CURRICULUM B.SC. CYBER SECURITY
DISTANCE LEARNING

Semester			Module	Course Code	Course	ECTS credits	Type of Exam
FT	PT I	PT II					
1. Semester	1. Semester	1. Semester	Operating Systems, Computer Networks, and Distributed Systems	DLBIBRVS01_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	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	DLBDSSPDS01-01	Statistics: Probability and Descriptive Statistics	5	Exam
2. Semester	2. 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	Introduction to Network Forensics	DLBCSEINF01_E	Introduction to Network Forensics	5	Exam
	3. Semester		Requirements Engineering	DLBCSRE01	Requirements Engineering	5	Exam
			System Pentesting Basics	DLBCSESPB01_E	System Pentesting Basics	5	Exam
3. 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
	4. Semester		Algorithms, Data Structures, and Programming Languages	DLBCSL01-01	Algorithms, Data Structures, and Programming Languages	5	Exam or Advanced Workbook
		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
4. Semester	5. Semester	7. Semester	IT Service Management	DLBCSITSM01-02	IT Service Management	5	Exam
			Cryptography	DLBCSCT01-01	Cryptography	5	Case Study
			IT Law	DLBCSIITL01	IT Law	5	Case Study
		8. Semester	Host and Software Forensics	DLBCSEHSF01_E	Host and Software Forensics	5	Exam
			Artificial Intelligence	DLBDSEAIS01	Artificial Intelligence	5	Exam
			Information Security Standards	DLBCSEISS01_E	Information Security Standards	5	Case Study
5. Semester	6. 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
			Cloud Computing	DLBDSCC01	Cloud Computing	5	Exam
	7. Semester	10.	ELECTIVE A*		e.g. Host Forensics	10	
			ELECTIVE B*		e.g. Pentesting	10	
6. Semester	8.	11.	ELECTIVE C*		e.g. DevSecOps	10	
		12.	Bachelor Thesis		Bachelor Thesis Thesis Defense	9 1	Bachelor Thesis Presentation: Colloquium
Total 180 ECTS credits							

INTERNATIONAL UNIVERSITY OF APPLIED SCIENCES

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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.

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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.

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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.

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* 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
		Microsoft ERP-Dynamics 365 Business Central - Functional Consultant
		SAP - SAP S/4HANA Business Process Integration - Application Associate
		Career Development