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# MASTER (M.SC.) CYBER SECURITY

With digitalisation, cyber-attacks on software and system structures in companies are on the rise. To ensure the confidentiality, availability and integrity of their data, just about every company, organisation and government agency requires competent cyber security professionals. There is now a huge and unmet demand for security experts with a keen eye to identify and defend against cyber-attacks. With the IU International University of Applied Sciences Master in Cyber Security, you will acquire all the skills you need to protect data and ensure top security measures for systems used by companies worldwide. You'll become a specialist in securing infrastructures against attacks, risks or malware using statistical and digital forensic methods.



## Degree

Master of Science (M.Sc.)



## Study start

Online: Anytime

On Campus: October 2022\*

(then 4 times a year; Oct, Jan, Apr or July)



## Study model available

Online, or On Campus in Berlin



## Duration

Online: 24, 36, 48 months

On Campus: 24 months



## Credits

120 ECTS



## Ultimate flexibility

Our On Campus model means that...

- You can start your degree online for distance learning while taking care of visa issues and join us later in Germany to experience campus life. You say which semester you want to spend on campus or online.
- You want to go on a trip during your studies? No problem. You can study online at your own pace without missing any classes.



## Fees

Online: From €98 per month

On Campus: From €499 per month

\*Subject to approval by the Thuringian Ministry of Economy, Science and Digital Society. We expect the Ministry's approval no later than the start of the studies. So far, the approval has always been on time.

## Study Content (120 ECTS)

1. PRESENCE TIMEFRAME	2. PRESENCE TIMEFRAME	MODULE TITLE	SEMESTER	CREDITS (ECTS)	TEST TYPE
Oct/Nov/Dec	Apr/May	Corporate Governance of IT, Compliance, and Law	1	5 ECTS	E
Oct/Nov/Dec	Apr/May	Advanced Mathematics		5 ECTS	E
Oct/Nov/Dec	Apr/May	Cyber Security and Data Protection		5 ECTS	OA
Jan/Feb/Mar	Jul/Aug	Advanced Research Methods		5 ECTS	WAWA
Jan/Feb/Mar	Jul/Aug	Cyber Risk Assessment and Management		5 ECTS	E
Jan/Feb/Mar	Jul/Aug	IT Systems: Software		5 ECTS	E
Apr/May	Oct/Nov/Dec	IT Systems: Hardware	2	5 ECTS	E
Apr/May	Oct/Nov/Dec	Cyber Systems and Network Forensics		5 ECTS	E
Apr/May	Oct/Nov/Dec	Theoretical Computer Science for IT Security		5 ECTS	E
Jul/Aug	Jan/Feb/Mar	Seminar: Advanced Cyber Security		5 ECTS	WARE
Jul/Aug	Jan/Feb/Mar	Seminar: Standards and Frameworks		5 ECTS	WARE
Jul/Aug	Jan/Feb/Mar	Project: Current Challenges of Cyber Security		5 ECTS	WAPR
Oct/Nov/Dec	Apr/May	Cryptology	3	5 ECTS	OA
Oct/Nov/Dec	Apr/May	Secure Networking		5 ECTS	E
Jan/Feb/Mar	Jul/Aug	Elective A		10 ECTS	
Apr/May Online	Oct/Nov/Dec	Elective B	4	10 ECTS	
		Master Thesis		30 ECTS	WAMT & PC

E = Exam, OA = Oral assignment, PC = Presentation: Colloquium, WB = Workbook, BWB = Basic Workbook, AWB = Advanced Workbook, WABT = Written assessment: Bachelor thesis, WACS = Written assessment: Case study, WAMT = Written assessment: Master thesis, WAPR = Written assessment: Project report, WARE = Written assessment: Research essay, WAWA = Written assessment: Written assignment, OPR = Oral project report, P = Portfolio, POP = Proof of Participation

### CHOOSE YOUR ELECTIVES

You'll have the chance to choose electives in subjects you're interested in. These will amount to 20 ECTS of your overall degree.

#### Choose one elective from the Electives A programmes:

- Blockchain and Quantum Computing
- Cyber Criminality
- Secure Software Development

#### Choose one elective from the Electives B programmes:

- Artificial Intelligence
- Audit- and Security Testing
- Business Analyst
- Continuous and Lifecycle Security
- Data Science and Big Data Technologies
- Industrial Automation and Internet of Things
- IT Law for IT Security
- Organizational Transformation

#### Electives on Campus:

Those elective modules where the minimum number of participants is not reached will not be offered on campus but only online (distance learning). However, IU ensures that there are always electives on campus.