Course of Study Computer Science (Study Cohort w20)

Sample course plan S Bachelor Computer Science (CSBS)
Specialisation I. Computer and Software Engineering, Specialisation II. Mathematics and Engineering Science,
Specialisation III. Subject Specific Focus

Legend:

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

LP

1	**Discrete Algebraic Structures** Discrete Algebraic Structures VL 2 Discrete Algebraic Structures GÜ 2	**Automata Theory and Formal Languages** Automata Theory and Formal Languages VL 2 Automata Theory and Formal Languages GÜ 2	**Computer Engineering** Computer Engineering VL 3 Computer Engineering GÜ 1	**Computability and Complexity Theory** Computability and Complexity Theory VL 2 Computability and Complexity Theory GÜ 2	**Software Industrial Internship**	**Signals and Systems** Signals and Systems VL 3 Signals and Systems GÜ 2
2						
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7	**Procedural Programming** Procedural Programming VL 1 Procedural Programming HÜ 1 Procedural Programming PR 2	**Mathematical Analysis** Mathematical Analysis VL 4 Mathematical Analysis HÜ 2 Mathematical Analysis GÜ 2	**Computernetworks and Internet Security** Computer Networks and Internet Security VL 3 Computer Networks and Internet Security GÜ 1	**Stochastics** Stochastics VL 2 Stochastics GÜ 2	**Seminars Computer Science** Introductory Seminar Computer Science II SE 2 Introductory Seminar Computer Science I SE 2	**Compiler Construction** Compiler Construction VL 2 Compiler Construction GÜ 2
8						
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13	**Functional Programming** Functional Programming VL 2 Functional Programming HÜ 2 Functional Programming GÜ 2		**Algorithms and Data Structures** Algorithms and Data Structures VL 4 Algorithms and Data Structures GÜ 1	**Software Engineering** Software Engineering VL 2 Software Engineering GÜ 2	**Introduction to Information Security** Introduction to Information Security VL 2 Introduction to Information Security GÜ 2	**Introduction into Medical Technology and Systems** Introduction into Medical Technology and Systems VL 2 Introduction into Medical Technology and Systems PS 2 Introduction into Medical Technology and Systems HÜ 1
14						
15		**Foundations of Management** Introduction to Management VL 3 Management Tutorial GÜ 2				
16						
17						
18						
19	**Linear Algebra** Linear Algebra VL 4 Linear Algebra HÜ 2 Linear Algebra GÜ 2		**Mathematics III (EN)** Analysis III VL 2 Analysis III HÜ 1 Analysis III GÜ 1 Differential Equations 1 VL 2 Differential Equations 1 HÜ 1 Differential Equations 1 GÜ 1	**Graph Theory and Optimization** Graph Theory and Optimization VL 2 Graph Theory and Optimization GÜ 2	**Combinatorial Structures and Algorithms** Combinatorial Structures and Algorithms VL 3 Combinatorial Structures and Algorithms GÜ 1	**Bachelor Thesis**
20						
21		**Programming Paradigms** Programming Paradigms VL 2 Programming Paradigms HÜ 1 Programming Paradigms PR 2				
22						
23						
24						
25				**Operating Systems** Operating Systems VL 2 Operating Systems GÜ 2		
26						
27			**Numerical Mathematics I** Numerical Mathematics I VL 2 Numerical Mathematics I GÜ 2			
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31						
32						

Non-technical Courses for Bachelors (from catalogue) - 6LP

Technical Complementary Course II for CSBS - 6LP

Technical Complementary Course I for CSBS - 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.