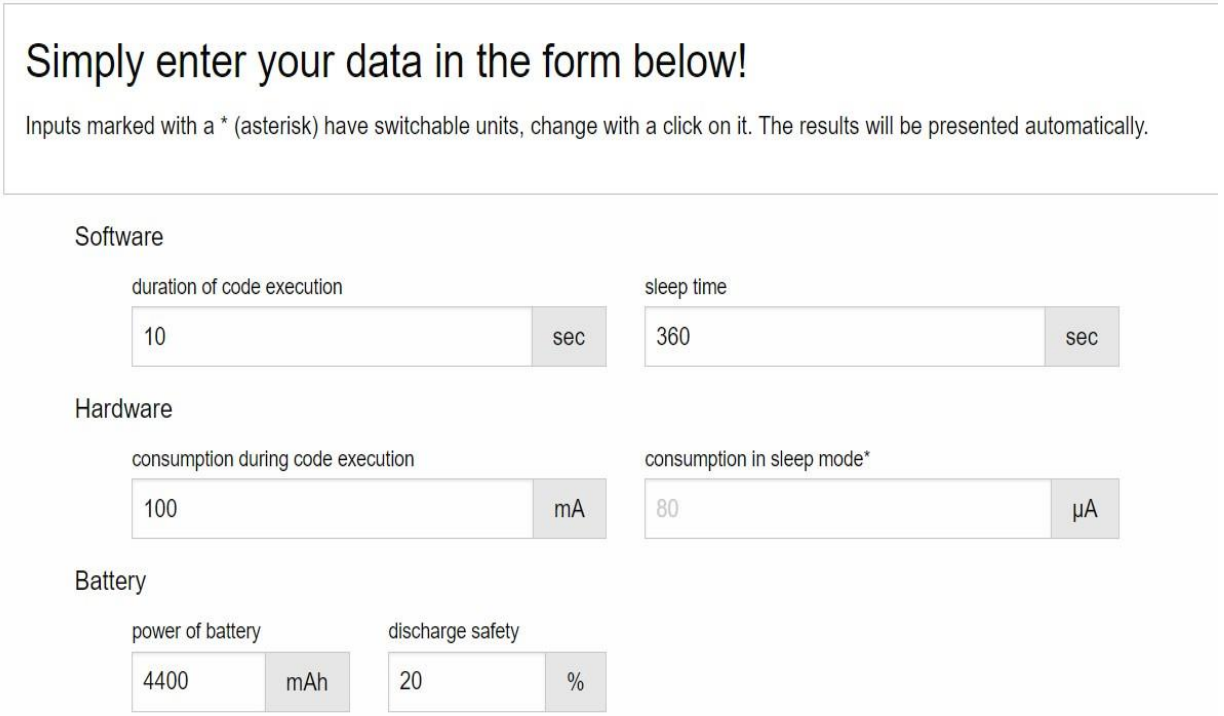
- [Home | Arduino_https://app.arduino.cc/](https://app.arduino.cc/)



Co-funded by the European Union

IoT Battery calculator

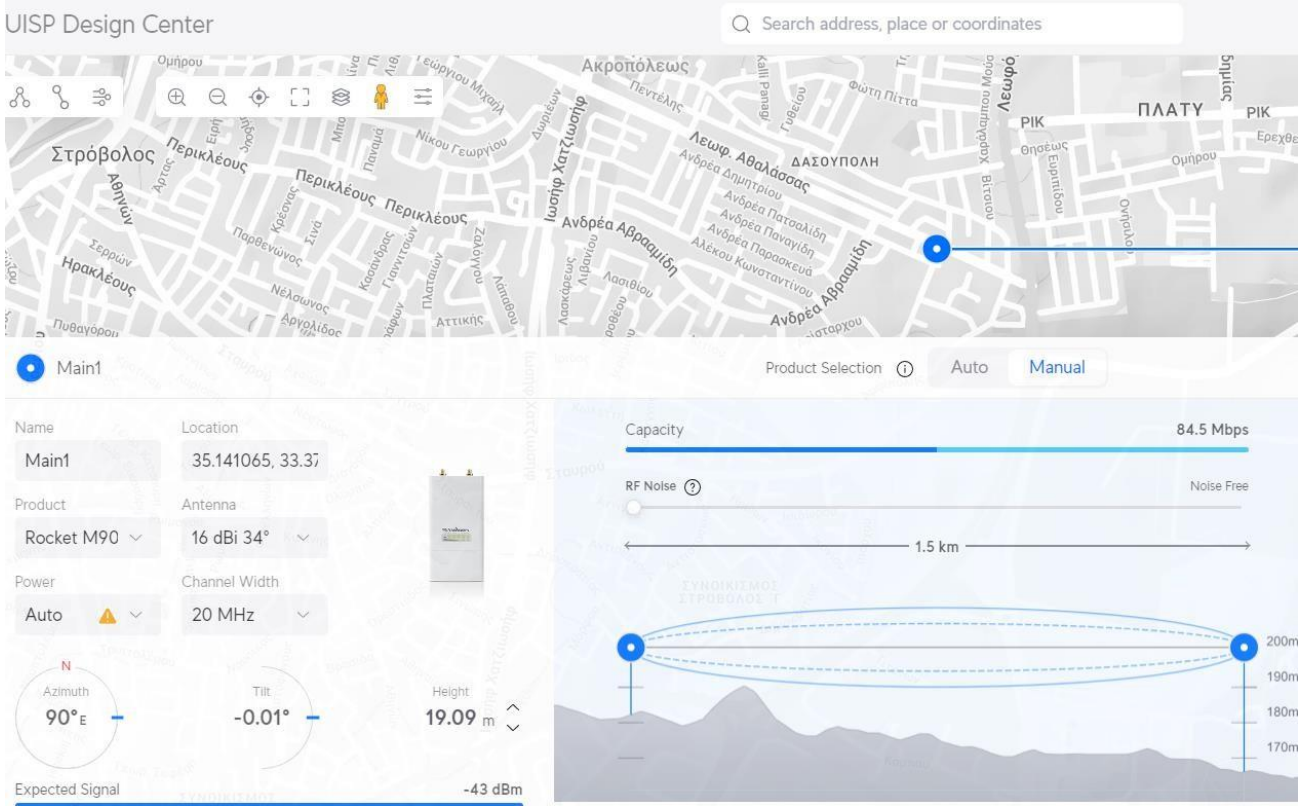
- https://www.of-things.de/battery-life-calculator.php
  - Experiment by changing the
    - Duration of code execution
    - Sleep time (120sec, 1h 3600sec, 86400sec)
    - Consumption in sleep mode
      - *80 µA, 800µA*
    - Change battery size
      - *4400mAh*



