

UNIVERSITÀ DEGLI STUDI DI MILANO-BICOCCA

SYLLABUS DEL CORSO

Informatica Generale - 2

2122-2-E3301M194-E3301M198M-T2

Learning objectives		
Contents		

Detailed program

- 1. Introduction to Computer Science
- 2. Machine architecture
 - Von Neumann architecture
 - Central Processing Unit (CPU)

- Computer data storage
- Input and output devices
- Modern computer architectures
- 3. Introduction to Algorithms
 - Variables and data types
 - Flow control: sequence, selection, iteration
- 4. Python programming language
 - Program structure
 - · Primitive data type.
 - Variables and assignment.
 - o Arithmetic, relational and logic expressions.
 - Conditional instructions
 - · Iterative instructions
 - o string, list, and text file.
 - Function: declaration, definition and parameters.
 - Program execution
- 5. Data Base and SQL language.
 - Relational model
 - SQL DDL and DML instructions
- 6. Operating System
- 7. Computer networks

Prerequisites

Teaching methods

During the Covid-19 emergency period, lessons will take place in synchronous videoconference.
Assessment methods
In the Covid-19 emergency period, exams will only be online. They will be carried out using the WebEx platfo and esamionline platform.
Textbooks and Reading Materials
 For 1, 2, 4 and 5 use the didactic material that can be downloaded from the course web page For 2: Think Python First Edition, by Allen B. Downey (online) or A. Lorenzi, E. Cavalli, V. Morigg Linguaggio Python. Atlas For 3: A. Lorenzi, D. Rossi. Le basi di dati. Il linguaggio SQL. Atlas
Semester
Second semester
Teaching language
Italian