

Course of Study Data Science (Study Cohort w21)

Sample course plan D Bachelor Data Science (DSBS)

Specialisation Logistics												
1	Discrete Algebraic Structures Discrete Algebraic Structures VL 2 Discrete Algebraic Structures GÜ 2		Automata Theory and Formal Languages Automata Theory and Formal Languages VL 2 Automata Theory and Formal Languages GÜ 2		Databases Databases VL 3 Databases GÜ 1		Signals and Systems Signals and Systems VL 3 Signals and Systems GÜ 2		Introduction to Information Security Introduction to Information Security VL 2 Introduction to Information Security GÜ 2		Seminars Computer Science Introductory Seminar Computer Science II SE 2 Introductory Seminar Computer Science I SE 2	
2												
3												
4												
5												
6												
7	Procedural Programming for Computer Engineers Procedural Programming for Computer Engineers VL 1 Procedural Programming for Computer Engineers HÜ 1 Procedural Programming for Computer Engineers PR 2		Stochastics Stochastics VL 2 Stochastics GÜ 2		Numerical Mathematics I Numerical Mathematics I VL 2 Numerical Mathematics I GÜ 2		Foundations of Management Introduction to Management VL 3 Management Tutorial GÜ 2		Data Mining Data Mining VL 2 Data Mining PBL 2		Ethics in Information Technology Ethics in Information Technology VL 2 Ethics in Information Technology SE 2	
8												
9												
10												
11												
12												
13	Mathematics I (EN) Analysis I VL 2 Analysis I HÜ 1 Analysis I GÜ 1 Linear Algebra I VL 2 Linear Algebra I HÜ 1 Linear Algebra I GÜ 1		Programming Paradigms Programming Paradigms VL 2 Programming Paradigms HÜ 1 Programming Paradigms PR 2		Algorithms and Data Structures Algorithms and Data Structures VL 4 Algorithms and Data Structures GÜ 1		Graph Theory and Optimization Graph Theory and Optimization VL 2 Graph Theory and Optimization GÜ 2		Machine Learning II Machine Learning II VL 2 Machine Learning II GÜ 3		Computability and Complexity Theory Computability and Complexity Theory VL 2 Computability and Complexity Theory GÜ 2	
14												
15												
16												
17												
18												
19			Mathematics II (EN) Analysis II VL 2 Analysis II HÜ 1 Analysis II GÜ 1 Linear Algebra II VL 2 Linear Algebra II HÜ 1 Linear Algebra II GÜ 1		Statistics Statistics VL 3 Statistics GÜ 1		Scientific Programming Scientific Programming VL 3 Scientific Programming GÜ 2		Simulation of Transport and Handling Systems Simulation of Transport and Handling Systems VL 1 Simulation of Transport and Handling Systems GÜ 3		Bachelor Thesis	
20												
21												
22												
23												
24												
25												
26												
27												
28												
29												
30												
31												
32												
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.

