

Course of Study Data Science (Study Cohort w21)

Sample course plan D Bachelor Data Science (DSBS)

Specialisation: Mechanics											
Semester 1			Semester 2			Semester 3			Semester 4		
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		
2	Discrete Algebraic Structures VL 2		Automata Theory and Formal Languages VL 2			Databases VL 3			Signals and Systems VL 3		
3	Discrete Algebraic Structures GÜ 2		Automata Theory and Formal Languages GÜ 2			Databases GÜ 1			Signals and Systems GÜ 2		
4											
5											
6											
7	Procedural Programming for Computer Engineers		Stochastics			Numerical Mathematics I			Foundations of Management		
8	Procedural Programming for Computer Engineers VL 1		Stochastics VL 2			Numerical Mathematics I VL 2			Introduction to Management VL 3		
9	Procedural Programming for Computer Engineers HÜ 1		Stochastics GÜ 2			Numerical Mathematics I GÜ 2			Management Tutorial GÜ 2		
10	Procedural Programming for Computer Engineers PR 2										
11											
12											
13	Mathematics I (EN)		Programming Paradigms			Algorithms and Data Structures			Graph Theory and Optimization		
14	Analysis I VL 2		Programming Paradigms VL 2			Algorithms and Data Structures VL 4			Graph Theory and Optimization VL 2		
15	Analysis I HÜ 1		Programming Paradigms HÜ 1			Algorithms and Data Structures GÜ 1			Graph Theory and Optimization GÜ 2		
16	Analysis I GÜ 1		Programming Paradigms PR 2								
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		
21	Mechanics I (Statics)		Analysis II VL 2			Statistics VL 3			Simulation of Transport and Handling Systems VL 1		
22	Mechanics I VL 2		Analysis II HÜ 1			Statistics GÜ 1			Simulation of Transport and Handling Systems GÜ 3		
23	Mechanics I GÜ 2		Analysis II GÜ 1								
24	Mechanics I HÜ 1		Linear Algebra II VL 2								
25			Linear Algebra II HÜ 1								
26			Linear Algebra II GÜ 1								
27						Mathematics III (EN)			Machine Learning I		
28			Mechanics II: Mechanics of Materials			Analysis III VL 2			Machine Learning I VL 2		
29			Mechanics II VL 2			Analysis III HÜ 1			Machine Learning I GÜ 2		
30			Mechanics II GÜ 2			Analysis III GÜ 1					
31			Mechanics II HÜ 2			Differential Equations 1 VL 2					
32						Differential Equations 1 HÜ 1					
						Differential Equations 1 GÜ 1					
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.