Co-funded by the European Union

UISP DESIGN CENTRE

- https://ispdesign.ui.com/
- Place point to point link
- Click on the point
- Select manual
- Change product
- Change Antenna
- Change position
- Select 900Mhz
- Select 2.4Ghz products



Co-funded by the European Union

BETES

Discover Technologies, expand opportunities!

Thank you!

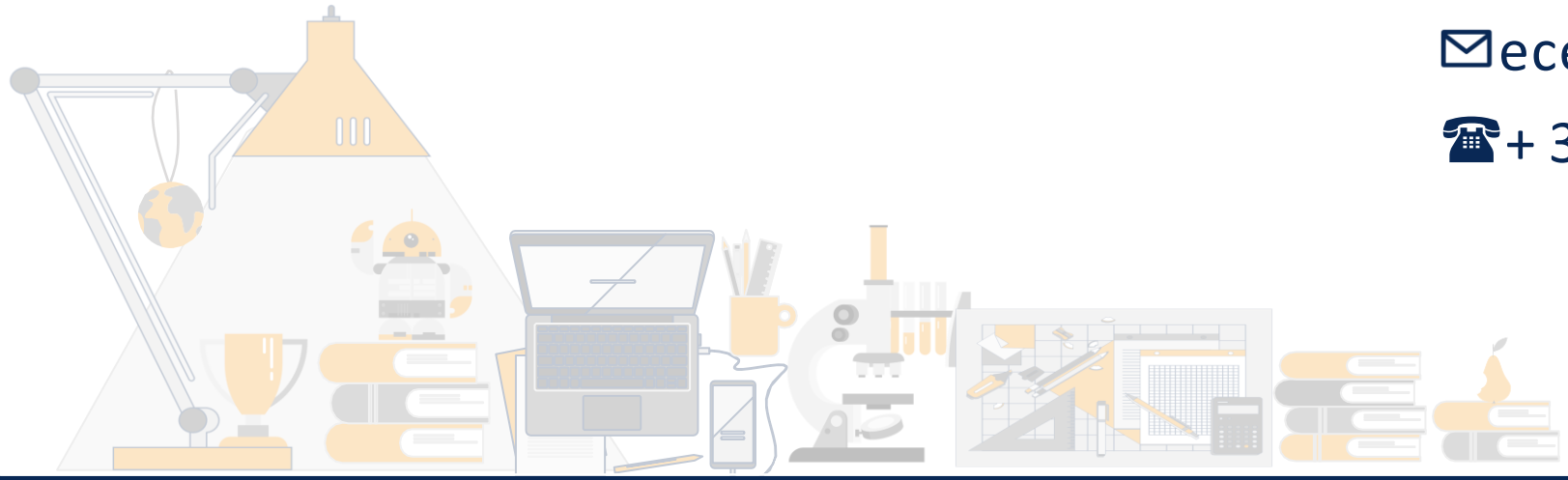
For more information:

www.betesproject.eu

www.facebook.com/BETESproject

ecect.projects@gmail.com

☎+ 357 96520112 (Cyprus)



Co-funded by the European Union