COURSE CATALOGUE - MSC PROGRAMS SPRING 2027

International students enrolled in the ECE Exchange Programs can select English taught courses from the following below **Masters of Science programs**

Please note that **all the English taught courses of this catalogue are taught at the Master's level.**

PROGRAMS	COURSES AND EXAMINATIONS
MSc Cybersecurity Management	January 5th 2027 – March 31st 2027
MSc Data Management	
MSc Artificial Intelligence	
MSc Sustainable Energy Futures	

🚫 **COURSES FROM DIFFERENT PROGRAMS AND STUDY LEVELS CANNOT BE MIXED.**

ABOUT

>A HIGH-LEVEL PROFESSIONAL POSTGRADUATE COURSE IN DIGITAL TECHNOLOGIES

ECE Masters of Science Programs are **specialized training programs** whose ambition is to prepare our graduates to take up the challenges posed by the **digital and environmental transitions.** They implement a pedagogy of excellence that allows the consolidation of **scientific and technical fundamentals** while developing the **managerial skills** required by any future decision-maker.



THE FREEDOM TO CHOOSE YOUR PATH

At ECE, each student **chooses freely their path according to their tastes, personal aptitudes and professional project.**

All M1 courses in Fall are core courses - specializations courses are scheduled only in Spring.

Starting from M2, you will be able to apply for a specialized program.

FALL 2026

General M1 — **Master of Science Programs** — **Specialized M2**

- Technical Core Courses
- AND
- Non-Technical Courses

1 UNIQUE PROGRAM FOR ALL

- Cybersecurity Management
- OR
- Data Management
- OR
- Sustainable Energy Futures
- OR
- Artificial Intelligence

SPRING 2027

General M1 — **Master of Science Programs**

- Technical Core Courses
- AND
- Non-Technical Courses
- AND
- Specialized Module - 3 specialized courses

YOU NEED TO CHOOSE YOUR TRACK FROM

- Cybersecurity Management
- Data Management
- Sustainable Energy Futures
- Artificial Intelligence

COURSE CATALOGUE - MSC PROGRAMS - YEAR 2026-2027

MSC - M1

FIRST SEMESTER - ENGLISH

MODULES	COURSES	HOURS	ECTS	ATTENDANCE
UEP 1- IT Transformation	Digital Transformation and Business Models	18	3	100% In-person
	Digital Ecosystem and Regulation	12	3	100% In-person
	Information Systems Design	12	3	100% In-person
UPE 2 - Digital Innovation	AI Foundations	18	3	100% In-person
	DevOps Practices and Continuous Integration	12	3	100% In-person
	Information Systems Architecture and Performance	12	2	100% Online - Asynchronous
	Internet of Things and Connected Systems	18	3	100% In-person
UPE 3 - IT Project Management and Innovation	Project Management Basics	18	3	100% In-person
	Practice Based Project	30	2	100% In-person
	Object Oriented Programming : Python	30	3	100% In-person
UPE 4 - Foreign Language	French courses	30	2	Hybrid (20h In-person, 10h online)

All M1 tracks in Fall follow the same courses - specializations courses are scheduled only in Spring.

COURSE CATALOGUE - MSC PROGRAMS - YEAR 2026-2027

MSC ARTIFICIAL INTELLIGENCE - M1

SECOND SEMESTER - ENGLISH OR FRENCH

>ABOUT THE PROGRAM

This program will provide the managerial and technical skills required to master **Big Data analysis** in order to collect the information needed to make strategic decisions and create innovative services. You will learn **how to create information systems using data from its collection to its analysis and artificial intelligence techniques.**

>PREREQUISITES

A first-class undergraduate degree with honors in **mathematics** (covering calculus, linear algebra and statistics) and **computer science** (covering programming, data structures and algorithms), with some exposure to **databases or information systems preferred.**

MORE INFO HERE

MODULES	COURSES	HOURS	ECTS	ATTENDANCE
UEP 6 - Managerial Innovation Serving Leadership	Innovation and Digital Entrepreneurship	18	5	100% Onsite
	Strategic Communication	18	4	100% Onsite
UEP 7 - Today's Challenges and Future World Transformations	Ethical Issues & Societal Impacts of Emerging Technologies	18	4	100% Onsite
	Green IT and Digital Sustainability	18	3	100% Online - Self-Paced
UEP 5 - Apply AI	Foundations of Machine Learning and Data Science	12	2	100% Online
	Introduction to Computer Vision	28	2	100% Onsite
	Introduction to NLP and LLM	28	4	100% Onsite
UEP 8 - Refresher pathway	French as a Foreign Language	18	2	100% Onsite

