Course of Study Data Science (Study Cohort w21)

Sample	e course plan B Bachelor Data Scien	ce (DSBS)		Core Qualification Elective Compulsory Specialisation Elective Compulsory Focus Elective Compulsory Interdisciplinary complement			
Special	isation Medicine						
2 3	Discrete Algebraic Structures Discrete Algebraic Structures VL 2 Discrete Algebraic Structures GÛ 2	Automata Theory and Formal Languages Automata Theory and Formal Languages VL 2 Automata Theory and Formal Languages GÛ 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	
4 5 6							
7 8 9 10 11	Procedural Programming for Computer Engineers Procedural Programming for Computer Engineers VL 1 Procedular Programming for Computer Engineers HÜ 1 Procedural Programming for Computer Engineers PR 2	Stochastics VL 2 Stochastics GÜ 2	Numerical Mathematics I Numerical Mathematics I Numerical Mathematics I O O O O O O O O O O O O O	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	
13 14 15 16 17 18	Mathematics I (EN) VL 2 Analysis I H0 1 Analysis I G0 1 Linear Algebra I VL 2 Linear Algebra I H0 1 Linear Algebra I G0 1	Programming Paradigms Programming Paradigms VL 2 Programming Paradigms H0 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	Enhanced Fundamentals of Materials Science Materials for Energy Storage and Conversion VL 2 Enhanced Fundamentals: Ceramics and VL 2 Polymers Enhanced Fundamentals: Ceramics and HÜ 1 Polymers	
19 20 21 22 23 24	MED II: Introduction to Biochemistry and Molecular Biology Introduction to Biochemistry and Molecular VL 2 Biology	Mathematics II (EN)	Statistics Statistics VL 3 Statistics GÜ 1	Scientific Programming Scientific Programming VL 3 Scientific Programming GÜ 2	Introduction to Communications and Random Processes Introduction to Communications and Random VL 3 Processes Introduction to Communications and Random HÜ 1 Processes Introduction to Communications and Random GÜ 1 Processes	Bachelor Thesis	
25 26 27 28 29 30		MED I: Introduction to Anatomy Introduction to Anatomy VL 2 MED I: Introduction to Radiology and Radiation	Mathematics III (EN) Analysis III VL 2 Analysis III HÜ 1 Analysis III GÜ 1 Dilfferential Equations 1 VL 2 Differential Equations 1 HÜ 1 Differential Equations 1 GÜ 1	Machine Learning I VL 2 Machine Learning I GÜ 2			
31 32 33	Non-technical Courses for Bachelors (from cash	Therapy Introduction to Radiology and Radiation Therapy VL 2		MED II: Introduction to Physiology Introduction to Physiology VL 2			

Thesis Compulsory

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.