

Introductory Session

Mannheim Master in Data Science



These slides will be available
for download
on the following website:

www.wim.uni-mannheim.de



Master Mailing List



You will be added to the mmds-master mailing list.



Please note: From now on, all email correspondence will go to your University of Mannheim email account!



Check your university mail account regularly!

Communication

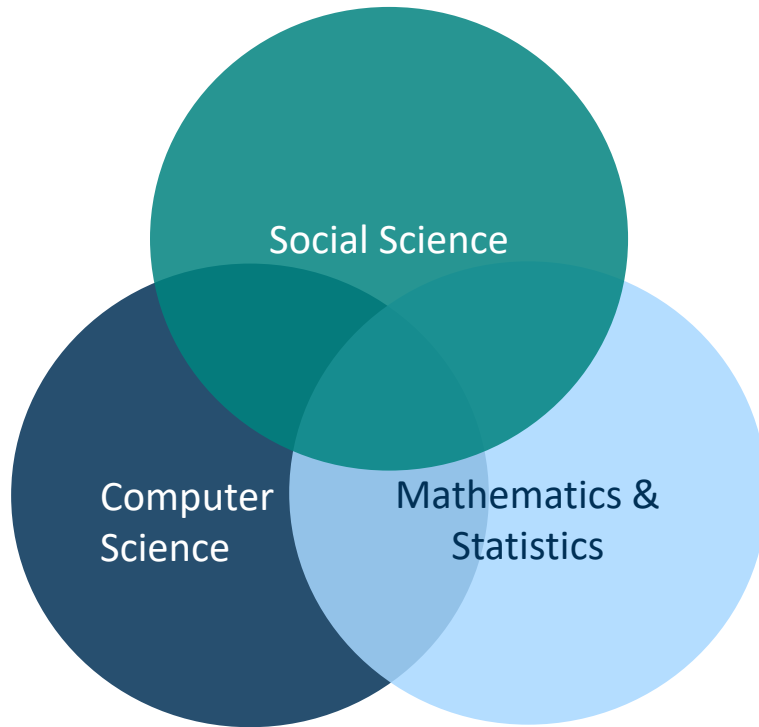
1. Please use **ONLY** your **university e-mail address** in a university environment
2. Identify the right **contact person**
3. E-Mail to **one** person (if you want to write to more than one individual at once, put them in copy)
4. Requests must always include the following **data**: full name, course of study, subjects, semester and matriculation number.
5. Screenshots of IT issues
6. Keep to **polite forms of communication** (no chat communication!) - appropriate form of addressing and wording



Communication

Good idea	Bad idea
<p>From: max.mustermann@students.uni-mannheim.de</p> <p>Dear Ms. Czanderle/Dear Sir or Madam,</p> <p>I have two questions regarding the organization of the upcoming semester.</p> <p>There is an overlap of two courses. IE 500 Data Mining Exercise I overlaps with the IE 675b Machine Learning lecture. The alternatives that would fit into my week would be the IE 650 Knowledge Graphs lecture or the CS 600 Model Driven Development lecture. Can you help me out with this?</p> <p>Kind regards,</p> <p>Max Mustermann Matriculation number: 123456 M.Sc. Business informatics (1st FS/1st FS)</p>	<p>From: gommemode@gmail.com</p> <p>Hello. 😊😊😊</p> <p>I am studying business informatics here, what do I have to do?</p> <p>Bye, Max</p>

