



You've already planned out exactly how your course schedule should look? Wonderful! The IU offers you the flexibility to choose any module you like from any semester. You can work on a number of modules at the same time or one by one.



At the beginning, choose modules that particularly interest you or that you can use directly in your job. This motivates you and gives you success right from the start.



A module with two courses consists of an introduction and a consolidation. In order to successfully complete a module, you must successfully pass both the introduction and the consolidation of the module within the framework of a module examination.



* Electives: Choose three modules, every elective module can only be chosen once.

FT: Full-Time, 36 months
PT I: Part-Time I, 48 months
PT II: Part-Time II, 72 months



You can find more information about your degree program in the module handbook on our website.

CURRICULUM B.SC. CYBER SECURITY

DISTANCE LEARNING

Semester			Module	Course Code	Course	ECTS	Type of Exam
FT	PT I	PT II					
1. Semester	1. Semester	1. Semester	Operating Systems, Computer Networks, and Distributed Systems	DLBIBRV501_E	Operating Systems, Computer Networks, and Distributed Systems	5	Exam
			Introduction to Data Protection and IT Security	DLBCSIDPITS01	Introduction to Data Protection and IT Security	5	Exam
			Mathematics: Analysis	DLBDSMFC01	Mathematics: Analysis	5	Exam
2. Semester	2. Semester	2. Semester	Introduction to Academic Work	DLBCSIW01	Introduction to Academic Work	5	Workbook
			Introduction to Programming with Python	DLBDSIPWP01	Introduction to Programming with Python	5	Exam
			Statistics - Probability and Descriptive Statistics	DLBDSSPDS01	Statistics - Probability and Descriptive Statistics	5	Exam
	3. Semester	3. Semester	Object-oriented Programming with Java	DLBCSOOPJ01	Object-oriented Programming with Java	5	Exam
			Mathematics: Linear Algebra	DLBDSMFLA01	Mathematics: Linear Algebra	5	Exam
			Collaborative Work	DLBCSCW01	Collaborative Work	5	Oral Assignment
3. Semester	3. Semester	4. Semester	Introduction to Network Forensics	DLBCSEINF01_E	Introduction to Network Forensics	5	Exam
			Requirements Engineering	DLBCSRE01	Requirements Engineering	5	Exam
			System Pentesting Basics	DLBCSESPB01_E	System Pentesting Basics	5	Exam
	4. Semester	5. Semester	Intercultural and Ethical Decision-Making	DLBCSIDM01	Intercultural and Ethical Decision-Making	5	Case Study
			Introduction to the Internet of Things	DLBINGEIT01_E	Introduction to the Internet of Things	5	Exam
			Algorithms, Data Structures, and Programming Languages	DLBCSL01	Algorithms, Data Structures, and Programming Languages	5	Exam
4. Semester	4. Semester	6. Semester	Theoretical Computer Sciences and Mathematical Logic	DLBCSTCSML01	Theoretical Computer Sciences and Mathematical Logic	5	Exam
			IT Project Management	DLBCSEITPAM01	IT Project Management	5	Exam
			DevSecOps and Common Software Weaknesses	DLBCSEDCSW01_E	DevSecOps and Common Software Weaknesses	5	Written Assignment
	5. Semester	7. Semester	IT Service Management	DLBCSITSM01	IT Service Management	5	Exam
			Cryptography	DLBCSCT01	Cryptography	5	Exam
			IT Law	DLBCSIITL01	IT Law	5	Case Study
5. Semester	6. Semester	8. Semester	Host and Software Forensics	DLBCSEHSF01_E	Host and Software Forensics	5	Exam
			Artificial Intelligence	DLBDSEAI01	Artificial Intelligence	5	Exam
			Information Security Standards	DLBCSEISS01_E	Information Security Standards	5	Case Study
	7. Semester	9. Semester	Seminar: Current Topics in Computer Science	DLBCSSCTCS01	Seminar: Current Topics in Computer Science	5	Research Essay
			Advanced Data Analysis	DLBDSEDA01	Advanced Data Analysis	5	Exam
			Project: Data Analysis	DLBDSEDA02	Project: Data Analysis	5	Portfolio
6. Semester	8. Semester	10. Semester	Cloud Computing	DLBDSCC01	Cloud Computing	5	Exam
			ELECTIVE A*		e.g. Host Forensics	10	
			ELECTIVE B*		e.g. Pentesting	10	
6. Semester	8. Semester	11. Semester	ELECTIVE C*		e.g. DevSecOps	10	
			Bachelor Thesis		Bachelor Thesis Thesis Defense	9	Bachelor Thesis Presentation: Colloquium
Total 180 ECTS						1	

Elective A:	Elective B:	Elective C:
IT Security Consulting Social Engineering Host Forensics DevSecOps Security in Complex Networks Network Forensics	Business Intelligence Future Threats Cloud Security Pentesting Industrial Systems Technology Cyber Threat Intelligence Mobile Threats	IT Security Consulting Social Engineering Host Forensics DevSecOps Security in Complex Networks Network Forensics Business Intelligence Future Threats Cloud Security Pentesting Industrial Systems Technology Cyber Threat Intelligence Mobile Threats Supply Chain Management Smart Factory Automation and Robotics Mobile Software Engineering