

MSc Degree in Data Science for Society and Business							
Matriculation Fall 2021							
Module Code	Program-Specific Modules	Type	Assessment	Period	Status ¹	Semester	CP
Semester 1							30
CORE Area							10
Unit: Digital Societies							
MDSSB-DSOC-01	Module: Digital Societies and Future Economies				m	1	5
	Digital Societies and Future Economies	Lecture	Written examination	Examination period			
MDSSB-DSOC-02	Module: Data Science Concepts				m	1	5
	Data Science Concepts	Lecture/Tutorial	Written examination	Examination period			
Elective Area							5
- students choose one module from those listed below							
Methods Area							5
MDSSB-MET-01	Module: Data Science Tools				m	1	5
	Data Science Tools	Lecture/Tutorial	Project report	Examination period			
Discovery							5
MDSSB-APP-01	Module: Current Topics and Applications in Data Science				m	1	
	Current Topics and Applications in Data Science	Lecture	Project report	Examination period			
CAREER							5
MCA006	Module: Communication and Presentation Skills				m	1	2.5
	Communication and Presentation Skills	Seminar	Oral presentation	During semester			
JTLA-xxx	Module: Language 1				m	1	2.5
	German is the default language. Native German speakers take modules in another offered language.						
JTLA-xxx	Language 1	Seminar	Various	Various	me		
Semester 2							30
CORE Area							10
Unit: Digital Transformation in Business							
MDSSB-DTRANS-01	Module: Digital Public Spheres				m	2	5
	Digital Public Spheres	Seminar	Term paper	Examination period			
MDSSB-DTRANS-02	Module: Digital Business Models & Functions				m	2	5
	Digital Business Models and Functions	Lecture	Term paper	Examination period			
Elective Area							5
- Students choose a module from those listed below.							
Methods Area							5
MDSSB-MET-02	Module: Text Analysis and Natural Language Processing				m	2	5
	Text Analysis and Natural Language Processing	Seminar/Lab	Project report	Examination period			
Discovery							5
MDSSB-DSCI-01	Module: Data Science Lab				m	2	5
	Data Science Lab	Lab	Project	Examination period			
CAREER							5/2.5
MDSSB-EIR-01	Module: IT-Law				me*	2	2.5
	Data Ethics	Lecture	Term Paper	Examination period			
JTLA-xxx	Module: Language 2				m	2	2.5
JTLA-xxx	Language 2	Seminar	Various	Various	me		
Semester 3							30
CORE Area							10
Unit: Data Science and Artificial Intelligence Concepts							
MDSSB-DSAI-01	Module: Digital Transformation and Innovation				m	3	5
A	Digital transformation of organizations	Seminar	Term paper	Examination period			2.5
B	Digital services and innovation	Seminar	Term paper	Examination period			2.5
MDSSB-DSAI-02	Module: Artificial Intelligence in Business & Society				m	3	5
	Artificial Intelligence in Business and Society	Lecture/Lab	Project	During semester			
Elective Area							5
- students choose one module from those listed below							
Methods Area							5
MDSSB-MET-03	Module: Visual Communication and Data Story Telling				m	3	5
	Visual Communication and Data Story Telling	Lecture/Tutorial	Project report	During semester			
Discovery							5/0
MDSSB-CAP-01	Module: Capstone Project				me*	3	5
	Capstone Project	Seminar	Project	During semester			
CAREER							5/12.5
MDSSB-EIR-01	Module: Ethics and the Information Revolution				me*	3	2.5
	The Information Revolution	Seminar	Term paper (report)	Examination period			2.5
JTLA-xxx	Module: Language 3				me*	3	2.5
JTLA-xxx	Language 3	Seminar	Various	Various			
MDSSB-INT-01	Module: Internship				me*	3	10
	Internship	Internship/Project	Report	Examination period			
Semester 4							30
MDSSB-THE-01	Master Thesis				m	4	30
	Master Thesis DSSB						
	Master Thesis						
Total CP							120

1m = mandatory, me = mandatory elective

* Students can replace the Capstone project, and two of the indicated career modules with an internship. See 3.5.5 in the handbook.

Elective Area							
Students choose 15 CP of mandatory electives							
Society and Business Track							25
MDSSB-SOCB-01	Module: Cybercriminology				me	1 or 3	5
	Cybercriminology	Seminar	Term paper	Examination period			
MDSSB-SOCB-02	Module: Introduction to Computational Social Science				me	2	5
	Computational Social Science	Seminar	Term paper	Examination period			
MCO009	Module: Smart Cities and Transport Concepts				me	3 or 1	5
51009	Smart Cities and Transport Concepts	Lecture	Project report	Examination period			
MDSSB-ECON-01	Module: Sustainability Economics				me	3 or 1	5
	Sustainability Economics	Seminar	Presentation / term paper	Examination period / during semester			
MCO010	Module: Principles of Consulting				me	3 or 1	5
51010	Principles of Consulting	Lecture/Seminar	Group project (report)	Examination period			
Advanced Data Science Track							20
MCO011	Module: Data Analytics				me	1 or 3	5
340131	Data Analytics	Lecture/Tutorials	Written examination	Examination period			
MESCO01	Module: Data Mining				me	2	5
340122	Data Mining	Lecture	Project report	Examination period			
MCO013	Module: Machine Learning				me	2	5
320372	Machine Learning	Lecture	Written examination	Examination period			
MMM014-	Module: Introduction to Data Management with Python				me	3	5
	Introduction to Data Management with Python	Lecture/Tutorials	Written examination/ Programming assignments	Examination period / during semester			
Environment and Health Track							20
MEGI001	Module: Geo-Informatics				me	1	5
210103	Geo-Information Systems	Lecture			m		2.5
210103	Introduction to Earth and System Data	Lecture	Term paper	Examination period	m		2.5
MEGI002	Module: Geo Informatics Lab				me	2	5
210001	Geo Informatics Lab	Lecture	Term paper	Term paper			
MEBI003	Module: Modeling and Analysis of Complex Systems				me	1 or 3	5
550453	Modeling and Analysis of Complex Systems	Lecture	Written examination	Examination period			
MMM007	Module: Network Approaches in Biology and Medicine				me	3 or 1	5
	Network Approaches in Biology and Medicine	Lecture	Presentations	During semester			
Total CP							65