Master in Data Science



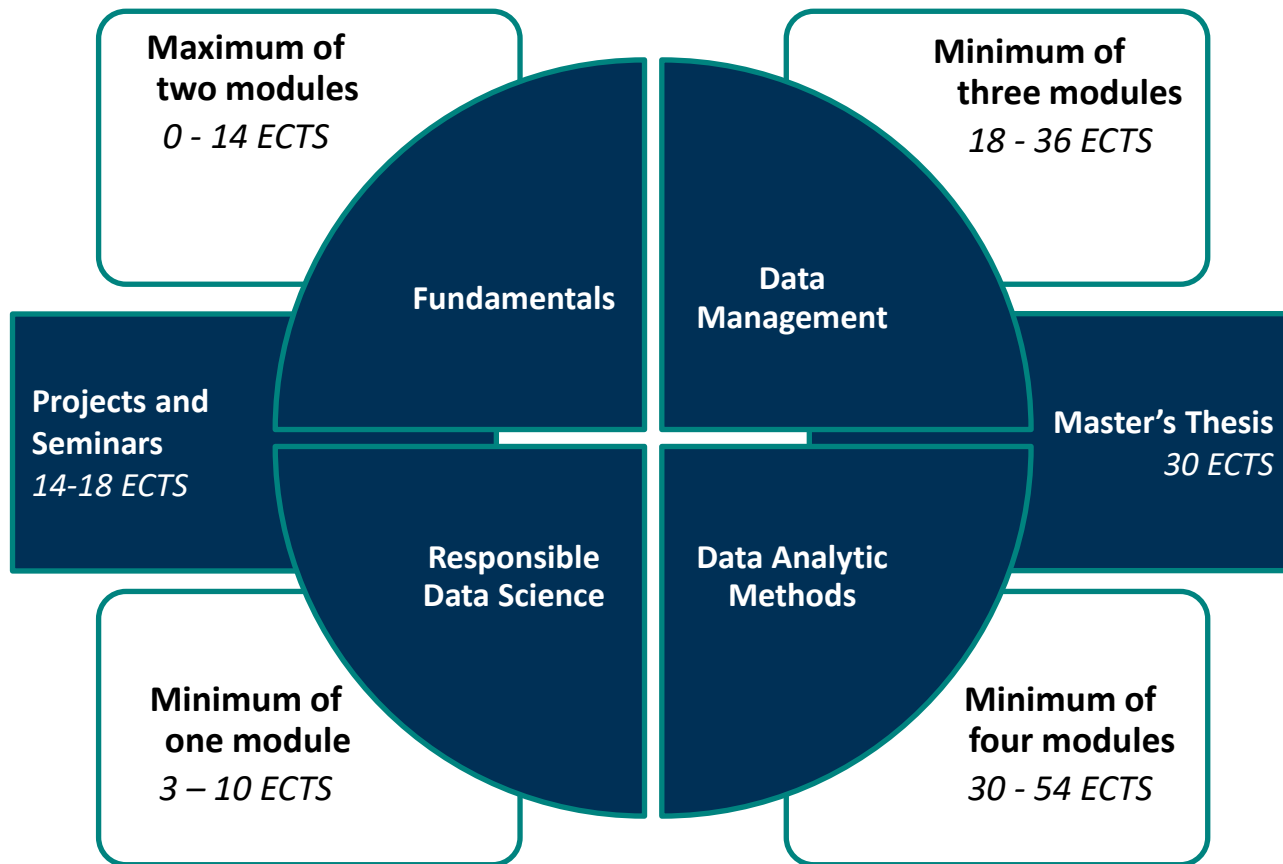
Interdisciplinary

- Computer Science
- Mathematics & Statistics
- Social Science

Applied

- Hands-on experience
- Close cooperation with industry partners (e.g. in most projects)

Structure of the M.Sc. Program



Fundamentals

**Programming
Course**
6 ECTS

**Database
Technology**
6 ECTS

**Quantitative
Methods**
6 ECTS

**Introduction to
Scientific
Programming with
Python ***
6 ECTS

**Statistics for
Data Scientists**
8 ECTS

**Empirische
Methoden der
Politikwissenschaft**
6 ECTS

**Tutorial
Quantitative
Methods**
2 ECTS

* Prerequisites: No completed exam in CS 470 Programming with Python

Structure of the M.Sc. Program

Data Management

Module no.	Name of module	ECTS
AC 651	Additional Course – Data Management	Max. 18
CS 500	Advanced Software Engineering	6 (BI*)
CS 550	Algorithmics	6 (BI*)
CS 560	Large Scale Data Management	6 (BI*)
CS 600	Model-driven Development	6 (BI*)
CS 660**	Compiler Construction	6 (BI*)
CS 661**	Parallel Programming	6 (BI*)

* For a detailed description, please see the module catalogue of the respective following degree programs:

•BI: M.Sc. Business Informatics, <https://www.wim.uni-mannheim.de/studium/studienorganisation/m-sc-business-informatics/>

•MMM: M.Sc. Mannheim Master in Management, <https://www.bwl.uni-mannheim.de/studium/master/mmm/>

**Additional offer to the Examination Regulations.

Data Management

Module no.	Name of module	ECTS
CS 664**	Blockchain Security	6 (BI*)
CS 666**	Digital Forensics and Incident Response	6 (BI*)
IE 650	Knowledge Graphs (formerly Semantic Web Technologies)	6 (BI*)
IE 670	Web Data Integration	6 (BI*)
IE 683	Web Data Integration Project	6 (BI*)
IS 540	Management of Enterprise Systems	6 (MMM*)
IS 556	Public Blockchains	6 (MMM*)

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•MMM: M.Sc. Mannheim Master in Management, <https://www.bwl.uni-mannheim.de/studium/master/mmm/>

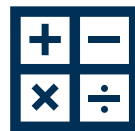
**Additional offer to the Examination Regulations.

