

Software, Data and Technology (180 CP)

	CHOICE / CORE / CAREER 3 x 45 = 135 CP				CONSTRUCTOR Track 45 CP	
3 rd Year CAREER	Bachelor Thesis / Seminar m, 15 CP		Summer Internship / Start-Up (after 2 nd year) m, 15 CP		New Skills modules	
	Specialization me, 5 CP	Specialization me, 5 CP				
2 nd Year CORE	Machine Learning m, 5 CP	Database Fundamentals me, 5 CP	Discrete Mathematics OR Artificial Intelligence me, 5 CP	Software Engineering and Design m, 7.5 CP	Statistics and Data Analytics m, 5 CP	me, 20 CP
	Functional Programming me, 5 CP	Scientific Data Analysis me, 5 CP	Advanced Algorithms and Data Structures m, 5 CP	Operating Systems m, 7.5 CP	Probability and Random Processes m, 5 CP	
1 st Year	Core Algorithms and Data Structures m, 7.5 CP	Introduction to AI and Agentic Workflows m, 5 CP	Compute System for AI and Performance m, 2.5 CP	Own Selection me, 7.5 CP	JVM-Based Programming m, 5 CP	German / Humanities me, 2.5 CP
	System Programming and Performance m, 7.5 CP	Industrial Programming with Python m, 5 CP	Practical Minimum (Git/Docker/CLI) m, 2.5 CP	Own Selection me, 7.5 CP	Basics of Discrete Mathematics m, 5 CP	German / Humanities me, 2.5 CP

CP: Credit Points

m: mandatory

me: mandatory elective

Study abroad Option in 5th
Semester (22.5 CP)