

Course of Study Data Science (Study Cohort w21)

Sample course plan E Bachelor Data Science (DSBS)

Specialisation Materials Science												
1	Discrete Algebraic Structures		Automata Theory and Formal Languages		Databases		Signals and Systems		Introduction to Information Security		Seminars Computer Science	
2	Discrete Algebraic Structures	VL 2	Automata Theory and Formal Languages	VL 2	Databases	VL 3	Signals and Systems	VL 3	Introduction to Information Security	VL 2	Introductory Seminar Computer Science II	SE 2
3	Discrete Algebraic Structures	GÜ 2	Automata Theory and Formal Languages	GÜ 2	Databases	GÜ 1	Signals and Systems	GÜ 2	Introduction to Information Security	GÜ 2	Introductory Seminar Computer Science I	SE 2
4												
5												
6												
7	Procedural Programming for Computer Engineers		Stochastics		Numerical Mathematics I		Foundations of Management		Data Mining		Ethics in Information Technology	
8	Procedural Programming for Computer Engineers	VL 1	Stochastics	VL 2	Numerical Mathematics I	VL 2	Introduction to Management	VL 3	Data Mining	VL 2	Ethics in Information Technology	VL 2
9	Procedural Programming for Computer Engineers	HÜ 1	Stochastics	GÜ 2	Numerical Mathematics I	GÜ 2	Management Tutorial	GÜ 2	Data Mining	PBL 2	Ethics in Information Technology	SE 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		Machine Learning II		Semiconductor Circuit Design	
14	Analysis I	VL 2	Programming Paradigms	VL 2	Algorithms and Data Structures	VL 4	Graph Theory and Optimization	VL 2	Machine Learning II	VL 2	Semiconductor Circuit Design	VL 3
15	Analysis I	HÜ 1	Programming Paradigms	HÜ 1	Algorithms and Data Structures	GÜ 1	Graph Theory and Optimization	GÜ 2	Machine Learning II	GÜ 3	Semiconductor Circuit Design	GÜ 1
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		Computer Engineering		Bachelor Thesis	
21			Analysis II	VL 2	Statistics	VL 3	Scientific Programming	VL 3	Computer Engineering	VL 3		
22			Analysis II	HÜ 1	Statistics	GÜ 1	Scientific Programming	GÜ 2	Computer Engineering	GÜ 1		
23			Analysis II	GÜ 1								
24			Linear Algebra II	VL 2								
25			Linear Algebra II	VL 2								
26			Linear Algebra II	HÜ 1								
27			Linear Algebra II	GÜ 1								
28					Mathematics III (EN)		Machine Learning I					
29					Analysis III	VL 2	Machine Learning I	VL 2				
30					Analysis III	HÜ 1	Machine Learning I	GÜ 2				
31					Analysis III	GÜ 1						
32					Differential Equations 1	VL 2						
33					Differential Equations 1	HÜ 1						
34					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.

