

Course of Study Data Science (Study Cohort w21)

Sample course plan A Bachelor Data Science (DSBS)

Specialisation		Mechanics		Semester 2		Semester 3		Semester 4		Semester 5		Semester 6	
		Form Hrs/wk		Form Hrs/wk		Form Hrs/wk		Form Hrs/wk		Form Hrs/wk		Form Hrs/wk	
1	Discrete Algebraic Structures			Automata Theory and Formal Languages		Databases		Signals and Systems		Introduction to Information Security		Seminars Data Science	
2	Discrete Algebraic Structures	VL	2	Automata Theory and Formal Languages	VL	Databases	VL	Signals and Systems	VL	Introduction to Information Security	VL	Seminar Data Science I	SE
3	Discrete Algebraic Structures	GÜ	2	Automata Theory and Formal Languages	GÜ	Databases	PBL	Signals and Systems	GÜ	Introduction to Information Security	GÜ	Seminar Data Science II	SE
4													
5													
6													
7	Procedural Programming for Computer Engineers			Stochastics		Numerical Mathematics I		Foundations of Management		Data Mining		Bachelor Thesis	
8	Procedural Programming for Computer Engineers	VL	1	Stochastics	VL	Numerical Mathematics I	VL	Introduction to Management	VL	Data Mining	VL		
9	Procedural Programming for Computer Engineers	HÜ	1	Stochastics	GÜ	Numerical Mathematics I	GÜ	Management Tutorial	GÜ	Data Mining	GÜ		
10	Procedural Programming for Computer Engineers	PR	2										
11													
12													
13	Mathematics I (EN)			Programming Paradigms		Algorithms and Data Structures		Graph Theory and Optimization		Practical Course Data Science			
14	Analysis I	VL	2	Programming Paradigms	VL	Algorithms and Data Structures	VL	Graph Theory and Optimization	VL	Practical Course Data Science	PR		
15	Analysis I	HÜ	1	Programming Paradigms	HÜ	Algorithms and Data Structures	GÜ	Graph Theory and Optimization	GÜ				
16	Analysis I	GÜ	1	Programming Paradigms	PR								
17	Linear Algebra I	VL	2										
18	Linear Algebra I	HÜ	1										
19	Linear Algebra I	GÜ	1										
20				Mathematics II (EN)		Statistics		Scientific Programming		Ethics in Information Technology			
21	Mechanics I (Statics)			Analysis II	VL	Statistics	VL	Scientific Programming	VL	Ethics in Information Technology	VL		
22	Mechanics I	VL	2	Analysis II	HÜ	Statistics	GÜ	Scientific Programming	GÜ	Ethics in Information Technology	SE		
23	Mechanics I	GÜ	2	Analysis II	GÜ								
24	Mechanics I	HÜ	1	Linear Algebra II	VL								
25				Linear Algebra II	HÜ								
26				Linear Algebra II	GÜ								
27						Mathematics III (EN)		Machine Learning		Functional Programming			
28				Mechanics II: Mechanics of Materials		Analysis III	VL	Machine Learning	VL	Functional Programming	VL		
29				Mechanics II	VL	Analysis III	HÜ	Machine Learning	GÜ	Functional Programming	HÜ		
30				Mechanics II	GÜ	Analysis III	GÜ			Functional Programming	GÜ		
31				Mechanics II	HÜ								
32													
33													
34													
35													
36													

Non-technical Courses for Bachelors (from catalogue) - 6LP

The choice of courses from the catalogue is flexible (depends on the semestral work load), provided the necessary number of required credits is reached.

