

		CHOICE / CORE / CAREER 3 x 45 = 135 CP				CONSTRUCTOR Track 45 CP	
3 <sup>rd</sup> Year	CAREER	Bachelor Thesis / Seminar m, 15 CP			Summer Internship / Start-Up (after 2 <sup>nd</sup> year) m, 15 CP	Argumentation, Data Visualization and Communication** m, 5 CP	Agency, Leadership & Accountability OR Community Impact Project me, 5 CP
		Specialization me, 5 CP	Specialization me, 5 CP	Specialization me, 5 CP			Linear Model / Matrices OR Complex Problem Solving me, 5 CP
2 <sup>nd</sup> 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	Causation/Correlation ** me, 2.5 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	Logic ** me, 2.5 CP
1 <sup>st</sup> Year		Core Algorithms and Data Structures m, 7.5 CP	Development in JVM Languages m, 7.5 CP	Own Selection me, 7.5 CP		Elements of Calculus Or Matrix Alg. & Adv. Calculus II m, 5 CP	German / Humanities me, 2.5 CP
		Programming in C/C++ m, 7.5 CP	Industrial Programming with Python m, 7.5 CP	Own Selection me, 7.5 CP		Elements of Linear Algebra Or Matrix Alg. & Adv. Calculus I m, 5 CP	German / Humanities me, 2.5 CP

### Minor Option in Software Development (30 CP)

CP: Credit Points

m: mandatory  
me: mandatory elective

Study abroad Option in 5<sup>th</sup>  
Semester (22.5 CP)

**\*\* Different module perspectives available**