

CURRICULUM B.SC. CYBER SECURITY, ENGLISH, FULL-TIME (36 MONTHS)



INTERNATIONALE
HOCHSCHULE
FERNSTUDIUM

Semester	Module	Course Code	Course Name	ECTS	
1. Semester 30 ECTS	Operating Systems, Computer Networks, and Distributed Systems	DLBIBRV501_E	Operating Systems, Computer Networks, and Distributed Systems	5	E
	Introduction to Data Protection and IT Security	DLBCSIDPITS01	Introduction to Data Protection and IT Security	5	E
	Mathematics: Analysis	DLBDSMF01	Mathematics: Analysis	5	E
	Introduction to Academic Work	DLBCSIAW01	Introduction to Academic Work	5	WB
	Introduction to Programming with Python	DLBDSIPWP01	Introduction to Programming with Python	5	E
2. Semester 30 ECTS	Statistics - Probability and Descriptive Statistics	DLBDSPPDS01	Statistics - Probability and Descriptive Statistics	5	E
	Mathematics: Linear Algebra	DLBDSMFLA01	Mathematics: Linear Algebra	5	E
	Collaborative Work	DLBCSCW01	Collaborative Work	5	OA
	Object Oriented and Functional Programming with Python	DLBDSOFP01	Object Oriented and Functional Programming with Python	5	P
	Introduction to Network Forensics	DLBCSEINF01_E	Introduction to Network Forensics	5	E
	Requirements Engineering	DLBCSRE01	Requirements Engineering	5	E
3. Semester 30 ECTS	System Pentesting Basics	DLBCSESPB01_E	System Pentesting Basics	5	E
	Introduction to the Internet of Things	DLBINGEIT01_E	Introduction to the Internet of Things	5	E
	Intercultural and Ethical Decision-Making	DLBCSIDM01	Intercultural and Ethical Decision-Making	5	WACS
	IT Project Management	DLBCSEITPA01	IT Project Management	5	E
	DevSecOps and Common Software Weaknesses	DLBCSEDCS01_W01_E	DevSecOps and Common Software Weaknesses	5	WAWA
	Algorithms, Data Structures, and Programming Languages	DLBCSL01	Algorithms, Data Structures, and Programming Languages	5	E
4. Semester 30 ECTS	Statistical Computing	DLBDBSC01_E	Statistical Computing	5	WACS
	Cryptography	DLBCSCT01	Cryptography	5	E
	IT Law	DLBCSIITL01	IT Law	5	WACS
	Host and Software Forensics	DLBCSEHSF01_E	Host and Software Forensics	5	E
	Specification	DLBCSS01	Specification	5	E
	Artificial Intelligence	DLBDSEAIS01	Artificial Intelligence	5	E
5. Semester 30 ECTS	IT Service Management	DLBCSITSM01	IT Service Management	5	E
	Seminar: Current Topics in Computer Science	DLBCSSCTCS01	Seminar: Current Topics in Computer Science	5	WARE
	Advanced Data Analysis	DLBDEDA01	Advanced Data Analysis	5	E
	Project: Data Analysis	DLBDEDA02	Project: Data Analysis	5	P
	Cloud Computing	DLBDSCC01	Cloud Computing	5	E
6. Semester 30 ECTS	ELECTIVE I**		e.g. Social Engineering	10	
	ELECTIVE II**		e.g. Cloud Security	10	
	ELECTIVE III**		e.g. Cyber Threat Intelligence	10	
Total 180 ECTS	Bachelor Thesis	DLBBT01 DLBBT02	Bachelor Thesis Colloquium	9 1	WABT PC
	GOAL: In order to stay on schedule, you should finish modules of about 30 Credit Points per semester!				

You've already planned out exactly how your course schedule should look? Wonderful! You can work on a number of modules at the same time or one by one.

As you begin your studies, choose modules that are of particular interest to you or that you can use directly in your job. This motivates you and helps you succeed 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.

- Elective III:**
- 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

NOTE:
Every elective module can only be chosen once.

* All the modules that have been unlocked for the Online Exams can be found in CARE.

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- E** Exam (monthly at study centres or anytime via the online exam*)
 - OA** Oral Assignment
 - P** Portfolio
 - PC** Presentation: Colloquium
 - WB** Workbook
 - WABT** Written Assessment: Bachelor Thesis
 - WACS** Written Assessment: Case Study
 - WARE** Written Assessment: Research Essay
 - WAWA** Written Assessment: Written Assignment
 - WB** Workbook

- ** ELECTIVES**
- Choose three modules
- Elective I:**
- IT Security Consulting
 - Social Engineering
 - Host Forensics
 - DevSecOps
 - Security in Complex Networks
 - Network Forensics
- Elective II:**
- Business Intelligence
 - Future Threats
 - Cloud Security
 - Pentesting
 - Industrial Systems Technology
 - Cyber Threat Intelligence
 - Mobile Threats