

Semester 5

Language and human Sciences 1 - 5 ECTS

English
optionnal 2nd Language
Art and physical education
RS&E
Business organisation
Bookkeeping

Applied Mathematics - 5 ECTS

Probability and statistics
Numerical analysis
Applied analysis

System and architecture - 4 ECTS

Advanced architecture
System programming

Data security and safety - 4 ECTS

System database
Introduction to General Data Protection Regulation (GPDR)

Fundamentals of optimisation - 4 ECTS

Linear programming
Complexity

Multimedia 1 - 4 ECTS

Infography 1
Web development 1

Application development - 4 ECTS

C programming
OOP / Java programming

Total S5 : 30 ECTS

Semester 6

Language and human Sciences 2 - 5 ECTS

English
optionnal 2nd Language
Art and physical education
Individual communication
Business organisation
Engineer career
Health and security at work

Security concepts - 6 ECTS

Fundamentals of security
Cryptography
Security project

Application production - 4 ECTS

Mobile development
Compilation

Graphs and languages - 4 ECTS

Automata and languages
Graphs and algorithms

Multimedia 2 - 4 ECTS

Infography 2
Advanced web technologies

Functional and logical programming - 4 ECTS

Functional programming
Logical programming

Innovation, creativity - 3 ECTS

Innovation project

Total S6 : 30 ECTS

Semester 7

Internship - 30 ECTS

Semester 8

Language and human Sciences 3 - 6 ECTS

English
optionnal 2nd Language
Art and physical education
Intellectual property
Group communication
Entrepreneurship
Human resource management

Total TC - 6 ECTS

Computer science project - 2 ECTS

Project

Theoretical fundamentals of security - 4 ECTS

Security models
Advanced cryptography

Operational research - 4 ECTS

System modeling and simulation
Optimisation and graphs

Networks and distributed systems - 6 ECTS

Distributed databases and new data models
Network services and protocols
Systems and secure programming

Artificial intelligence - 4 ECTS

Fundamentals of AI
AI : models and reasoning

Total Specialisation - 20 ECTS

Information systems (IS) option

Ubiquitous computing - 4 ECTS

Middleware and component oriented programming
Embedded systems

Total IS option - 4 ECTS

Cybersecurity (CS) option

Security of networked systems and services - 4 ECTS

Security of network services and protocols
Security of operating systems

Total CS option - 4 ECTS

TOTAL S8

TC + specialisation + IS option - 30 ECTS

TC + specialisation + CS option - 30 ECTS

Semester 9

Project - 6 ECTS

Project

Languages and human sciences 4 - 4 ECTS

English
optionnal 2nd Language
Art and physical education
Employment law
Project management

Elective courses - 3 ECTS

EC1
EC2

Total TC 3A - 13 ECTS

Information systems (IS) option

Advanced mobility - 4 ECTS

Complex mobile application
Mobile application compilation and development

Distributed application design - 5 ECTS

Human-computer interaction
Service-oriented architecture
New dispatch technologies

Distributed AI - 4 ECTS

Agent-oriented programming
Collective intelligence

Decision intelligence - 4 ECTS

Meta-heuristics - optimisation methods
Constraint programming

Total IS option - 17 ECTS

Semester 10

Cybersecurity (CS) option

Predictive and proactive security - 4 ECTS

Security information and event management (SIEM) /
Security Operation Center (SOC)
Pentesting

Advanced perimeter security - 6 ECTS

Securing connected objects
Cloud security
Application security

Identity and Access Management (IAM) and security management - 4 ECTS

Security policies and legal aspects

Regulation and risk management - 3 ECTS

Regulation, standards and risk management methodology
Human factor, risk management and security incident handling

Total CS option - 17 ECTS

Total S9

TC + specialisation + IS option - 30 ECTS

TC + specialisation + CS option - 30 ECTS

Final internship - 30 ECTS

Total TC S10 - 30 ECTS