

# PROGRAMMING AND COMMUNICATIONS II

Academic year 2015-16

# Subject's general information

Subject name	PROGRAMMING AND COMMUNICATIONS II
Code	102134
Semester	2nd Q Continuous Assessment
Typology	Optional
ECTS credits	6
Groups	1
Theoretical credits	0
Practical credits	0
Office and hour of attention	Make an appointment by e-mail. Office 3.23 of the EPS.
Department	Computer Science and Industrial Engineering
Modality	Presencial
Important information on data processing	Consult this link for more information.
Language	English
Degree	Degree in Automation and Industrial Electronic Engineering
Office and hour of attention	Make an appointment by e-mail. Office 3.23 of the EPS.
E-mail addresses	carlesm@diei.udl.cat

Mateu Piñol. Carles

## Learning objectives

To program web servers capable of interacting with the physical world to be used in, for example, home automation applications.

### Competences

#### **Specific**

Basic knowledge of the use and programming of computers, operating systems, databases and computer programs with applications in engineering.

Applied knowledge of industrial computing and communications.

Knowledge of the basics of the applications and computer systems.

#### General

To have the skills required to undertake new studies or improve the training with self-direction.

Capacity for unidisciplinary and multidisciplinary teamwork.

#### Strategic of the University

Command of a foreign language.

Mastering ICT's.

## Subject contents

Programming in the Python language.

Library for micro web servers: Flask.

Library for interacting with the physical world by using a Raspberry Pi: WiringPi2.

Others.

## Methodology

Lectures.

Development of tasks and small projects.

#### Evaluation

Continuous assessment, by means of tasks and small projects.

## Bibliography

Documentation and examples in the virtual campus.

https://www.python.org/about/gettingstarted/

https://docs.python.org/2/

https://docs.python.org/2/tutorial/index.html

http://flask.pocoo.org/docs/0.10/

https://pypi.python.org/pypi/wiringpi2

Google.