

CURRICULUM M.SC. COMPUTER SCIENCE, 120 ECTS, PART-TIME (48 MONTHS)

Semester	Module	Course Code	Course Name	ECTS	
1. Semester 15 ECTS	Programming with Python	DLMDSPWP01	Programming with Python	5	WAWA
	Software Engineering: Software Processes	DLMCSSESP01	Software Engineering: Software Processes	5	OA
	Advanced Mathematics	DLMDSAM01	Advanced Mathematics	5	E
2. Semester 15 ECTS	Advanced Statistics	DLMDSAS01	Advanced Statistics	5	WB
	Data Science	DLMBDSA01	Data Science	5	E
	Project: Software Engineering	DLMCSPSE01	Project: Software Engineering	5	P
3. Semester 15 ECTS	Algorithmics	DLMCSA01	Algorithmics	5	E
	Cyber Security and Data Protection	DLMCSITSDP01	Cyber Security and Data Protection	5	OA
	Seminar: Computer Science and Society	DLMCSSCSAS01	Seminar: Computer Science and Society	5	WARE
4. Semester 10 ECTS	Artificial Intelligence	DLMIAI01	Artificial Intelligence	5	E
	Big Data Technologies	DLMDSBDT01	Big Data Technologies	5	OA
5. Semester 10 ECTS	Project: Computer Science Project	DLMCPCSP01	Project: Computer Science Project	5	P
	Seminar: Current Topics in Computer Science	DLMCSCTCS01	Seminar: Current Topics in Computer Science	5	WARE
6. Semester 15 ECTS	Networks and Distributed Systems	DLMCSNDS01	Networks and Distributed Systems	5	E
	ELECTIVE MODULE I **		e.g. Advanced Cyber Security and Cryptology	10	
7. Semester 10 ECTS	ELECTIVE MODULE II **		e.g. Machine Learning and Deep Learning	10	
8. Semester 30 ECTS	Master Thesis	MMTHE01	Master Thesis	27	WAT
		MMTHE02	Colloquium	3	PC
Gesamt 120 ECTS	GOAL: In order to stay on schedule, you should finish modules of about 15 Credit Points per semester!				

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A module with two courses consists of an introduction and a consolidation. In order to successfully complete a module, you must successfully pass both the introduction and the consolidation of the module within the framework of a module examination.

* All the modules that have been unlocked for the Online Exams can be found in CARE.

NOTE:
If the result of the recognition exam is still pending, you should not choose any courses that you have applied for.

E Exam (monthly at study centres or anytime via the online exam*)
OA Oral Assignment
P Portfolio
PC Presentation: Colloquium
WARE Written Assessment: Research Essay
WAT Written Assessment: Thesis
WAW Written Assessment: Written Assignment
WB Workbook

** Electives
- Choose two modules

Elective Module I:

- + Advanced Cyber Security and Cryptology
- + Blockchain and Quantum Computing
- + IT Governance and Service Management
- + UI/UX Expert

Elective Module II:

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