

Curriculum Bachelor Data Science & Artificial Intelligence

2025 - 2026



Research / Skills	Programming / Software	Core Computer Science	Data / AI	Cognition & Interaction	Mathematics
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Year 1	Semester 1	Digital Skills & Programming Intro	Studying & Presenting	Foundations of Computer Science	Orientation AI	Calculus 1
		Fundamentals of Programming			Essentials of Computer Systems 1	Linear Algebra
	Semester 2	Algorithms and Data Structures	Databases	Logic 1	Introduction to Cognitive Science	Calculus 2
				Essentials of Computer Systems 2		Probability Theory

Year 2	Semester 1	Software Development	Languages and Computation	Symbolic AI	Human-Agent Interaction	Statistics
	Semester 2	Security	Neural Computing	Reinforcement Learning	Cognition & Computation Research Methods in AI	Machine Learning

Year 3	Semester 1 30 ECTS Elective Space, (LDE) Minor or Study Abroad	Concepts of Programming Languages		Human-Computer Interaction and Information Visualization	Generative AI		Cognitive Neuroscience	Natural Language Processing
		Video Game Making		Cognitive Modelling	Cognitive Robotics		Natural Computing	Computer Vision
				Mathematical Structures in Computer Science				
	Semester 2 6 ECTS Elective Space	Program Correctness					Applied Data Science & Explainable AI	
				Logic 2				
		Software Engineering			AI and Ethics	Bachelor Thesis Project		

Extra-curricular	CTF: Cyber Security in Practice	AI & Robotics Challenge
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N.B.: Bold courses are mandatory. Scheme above is indicative and non-binding.