

### ENGINEERING AND ARCHITECTURE

### **TELEMATICS ENGINEERING**







### What does it cover?

The Degree in Telematics Engineering trains students in technologies, systems, services and applications that are instrumental to both information technology and telecommunications.

### What skills will you acquire?

Telematics engineers have wide-ranging skills including: designing data transmission networks; communications protocols; the Internet; telephone switching and signalling; architecture and operating systems for telematics systems; web servers; the design of web-based applications and services, and security on communication networks.





Higher Polytechnic School Administrative Services: Anselm Turmeda Building Tel.: 971 17 29 99 secretaria.at@uib.cat



## What career opportunities will you have?

- As a technical telecommunications engineer: planning installing, managing and maintaining communications networks; producing communal building infrastructure projects (ICT); designing and auditing networks; designing and implementing security systems and tools; designing and developing telematic applications and services; designing and developing communications protocols (TCP/IP), etc.
- As an expert (expert reports and legal expertise) or a consultant (developing regulations, standards)
- As a teacher and a researcher.

# What profile should you have?

- An ability for teamwork
- An ability for problem-solving
- An ability for taking initiative
- Perseverance.

### MORE INFORMATION

http://estudis.uib.cat/grau/telematica http://eps.uib.cat



One

Semester One

Semester Two

### ENGINEERING AND ARCHITECTURE

## **TELEMATICS ENGINEERING**



### **CURRICULUM**

### **FIRST YEAR**

Mathematics II – Calculus\*
Linear Algebra and Discrete Mathematics\*
Foundations of Physics\*
Introduction to Telematics
Business\*

Calculus II\*
Computers and Operating Systems\*
Introduction to Electronics\*
English for Engineering (elective)
Programming – Computer Studies I\*

#### **THIRD YEAR**

Software Engineering and Databases
Network Architecture and Interconnection
Data Transmission
Network Architecture Applications
Networks Planning

Network Management
Telecommunication Installations I
Multimedia Networks
Applications and Telematic Services

Security in Telematic Networks

### **SECOND YEAR**

Random Probabilities and Processes\*
Signals and Systems\*
Advanced Programming
Digital Electronics
Foundations of Telecommunications Networks

Operator Networks
Local Networks and Intranets
Propagation, Transmitters and Receivers
Microprocessors and Microcontrollers

Foundations and Applications of Digital Signal Processing

### **FOURTH YEAR**

Projects
Electronics Laboratory
Laboratory of Networks, Applications and Telematic
Systems
Computer Laboratory
Elective

Laboratory of Networks and Telecommunication
Projects
Elective
Final Degree Project

**ECTS Credits: 240** 



### Did you know...

To achieve your title you must accredit B2-level English or pass the English for Engineering elective course?

The curriculum does not include mandatory external placements, but it does give students the opportunity to do their Final Degree Project at a company.

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