



ALMA MATER STUDIORUM
UNIVERSITÀ DI BOLOGNA

Computer Science and Engineering Educational Offer @UNIBO

Ugo Dal Lago

Department of Computer Science and Engineering

Computer Science Degrees

- One Bachelor (180 ECTS) and one Master (120 ECTS) Degree.
- More than 70% of the courses are in Computer Science.
- Examples of Bachelor CS courses: *Computer Architectures* (6 ECTS), *Algorithms and Data Structures* (12 ECTS), *Programming* (12 ECTS), *Programming Languages* (6 ECTS), *Computer Networks* (12 ECTS), *Operating Systems* (12 ECTS), *Databases* (9 ECTS).
- Examples of Master CS courses: *Artificial Intelligence* (6 ECTS), *Usability & User Experience Design* (6 ECTS), *Cryptography* (6 ECTS), *Internet of Things* (6 ECTS).
- Bachelor courses are all in Italian. Master courses can be either in Italian or in English.
- Lectures are given in classes located around Porta San Donato.



Computer Engineering Degrees

- One Bachelor (180 ECTS) and one Master (120 ECTS) Degree.
- More than 50% of the courses are in Computer Science and Engineering.
- Examples of Bachelor CS/CE courses: *Computer Architectures* (6 ECTS), *Information Systems* (9 ECTS), *Operating Systems* (9 ECTS), *Web Technologies* (9 ECTS).
- Examples of Master CS/CE courses: *Artificial Intelligence* (8 ECTS), *Software Engineering* (8 ECTS), *Real-Time Systems* (8 ECTS).
- Bachelor courses are all in Italian. Master courses can be either in Italian or in English.
- Lectures are given in classes located around Viale Risorgimento.



Bachelor Degree on Information Sciences and Management

- Bachelor Degree (180 ECTS).
- More than 50% of the courses are in Computer Science.
- At least 30% of the courses are in Law and Management.
- Examples of Bachelor CS courses: *Network Programming* (9 ECTS), *Operating Systems* (9 ECTS), *Software Engineering* (6 ECTS), *Databases* (9 ECTS).
- All courses are given in Italian.
- Lectures are given in classes located around Porta San Donato.



Artificial Intelligence Master Degree

- Master Degree (120 ECTS).
- All courses are in Computer Science and Engineering.
- Examples of courses: *Cognition and Neuroscience* (6 ECTS), *Image Processing and Computer Vision* (6 ECTS), *Deep Learning* (6 ECTS), *Knowledge Engineering* (6 ECTS).
- All courses are given in English.
- Lectures are given in classes located around Viale Risorgimento.



CS Courses in Other Degrees

- **Genomics:** *Python Programming* (6 ECTS), *Algorithms and Data Structures* (6 ECTS), ...
- **Bioinformatics:** *Python Programming* (10 ECTS), *Algorithms and Data Structures* (10 ECTS), ...
- **Mathematics:** *Python Programming* (8 ECTS).
- ...





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