Course of Study Computer Science in Engineering (Study Cohort w22)

Sample course plan C Bachelor Computer Science in Engineering (IIWBS) Dual study program Specialisation I. Computer Science, Specialisation II. Mathematics & Engineering Science, Specialisation III. Core Qualification Elective Compulsory Specialisation Elective Compulsory Focus Elective Compulsory Interdisciplinary complement Subject Specific Focus **Discrete Algebraic Structures** Electrical Engineering II: Alternating Current Networks Numerical Mathematics I Signals and Systems Introduction to Communications and Random Computability and Complexity Theory and Basic Devices Discrete Algebraic Structures Numerical Mathematics I Signals and Systems Processes Computability and Complexity Theory GÜ 2 Electrical Engineering II: Alternating Current GÜ 2 GÜ 2 Introduction to Communications and Random Computability and Complexity Theory GÜ 2 Discrete Algebraic Structures Numerical Mathematics I Signals and Systems 3 Networks and Basic Devices Processes Electrical Engineering II: Alternating Current Introduction to Communications and Random Networks and Basic Devices Processes 5 Introduction to Communications and Random GÜ 1 Electrical Engineering I: Direct Current Networks and **Automata Theory and Formal Languages** Computer Engineering Stochastics Introduction to Control Systems Bachelor thesis (dual study program) VI 2 Automata Theory and Formal Languages Computer Engineering VI 3 Stochastics Introduction to Control Systems VI 2 Automata Theory and Formal Languages Computer Engineering GÜ 1 Stochastics Introduction to Control Systems GÜ 2 and Electromagnetic Fields Electrical Engineering I: Direct Current Networks GÜ 2 and Electromagnetic Fields 11 12 13 Mathematics I Foundations of Management Computernetworks and Internet Security Embedded Systems Practical Course IIW Mathematics I VI 4 Introduction to Management Computer Networks and Internet Security Emhedded Systems VL 3 Practical Course IIW PRI 8 14 HŪ 2 Management Tutorial Computer Networks and Internet Security GÜ 1 Embedded Systems GÜ 1 16 17 18 19 Mathematics II Mathematics III Seminars Computer Science Practical module 5 (dual study program, Bachelor's Mathematics II VI 4 Analysis III VI 2 Introductory Seminar Computer Science II SF 2 degree) 20 Practical term 5 HÜ 2 Analysis III GÜ 1 Introductory Seminar Computer Science I 21 Procedural Programming for Computer Engineers Analysis III HÜ 1 Procedural Programming for Computer Engineers VL 2 22 Procedural Programming for Computer Engineers HŪ 1 Differential Equations 1 GÜ 1 23 Procedural Programming for Computer Engineers PR 2 HÜ 1 Differential Equations 1 24 25 Practical module 4 (dual study program, Bachelor's **Functional Programming** Functional Programming VI 2 26 Practical term 4 Functional Programming HÜ 2 27 Practical module 1 (dual study program, Bachelor's Algorithms and Data Structures Programming Paradigms Functional Programming GÜ 2 degree) Programming Paradigms Algorithms and Data Structures VL 4 28 Practical term 1 HÜ 1 Algorithms and Data Structures GÜ 1 Programming Paradigms 29 Programming Paradigms PR 2 30 31 Combinatorial Structures and Algorithms Combinatorial Structures and Algorithms 32 Combinatorial Structures and Algorithms 33 Practical module 2 (dual study program, Bachelor's Practical module 3 (dual study program, Bachelor's degree) 34 Practical term 2 Practical term 3 35 36 37 38

Linking theory and practice (dual study program, Bachelor's degree) (from catalogue) - 6LP

Technical Complementary Course for Computational Science and Engineering Bachelor - 12LP

The choice of courses from the catalogue is flexible (depends on the semestral work load), provided the necessary number of required credits is reached.