

CURRICULUM M.SC. COMPUTER SCIENCE
DISTANCE LEARNING, 120 ECTS

Semester			Module	Course Code	Course	ECTS	Type of Exam	
FT	PT I	PT II						
1. Semester	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	
			Advanced Mathematics	DLMDSAM01	Advanced Mathematics	5	Exam	
	2. Semester	2. Semester	Advanced Statistics	DLMDSAS01	Advanced Statistics	5	Advanced Workbook	
			Data Science	DLMBDSA01	Data Science	5	Exam	
			Project: Software Engineering	DLMCSPSE01	Project: Software Engineering	5	Portfolio	
2. Semester	2. Semester	3. Semester	Algorithmics	DLMCSA01	Algorithmics	5	Exam	
			Cyber Security and Data Protection	DLMCSITSDP01	Cyber Security and Data Protection	5	Oral Assignment	
	3. Semester	4. Semester	Seminar: Computer Science and Society	DLMCSCSAS01	Seminar: Computer Science and Society	5	Research Essay	
			Artificial Intelligence	DLMIAIA01	Artificial Intelligence	5	Exam	
	3. Semester	4. Semester	5. Semester	Big Data Technologies	DLMDSBDT01	Big Data Technologies	5	Oral Assignment
				Project: Computer Science Project	DLMCSPCSP01	Project: Computer Science Project	5	Portfolio
5. Semester		6. Semester	Seminar: Current Topics in Computer Science	DLMCSCTCS01	Seminar: Current Topics in Computer Science	5	Research Essay	
			Networks and Distributed Systems	DLMCSNDS01	Networks and Distributed Systems	5	Exam	
3. Semester	5. Semester	6. Semester	ELECTIVE A*		e.g. Advanced Cyber Security and Cryptology	10		
			ELECTIVE B*		e.g. Machine Learning and Deep Learning	10		
4.	6.	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	Elective B
Advanced Cyber Security and Cryptology Blockchain and Quantum Computing IT Governance and Service Management UI/UX Expert	Data Engineer Business Analyst Technical Project Lead Machine Learning and Deep Learning Use Case Identification and Evaluation for Analytical Applications Internship

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