# CURRICULUM M.SC. CYBER SECURITY

## DISTANCE LEARNING, 120 ECTS

**INTERNATIONAL UNIVERSITY OF APPLIED SCIENCES**

| Semester FT | Semester PT I | Semester PT II | Module | Course Code | Course | ECTS | Type of Exam |
|---|---|---|---|---|---|---|---|
| 1. Semester | 1. Semester | 1. Semester | Corporate Governance of IT, Compliance, and Law | DLMIGCR01-01_E | Corporate Governance of IT, Compliance, and Law | 5 | Exam |
| | | | Advanced Mathematics | DLMDSAM01 | Advanced Mathematics | 5 | Exam |
| | | | Cyber Security and Data Protection | DLMCSITSDP01 | Cyber Security and Data Protection | 5 | Oral Assignment |
| | 2. Semester | 2. Semester | Advanced Research Methods | DLMARM01 | Advanced Research Methods | 5 | Written Assignment |
| | | | Seminar: Advanced Cyber Security | DLMCSEAITSC01 | Seminar: Advanced Cyber Security | 5 | Research Essay |
| | | | Cryptology | DLMCSEAITSC02 | Cryptology | 5 | Oral Assignment |
| 2. Semester | 3. Semester | 3. Semester | Cyber Risk Assessment and Management | DLMCSECRAM01_E | Cyber Risk Assessment and Management | 5 | Exam |
| | | | IT Systems: Software | DLMIMITSS01_E | IT Systems: Software | 5 | Exam |
| | | | IT Systems: Hardware | DLMIMITSH01_E | IT Systems: Hardware | 5 | Exam |
| | | 4. Semester | Cyber Systems and Network Forensics | DLMCSECSNF01_E | Cyber Systems and Network Forensics | 5 | Exam |
| | 4. Semester | | Secure Networking | DLMCSEESN01_E | Secure Networking | 5 | Exam |
| | | 5. Semester | Theoretical Computer Science for IT Security | DLMCSETCSITS01_E | Theoretical Computer Science for IT Security | 5 | Exam |
| 3. Semester | | | Seminar: Standards and Frameworks | DLMIMSSF01_E | Seminar: Standards and Frameworks | 5 | Research Essay |
| | | 6. Semester | Project: Current Challenges of Cyber Security | DLMCSEPCCCS01_E | Project: Current Challenges of Cyber Security | 5 | Project Report |
| | 5. Semester | | ELECTIVE A* | | e.g. Cyber Criminality | 10 | |
| | | 7. Semester | ELECTIVE B* | | e.g. Audit- and Security Testing | 10 | |
| 4. | 6. | 8. | Master Thesis | | Master Thesis / Thesis Defense | 27 / 3 | Master Thesis / Presentation: Colloquium |
| | Total 120 ECTS | | | | | | |

You've already planned out exactly how your course schedule should look? Wonderful!
The IU International University of Applied Sciences 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.

* Electives: Choose two modules, every elective module can only be chosen once.

FT: Full-Time, 24 months
PT I: Part-Time I, 36 months
PT II: Part-Time II, 48 months

| Elective A |
|---|
| Cyber Criminality |
| Blockchain and Quantum Computing |
| Secure Software Development |

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

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