Course of Study Computer Science (Study Cohort w20)

Sample course plan S Bachelor Computer Science (CSBS) Specialisation Compulsory Thesis Compulsory Specialisation I. Computer and Software Engineering, Specialisation II. Mathematics and Engineering Science, Core Qualification Elective Compulsory Specialisation Elective Compulsory Focus Elective Compulsory Interdisciplinary complement Specialisation III. Subject Specific Focus_{irs/wk} | Semester 2 Form Hrs/wk Semester 3 Form Hrs/wk Semester 5 Form Hrs/wk Semester 6 **Discrete Algebraic Structures Automata Theory and Formal Languages** Computer Engineering Computability and Complexity Theory Discrete Algebraic Structures Automata Theory and Formal Languages Computer Engineering Computability and Complexity Theory VL 2 Signals and Systems VL 3 2 GÜ 2 Automata Theory and Formal Languages GÜ 2 GÜ 1 GÜ 2 GÜ 2 Discrete Algebraic Structures Computer Engineering Computability and Complexity Theory Signals and Systems 3 4 5 7 Procedural Programming Mathematical Analysis Computernetworks and Internet Security Stochastics Seminars Computer Science Compiler Construction VI 2 SF 2 Compiler Construction Procedural Programming VI 1 Mathematical Analysis VI 4 Computer Networks and Internet Security Stochastics Introductory Seminar Computer Science II VI 2 HŪ 1 Mathematical Analysis HÜ 2 Computer Networks and Internet Security GÜ 1 Stochastics GÜ 2 Introductory Seminar Computer Science I Compiler Construction GÜ 2 Procedural Programming 10 11 12 13 **Functional Programming** Algorithms and Data Structures Software Engineering Introduction to Information Security Introduction into Medical Technology and Systems VI 2 Introduction to Information Security Introduction into Medical Technology and Functional Programming VI 2 Algorithms and Data Structures VI 4 Software Engineering VI 2 14 HŪ 2 Algorithms and Data Structures GÜ 1 Software Engineering GÜ 2 Introduction to Information Security GÜ 2 Functional Programming Foundations of Management Functional Programming Introduction into Medical Technology and Introduction to Management 16 Management Tutorial GÜ 2 Introduction into Medical Technology and 17 Systems 18 19 Linear Algebra Mathematics III (EN) **Graph Theory and Optimization** Combinatorial Structures and Algorithms Bachelor Theele Linear Algebra VI 4 Analysis III VI 2 Graph Theory and Optimization VI 2 Combinatorial Structures and Algorithms 20 Linear Algebra HŪ 2 Analysis III HÜ 1 Graph Theory and Optimization Combinatorial Structures and Algorithms 21 Linear Algebra Programming Paradigms Analysis III GŪ 1 Programming Paradigms 22 VL 2 Programming Paradigms Differential Equations 1 HÜ 1 23 Programming Paradigms GÜ 1 Differential Equations 1 24 25 Operating Systems Operating Systems VI 2 26 Operating Systems GÜ 2 27 Numerical Mathematics I Numerical Mathematics I VL 2 28 Numerical Mathematics I GÜ 2 29 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.