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

Sample course plan I Bachelor Computer Science in Engineering (IIWBS) Dual study program
Specialisation I. Computer Science, Specialisation II. Mathematics & Engineering Science, Specialisation III.
Subject Specific Focus

Rows 1–6

Discrete Algebraic Structures
Discrete Algebraic Structures — VL 2
Discrete Algebraic Structures — GÜ 2

Electrical Engineering II: Alternating Current Networks and Basic Devices
Electrical Engineering II: Alternating Current Networks and Basic Devices — VL 3
Electrical Engineering II: Alternating Current Networks and Basic Devices — GÜ 2

Numerical Mathematics I
Numerical Mathematics I — VL 2
Numerical Mathematics I — GÜ 2

Signals and Systems
Signals and Systems — VL 3
Signals and Systems — GÜ 2

Introduction to Communications and Random Processes
Introduction to Communications and Random Processes — VL 3
Introduction to Communications and Random Processes — HÜ 1
Introduction to Communications and Random Processes — GÜ 1

Software Development
Software Development — VL 1
Software Development — PBL 2

Rows 7–12

Electrical Engineering I: Direct Current Networks and Electromagnetic Fields
Electrical Engineering I: Direct Current Networks and Electromagnetic Fields — VL 3
Electrical Engineering I: Direct Current Networks and Electromagnetic Fields — 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

Stochastics
Stochastics — VL 2
Stochastics — GÜ 2

Introduction to Control Systems
Introduction to Control Systems — VL 2
Introduction to Control Systems — GÜ 2

Fundamentals of Operating Systems
Fundamentals of Operating Systems — VL 2
Fundamentals of Operating Systems — GÜ 2

Rows 13–18

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

Foundations of Management
Introduction to Management — VL 3
Management Tutorial — GÜ 2

Computernetworks and Internet Security
Computer Networks and Internet Security — VL 3
Computer Networks and Internet Security — GÜ 1

Embedded Systems
Embedded Systems — VL 3
Embedded Systems — GÜ 1
Embedded Systems — PBL 1

Practical Course IIW
Practical Course IIW — PBL 8

Bachelor thesis (dual study program)

Rows 19–26

Mathematics II
Mathematics II — VL 4
Mathematics II — HÜ 2
Mathematics II — GÜ 2

Mathematics III
Analysis III — VL 2
Analysis III — GÜ 1
Analysis III — HÜ 1
Differential Equations 1 — VL 2
Differential Equations 1 — GÜ 1
Differential Equations 1 — HÜ 1

Seminars Computer Science
Introductory Seminar Computer Science II — SE 2
Introductory Seminar Computer Science I — SE 2

Practical module 5 (dual study program, Bachelor's degree)
Practical term 5 — 0

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

Practical module 4 (dual study program, Bachelor's degree)
Practical term 4 — 0

Electrical Power Systems I: Introduction to Electrical Power Systems
Electrical Power Systems I: Introduction to Electrical Power Systems — VL 3
Electrical Power Systems I: Introduction to Electrical Power Systems — GÜ 2

Rows 27–32

Practical module 1 (dual study program, Bachelor's degree)
Practical term 1 — 0

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

Algorithms and Data Structures
Algorithms and Data Structures — VL 4
Algorithms and Data Structures — GÜ 1

Rows 33–38

Practical module 2 (dual study program, Bachelor's degree)
Practical term 2 — 0

Practical module 3 (dual study program, Bachelor's degree)
Practical term 3 — 0

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.