

# Course of Study Data Science (Study Cohort w20)

Sample course plan D Bachelor Data Science (DSBS)  
Specialisation Logistics

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

LP	Semester 1	FormHrs/wk	Semester 2	FormHrs/wk	Semester 3	FormHrs/wk	Semester 4	FormHrs/wk	Semester 5	FormHrs/wk	Semester 6	FormHrs/wk						
1	<b>Discrete Algebraic Structures</b>	VL 2	<b>Automata Theory and Formal Languages</b>	VL 2	<b>Databases</b>	VL 4	<b>Signals and Systems</b>	VL 3	<b>Introduction to Information Security</b>	VL 3	<b>Seminars Data Science</b>	SE 2						
2													Discrete Algebraic Structures	Automata Theory and Formal Languages	Databases	Signals and Systems	Introduction to Information Security	Seminar Data Science I
3													Discrete Algebraic Structures	Automata Theory and Formal Languages	Databases	Signals and Systems	Introduction to Information Security	Seminar Data Science II
4													Discrete Algebraic Structures	Automata Theory and Formal Languages	Databases	Signals and Systems	Introduction to Information Security	Seminar Data Science II
5													Discrete Algebraic Structures	Automata Theory and Formal Languages	Databases	Signals and Systems	Introduction to Information Security	Seminar Data Science II
6													Discrete Algebraic Structures	Automata Theory and Formal Languages	Databases	Signals and Systems	Introduction to Information Security	Seminar Data Science II
7	<b>Procedural Programming</b>	VL 1	<b>Stochastics</b>	VL 2	<b>Numerical Mathematics I</b>	VL 2	<b>Foundations of Management</b>	VL 3	<b>Data Mining</b>	VL 2	<b>Computability and Complexity Theory</b>	VL 2						
8													Procedural Programming	Stochastics	Numerical Mathematics I	Foundations of Management	Data Mining	Computability and Complexity Theory
9													Procedural Programming	Stochastics	Numerical Mathematics I	Foundations of Management	Data Mining	Computability and Complexity Theory
10													Procedural Programming	Stochastics	Numerical Mathematics I	Foundations of Management	Data Mining	Computability and Complexity Theory
11													Procedural Programming	Stochastics	Numerical Mathematics I	Foundations of Management	Data Mining	Computability and Complexity Theory
12													Procedural Programming	Stochastics	Numerical Mathematics I	Foundations of Management	Data Mining	Computability and Complexity Theory
13	<b>Linear Algebra</b>	VL 4	<b>Mathematical Analysis</b>	VL 4	<b>Mathematics III</b>	VL 2	<b>Graph Theory and Optimization</b>	VL 2	<b>Practical Course Data Science</b>	PR 8	<b>Bachelor Thesis</b>							
14													Linear Algebra	Mathematical Analysis	Mathematics III	Graph Theory and Optimization	Practical Course Data Science	Bachelor Thesis
15													Linear Algebra	Mathematical Analysis	Mathematics III	Graph Theory and Optimization	Practical Course Data Science	Bachelor Thesis
16													Linear Algebra	Mathematical Analysis	Mathematics III	Graph Theory and Optimization	Practical Course Data Science	Bachelor Thesis
17													Linear Algebra	Mathematical Analysis	Mathematics III	Graph Theory and Optimization	Practical Course Data Science	Bachelor Thesis
18													Linear Algebra	Mathematical Analysis	Mathematics III	Graph Theory and Optimization	Practical Course Data Science	Bachelor Thesis
19	<b>Transport- and Handling-Technology</b>	VL 2	<b>Programming Paradigms</b>	VL 2	<b>Algorithms and Data Structures</b>	VL 4	<b>Scientific Programming</b>	VL 3	<b>Ethics in Information Technology</b>	VL 2	<b>Simulation of Transport and Handling Systems</b>	VL 1						
20													Transport- and Handling-Technology	Programming Paradigms	Algorithms and Data Structures	Scientific Programming	Ethics in Information Technology	Simulation of Transport and Handling Systems
21													Transport- and Handling-Technology	Programming Paradigms	Algorithms and Data Structures	Scientific Programming	Ethics in Information Technology	Simulation of Transport and Handling Systems
22													Transport- and Handling-Technology	Programming Paradigms	Algorithms and Data Structures	Scientific Programming	Ethics in Information Technology	Simulation of Transport and Handling Systems
23													Transport- and Handling-Technology	Programming Paradigms	Algorithms and Data Structures	Scientific Programming	Ethics in Information Technology	Simulation of Transport and Handling Systems
24													Transport- and Handling-Technology	Programming Paradigms	Algorithms and Data Structures	Scientific Programming	Ethics in Information Technology	Simulation of Transport and Handling Systems
25	<b>Logistics Management</b>	PBL 2	<b>Advanced Stochastics</b>	VL 2	<b>Machine Learning</b>	VL 2	<b>Simulation of Transport and Handling Systems</b>	VL 1	<b>Simulation of Transport and Handling Systems</b>	UE 3								
26													Logistics Economics	Advanced Stochastics	Machine Learning	Simulation of Transport and Handling Systems	Simulation of Transport and Handling Systems	
27													Logistics Economics	Advanced Stochastics	Machine Learning	Simulation of Transport and Handling Systems	Simulation of Transport and Handling Systems	
28													Logistics Economics	Advanced Stochastics	Machine Learning	Simulation of Transport and Handling Systems	Simulation of Transport and Handling Systems	
29													Logistics Economics	Advanced Stochastics	Machine Learning	Simulation of Transport and Handling Systems	Simulation of Transport and Handling Systems	
30													Logistics Economics	Advanced Stochastics	Machine Learning	Simulation of Transport and Handling Systems	Simulation of Transport and Handling Systems	
31	Logistics Economics	Advanced Stochastics	Machine Learning	Simulation of Transport and Handling Systems	Simulation of Transport and Handling Systems													
32	Logistics Economics	Advanced Stochastics	Machine Learning	Simulation of Transport and Handling Systems	Simulation of Transport and Handling Systems													

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.

