



## EUROPEAN BACHELOR'S IN COMPUTER SCIENCE AND NETWORKING - LEVEL 6 EQF



**Level**  
6 EQF (*European  
Qualifications Framework*)



**Duration**  
1 year



**Credits**  
60 ECTS



**Target group**  
Students - people seeking  
employment - employees  
and professionals in the  
sector



**Admission requirements**  
Candidates holding a level 5  
EQF qualification or a  
qualification equivalent to the  
attainment of 120 ECTS



**Course Structure**  
Full-time or work-study



**Pedagogical methods**  
Theoretical courses, tutorials  
and practical work  
Case studies and professional  
scenarios  
Individual and group projects



**Professional assessments :**

- Continuous assessment
- Case Study (2h)
- Specialization Cases Studies (4h)
- Activity report and professional support (30 min)

**CCE :**

- Quizzes (1h20)

**Modern language :**

- Reading Comprehension (1h)
- Listening (45min)

**The FEDE, as a certifier, is in charge of the assessment processes**

- Organisation and planning of exam sessions
- Development of topics and model answers
- Ensuring compliance with examination regulations and supervision (anonymity, integrity, confidentiality)
- Assessment and marking of papers
- Reporting results, issuing diplomas, diploma supplements and certificates

[www.fede.education/en/fede-quality-charter](http://www.fede.education/en/fede-quality-charter)

**T**echnological and IT developments are transforming consumer habits and the way businesses operate. To remain competitive, organisations need to develop innovative tools, networks, applications and programmes.

Against this backdrop of digitalisation, the database development and network administration professions are expanding rapidly. The European Bachelor's Degree in Computer Science and Networking aims to provide an intermediate qualification in operating system and network administration, object-oriented programming and relational databases, equipping students with the skills they need to excel in these areas.

### LEARNING OUTCOMES

- Use website creation software
- Use UML in the project lifecycle
- Master communication protocols, compression and programming languages
- Program in a specific computer language
- Expertise in hardware and software
- Install, administer and maintain a network on a platform
- Implement, consult, query and update a relational database
- Install an RDBMS (relational database management system)
- Deploy and maintain a multi-protocol IT infrastructure
- Independently administer and secure a server

### PROGRAMME

#### PROFESSIONAL SKILLS (420-510 HOURS)

##### Core Curriculum

Mathematics Applied to Computing  
Python programming - Databases and SQL language - Project management

##### Development and Databases

UML modelling language - Object-oriented programming - Web programming fundamentals - Mobile-oriented programming - Relational databases - Big Data application development

##### Systems and Network Administration

Network security and administration - Connected objects - Administration of Unix/Linux open source systems - Administration of Microsoft systems

##### Professional assignment (≥12 weeks)

Internship - Apprenticeship - Salaried employment

##### MODERN LANGUAGE (60-80 HOURS)

Modern language 1 - CEFR Level B1  
German, English, Spanish, French, Italian, Portuguese  
Modern language 2 and 3 (optional)  
German, English, Arabic, Chinese, Spanish, French, Italian, Portuguese

### CAREER DESTINATIONS

- Application Developer
- Programme Analyst
- Application Integrator
- Study and Development Officer
- Assistant Project Manager

### FEDE'S ASSET - EUROPEAN DEGREE

#### EUROPEAN CULTURE AND CITIZENSHIP (40H)

##### The European project: Culture and Democracy for Active Citizenship

- Importance of History (OHE - Observatory on History Teaching in Europe)
- Contemporary Europe
- Europe and the World
- Cultures and diversity in Europe
- European citizenship
- The Workings of the European Union
- Importance, challenges and future of European construction
- Focus on corruption (GRECO)

##### Intercultural management and human resources

- Culture and cultural diversity
- Intercultural communication in an organisation
- Managing intercultural aspects and resolving cultural conflicts
- Working in Europe
- Social protection systems in Europe
- Corporate Social Responsibility (CSR)