

CURRICULUM M.SC. DATA MANAGEMENT

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	Concepts in Data Management	DLMDMCDM01	Concepts in Data Management	5	Exam
			Database Concepts and Technologies	DLMDMDCT01	Database Concepts and Technologies	5	Exam
			Data Query Languages	DLMDMDQL01	Data Query Languages	5	Oral Assignment
	2. Semester	2. Semester	NoSQL Databases	DLMDMNDB01	NoSQL Databases	5	Oral Assignment
			Seminar: Ethic & Societal Considerations in Data Management	DLMDMSESC01	Seminar: Ethic & Societal Considerations in Data Management	5	Research Essay
			Advanced Research Methods	DLMARM01-01	Advanced Research Methods	5	Written Assignment
2. Semester	3. Semester	3. Semester	Data Engineering	DLMSESE01	Data Engineering	5	Oral Assignment
			Big Data Technologies	DLMDSBDT01	Big Data Technologies	5	Oral Assignment
			Data Warehousing, Pipelines and Orchestration	DLMDMDWPO01	Data Warehousing, Pipelines and Orchestration	5	Case Study
	4. Semester	4. Semester	Managing Data Projects	DLMDMMDP01	Managing Data Projects	5	Oral Assignment
			Seminar: Cloud Providers and Services	DLMDMSCPS01	Seminar: Cloud Providers and Services	5	Research Essay
3. Semester	5. Semester	5. Semester	Project: Data Engineering	DLMSESE02	Project: Data Engineering	5	Portfolio
			Programming with Python	DLMDSPWP01	Programming with Python	5	Written Assignment
	6. Semester	6. Semester	Project: Data Analysis in the Cloud	DLMDMPDAC01	Project: Data Analysis in the Cloud	5	Project Report
			ELECTIVE A*		e.g. Master Data Manager	10	
5. Semester	7. Semester	7. Semester	ELECTIVE B*		e.g. Data Security and Protection Specialist	10	
			6. Semester	8. Semester	8. Semester	Master Thesis	
4.	6.	8.	Master Thesis				Thesis Defense
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.

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

Elective A

Data Manager for Internet of Things
Data Miner
Master Data Manager
Data Security and Protection Specialist
Data Scientist
Business Analyst
Technical Project Lead
Process Management and Operational Application Systems

Elective B

Data Manager for Internet of Things
Data Miner
Master Data Manager
Data Security and Protection Specialist
Data Scientist
Business Analyst
Technical Project Lead
Process Management and Operational Application Systems
AI and Mastering AI Prompting



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