

CURRICULUM M.Sc. CYBER SECURITY

Campus Studies, 120 ECTS Credits

	Model 1: Programme Start October				Model 2: Programme Start April			
Month	Courses				Courses			
Oct	Semester 1	Corporate Governance of IT, Compliance, and Law	Advanced Mathematics	Cyber Security and Data Protection				
Nov								
Dec								
Jan								
Feb	Semester 1	Advanced Research Methods	Cyber Risk Assessment and Management	IT Systems: Software				
Mar								
Apr								
May								
Jun	Semester 2	IT Systems: Hardware	Cyber Systems and Network Forensics	Theoretical Computer Science for IT Security	Semester 1	Corporate Governance of IT, Compliance, and Law	Advanced Mathematics	Cyber Security and Data Protection
Jul								
Aug								
Sep								
Oct	Semester 2	Project: Current Challenges of Cyber Security*	Seminar: Standards and Frameworks	Elective A Course a	Semester 1	Advanced Research Methods	Cyber Risk Assessment and Management	IT Systems: Software
Nov								
Dec								
Jan								
Feb	Semester 3	Cryptography*		Elective A Course b	Semester 2	IT Systems: Hardware	Cyber Systems and Network Forensics	Theoretical Computer Science for IT Security
Mar								
Apr								
May								
Jun	Semester 3	Seminar: Advanced Cyber Security*		Elective B Course c	Semester 2	Seminar: Advanced Cyber Security*	Project: Current Challenges of Cyber Security*	Elective A Course a
Jul								
Aug								
Sep								
Oct	Semester 4	Secure Networking*		Elective B Course d	Semester 3	Secure Networking*		Elective A Course b
Nov								
Dec								
Jan								
Feb	Semester 4	Master Thesis			Semester 3	Seminar: Standards and Frameworks		Elective B Course c
Mar								
Apr								
May								
Oct	Semester 4				Semester 4	Cryptography*		Elective B Course d
Nov								
Dec								
Jan								
Feb	Semester 4				Semester 4	Master Thesis		
Mar								
Apr								
May								

Electives ~		
Elective A		Elective B
Elective combinations:		
Combination 1	Cyber Criminality a) Attack Scenarios and Incident Response b) Project: Cyber Forensics*	Audit- and Security Testing c) Attack Models and Auditing d) Seminar: IT Security Tests*
Combination 2	Cyber Criminality a) Attack Scenarios and Incident Response b) Project: Cyber Forensics*	AI and Mastering AI Prompting c) Artificial Intelligence d) Project: AI Excellence with Creative Prompting Techniques
Combination 3	Blockchain and Quantum Computing a) Blockchain b) Quantum Computing	Audit- and Security Testing c) Attack Models and Auditing d) Seminar: IT Security Tests*
Combination 4	Blockchain and Quantum Computing a) Blockchain b) Quantum Computing	AI and Mastering AI Prompting c) Artificial Intelligence d) Project: AI Excellence with Creative Prompting Techniques
Additional option:		
Internship	Internship	Internship



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Here you see the order in which you study your courses in presence depending on your personal study start in October or April. You attend campus lectures during each semester and learn in direct exchange with your fellow students and lecturers. In addition, you will have lecture-free periods, which you can spend reviewing and preparing for exams.

Attending the courses on campus is mandatory and will be verified due to Visa regulations (not valid for EU citizen).

* This course comes with admissions requirement. Please consult the module handbook for more information.



Note: You can already start with your thesis earlier than the designated block, once you have met the minimum amount of credit points required to enter.



~ Electives: For your Electives, you have the flexibility to select modules according to your interests. You may choose a combination from the Elective pools. Each combination consists of two blocks of Elective modules.

Internships: Opting for an internship allows you to gain practical work experience in your chosen field, which takes place during the 2 Elective module blocks. You have a choice of **either** an internship **or** Elective modules, but you cannot receive credits for both.

Please note: If you choose an internship, we advise you to start researching and applying for internships early to increase your chances of obtaining one in time for the designated Internship block.