INITIAL ENGINEER TRAINING IN COMPUTER SCIENCE

THEMATIC COURSE

COMPUTER
SCIENCE AND
SECURITY

SOFTWARE ARCHITECTURE
ADVANCED PROGRAMMING TECHNICS
FORMAL METHODS
FOR SAFE PROGRAMMING
SECURITY AND DIGITAL
BASIS OF COMPUTER SCIENCE

GUILLAUME JICQUEL
PROMOTION 2017
Consultant in Cybersecurity,
specialised in industrial field

I entered the ENSIIE with a University Diploma of Technology (DUT) in computer science. I have followed the common core courses for over a year and a half before specializing in computer science security at Abertay University in Scotland. I performed my last year in a double degree with the FIIL Master.

AMÉLIE DELGA
PROMOTION 2016
Business Volunteer Programs Abroad in Japan in Engineering Pricing for the company Société Générale

The FIIL course helps the students to be more rigorous regarding software conception and tests to create safer software regardless the field of application.

CONTACT
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PARTNERS
Marte Conseil
CEA
CS
ANSSI
MATTERS

JOBS OPPORTUNITIES
Conceptions and software development engineer
Formal methods engineer
R&D engineer
Computer science safety expert

EXAMPLES OF INTERNSHIPS
Formal modelisation of rail engagement using a synchronous formal language
Retention in safety conditions study and realisation of an assistance solution to security watch
Study, conception and development of a software package solution
Contribution to a tool finding bugs in software using a statistical analysis
Study, conception and realisation of a multiplatform software tests solution
Formal proof in functional analysis
This course is set up for 2nd Year students at the ENSIE. From the 3rd semester, a more strengthened specialisation in computer science is offered, including fundamental teachings (compilation, formal languages, calculation models), a material/system architecture initiation, as well as advanced programming technics (functional programming, based-thread programming, middleware, ICT) with minors in safety programming (software validation and verification, formal methods for safety software development, reasoned programming), and digital security (networks security, networks and protocols security and, information system security, advanced security).