## **CURRICULUM M.SC. DATA MANAGEMENT**

## **DISTANCE LEARNING, 120 ECTS credits**

Semester			Module	Course Code	Course	ECTS	Type of Exam
FT	PTI	PT II	mount	course couc	Course	credits	Type of Exam
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	Advanced Research Methods	5	Written Assignment
2. Semester	3. Semester	3. Semester	Data Engineering	DLMDSEDE01	Data Engineering	5	Oral Assignment
			Big Data Technologies	DLMDSBDT01	Big Data Technologies	5	Oral Assignment
			Data Warehousing, Pipelines and Orchestration	DLMDMDWP001	Data Warehousing, Pipelines and Orchestration	5	Case Study
		4. nester	Managing Data Projects	DLMDMMDP01	Managing Data Projects	5	Oral Assignment
	Semester	4. Semes	Seminar: Cloud Providers and Services	DLMDMSCPS01	Seminar: Cloud Providers and Services	5	Research Essay
		5. nester	Project: Data Engineering	DLMDSEDE02	Project: Data Engineering	5	Portfolio
3. Semester	4. Ser	Sem	Programming with Python	DLMDSPWP01	Programming with Python	5	Written Assignment
		6. Iester	Project: Data Analysis in the Cloud	DLMDMPDAC01	Project: Data Analysis in the Cloud	5	Project Report
	5. Semester	6. Seme	ELECTIVE A*		e.g. Master Data Manager	10	
		7.	ELECTIVE B*		e.g. Data Security and Protection Specialist	10	
4	6.	8.	Master Thesis		Master Thesis Thesis Defense	27 3	Master Thesis Presentation: Colloquiu
	Total CTS cr	edits					





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

Al and Mastering Al Prompting

**(i)** 

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