

BSc Physics and Data Science (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		Argumentation, Data Visualization and Communication** m, 5 CP	Agency, Leadership & Accountability OR Community Impact Project me, 5 CP		
	Specialization Physics I me, 5 CP	Specialization Physics II me, 5 CP	Specialization Data Science me, 5 CP				Linear Model and Matrices OR Complex Problem Solving me, 5 CP		
2 nd Year CORE	Quantum Mechanics m, 5 CP	Computa- tional Modeling m, 5 CP	Statistical Physics m, 5 CP	Advanced Lab II m, 5 CP	Machine Learning m, 5 CP	Statistics and Data Analytics m, 5 CP	Causation / Correlation** m, 2.5 CP		
	Analytical Mechanics m, 5 CP		Electrodynamics & Relativity m, 5 CP	Advanced Lab I m, 5 CP	Scientific Data Analysis m, 5 CP	Probability and Random Processes m, 5 CP	Logic** m, 2.5 CP		
1 st Year CHOICE	Modern Physics m, 7.5 CP		Mathematical Modeling m, 7.5 CP		Own Selection me, 7.5 CP		Matrix Algebra & Adv. Calculus II m, 5 CP	German / Humanities me, 2.5 CP	
	Classical Physics m, 7.5 CP		Scientific Programming with Python m, 7.5 CP		Own Selection me, 7.5 CP		Matrix Algebra & Adv. Calculus I m, 5 CP	German / Humanities me, 2.5 CP	
Minor Option in Physics (30 CP)			CP: Credit Points		m: mandatory me: mandatory elective		Study abroad Option in 5 th Semester (22.5 CP)		**Different module perspectives available