

CURRICULUM M.SC. COMPUTER SCIENCE

DISTANCE LEARNING, 120 ECTS credits

Semester			Module	Course Code	Course	ECTS credits	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	3. Semester	3. Semester	Algorithmics	DLMCSA01	Algorithmics	5	Exam
			Cyber Security and Data Protection	DLMCSITSDP01	Cyber Security and Data Protection	5	Oral Assignment
	4. Semester	4. Semester	Seminar: Computer Science and Society	DLMCSCSAS01	Seminar: Computer Science and Society	5	Research Essay
			Artificial Intelligence	DLMAIAI01	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
			ELECTIVE A*		e.g. Advanced Cyber Security and Cryptology	10	
7. Semester	7. Semester	ELECTIVE B*		e.g. Machine Learning and Deep Learning	10		
4. Semester	6. Semester	8. Semester	Master Thesis	MMTHE01 MMTHE02	Master Thesis Thesis Defense	27 3	Master Thesis Presentation: Colloquium
Total							
120 ECTS credits							



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.

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
Internship*



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

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