

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	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	Introduction to Academic Work	DLBCSIAW01	Introduction to Academic Work	5	Basic Workbook
		Introduction to Programming with Python	DLBDSIPWP01	Introduction to Programming with Python	5	Exam
		Statistics - Probability and Descriptive Statistics	DLBDSPPDS01	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
4. 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
5. 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	DLBCL01	Algorithms, Data Structures, and Programming Languages	5	Exam
6. 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
7. Semester	7. Semester	IT Service Management	DLBCSITSM01-01	IT Service Management	5	Exam
		Cryptography	DLBCSCT01	Cryptography	5	Exam
		IT Law	DLBCSITL01	IT Law	5	Case Study
8. 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
9. Semester	9. Semester	Seminar: Current Topics in Computer Science	DLBCSSCTCS01	Seminar: Current Topics in Computer Science	5	Research Essay
		Advanced Data Analysis	DLBDEDA01	Advanced Data Analysis	5	Exam
		Project: Data Analysis	DLBDEDA02	Project: Data Analysis	5	Portfolio
10. Semester	10. Semester	Cloud Computing	DLBDSCC01	Cloud Computing	5	Exam
		ELECTIVE A*		e.g. Host Forensics	10	
		ELECTIVE B*		e.g. Pentesting	10	
11. Semester	11. Semester	ELECTIVE C*		e.g. DevSecOps	10	
		Bachelor Thesis		Bachelor Thesis Thesis Defense	9 1	Bachelor Thesis Presentation: Colloquium
Total					180 ECTS	



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

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

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