

International Master in Data Analytics

Welcome Back to Winter Term 2025/26

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Outline

1. Study Progress
2. Course Feedback, Exams and Retakes
3. Courses Current Term

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Study Progress

Table: Study Progress

Starting Term	Coming Term	Started	Remaining
W25/26	1	20	20
S25	2	53	53
W24/25	3	16	16
S24	4	23	19
W23/24	5	34	30
S23	6	21	21
W22/22	7	40	26
S22	8	26	17
$\geq$ W21/22	>8	-	26

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Retakes for Courses

- ▶ 12 students failed the ML2 exam last semester
 - ▶ 3 students failed after the second take
- ▶ 25 students failed the BDA exam
- ▶ **Unlimited Exam Attempts:** Students can now take exams an unlimited number of times for each course. There will no longer be a cap on the number of exam attempts allowed.
- ▶ **Transcript of Records:** Every exam attempt will be recorded on the student's final transcript. The number of attempts for each course will be visible on the official transcript upon completion of studies.

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Courses First Year (Summer Start 2025)

1st Term

Nr	Module	Type	CPs
M5	Big Data Analytics	Lecture	6
M7	Data and Privacy Protection	Seminar	3
M8	Distributed Data Analytics	Lab	6
MS1	<i>Methodological Specialization</i>	Lecture	6
AM1	<i>Application Module I</i>	-	6

2nd Term

Nr	Module	Type	CPs
M1	Machine Learning	Lecture	6
M2	Modern Optimization Techniques	Lecture	6
M3	Programming Machine Learning	Lab	6
M10	Project (part I)	Project	3
AM1	<i>Application Module I</i>	-	6

Courses Second Year (Winter Start 2024/25)

3rd Term	Nr	Module	Type	CPs
	M11	Planning and Optimal Control	Lecture	6
	MS1	<i>Methodological Specialization</i>	Lecture	6
	M9	Seminar Data Analytics II	Seminar	4
	M12	Project (part III)	Project	6
	AM2	<i>Application Module II</i>	-	6
4th Term	Nr	Module	Type	CPs
	M13	Seminar Data Analytics II	Seminar	4
	M14	Master Thesis	Thesis	30

!! The *Seminar Data Analytics II* is offered 3 times, by three groups:
 ISMLL (Schmidt-Thieme) / Data Science (Landwehr) / Intelligent Assistive
 Systems (Roitberg)

Courses Second Year (Summer Start 2024)

3rd Term	Nr	Module	Type	CPs
	M6	Advanced Machine Learning	Lecture	6
	M4	Seminar Data Analytics II	Seminar	4
	M10	Project (part II)	Project	6

4th Term	Nr	Module	Type	CPs
	M11	Planning and Optimal Control	Lecture	6
	M12	Project (part III)	Project	3
	M13	Seminar Data Analytics III	Seminar	4
	M14	Master Thesis	Project	24

- as the 4th term may be too heavy,
better plan for a 5th term (at least for 2 more months).

Master Thesis / General information

- ▶ The master thesis is the last step in your studies.
- ▶ You can write your thesis with any group teaching in the program.
 - ▶ Prof Schmidt-Thieme / Hanika (our group)
 - ▶ Prof Landwehr
 - ▶ Prof Roitberg
 - ▶ Group from Application Modules
- ▶ If you want to do your thesis in a group from the application modules (e.g. NLP), make sure to have taken the corresponding course

Master Thesis / Oberseminar

General procedure for students doing a thesis in our group:

- ▶ Register for the Oberseminar Learnweb Course:
3117 Oberseminar: Maschinelles Lernen und Data Mining
- ▶ There you find **materials** and step-by-step **guide** on how to start the thesis
 - ▶ Link to available master thesis topics
 - ▶ Formal documents (proposal/thesis template, registration form, ...)
 - ▶ Information about the Oberseminar
- ▶ The Oberseminar...
 - ▶ is a colloquium for students currently involved in writing their thesis.
 - ▶ Attendance is **mandatory** for passing the Master thesis.
Only exception:
 - ▶ Working at a company far away from Hildesheim.
 - ▶ We need a signed letter from the company.

Advice Courses This Term

- ▶ focus on the mandatory courses
 - ▶ esp. if you have other obligations such as
 - ▶ failed courses from 1st term to prepare (start to prepare them now)
- ▶ invest time into the project continuously
 - ▶ arrange regular meetings with your advisor

Elective Courses 1: Methodological Specialization

- ▶ to deepen your methodological understanding and widen the models and methods you command.
- ▶ Available in Winter25/26:
 - ▶ Machine Learning for IT Security (Landwehr) – Winter
 - ▶ Multimodal Foundation Models (Roitberg) – Winter
 - ▶ *Further Course may be available. Please check LSF.*
- ▶ you have to choose at least one course during your program (6 CP)
 - ▶ marks of just one course count to your final degree

Elective Courses 2: Application

- ▶ currently from 6 areas:
 - ▶ Computer Science / Software Engineering
 - ▶ Business Administration and Information Systems
 - ▶ Information Retrieval and Information Sciences
 - ▶ Natural Language Processing
 - ▶ Environmental Sciences

- ▶ Not all courses are available every semester.

- ▶ you have to choose courses worth at least 12 CP from **one** area
 - ▶ e.g., two lectures with tutorials
 - ▶ marks of courses worth 12 CP count to your degree
 - ▶ You can earn up to 6 credits from Soft Skills (Deutschkurs).

Welcome Back to the International Master in Data Analytics!

We wish you successful continuation of your studies!