



KAMK • University
of Applied Sciences

Course description

Embedded Python Programming
5 ECTS
Grading: pass/fail

After this course students know how to use Python professionally. This course includes quizzes, tests and homework assignments as well as three projects to create a Python project portfolio. This course will teach Python in a practical manner, with every lecture comes a full coding screencast and a corresponding code notebook.

The course covers the following topics:

- Learn to use Python basic features and basics of micro Python programming.
- Learn advanced Python features, like the collections module and how to work with time series databases, send sensor data to different databases and MQTT broker.
- Learn to use Object Oriented Programming with classes.
- Understand complex topics, like decorators.
- Understand how to both use the Jupyter Notebook and create .py files
- Get an understanding of how to create GUIs in the Jupyter Notebook system.
- Python 3 on microcontrollers and small embedded systems (Micro Python).

Requirements:

Participants should have background in Operating Systems, primarily in Linux Operating systems

