Data Science & AI Curriculum Overview

Year	Period 1	Period 2	Period 3 (Project)	Period 4	Period 5	Period 6
Year 1	• Procedural Programming • Discrete Mathematics • Intro to DS & AI	• Objects in Programming • Calculus • Logic	**Project**	• Data Structures & Algorithms • Linear Algebra • Principles of Data Science	• Computational & Cognitive Neuroscience • Numerical Methods • Software Engineering	**Project**
Year 2	• Databases • Probability & Statistics • Graph Theory	• Machine Learning • Simulation & Statistical Analysis • Reasoning Techniques	**Project**	• HCI & Affective Computing • Mathematical Modelling • Elective (Theoretical CS / Image & Video)	• Philosophy & AI • Linear Programming • Natural Language Processing	**Project**
Year 3	**Electives:** • Semantic Web • Game Theory • Computer Security • Robotics • Digital Society • Recommender Systems	**Electives:** • Cloud Computing • Computer Security • Logic for AI • Parallel Programming • Bio-Informatics • Verification • Quantum Computing	**Project**	• Data Analysis • Operations Research Case Studies • Intelligent Systems	**Bachelor's Thesis**	**Bachelor's Thesis**