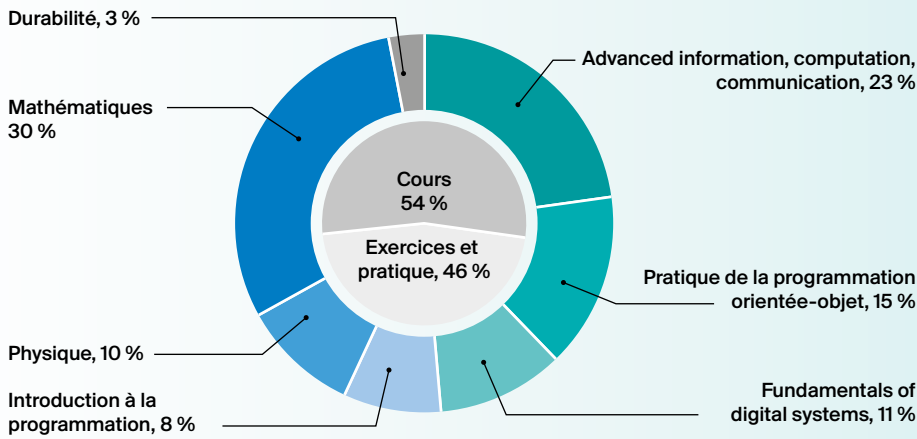
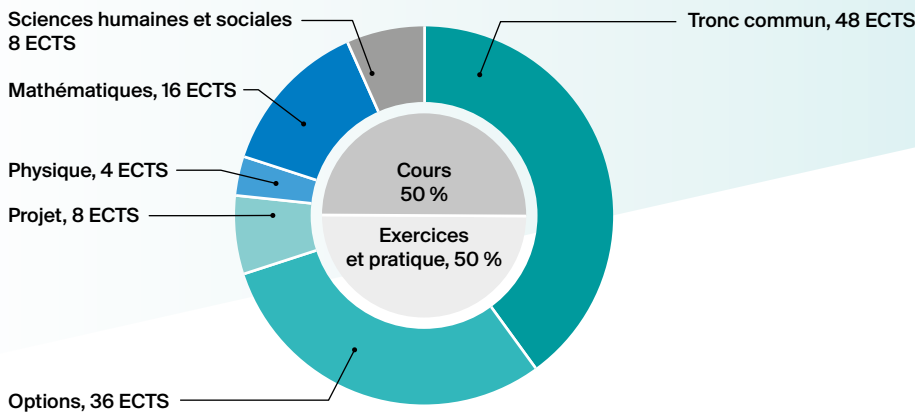


Plan d'études  
Bachelor 1<sup>e</sup> année

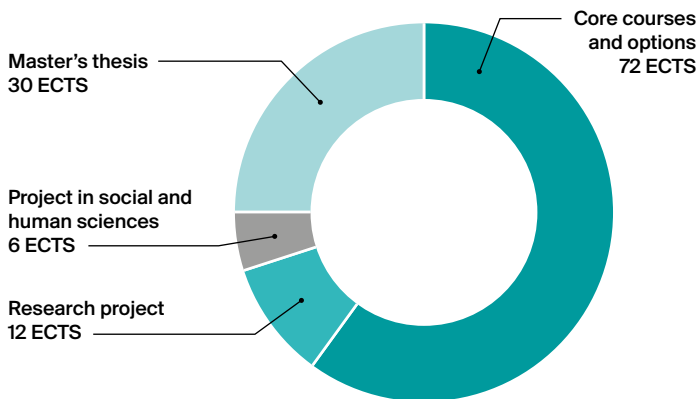


Bachelor 2<sup>e</sup> et 3<sup>e</sup> années



10 exemples de cours :

- Computer security and privacy
- Computer systems
- Data-intensive systems
- Électronique
- Internet analytics
- Introduction to quantum computation
- Principles of digital communications
- Signal processing
- Technologies for democratic society
- Theory of computation



Master  
2-year program - 120 ECTS

The Master's program includes a compulsory internship in a company.

The Bachelor's degree in Communication Systems also gives access to the Master's programs in Data Science (120 ECTS), Computer science (120 ECTS), Cyber Security (120 ECTS) and Neuro-X (120 ECTS).

Examples of courses in Data Science:

- Computational photography
- Machine learning for behavioral data
- Modern natural language processing
- Statistics for Data Science
- Visual intelligence: machines and minds

Examples of courses in Cyber Security:

- Advanced topics on privacy enhancing technologies
- Cryptography and security
- Formal verification
- Information security and privacy
- Software security

Examples of courses in Neuro-X:

- Computational neurosciences: biophysics
- Neural circuits of motivated behaviors
- Neural signals and signal processing
- Translational neuroengineering
- Virtual reality

Master in Communication Systems (120 ECTS)

More than 60 optional courses in 10 specializations:

- Computer engineering
- Computer science theory
- Cyber security
- Data analytics
- Foundations of software
- Internet information systems
- Networking and mobility
- Signals, images and interfaces
- Software systems
- Wireless communications

The students may also opt for a Teaching specialization (30 ECTS) at the *Haute école pédagogique du canton de Vaud* or a minor (30 ECTS) included in the 120 ECTS of the Master's program

Perspectives professionnelles

Le stage peut être effectué dans l'une des entreprises avec lesquelles la Faculté informatique et communications est en contact, comme Oracle, Swisscom Digital Lab, Google, Logitech, IBM Research Lab, NEC Labs, Sony, Elca Informatique, Nagravision, Armasuisse, INRIA, Schlumberger Inc., CSEM. Le stage représente également une occasion de voyager.

Faculté informatique et communications (IC)

Section des systèmes de communication

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