Course of Study Computer Science (Study Cohort w22)

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 1–6

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

Databases

Databases	VL	3
Databases - Exercise	GÜ	2

Computability and Complexity Theory

Computability and Complexity Theory	VL	2
Computability and Complexity Theory	GÜ	2

Software Industrial Internship

Compiler Construction

Compiler Construction	VL	2
Compiler Construction	GÜ	2

LP 7–12

Functional Programming

Functional Programming	VL	2
Functional Programming	HÜ	2
Functional Programming	GÜ	2

Foundations of Management

Introduction to Management	VL	3
Management Tutorial	GÜ	2

Computer Engineering

Computer Engineering	VL	3
Computer Engineering	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

Algebra and Control

Algebra and Control	VL	2
Algebra and Control	GÜ	2

LP 13–18

Procedural Programming for Computer Engineers

Procedural Programming for Computer Engineers	VL	2
Procedural Programming for Computer Engineers	HÜ	1
Procedural Programming for Computer Engineers	PR	2

Programming Paradigms

Programming Paradigms	VL	2
Programming Paradigms	HÜ	1
Programming Paradigms	PR	2

Computernetworks and Internet Security

Computer Networks and Internet Security	VL	3
Computer Networks and Internet Security	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

Solvers for Sparse Linear Systems

Solvers for Sparse Linear Systems	VL	2
Solvers for Sparse Linear Systems	GÜ	2

LP 19–32

Mathematics I (EN)

Mathematics I	VL	4
Mathematics I	HÜ	2
Mathematics I	GÜ	2

Mathematics II (EN)

Mathematics II	VL	4
Mathematics II	HÜ	2
Mathematics II	GÜ	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

Combinatorial Structures and Algorithms

Combinatorial Structures and Algorithms	VL	3
Combinatorial Structures and Algorithms	GÜ	1

Bachelor Thesis

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

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.