Course of Study Data Science (Study Cohort w21)

Sample course plan D Bachelor Data Science (DSBS) Dual study program

Specialisation Medicine

Legend

Core Qualification Compulsory	Specialisation Compulsory	Focus Compulsory	Thesis Compulsory
Core Qualification Elective Compulsory	Specialisation Elective Compulsory	Focus Elective Compulsory	Interdisciplinary complement

LP	Semester 1	Form	Hrs/wk	Semester 2	Form	Hrs/wk	Semester 3	Form	Hrs/wk	Semester 4	Form	Hrs/wk	Semester 5	Form	Hrs/wk	Semester 6	Form	Hrs/wk
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	Procedular 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**			**Computability and Complexity Theory**		
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	Computability and Complexity Theory	VL	2
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	2	Computability and Complexity Theory	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	**Mathematics II (EN)**			**Statistics**			**Scientific Programming**			**Simulation of Transport and Handling Systems**					
20				Analysis II	VL	2	Statistics	VL	3	Scientific Programming	VL	3	Simulation of Transport and Handling Systems	VL	1			
21	**MED II: Introduction to Biochemistry and Molecular Biology**			Analysis II	HÜ	1	Statistics	GÜ	1	Scientific Programming	GÜ	2	Simulation of Transport and Handling Systems	GÜ	3			
22	Introduction to Biochemistry and Molecular Biology	VL	2	Analysis II	GÜ	1												
23				Linear Algebra II	VL	2												
24				Linear Algebra II	HÜ	1												
25				Linear Algebra II	GÜ	1	**Mathematics III (EN)**			**Machine Learning I**								
26							Analysis III	VL	2	Machine Learning I	VL	2						
27				**MED I: Introduction to Anatomy**			Analysis III	HÜ	1	Machine Learning I	GÜ	2						
28				Introduction to Anatomy	VL	2	Analysis III	GÜ	1									
29							Differential Equations 1	VL	2									
30				**MED I: Introduction to Radiology and Radiation Therapy**			Differential Equations 1	HÜ	1									
31				Introduction to Radiology and Radiation Therapy	VL	2	Differential Equations 1	GÜ	1	**MED II: Introduction to Physiology**								
32										Introduction to Physiology	VL	2						
33																		

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.