

Mathematics for Master Students

A voluntary refresher for incoming KLU M.Sc. students

Welcome! This is a compact mathematics tutorial accompanying the M.Sc. programs at [Kühne Logistics University](#). Your KLU courses assume you can read and use mathematics fluently: this tutorial refreshes exactly the topics that appear across your first- and second-semester courses, so you can follow them without the mathematics getting in the way.

The tutorial is **voluntary** and **not graded**. Nobody tracks your answers or your progress. The only goal is to make the mathematics in your degree courses feel familiar again.

How It Works

- **Six sessions of 90 minutes**, plus one **voluntary mock exam** at the end.
- Each session is taught **in class** by [Tobias Vlček](#).
- Between sessions, you work through **homework tasks** at your own pace. Every session starts with a short recap and your questions.
- Every session comes with **four materials**: the lecture, a set of homework tasks with worked solutions, a short self-test quiz, and a compact cheatsheet.

Tip

Ask any question you have, no matter how simple it may seem. That is exactly what this tutorial is for. Bring your questions to the start of each session.

Session Materials

Session dates are still to be scheduled (see the [Syllabus](#)). Each row links the lecture page, homework tasks, self-test quiz, and cheatsheet for that session.

#	Topic	Lecture	Tasks	Self-Test	Cheatsheet
1	Notation & Logic	Class	Tasks	Quiz	Sheet
2	Sets	Class	Tasks	Quiz	Sheet
3	Functions	Class	Tasks	Quiz	Sheet
4	Differen- tiation	Class	Tasks	Quiz	Sheet
5	Single Variable	Class	Tasks	Quiz	Sheet

#	Topic	Lecture	Tasks	Self-Test	Cheatsheet
	Optimization				
6	Systems of Linear Equations	Class	Tasks	Quiz	Sheet

And once you have worked through the sessions, try the voluntary [Mock Exam](#): a self-diagnosis under exam-like conditions, with fully worked solutions.

Need a Hand?

A tutorial chatbot, the [Math Helper](#), is available throughout this website. It is set up to guide your thinking with hints rather than hand you finished solutions (a study partner you can reach any time between sessions).

Getting Started

- New here? Skim the [Syllabus](#) to see the arc of the six sessions.
- Looking for textbooks and self-study resources? See the [Literature](#) page.
- Practical questions about attendance, grades, or missed sessions? The [FAQ](#) has short, honest answers.

If you have any questions, contact Tobias Vlček at vlcek@beyondsimulations.com.