

# Course of Study Data Science (Study Cohort w21)

Sample course plan C Bachelor Data Science (DSBS)

Specialisation: Medicine		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	Form Hrs/wk	Form Hrs/wk	Form Hrs/wk	Form Hrs/wk	Form Hrs/wk	Form Hrs/wk
1	<b>Discrete Algebraic Structures</b>	<b>Automata Theory and Formal Languages</b>	<b>Databases</b>	<b>Signals and Systems</b>	<b>Introduction to Information Security</b>	<b>Seminars Data Science</b>					
2	Discrete Algebraic Structures VL 2	Automata Theory and Formal Languages VL 2	Databases VL 4	Signals and Systems VL 3	Introduction to Information Security VL 2	Seminar Data Science I SE 2					
3	Discrete Algebraic Structures GÜ 2	Automata Theory and Formal Languages GÜ 2	Databases PBL 1	Signals and Systems GÜ 2	Introduction to Information Security GÜ 2	Seminar Data Science II SE 2					
4											
5											
6											
7	<b>Procedural Programming for Computer Engineers</b>	<b>Stochastics</b>	<b>Numerical Mathematics I</b>	<b>Foundations of Management</b>	<b>Data Mining</b>	<b>Introduction into Medical Technology and Systems</b>					
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	Introduction into Medical Technology and Systems VL 2					
9	Procedural Programming for Computer Engineers HÜ 1	Stochastics GÜ 2	Numerical Mathematics I GÜ 2	Management Tutorial GÜ 2	Data Mining GÜ 2	Introduction into Medical Technology and Systems PS 2					
10	Procedural Programming for Computer Engineers PR 2					Introduction into Medical Technology and Systems HÜ 1					
11											
12											
13	<b>Mathematics I (EN)</b>	<b>Programming Paradigms</b>	<b>Algorithms and Data Structures</b>	<b>Graph Theory and Optimization</b>	<b>Practical Course Data Science</b>	<b>Bachelor Thesis</b>					
14	Analysis I VL 2	Programming Paradigms VL 2	Algorithms and Data Structures VL 4	Graph Theory and Optimization VL 2	Practical Course Data Science PR 8						
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		<b>Mathematics II (EN)</b>	<b>Statistics</b>	<b>Scientific Programming</b>	<b>Ethics in Information Technology</b>						
21		Analysis II VL 2	Statistics VL 3	Scientific Programming VL 3	Ethics in Information Technology VL 2						
22		Analysis II HÜ 1	Statistics GÜ 1	Scientific Programming GÜ 2	Ethics in Information Technology SE 2						
23		Analysis II GÜ 1									
24		Linear Algebra II VL 2									
25		Linear Algebra II HÜ 1									
26		Linear Algebra II GÜ 1									
27			<b>Mathematics III (EN)</b>	<b>Machine Learning</b>	<b>Image Processing</b>						
28			Analysis III VL 2	Machine Learning VL 2	Image Processing VL 2						
29			Analysis III HÜ 1	Machine Learning GÜ 2	Image Processing GÜ 2						
30			Analysis III GÜ 1								
31		<b>MED I: Introduction to Anatomy</b>	Differential Equations 1 VL 2								
32		Introduction to Anatomy VL 2	Differential Equations 1 HÜ 1								
33			Differential Equations 1 GÜ 1								
		<b>MED I: Introduction to Radiology and Radiation Therapy</b>		<b>MED II: Introduction to Physiology</b>							
		Introduction to Radiology and Radiation Therapy VL 2		Introduction to Physiology VL 2							
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.

