CURRICULUM B.SC. CYBER SECURITY								
DISTANCE LEARNING Somester								
FT	PTI	PT II	Module	Course Code	Course	credits	Type of Exam	IU
1. Semester	1. Semester	1. Semester	Operating Systems, Computer Networks, and Distributed Systems	DLBIBRVS01_E	Operating Systems, Computer Networks, and Distributed Systems	5	Exam	INTERNATIONAL UNIVERSITY OF APPLIED SCIENCES
			Introduction to Data Protection and Cyber Security	DLBCSIDPITS01	Introduction to Data Protection and Cyber Security	5	Exam	
			Introduction to Programming with Python	DLBDSIPWP01	Introduction to Programming with Python	5	Exam	
		Semester	Introduction to Academic Work for IT and Technology	DLBIAWITT01	Introduction to Academic Work for IT and Technology	5	Advanced Workbook	Ø
			Project: Object Oriented and Functional Programming with Python	DLBDSOOFPP01	Project: Object Oriented and Functional Programming with Pvthon	5	Portfolio	You've already planned out exactly how your course schedule should look? Wonderful! The lU International University of Applied Sciences offers you the flexibility to choose any available module you like from any semester. You can work on a number of modules at the same time or one by one.
		2.	ELECTIVES C		Internship or modules to choose	5		
2. Sem ester	2. Semeste	3. Semester	Introduction to Network Forensics	DLBCSEINF01_E	Introduction to Network Forensics	5	Exam	
			Mathematics: Analysis	DLBDSMFC01	Mathematics: Analysis	5	Exam	
			Statistics: Probability and Descriptive Statistics	DLBDSSPDS01-01	Statistics: Probability and Descriptive Statistics	5	Exam	
	Semester	4. Semester	Requirements Engineering	DLBCSRE01	Requirements Engineering	5	Exam	
			Project: Agile Project Management	DLBCSAPM01	Project: Agile Project Management	5	Project Report	Ø
			ELECTIVES C		Internship or modules to choose	5		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.
3. Semester	ŕ	Semester	System Pentesting Basics	DLBCSESPB01_E	System Pentesting Basics	5	Exam	
			Theoretical Computer Science and Mathematical Logic	DLBCSTCSML01	Theoretical Computer Science and Mathematical Logic	5	Exam	
	4. Semester	ŝ	Social Engineering and Insider Threats	DLBCSEESE01_E	Social Engineering and Insider Threats	5	Case Study	
		6. Semester	Technical and Operational IT Security Concepts	DLBCSEEISC01_E	Technical and Operational IT Security Concepts	5	Exam	
			Project: Social Engineering	DLBCSEESE02_E	Project: Social Engineering	5	Oral Project Report	
			ELECTIVES C		Internship or modules to choose	5		Ø
4. Semester	5. Semester	7. Semester	DevSecOps and Common Software Weaknesses	DLBCSEDCSW01_E	DevSecOps and Common Software Weaknesses	5	Written Assignment	Information about electives D: Decide at the beginning between an internship at a company or modules from electives D. You will complete the internship with a practical reflection. If you decide on the modules from electives D, all modules from this area must be completed. Mixed forms of internship and compulsory electives D are not possible.
			Cryptography	DLBCSCT01-01	Cryptography	5	Case Study	
			Host and Software Forensics	DLBCSEHSF01_E	Host and Software Forensics	5	Exam	
		Semester	Seminar: Current Topics in Computer Science	DLBCSSCTCS01	Seminar: Current Topics in Computer Science	5	Research Essay	
			Project: Configuration and Application of SIEM Systems	DLBCSEEISC02_E	Project: Configuration and Application of SIEM Systems	5	Project Report	
		ø	ELECTIVES C		Internship or modules to choose	5		
6. Semester 5. Semester	6. Semeste	9. Semester	Threat Modeling	DLBCSEEFT01_E	Threat Modeling	5	Exam	
			Information Security Standards	DLBCSEISS01_E	Information Security Standards	5	Case Study	Ø
			ELECTIVES A*		ELECTIVES A*	10		 * Electives: Two modules per elective to choose from, each 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
	7. Semester	10.	Project: Threat Modeling	DLBCSEEFT02_E	Project: Threat Modeling	5	Project Report	
			ELECTIVES C		ELECTIVES C	5		
			ELECTIVES B*		ELECTIVES B*	10		
	8.	11	Project: Data Analysis	DLBDSEDA02	Project: Data Analysis	5	Portfolio	
			ELECTIVES C		ELECTIVES C	5		
		12	Bachelor Thesis	DLBBT01 DLBBT02	Bachelor Thesis Colloquium	9 2	Bachelor Thesis Colloquium	
Total 180 ECTS credits								

Electives A:

Electives A: Cloud Computing Static and Dynamic Malware Analysis Principles of Ethical Hacking Object-oriented Programming with Java Techniques and methods for Jaglies Software deve Attack Models and Threat Feeds Mobile Software Engineering Wireless and Telecom Security Protocols, Log-and Dataflow-Analysis in Depth Smart Factory I Production Engineering Industry 4.0 Introduction to the Internet of Things Software Engineering Principles Studium Generale I Studium Generale II re development Electives 8: Security Controls in the Cloud Project-Security by Design in the Cloud Seminar: Sandbox Interpretation Project: Pentesting Agorthms, Data Structures, and Programming Languages Project Jednes against APTs Project: Molies Gafware Engineering Project: Molies Gafware Engineering Software Architectures of Molie Devices Seminar: Threat Hunting, Analysis and Incident Response Project: Offense Analysis Internet of Thing Security Database Modeling and Database Systems Studium Generale III Studium Generale III

Electives B:

Electives C:

Internship: Computer Science or: Collaborative Work Intercultural and Ethical Decision-Making Conflict Management and Mediation Interaction and Communication in Organisations Business Intelligence Project: AI Excellence with Creative Prompting Techniques