COURSE CATALOGUE - MSC PROGRAMS - YEAR 2026-2027

MSC DATA MANAGEMENT - M1

SECOND SEMESTER - ENGLISH OR FRENCH

>ABOUT THE PROGRAM

This program will provide the managerial and technical skills required to master **Big Data analysis** in order to collect the information needed to make strategic decisions and create innovative services. You will learn **how to create information systems using data from its collection to its analysis and artificial intelligence techniques.**

>PREREQUISITES

A first-class undergraduate degree with honors in **mathematics** (covering calculus, linear algebra and statistics) and **computer science** (covering programming, data structures and algorithms), with some exposure to **databases or information systems preferred.**

MORE INFO HERE

MODULES	COURSES	HOURS	ECTS	ATTENDANCE
UEP 6 - Managerial Innovation Serving Leadership	Innovation and Digital Entrepreneurship	18	3	100% Onsite
	Management of Multicultural and Distributed Teams	18	3	100% Onsite
	Strategic Communication	18	3	100% Onsite
UEP 7 - Today's Challenges and Future World Transformations	Ethical Issues & Societal Impacts of Emerging Technologies	18	4	100% Onsite
	Green IT and Digital Sustainability	12	4	100% Online - Self-Paced
UEP 5 - Smart Data	Data bases	30	5	100% Online
	Data representation and quality	30	4	100% Onsite
	Introduction to Machine Learning	30	4	100% Onsite
UEP 8 - Refresher pathway	French as a Foreign Language	18	2	100% Onsite

COURSE CATALOGUE - MSC PROGRAMS - YEAR 2026-2027

MSC CYBERSECURITY MANAGEMENT - M1

SECOND SEMESTER - ENGLISH OR FRENCH

>ABOUT THE PROGRAM

The aim of the Cybersecurity Manager training program is to **acquire a solid understanding** of the technical and managerial aspects of information systems cybersecurity, its implementation and its specific features.

>PREREQUISITES

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.**

MORE INFO HERE

MODULES	COURSES	HOURS	ECTS	ATTENDANCE
UEP 6 - Managerial Innovation Serving Leadership	Innovation and Digital Entrepreneurship	18	3	100% Onsite
	Management of Multicultural and Distributed Teams	18	3	100% Onsite
	Strategic Communication	18	3	100% Onsite
UEP 7 - Today's Challenges and Future World Transformations	Ethical Issues & Societal Impacts of Emerging Technologies	18	4	100% Onsite
	Green IT and Digital Sustainability	12	4	100% Online - Self-Paced
UEP 5 - Security compliance and governance	Cybersecurity in a Cloud Environment	30	4	100% Online
	Information Systems, Networks and Security	30	5	100% Onsite
	Introduction to Cybersecurity	30	4	100% Onsite
UEP 8 - Refresher pathway	French as a Foreign Language	18	2	100% Onsite

COURSE CATALOGUE - MSC PROGRAMS - YEAR 2026-2027

MSC SUSTAINABLE ENERGY FUTURES - M1

SECOND SEMESTER - ENGLISH OR FRENCH

>ABOUT THE PROGRAM

This program offers a **global vision of the energy and environment sectors**, drawing on both **science and technology,** but also on the humanities and social sciences (political science, economics, etc.).

>PREREQUISITES

A first-class undergraduate degree with honors in **engineering, physics, chemistry, materials science, mathematics, economics, geography or related numerate disciplines.**

MORE INFO HERE

MODULES	COURSES	HOURS	ECTS	ATTENDANCE
UEP 6 - Managerial Innovation Serving Leadership	Innovation and Digital Entrepreneurship	18	3	100% Onsite
	Management of Multicultural and Distributed Teams	18	3	100% Onsite
	Strategic Communication	18	3	100% Onsite
UEP 7 - Today's Challenges and Future World Transformations	Ethical Issues & Societal Impacts of Emerging Technologies	18	4	100% Onsite
	Green IT and Digital Sustainability	12	4	100% Online - Self-Paced
UEP 5 - Energy Technologies	Energy Systems for Sustainable Development	30	5	100% Online
	Introduction to Energy Technologies	30	4	100% Onsite
	Sustainable Development and Environmental Transition	30	4	100% Onsite
UEP 8 - Refresher pathway	French as a Foreign Language	18	2	100% Onsite