

# MSc CYBERSECURITY MANAGEMENT



#### **GRADUATE PROGRAMME**

INTAKE: September CAMPUS: Paris LANGUAGE: English

## Design, compliance and governance in cybersecurity

Established in Paris in

1919

**4,000** students

+160

international academic partners

350

teachers and professional lecturers

**15,000** graduates

+800

corporate partners and public organizations

40+

students associations Established in 1919, ECE Engineering School in Paris excels in tech and digital education. Specializing in soft- ware development, network architecture, cybersecurity, data and AI, our educators use project-based pedagogy to enhance learning. As part of the OMNES Education Group, a top private institution in France, ECE leads in innovation and academic excellence.

In a constantly evolving digital world, cybersecurity has become a crucial issue for businesses and organizations of all sizes. Cyberattacks are becoming increasingly frequent and sophisticated. Therefore, we need highly skilled professionals to protect computer systems and sensitive data.

This programme furnishes students with indispensable proficiencies essential for maneuvering through the multifaceted realm of cybersecurity. Encompassing critical areas such as risk assessment, threat identification, incident response and strategic resource management, it equips graduates with the requisite skills to confront and surmount the varied challenges encountered in the professional sphere.

Additionally, the curriculum places a paramount emphasis on ethical standards and adherence to legal protocols. By instilling a strong ethical foundation, students are primed to take the helm in cybersecurity initiatives with integrity and compliance.

#### CAREER OPPORTUNITIES

Upon completion of this programme, students will be professionals capable of meeting the needs of businesses, organizations and the public sector. They will be prepared for future careers as cybersecurity consultant, project security manager, security solutions integrator, SOC analyst operator or security incident response analyst.

#### WHY CHOOSE THIS PROGRAMME

> This master's program covers fundamental topics such as database management, network and operating system security, secure IT infrastructures, DevOps, cryptography, identity management and incident response. Additionally, it includes discussions on cybersecurity standards, norms and methodologies.

- > Through conferences, site visits and projects, students meet with cybersecurity professionals, thus building their networks.
- > Courses are held on ECE's campus, centrally situated in Paris, near iconic landmarks such as the Eiffel Tower and the Seine River.
- > Students are offered a fully immersive experience in the world of cybersecurity.
- Students build on the theoretical knowledge they have gained through the academic year and discuss their analyses and recommendations with senior managers in cybersecurity.
- > Upon culmination of the programme, students maybe conferred with a Bac+5 level diploma adorned with the prestigious MSc – Master of Science label accredited by the Conference of Grandes Écoles.
- Students can obtain the international Certification of Trust (CC) by ANSSI.

#### THE OBJECTIVES OF THE PROGRAMME

Our graduates will be able to:

- Understand the stakes and challenges of cybersecurity.
- > Identify and analyze cyber threats.
- > Design and implement effective security solutions.
- > Anticipate and manage security incidents.
- > Comply with security regulations and standards.

#### **ANSSI CERTIFICATION**



ECE has earned the SecNumEdu label from ANSSI, France's national authority for cybersecurity. This certification

programme, established by the French government, is designed to enhance the cybersecurity resilience of educational institutions. Through SecNumEdu, institutions receive guidelines and support to bolster their cybersecurity measures. This achievement reflects ECE's dedication to maintaining robust cybersecurity standards within its educational environment.



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## **MSc CYBERSECURITY** MANAGEMENT

### **Programme structure**

#### **ENROLL OUR PROGRAMME**



**Applications** from French or international students residing in France



Applications from international students residing outside France

The international admission procedure only applies to you if you are not a French national and live outside France

#### CERTIFICATION



#### YEAR 1

#### Semester 1 - 30 credits

Advanced Databases

DevOps with SRE

Computer Networks

**Operating Systems** 

Windows Server

Web Technologies

**Initial Python** 

Master Class, Team Management, Budget Management, Sustainable Development, French courses FLE, Multidisciplinary Team Project

#### Semester 2 - 30 credits

Machine Learning

Information Systems Management

Pentest

**Container Security** 

Computer Network Security

Software Security

Information Systems Security I

Individual Relationship Management, Corporate Management, Marketing in a Digital World, Manager Ethic's

French courses FLE

Multidisciplinary Team Project

#### 4-month internship (optional)

#### YEAR 2

#### Semester 3 - 30 credits

Cryptography

Identity and Access Management

Hybrid Identity Security, Cybersecurity Policies, Standards and Methodologies

Cybersecurity Risk Management

Policy Incident Response, Forensics and Reverse Engineering

Windows Security

Advanced Network Security

**Enterprise Security** 

Cybersecurity

Change Management, Workplace Health, Safety and Security, Job Interview Simulation

French courses FLE

Research Writing, Final Project

#### Dissertation - 20 credits

#### 6-month internship - 10 credits

#### **TUITION FEES**

- > 10,700 €/academic year¹ or 11,190 €/academic year².
- > An application fee is payable at the time of the application submission: 90 €1 or 50 €2.
- 1. For French or international students residing in France
- 2. For international students residing outside France

#### **ENTRY REQUIREMENTS**

- > A first-class undergraduate degree with honors in mathematics (covering calculus, linear algebra and statistics), computer science (covering programming, data structures and algorithms), as well as networks and operating systems.
- > English proficiency: the minimum score required is the upper intermediate B2 level, 4th level of English in the Common European Framework of Reference (CEFR).



A Corporate Social Responsibility policy to embody the commitments of OMNES Education. The societal challenges of the contemporary world require new skills, new responsibilities and new professions, which OMNES Education aims to provide to its student audience. With a resolutely humanistic and universalist approach, OMNES Education seeks to unlock the abilities and aspirations of each individual through an innovative and multidisciplinary study programme.













