## **Course of Study Computer Science (Study Cohort w21)**

Sample course plan S Bachelor Computer Science (CSBS) Specialisation Compulsory Thesis Compulsory Core Qualification Elective Compulsory Specialisation Elective Compulsory Focus Elective Compulsory Specialisation I. Computer and Software Engineering, Specialisation II. Mathematics and Engineering Science, Interdisciplinary complement Specialisation III. Subject Specific Focus<sub>irs/wk</sub> | 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 Software Industrial Internship **Compiler Construction** Discrete Algebraic Structures Automata Theory and Formal Languages Computer Engineering Computability and Complexity Theory VL 2 Compiler Construction VL 2 2 GÜ 2 Automata Theory and Formal Languages GÜ 2 GÜ 1 GÜ 2 Compiler Construction GÜ 2 Discrete Algebraic Structures Computer Engineering Computability and Complexity Theory 3 4 5 7 **Functional Programming** Foundations of Management Computernetworks and Internet Security Stochastics Seminars Computer Science Introduction into Medical Technology and Systems VI 2 Introduction into Medical Technology and Functional Programming VI 2 Introduction to Management Computer Networks and Internet Security Stochastics Introductory Seminar Computer Science II Functional Programming HÜ 2 Management Tutorial Computer Networks and Internet Security GÜ 1 Stochastics Introductory Seminar Computer Science I Functional Programming Introduction into Medical Technology and 10 Introduction into Medical Technology and 11 Systems 12 13 **Procedural Programming for Computer Engineers Programming Paradigms** Algorithms and Data Structures Software Engineering Introduction to Information Security Solvers for Sparse Linear Systems VI 2 Introduction to Information Security Solvers for Sparse Linear Systems Procedural Programming for Computer Engineers VL 1 Programming Paradigms VI 2 Algorithms and Data Structures VI 4 Software Engineering VI 2 14 Procedular Programming for Computer Engineers HŪ 1 HÜ 1 Algorithms and Data Structures GÜ 1 Software Engineering GÜ 2 Introduction to Information Security Solvers for Sparse Linear Systems Programming Paradigms 15 Procedural Programming for Computer Engineers PR 2 Programming Paradigms 16 17 18 19 Mathematics I (EN) Mathematics II (EN) Mathematics III (EN) **Graph Theory and Optimization** Combinatorial Structures and Algorithms Bachelor Theele Analysis I VI 2 Analysis II Analysis III VI 2 Graph Theory and Optimization VI 2 Combinatorial Structures and Algorithms 20 Analysis I HŪ 1 Analysis II HÜ 1 Analysis III HÜ 1 Graph Theory and Optimization Combinatorial Structures and Algorithms 21 Analysis I GÜ 1 Analysis II Analysis III GŪ 1 22 HÜ 1 Linear Algebra II HÜ 1 Differential Equations 1 HÜ 1 23 GÜ 1 GÜ 1 Linear Algebra I Linear Algebra II Differential Equations 1 24 25 26 28 29 Non-technical Courses for Bachelors (from catalogue) - 6LP

Technical Complementary Course I for CSBS - 6LP

Technical Complementary Course II 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.