

# Course of Study Computer Science (Study Cohort w22)

Sample course plan M Master Computer Science (CSMS) Dual study program  
 Specialisation I. Computer and Software Engineering, Specialisation II: Intelligence Engineering, 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

1	<b>Practical module 1 (dual study program, Master's degree)</b> Practical term 1 0	<b>Practical module 2 (dual study program, Master's degree)</b> Practical term 2 0	<b>Research Project Computer Science</b> Research Project Computer Science PK 8	<b>Master thesis (dual study program)</b>		
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11	<b>Security of Cyber-Physical Systems</b> Security of Cyber-Physical Systems VL 2 Security of Cyber-Physical Systems GÜ 2	<b>Compilers for Embedded Systems</b> Compilers for Embedded Systems VL 3 Compilers for Embedded Systems PBL 1	<b>Practical module 3 (dual study program, Master's degree)</b> Practical term 3 0			
12						
13	<b>Intelligent Autonomous Agents and Cognitive Robotics</b> Intelligent Autonomous Agents and Cognitive Robotics VL 2 Intelligent Autonomous Agents and Cognitive Robotics GÜ 2	<b>Model Checking - Proof Engines and Algorithms</b> Model Checking - Proof Engines and Algorithms VL 2 Model Checking - Proof Engines and Algorithms GÜ 2				
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17	<b>Hierarchical Algorithms</b> Hierarchical Algorithms VL 2 Hierarchical Algorithms GÜ 2	<b>Machine Learning and Data Mining</b> Machine Learning and Data Mining VL 2 Machine Learning and Data Mining GÜ 2				<b>Intelligent Systems in Medicine</b> Intelligent Systems in Medicine VL 2 Intelligent Systems in Medicine GÜ 1 Intelligent Systems in Medicine PS 2
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20	<b>Randomised Algorithms and Random Graphs</b> Randomised Algorithms and Random Graphs VL 2 Randomised Algorithms and Random Graphs HÜ 2	<b>Advanced Machine Learning</b> Advanced Machine Learning VL 2 Advanced Machine Learning GÜ 2				
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25	Business & Management (from catalogue) - 6LP					
26	Linking theory and practice (dual study program, Master's degree) (from catalogue) - 6LP					
27	Technical Complementary Course I for CSMS - 6LP					
28	Technical Complementary Course II for CSMS - 6LP					
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The choice of courses from the catalogue is flexible (depends on the semestral work load), provided the necessary number of required credits is reached.

