

## Langages de programmation 1

#### Lecturer

Christophe PETIT (Coordinator)

#### Course mnemonic

INFO-F105

#### **ECTS** credits

5 credits

#### Language(s) of instruction

French

#### Course period

Second term

#### **Campus**

Plaine

### Course content

Concept of programming language and compilation interpretation

Statements (high and low level), expressions and programming style

Type systems and fundamental types

Declarations, scope and conversions

Compound types (POD)

Functions and modules (parameters passing, stack frame)

Abstract data types (encapsulation) - Construction, copy...

Codifications and standards

# Objectives (and/or specific learning outcomes)

General concepts

Applications to various languages (particularly C++ and Python) Understanding of translation process from program source to binary code.

Learning of C/C++ (procedural aspects, without Object Oriented design).

## Pre-requisits and co-requisits

## Courses having this one as pre-requisit

INFO-F202 | Langages de programmation 2 | 5 crédits and INFO-F209 | Projets d'informatique 2 | 10 crédits

## Teaching method and learning activities

Lectures, exercices and programs.

## Contribution to the teaching profile

Fundamental knowledge of programming, languages and computer architecture; introduction to assembly language.

Correct usage of these concepts for writing programs and choosing the more efficient programming constrution.

Critical presentation of projects and results.

# References, bibliography and recommended reading

Hyperlinks and downloadable documents on UV.

#### Course notes

Université virtuelle

### Other information

## Place(s) of teaching

Plaine

#### Contact(s)

Christophe Petit - Computer Science Dept - Campus Plaine - CP212 - Building N/O, Room 2.N8.115. Email: firstname dot lastname at ulb dot be

## Evaluation method(s)

written examination and Project

# Determination of the mark (including the weighting of partial marks)

Higher mark among

- > 1/3 project + 2/3 exam
- > 100% exam

Project marks will count towards both June and September evaluation sessions

### Main language(s) of evaluation

French

## Programmes

Programmes proposing this course at the faculty of Sciences

BA-INFO | Bachelor in Computer science | unit 1