

Master's degree year 1 - semester 1

Advanced Java (6 ECTS)
Modelling and optimisation methods (3 ECTS)
Complexity of problems (3 ECTS)
Advanced data base (3 ECTS)
Network architecture and function (3 ECTS)
Python and script language (3 ECTS)
Design pattern (3 ECTS)
Code generation (3 ECTS)
Option (3 ECTS), choose between:
* Embedded system modelling (3 ECTS)
* Image processing (3 ECTS)

Master's degree year 1 - semester 2

Network programming (6 ECTS)
Cryptography (3 ECTS)
Real-time Java (3 ECTS)
Computer science and society (3 ECTS)
Internship or project (6 ECTS)
Option (6 ECTS), choose between:
* Logic and programming (3 ECTS)
* First-order logic modelling (3 ECTS)
* Communication system modelling (3 ECTS)
* Computer security: initiation (3 ECTS)
English (3 ECTS)

Master's degree year 2 - semester 1

Java EE (3 ECTS)
Formal methods (3 ECTS)
Computer project management (3 ECTS)
Middleware and RMI (3 ECTS)
Parallel calculus (3 ECTS)
Generic programming in C++ (3 ECTS)
Technological innovation project (3 ECTS)
Formal security proofs 1 (option) (3 ECTS)
Probabilistic models (option) (3 ECTS)
Anglais (3 ECTS)

Master's degree year 2 - semester 2

Governance and risk management (3 ECTS)
Test method (3 ECTS)
Smart card programming (option) (3 ECTS)
Option (6 ECTS), choose between:
* Simulation and service quality (3 ECTS)
* Static analysis (3 ECTS)
* Big data (3 ECTS)
* Formal security proofs 2 (3 ECTS)
Internship (15 ECTS)