CURRICULUM M.Sc. COMPUTER SCIENCE

myStudies, 120 ECTS

Month	Model 1: Programme Start October			Model 2: Programme Start April		
	Courses			Courses		
Oct	Advanced Mathematics	Algorithmics	Cyber Security and Data Protection			
Nov						
Dec						
Jan	Semester Break					
Feb	Seminar: Computer Science and Society	Artificial Intelligence	Advanced Statistics			
Mar						
Apr	Semester Break					
May	Data Science	Big Data Technologies	Programming with Python	Data Science	Big Data Technologies	Programming with Python
Jun						
Jul	Software Engineering: Software Processes	Project: Software Engineering	Networks and Distributed Systems	Software Engineering: Software Processes	Project: Software Engineering	Networks and Distributed Systems
Aug						
Sep	Semester Break					
Oct	Seminar: Current Topics in Computer Science	Project: Computer Science Project		Advanced Mathematics	Algorithmics	Cyber Security and Data Protection
Nov						
Dec	Semester Break					
Jan						
Feb	Elective A Course a		Elective A Course b	Seminar: Computer Science and Society	Artificial Intelligence	Advanced Statistics
Mar	Semester Break					
Apr						
May	Elective B Course c		Elective B Course d	Seminar: Current Topics in Computer Science		Project: Computer Science Project
Jun						
Jul	Master Thesis			Elective A Course a		Elective A Course b
Aug						
Sep	Semester Break					
Oct				Elective B Course c		Elective B Course d
Nov						
Dec	Semester Break					
Jan						
Feb				Master Thesis		
Mar						

Here you see the order in which you can study your courses in presence depending on your personal study start in October or April.
IU International University of Applied Sciences offers you the flexibility to switch from campus to online studies or the other way around. You decide which semester you want to spend on campus or online.
The above is only valid for DACH students. For INT Students: attending the courses on Campus in presence is mandatory and will be verified due to VISA regulations.

☑

Each study block usually consists of three courses. There are 9 weeks of attendance to deepen the content in direct exchange with fellow students and lecturers. Each block concludes with a two-week exam preparation phase.

☑

Attention: Attendance times may vary slightly depending on public holidays and the federal state holidays the campus is located in.

☑

* Electives: Choose one module from the Elective A and one module from the Elective B.

Note: In every module, **courses a** and **c** are offered **on campus**. Courses b and d are offered only online (distance learning).

ⓘ

By choosing the elective "Internship" you cannot qualify for the dual degree with LSBU.

Elective A*

Advanced Cyber Security and Cryptology
  a) Seminar: Advanced Cyber Security
  b) Cryptology
Blockchain and Quantum Computing
  a) Blockchain
  b) Quantum Computing
IT Governance and Service Management
  a) IT Service Management
  b) IT Governance and Compliance
UI/UX Expert
  a) User Interface and Experience
  b) Project: Human Computer Interaction

Elective B*

Business Analyst
  c) Business Intelligence I
  d) Project: Business Intelligence
Data Engineer
  c) Data Engineering
  d) Project: Data Engineering
Machine Learning and Deep Learning
  c) Machine Learning
  d) Deep Learning
Technical Project Lead
  c) IT Project Management
  d) Project: Technical Project Planning
Use Case Identification and Evaluation for Analytical Applications
  c) Use Case and Evaluation
  d) Project: Data Science Use Case
Internship

Course Information

Module	Course Code	Course	ECTS	Type of Exam
Advanced Mathematics	DLMDSAM01	Advanced Mathematics	5	Exam
Algorithmics	DLMCSA01	Algorithmics	5	Exam
Cyber Security and Data Protection	DLMCSITSDP01	Cyber Security and Data Protection	5	Oral Assignment
Seminar: Computer Science and Society	DLMCSSCSAS01	Seminar: Computer Science and Society	5	Research Essay
Artificial Intelligence	DLMAIAI01	Artificial Intelligence	5	Exam
Advanced Statistics	DLMDSAS01	Advanced Statistics	5	Advanced Workbook
Data Science	DLMBDSA01	Data Science	5	Exam
Big Data Technologies	DLMDSBDT01	Big Data Technologies	5	Oral Assignment
Programming with Python	DLMDSPWP01	Programming with Python	5	Written Assignment
Software Engineering: Software Processes	DLMCSSESP01	Software Engineering: Software Processes	5	Oral Assignment
Project: Software Engineering	DLMCSPSE01	Project: Software Engineering	5	Portfolio
Networks and Distributed Systems	DLMCSNDS01	Networks and Distributed Systems	5	Exam
Seminar: Current Topics in Computer Science	DLMCSSCTCS01	Seminar: Current Topics in Computer Science	5	Research Essay
Project: Computer Science Project	DLMCSPCSP01	Project: Computer Science Project	5	Portfolio
ELECTIVE A*		e.g. Advanced Cyber Security and Cryptology	10	
ELECTIVE B*		e.g. Data Engineer	10	
Master Thesis		Master Thesis	27	Master Thesis
		Thesis Defense	3	Presentation: Colloquium

INTERNATIONAL UNIVERSITY OF APPLIED SCIENCES