## **CURRICULUM M.SC. COMPUTER SCIENCE**

## **DISTANCE LEARNING, 120 ECTS**

Semester							
	PTI		Module	Course Code	Course	ECTS	Type of Exam
	1. Semester	1. Semester	Programming with Python	DLMDSPWP01	Programming with Python	5	Written Assignment
			Software Engineering: Software Processes	DLMCSSESP01	Software Engineering: Software Processes	5	Oral Assignment
Semester			Advanced Mathematics	DLMDSAM01	Advanced Mathematics	5	Exam
1. Sem		ter	Advanced Statistics	DLMDSAS01	Advanced Statistics	5	Workbook
	Semester	2. Semester	Data Science	DLMBDSA01	Data Science	5	Exam
			Project: Software Engineering	DLMCSPSE01	Project: Software Engineering	5	Portfolio
	2. Sen	ter	Algorithmics	DLMCSA01	Algorithmics	5	Exam
Semester		Semester	Cyber Security and Data Protection	DLMCSITSDP01	Cyber Security and Data Protection	5	Oral Assignment
	3. Semester	3.8	Seminar: Computer Science and Society	DLMCSSCSAS01	Seminar: Computer Science and Society	5	Research Essay
2. Serr		4. nester	Artificial Intelligence Big Data Technologies	DLMAIAI01	Artificial Intelligence	5	Exam
		4 Sem	Big Data Technologies	DLMDSBDT01	Big Data Technologies	5	Oral Assignment
	ter	5. nester	Project: Computer Science Project	DLMCSPCSP01	Project: Computer Science Project	5	Portfolio
3. Semester	4. Semester	5. Semes	Seminar: Current Topics in Computer Science	DLMCSSCTCS01	Seminar: Current Topics in Computer Science	5	Research Essay
			Networks and Distributed Systems	DLMCSNDS01	Networks and Distributed Systems	5	Exam
	5. Semester	Seme	ELECTIVE A*		e.g. Advanced Cyber Security and Cryptology	10	
		7.	ELECTIVE B*		e.g. Machine Learning and Deep Learning	10	
4.	9.	8.	Master Thesis	MMTHE01 MMTHE02	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 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 Advanced Cyber Security and Cryptology Blockchain and Quantum Computing IT Governance and Service Management UI/UX Expert

Elective B

Data Engineer
Business Analyst
Technical Project Lead
Machine Learning and Deep Learning
Use Case Identification and Evaluation for Analytical Applications



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