

## Introduction to Programming

Code: 107738  
ECTS Credits: 6

**2025/2026**

| Degree                    | Type | Year |
|---------------------------|------|------|
| Interactive Communication | FB   | 1    |

## Contact

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## Teaching groups languages

You can view this information at the [end](#) of this document.

## Prerequisites

It is recommended to have passed the subject of Introduction to Algorithms

## Objectives and Contextualisation

1. Learn about programming languages
2. Learn Python

## Learning Outcomes

1. CM09 (Competence) Apply the principles of algorithms and programming to proposals for interactive communicative projects within the framework of a professional practice that is sensitive to society's problems and challenges.
2. CM10 (Competence) Design interactive communicative projects with the Python programming language in accordance with the principles of ethical responsibility and respect for fundamental rights and duties, diversity and democratic values.
3. CM11 (Competence) Create and develop applications with the Python programming language in the field of interactive communication autonomously with initiative and proactivity.
4. CM11 (Competence) Create and develop applications with the Python programming language in the field of interactive communication autonomously with initiative and proactivity.
5. KM08 (Knowledge) Identify the specific aspects of an information system with respect to its architecture, protocols, storage systems, languages, features and applications.
6. KM08 (Knowledge) Identify the specific aspects of an information system with respect to its architecture, protocols, storage systems, languages, features and applications.
7. KM09 (Knowledge) Distinguish the most complex programming concepts in Python.
8. KM09 (Knowledge) Distinguish the most complex programming concepts in Python.
9. SM08 (Skill) Use programming principles to turn a specific problem into a programme that solves it.
10. SM10 (Skill) Use the Python programming language in interactive communication projects
11. SM10 (Skill) Use the Python programming language in interactive communication projects
12. SM10 (Skill) Use the Python programming language in interactive communication projects
13. SM10 (Skill) Use the Python programming language in interactive communication projects

## Content

1. introduction to the programming languages
2. Python as a programming language
  - 2.1 Conditional sentences, repetitive sentencies...
  - 2.2. Data structures

## Activities and Methodology

| Title          | Hours | ECTS | Learning Outcomes                              |
|----------------|-------|------|--|
| Type: Directed |       |      |  |
| Exercises      | 25    | 1    | CM09, CM10, CM11, KM08, KM09, SM08, SM10, CM09 |
| Lab practices  | 35    | 1.4  | KM09, SM08, SM10, KM09                         |
| Master class   | 30    | 1.2  | CM09, CM10, CM11, KM08, KM09, SM08, SM10, CM09 |

Note: The course content will be sensitive to issues related to gender perspective and the use of inclusive language.

A detailed schedule outlining the content of each session will be presented on the first day of the course and will be available on the course's Virtual Campus, where students will find all teaching materials and necessary information for elective course monitoring. Should the teaching modality change for reasons of force majeure according to the competent authorities, the teaching staff will inform students of any modifications to the course schedule and teaching methodologies.

Annotation: Within the schedule set by the centre or degree programme, 15 minutes of one class will be reserved for students to evaluate their lecturers and their courses or modules through questionnaires.

## Assessment

### Continuous Assessment Activities

| Title             | Weighting | Hours | ECTS | Learning Outcomes                        |
|-------------------|-----------|-------|------|--|
| Attendance        | 10%       | 10    | 0.4  | CM09, CM10, CM11, KM08, KM09, SM08, SM10 |
| Lab practices     | 20%       | 20    | 0.8  | KM09, SM08, SM10                         |
| Report deliveries | 20%       | 20    | 0.8  | CM09, CM10, CM11, KM08, KM09, SM08, SM10 |

Students will be entitled to reassessment in the course if they have been evaluated on a set of activities accounting for at least two-thirds of the total course grade.

This course/module does not provide for a single-assessment system.

In this course, the use of Artificial Intelligence (AI) technologies is not permitted at any stage. Any assignment containing content generated by AI will be considered a breach of academic integrity and may result in a partial or total penalty to the assignment grade, or more serious sanctions in severe cases.

## Bibliography

<https://pythoninstitute.org/>

<https://www.python.org/>

## Software

Visual Studio Code

## Groups and Languages

Please note that this information is provisional until 30 November 2025. You can check it through this [link](#). To consult the language you will need to enter the CODE of the subject.

| Name                          | Group | Language | Semester        | Turn      |
|-------------------------------|-------|----------|-----------------|-----------|
| (PAUL) Classroom practices    | 1     | Spanish  | second semester | afternoon |
| (PLAB) Practical laboratories | 1     | Spanish  | second semester | afternoon |
| (PLAB) Practical laboratories | 2     | Spanish  | second semester | afternoon |
| (TE) Theory                   | 1     | Spanish  | second semester | afternoon |