Course of Study Data Science (Study Cohort w21)

Sample course plan E Bachelor Data Science (DSBS) Dual study program								Core Qualification Elective Compulsory Specialisation Compulsory		Focus Elective	Compulsory Interdisciplinary comp	olement
Specia	lisation Medicine	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 2 3 4 5 6	Discrete Algebraic Structures Discrete Algebraic Structures Discrete Algebraic Structures	VL 2 GÜ 2	Automata Theory and Formal Languages Automata Theory and Formal Languages Automata Theory and Formal Languages	VL 2 GÜ 2	Databases Databases Databases	VL 3 GÜ 1	Signals and Systems Signals and Systems Signals and Systems	VL 3 GÜ 2	Introduction to Information Security Introduction to Information Security Introduction to Information Security	VL 2 GÜ 2	Seminars Computer Science Introductory Seminar Computer Science II Introductory Seminar Computer Science I	SE 2 SE 2
7 8 9 10 11 12	Procedural Programming for Computer En Procedural Programming for Computer Enginee Procedular Programming for Computer Enginee Procedural Programming for Computer Enginee	gineers rs VL 1 rs HŪ 1 rs PR 2	Stochastics Stochastics Stochastics	VL 2 GÜ 2	Numerical Mathematics I Numerical Mathematics I Numerical Mathematics I	VL 2 GŨ 2	Foundations of Management Introduction to Management Management Tutorial	VL 3 GÜ 2	Data Mining Data Mining Data Mining	VL 2 PBL 2	Ethics in Information Technology Ethics in Information Technology Ethics in Information Technology	VL 2 SE 2
13 14 15 16 17 18	Mathematics I (EN) Analysis I Analysis I Analysis I Linear Algebra I Linear Algebra I Linear Algebra I	VL 2 HŪ 1 GŨ 1 VL 2 HŨ 1 GŨ 1	Programming Paradigms Programming Paradigms Programming Paradigms Programming Paradigms	VL 2 HÜ 1 PR 2	Algorithms and Data Structures Algorithms and Data Structures Algorithms and Data Structures	VL 4 GÜ 1	Graph Theory and Optimizati Graph Theory and Optimization Graph Theory and Optimization	ion VL 2 GÜ 2	Machine Learning II Machine Learning II Machine Learning II	VL 2 GÜ 2	Semiconductor Circuit Design Semiconductor Circuit Design Semiconductor Circuit Design	VL 3 GÜ 1
19 20 21 22 23 24	MED II: Introduction to Biochemistry and M Biology Introduction to Biochemistry and Molecular Biology	folecular VL 2	Mathematics II (EN) Analysis II Analysis II Analysis II Linear Algebra II Linear Algebra II Linear Algebra II	VL 2 HÜ 1 GÜ 1 VL 2 HÜ 1 GÜ 1	Statistics Statistics Statistics	VL 3 GŨ 1	Scientific Programming Scientific Programming Scientific Programming	VL 3 GÜ 2	Computer Engineering Computer Engineering Computer Engineering	VL 3 GÜ 1		
25 26 27 28 29 30 31 32			MED I: Introduction to Anatomy Introduction to Anatomy MED I: Introduction to Radiology and Radia Therapy Introduction to Radiology and Radiation Therapy	VL 2 ition / VL 2	Mathematics III (EN) Analysis III Analysis III Differential Equations 1 Differential Equations 1 Differential Equations 1	VL 2 HÜ 1 GÜ 1 VL 2 HÜ 1 GÜ 1	Machine Learning I Machine Learning I Machine Learning I MED II: Introduction to Physiology	VL 2 GÜ 2 ology VL 2				
33	Non-technical Courses for Bachelo	ors (from ca	talogue) - 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.