



EUROPEAN MASTER'S IT EXPERT - CYBERSECURITY AND HIGH AVAILABILITY - LEVEL 7 EQF



Level
7 EQF (European
Qualifications Framework)



Duration
2 years



Credits
120 ECTS



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



Admission requirements
Candidates holding a level 6
EQF qualification or a
qualification equivalent to the
attainment of 180 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



First Year Assessments

- Continuous assessment
- Practical Exercises 1 (1h30)
- Practical Exercises 2 (2h)
- Thesis defence (1h)

Modern language

- Reading (1h45)

Second Year Assessments

- Continuous assessment
- Practical Exercises 1 (2h)
- Practical Exercises 2 (2h)
- Thesis defence (1h)

Modern language

- Listening (45 min)

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

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Cybersecurity issues and the risks of data leakage are on the increase, with digitalisation present in all major business sectors, from industry and leisure to education and agri-food. Companies are looking for profiles with solid technical skills, experts in various IT fields.

These professionals have to manage teams, master the management of complex projects and respond to the specific needs of customers. **The European Master's IT Expert - Cybersecurity and High Availability** prepares students to lead technology projects with competence and full autonomy.

LEARNING OUTCOMES

- Carry out an audit/resource specification to design and secure a multi-protocol network infrastructure tailored to the customer's requirements
- Manage a network infrastructure installation project and manage a team
- Deliver the product to the customer and ensure maintenance.
- Administer and secure all types of servers and network architecture (Cisco, Netgear), in particular using scripting (Python, Perl)
- Secure infrastructure with databases
- Understand various cyber-attacks and how to defend against them
- Understand and master the economic challenges of cybersecurity, IOT and high availability

PROGRAMME

PROFESSIONAL SKILLS (670-770 HOURS)

Master's Year 1

IT Project Management - Fundamentals

Project management tools/methods - IT project management - Corporate IT culture

Networks, Systems and Security - Fundamentals

Network technologies - Operating systems and virtualisation - Network security

Cybersecurity

Advanced Cisco Networks - Cybersecurity

Professional assignment (≥12 weeks)

Internship - Apprenticeship - Salaried employment

Master's Year 2

Information Technology Project Management - Advanced

Project management tools/methods - IT project management - Corporate IT culture

Networks, Systems and Security - Advanced

Advanced network technologies - DevOps architectures - Internet and the security of objects and connected objects

High Availability

Under Windows - Under Linux

Professional assignment (≥12 weeks)

Internship - Apprenticeship - Salaried employment

MODERN LANGUAGE (60-80 HOURS)

Modern language 1 - CEFR level B2

German, English, Spanish, French, Italian, Portuguese

Modern language 2 and 3 (optional)

German, English, Arabic, Chinese, Spanish, French, Italian, Portuguese

CAREER DESTINATIONS

IT project manager / Cybersecurity project manager / Functional consultant / Technical consultant / Network and cybersecurity engineer for multi-protocol infrastructures / Linux/Windows, Virtualisation, Cisco systems engineer / Project manager for high-availability network architectures / Scrum Master in an IT service management project team (asset management, implementation of a private cloud, Datacenter moves, etc.)

FEDE'S ASSET - EUROPEAN DEGREE

EUROPEAN CULTURE AND CITIZENSHIP (40H)

Businesses and the challenges of the ecological transition

- The climate crisis and the destruction of biodiversity: causes and consequences
- The regulatory framework governing the green transition
- The green transition: a response to crises
- Key actors in the green transition and sustainable development
- Citizens as agents of change
- The role of businesses in the green transition
- Cross-cutting skills and interdisciplinarity

CCE (Company Skills Certificate) Assessments

Quiz (1h)