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

Sample course plan A Master Computer Science in Engineering (IIWMS)
Specialisation I. Computer Science, Specialisation II. Engineering Science, Specialisation III. Mathematics, Specialisation IV. 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 1–30

Semester 1

Software Verification (LP 1–6)

Software Verification	VL	2
Software Verification	GÜ	2

Mathematical Image Processing (LP 7–12)

Mathematical Image Processing	VL	3
Mathematical Image Processing	GÜ	1

Semester 2

Algorithmic Game Theory (LP 1–6)

Algorithmic game theory	VL	2
Algorithmic game theory	HÜ	2

Advanced Internet Computing (LP 7–12)

Advanced Internet Computing	VL	2
Advanced Internet Computing	PBL	2

Information Theory and Coding (LP 13–18)

Information Theory and Coding	VL	3
Information Theory and Coding	HÜ	2

Machine Learning in Electrical Engineering and Information Technology (LP 19–24)

General Introduction Machine Learning	VL	1
Machine Learning in Wireless Communications	VL	1
Machine Learning in Electromagnetic Compatibility Engineering	VL	1
Machine Learning in High-Frequency Technology and Radar	VL	1
Machine Learning Applications in Electric Power Systems	VL	1

Semester 3

Research Project (LP 1–12)

Research Project IIW	PK	8

Advanced Machine Learning (LP 13–18)

Advanced Machine Learning	VL	2
Advanced Machine Learning	GÜ	2

Semester 4

Master Thesis (LP 1–30)

Business & Management (from catalogue) - 6LP

Non-technical Courses for Master (from catalogue) - 6LP

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

Technical Complementary Course I for Computational Science and Engineering - 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.