

<b>Curriculum 2020 - First year (as implemented in academic year 2020-2021)</b>			
Quarter 1	Quarter 2	Quarter 3	Quarter 4
NWI-IPC020 Mathematical Structures (3 EC)	NWI-IPC017 Matrix Calculation (3 EC)	NWI-IPC006 Processors (3 EC)	NWI-IBC017 Calculus and Probability Theory (3 EC)
SOW-BKI135 Introduction Artificial Intelligence A (3 EC)	NWI-IBC016 Combinatorics (3 EC)	NWI-IPC002 Languages and Automata (3 EC)	NWI-IPC025 Hacking in C (3 EC)
NWI-IPC021 Security (6 EC)		NWI-IPC023 Requirements Engineering (3 EC)	NWI-IPC030 Research & Development: Project (3 EC)
NWI-IPC031 Imperative Programming (6 EC)		NWI-IPI004 Logic and Applications (6 EC)	
NWI-IPC033 Information Modeling and Databases (6 EC)		NWI-IPI005 Object Oriented Programming (6 EC)	
<b>Total: 15 EC</b>	<b>Total: 15 EC</b>	<b>Total: 15 EC</b>	<b>Total: 15 EC</b>

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<b>Curriculum 2020- Second year (as implemented in academic year 2021-2022)</b> <i>Please note: the courses of the Cybersecurity specialisation have switched quarter</i>			
Quarter 1	Quarter 2	Quarter 3	Quarter 4
NWI-IBC019 Operating Systems (3 EC)	NWI-IBC020 Information Systems (3 EC)	NWI-I0036 IT and Society (3 EC)	NWI-IBI007 Research Methods (3 EC)
NWI-IBC027 Algorithms and Datastructures (6 EC)		NWI-IBC003 Computability (3 EC)	NWI-IBC028 Complexity (3 EC)
NWI-IBC040 Functional Programming (6 EC)		NWI-IBC026 Semantics and Correctness (3 EC)	NWI-IBC042 Parallel Computing (3 EC)
		NWI-IBC048 NWI-Networks and Security (6 EC)	
<i>Specialisation: Choose 2 out of 3 tracks Data Science / Cybersecurity / Software Science in Q1-2 and for one of these, also the corresponding course(s) in Q3-4. The remaining spring course(s) of the second specialisation will be taken in the third year.</i>			
NWI-IBI008 Data Mining (6 EC) (DSc)		NWI-IBC036 Big Data (6 EC) (DSc)	
NWI-IBC023 Introduction to Cryptography (6 EC) (Cyb)		NWI-IPC026 Web Security (3 EC) (Cyb)	NWI-IBC034 Operating Systems Security (3 EC) (Cyb)
NWI-IBC041 New Devices Lab (SwS)		NWI-IBC024 Software Verification (3 EC) (SwS)	NWI-IBC025 Semantics and Rewriting (3 EC) (SwS)
<b>Total: 15 EC</b>	<b>Total: 15 EC</b>	<b>Total: 15 EC</b>	<b>Total: 15 EC</b>

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<b>Curriculum 2020 - Third year (as implemented in academic year 2022-2023)</b>			
Quarter 1	Quarter 2	Quarter 3	Quarter 4
*NWI-IBC035 Academic Writing for Computing Scientists (3 EC)	*NWI-IBC035 Academic Writing for Computing Scientists (3 EC)	NWI-IBI010 Reflection and Vocational Orientation (3 EC)	NWI-IBC047 Law, Privacy and Identity (3 EC)
Free electives (12 EC)		NWI-IBI001 Software Engineering (6 EC)	
Minor Programme (15 EC)		NWI-IBC033 Bachelor Thesis (12 EC)	
<p><i>The autumn semester is the so-called "mobility window", enabling students to take a semester abroad. In that case, you may propose a course from your university of choice which is equivalent to Academic Writing for Computing Scientists (subject to approval of the Examination board).</i></p>		<i>Room for spring course(s) of the second specialisation (6 EC): (Choose courses of the same specialisation if there are 2)</i>	
		NWI-IBC036 Big Data (DSc) (6 EC) - or -	
		NWI-IPC026 Web Security (3 EC) (Cyb) -or-	NWI-IBC034 Operating Systems Security (3 EC) (Cyb) -or-
		NWI-IBC024 Software Verification (3 EC) (SwS)	NWI-IBC025 Semantics and Rewriting (3 EC) (SwS)
<b>Total: 30 EC in the first semester</b>		<b>Total: 15 EC</b>	<b>Total: 15 EC</b>

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\*It is currently foreseen that this course will be offered in Q1 as well as Q2, where students can choose one of these options.