

Computer Science (180 CP) (without minor)

	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 I me, 5 CP	Specialization II me, 5 CP	Specialization III me, 5 CP			
2 nd Year CORE	Software Engineering m, 7.5 CP	Automata, Computability, Complexity m, 7.5 CP	Machine Learning me, 5 CP	Academic Skills in CS me, 2.5 CP	Numerical Methods OR Statistics and Data Analytics me, 5 CP	me, 20 CP
	Databases m, 7.5 CP	Operating Systems m, 7.5 CP	Functional Programming me, 5 CP	Legal and Ethical Aspects me, 2.5 CP	Probability and Random Processes m, 5 CP	
1 st Year CHOICE	Algorithms and Data Structures m, 7.5 CP	Digital Systems and Computer Architecture m, 7.5 CP	Object-Oriented Programming and Design OR Safe and Concurrent Programming me, 7.5 CP		Elements of Calculus me, 5 CP	German / Humanities me, 2.5 CP
	Programming in C and C++ m, 7.5 CP	Mathematical Foundations of Computer Science m, 7.5 CP	Own Selection me, 7.5 CP		Elements of Linear Algebra me, 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)