

Job Opportunities

Jobs :

- Administrator (monitoring and security tools).
- Engineering Assistant in Quality of ICT Services.
- Engineering Assistant in User Services (Support and Maintenance).
- ICT Infrastructure Manager.
- etc.

Sectors concerned:

- Any organisation with a Computer Department : (Banks, Insurances Administrative Departments, Hospital Services, Computer Consultants, Industries, etc.).



Information and Communication Technology (ICT) Infrastructures and Operations Management (in french: QSSI)

Students acquire on the one hand **the technical tools** required to implement and monitor security and quality at various levels of Information Systems (systems, network, data, services), on the other hand they integrate skills concerning ICT Services Quality and Information Systems Security **Management**. These skills ensure an efficient and reliable Computer Department.

The aim is to provide the skills required by Computer Production, as well as the "best practices" in **ICT Service Quality** (ITIL) and in **Information Systems Security** (ISO 27002).

The Educational Programme

Four Teaching Units:

- Foundation Courses : Database, networks, operating systems.
- Communication and corporate culture : English, corporate culture, law and management.
- Technical tools concerning quality/security of ICT Infrastructures.
- Management of quality/security of ICT Infrastructures.

A two-month end-of-studies supervised project in a company or at the IUT, which can be in preparation for a work experience placement period.

A four-month work experience placement period in a company (March to June).

Sept Oct Nov Dec Jan Feb Mar April May June



Enrolment is based on application criteria: to have validated two years of studies in computer science.

Faculté des Sciences et Techniques + IUT de Blois
 3 place Jean JAURES, CS 2903, 41029 BLOIS CEDEX
 Phone : 33 2 54 55 21 17 Fax : 33 2 54 55 21 44 <http://www.blois.univ-tours.fr/iut>



SYLLABUS

UE1 : Foundation Courses (87 hours)

EC1 : Databases 27 h

Objectives : Create and use a relational Database on a Database Management System.

EC2 : Networks 30 h

Objectives : Acquisition of the main transmission protocols, fundamental to local and wide area networks.

EC3 : Operating Systems 30 h

Objectives : Understanding the role and the methods of operating systems and their administration.

UE2 : Corporate culture and communication (87 hours)

EC1 : English 30 h

Objectives : Ability to hold a professional conversation in English and to read technical information.

EC2 : Technical and scientific communication 21 h

Objectives : To communicate both orally and in writing on technical issues, job applications, project and professional presentations.

EC3 : Connaissance Corporate culture : economic and legal issues concerning security and quality 36h

Objectives : Companies, their organisation and environment, financial aspects, importance of quality and security policy issues (financial and legal).

UE3 : Technical tools concerning ICT quality and security (175,5 hours)

EC1 : Data Security 28,5 h

Objectives : To acquire the fundamentals and the techniques to ensure data protection and retrieval.

EC2 : Network Security 30 h

Objectives : To acquire the fundamentals and the techniques to ensure transmission confidentiality and integrity.

EC3 : System Security 30 h

Objectives : To acquire the fundamentals and the techniques to ensure the retrieval, integrity and confidentiality of data as well as of Systems Processing.

EC4 : Security of Services 30 h

Objectives : to acquire the fundamentals and the techniques to ensure the security of Applications.

EC5 : Quality of Services (networks and applications) 36 h

Objectives : To acquire the fundamentals and the techniques necessary to ensure the efficiency of services (techniques, OSI layers).

EC6 : Quality Measurements 21 h

Objectives : To acquire the measuring techniques necessary for Systems and Networks Assessment (SNMP, Nagios...).

UE4 : Supervised Project (150 hours + 12 hours)

EC1 : Project Management and Methods 12 h

Objectives : To acquire knowledge of available tools, organise a project.

EC2 : Project Development 150 h

Objectives : Implementing a project involving theory and practice within a concrete industrial context.

UE5 : Quality and Security Management (88,5 hours)

EC1 : Standards, certifications, controls 30 h

Objectives : Study of a standard (ISO 9001), what the principal methods are, what an audit is.

EC2 : Management of Quality for ICT 30 h

Objectives : To acquire notions of quality for ICT infrastructures and operations management (ITIL).

EC3 : Management of Information Systems Security 28,5 h

Objectives : To acquire notions of overall security organisation and implementation in an Information System (ISO 27002).

UE6 : Work Experience Period (16 weeks)

Objectives : To put into practice and adapt the theoretical knowledge acquired within the courses.