

## Artificial intelligence and cybersecurity programme

### Course content - 2nd year of the engineering cycle

#### Compulsory scientific courses

Title	Hours	ECTS
<b>UE - Advanced science and technology Semester 1 - Period 1</b>	120	10
Algorithm Design	30	
Machine Learning	30	
Signal Analysis	30	
Introduction to Cybersecurity	30	

Title	Hours	ECTS
<b>UE - Advanced science and technology Semester 1 - Period 2</b>	120	10
Deep Learning	30	
Software Security	30	
System Security	30	
Graphs - Algorithms	30	

Title	Hours	ECTS
<b>UE - Advanced science and technology Semester 2</b>	90	7
Networks Security	30	
Artificial intelligence	30	
Data science	30	

## Open science and technology

Title	Hours	ECTS
<b>UE - Science and technology elective Semester 1 - Periods 1 and 2</b>	60	4
<b>Period 1</b>		
Programming and computing tools	30	
<b>Period 2</b>		
Introduction to robotics	30	

Title	Hours	ECTS
<b>UE - Science and technology elective Semester 2</b>	50	6
<b>A 30-hour course of your choice:</b>		
Intensive TOEIC Training Workshop	30	
Life Cycle Analysis	30	
Rétro-ingénierie	30	
Management de la sécurité des systèmes d'information	30	
Clean-room	30	
Test et validation des systèmes embarqués	30	
Prothèses et aide au handicap	30	
Introduction to image analysis	30	
Approches sémantiques en Intelligence artificielle	30	
Android development for Smartphones with Java	30	
Android development for Smartphones with Kotlin	30	
Éthique générale de l'IA	30	
<b>Compulsory 4th-year project (10 weeks)</b>		

## Management and human sciences

Title	Hours	ECTS
<b>UE - Management and human sciences Semester 1 - Periods 1 and 2</b>	60	4
<b>Period 1</b>		
Intercultural Management and communication	30	
<b>Period 2</b>		
Management d'équipe et Leadership	30	

Title	Hours	ECTS
<b>UE - Management and human sciences Semester 2</b>	60	3
<b>A 30-hour course of your choice:</b>		
Stratégie d'entreprise et développement durable	30	
Droit des affaires	30	
Marketing opérationnel	30	
International management	30	
Economie et environnement	30	
Economie et organisation du système de santé	30	
Management d'équipe et Leadership	30	
<b>Progressive preparation of the Personal and Professional Project (P5) - Compulsory course</b>	30	

## Modern languages

Title	Hours	ECTS
<b>UE - Compulsory foreign languages (LV1) Semester 1 - Periods 1 and 2</b>	30	2
English CV & Cover letter (period 1)		
English Electives 1 (period 2)		

Title	Hours	ECTS
<b>UE - Compulsory foreign languages (LV1) Semester 2</b>	22	2
English electives 2		

Title	Hours	ECTS
<b>UE - French for foreign students Semester 1 - Periods 1 and 2</b>	24	1
French		

Title	Hours	ECTS
<b>UE - French for foreign students Semester 2</b>		1
French		

## Internship

Title	Hours	ECTS
<b>UE - Compulsory internship Semester 2</b>		12
INTERNSHIP (minimum 12 weeks)		

*Non-contractual document  
Updated: December 2023*