Data Analytic Methods



M.Sc. Business Informatics

- Network Analysis
- Machine Learning
- Data Mining I



M.Sc. Mathematics in Business and Economics

- Mathematics & Information
- Computational Finance
- Optimization



M.A. Political Science

- Advanced Quantitative Methods



M.A. Sociology

- Longitudinal Data Analysis
- Research Design
- Cross Sectional Data Analysis

Responsible Data Science

Module no.	Name of module	ECTS
CS 652	Data Security and Privacy	6 (BI*)
	Legal and Ethical Aspects in Privacy	3
CS 718	AI and Data Science in Fiction and Society	4
AC 654	Additional Course – Responsible Data Science only as part of Responsible Data Science not as Seminar	Max. 18
DS 203	Responsible AI: Conceptual Foundations, Methods and Applications	6

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•MMM: M.Sc. Mannheim Master in Management, <https://www.bwl.uni-mannheim.de/studium/master/mmm/>

**Additional offer to the Examination Regulations.

Projects and Seminars



**Team Project
or Individual
Project**
*12 ECTS /
8 ECTS*



Seminar
4 ECTS



**Scientific
Research**
2 ECTS

PLEASE NOTE:

**Each student MUST take a Seminar and Scientific Research
as well as a Team or Individual Project.**

Projects and Seminars - Team Project



- 12 ECTS, 1 or 2 semesters
- **Presentation: at 1:45 pm on February 14**
- Registration: portal² “Team Projects Master Wifo & MMDS”
- Registration will start on February 14. 3 pm
You can register until February 18 11:59 pm
- Registration is possible AFTER the presentation of the new Team Projects!



Projects and Seminars

Scientific Research Course



- 2 ECTS
- Block seminar during the semester or in lecture-free period
- Offered several times a year
- Dates will be announced via mailing list



Seminars



Seminar
4 ECTS

Module no.	Name of module	Offered	Language	ECTS
CS 701	Selected Topics in Algorithmics and Cryptography	Irregular	E	4
CS 704	Master Seminar Artificial Intelligence	Irregular	E	4
CS 707	Seminar Data and Web Science	Irregular	E	4
CS 708	Seminar Software Engineering Prof. Atkinson	Irregular	E	4
CS 709	Seminar Text Analytics	Irregular	G/E	4
CS 710	Selected Topics in Data Science	Irregular	G/E	4
CS 715	Large-Scale Data Integration Seminar	Irregular	E	4
CS 716	IT-Security	Irregular	E	4
CS 719	Seminar on Process Analysis	Irregular	E	4

Seminars

Module no.	Name of module	Offered	Language	ECTS
CS 720	Uncertainty Estimation	Irregular	E	4
CS 721	Seminar Data-Science I	Irregular	E	4
CS 722	Seminar Ethical Aspects of AI	Irregular	E	4
CS 717	Master Seminar on Computer Vision	FSS	E	4
IE 704	Seminar AI Systems Engineering	Irregular	E	4

Seminars

- Registration for CS-seminars via Portal² until February 12
- You have to choose at least 3 priorities
- IE-seminar has different application process
- BUT: consider the requirements of each seminar



Study abroad



- All students have the opportunity to study abroad
- for one or two semesters
- without paying tuition fees

What for?

Don't miss the unique opportunity to



- immerse yourself in another culture
- overcome challenges and gain new soft skills
- experience high-class education systems
- brush up your foreign language skills
- form lifelong friendships and international networks
- boost your CV and your career opportunities
- ...

Where to?



- with over **450 partner universities in 60 countries** you can choose from a variety of universities all around the globe
- 70 of those are faculty-owned partner universities
- even lesser-known regions can become exciting destinations for your exchange!

First steps



- take a look at the different [application deadlines](#), depending on your program of study and your host country
- take part in one of the mandatory [Introductory Study Abroad Sessions](#) right at the beginning of your studies
- look for suitable [partner universities](#) all around the globe

Application Deadlines

Exchange destinations and application deadlines are divided into two regions:

Region	Deadline	Semester
Overseas North & South	15 October 2024	fall 2025 or spring 2026
Europe (without Russia)	31 January 2025	fall 2025 or spring 2026
Europe (remaining places)	30 April 2025	fall 2025 or spring 2026

Table for Master degrees starting in the spring term 2024.



If you want to travel to Overseas North in fall semester of 2025 or spring semester of 2026, you have to apply by 15 October 2024!

Contact

Juliane Roth, M.A.

Departmental Exchange Coordinator



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School of Business Informatics and Mathematics

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E-mail: roth@wim.uni-mannheim.de

Consultation hour(s):

by appointment via email

Important Webpages

- wim.uni-mannheim.de
 - Info about study organization (module catalogue, examination regulation, contacts, ...)
- uni-mannheim.de/dws
 - Info about professors from our faculty related to data science
 - Detailed course information (regarding content and organization)
- <https://fim.uni-mannheim.de/>
 - Student association Homepage



Questions?

