

Preliminary model schedules for the academic years 2023-24 and 2024-25 in the master's programme for mathematics and statistics by study track and specialization

The optional studies marked in **blue** can be taken from any degree programme including **MAST**.

The optional studies marked in **red** can be taken from the following degree programmes, **MAST, LSI, TCM, DAT**.

Model schedules for students who started their studies in the academic year 2023-24

Mathematics study track:

Analysis specialization

Academic year 2023-24

1 st period	2 nd period	3 rd period	4 th period
Functional analysis I	Functional analysis II	Fourier analysis and distributions	Introduction to complex analysis
Topology II	Topology II	Spectral theory	Spectral theory
5 credits of optional studies	Introduction to real and fourier analysis	5 credits of optional studies	5 credits of optional studies
Master's studies seminar I	Master's studies seminar I	Master's studies seminar I	Master's studies seminar I

Academic year 2024-25

1 st period	2 nd period	3 rd period	4 th period
10 credits of optional studies	5 credits of optional studies	5 credits of optional studies	5 credits of optional studies
Master's thesis	Master's thesis	Master's thesis	Master's thesis
Master's studies seminar II	Master's studies seminar II	Master's studies seminar II	Master's studies seminar II

Algebra, topology, geometry specialization

Academic year 2023-24

1 st period	2 nd period	3 rd period	4 th period
Topology II	Topology II	Algebra II	Algebra II
10 credits of optional studies	10 credits of optional studies	De Rham theory	De Rham theory
		5 credits of optional studies	5 credits of optional studies
Master's studies seminar I	Master's studies seminar I	Master's studies seminar I	Master's studies seminar I

Academic year 2024-25

1 st period	2 nd period	3 rd period	4 th period
10 credits of optional studies	5 credits of optional studies	5 credits of optional studies	5 credits of optional studies
Master's thesis	Master's thesis	Master's thesis	Master's thesis
Master's studies seminar II	Master's studies seminar II	Master's studies seminar II	Master's studies seminar II

Mathematical logic

Academic year 2023-24

1 st period	2 nd period	3 rd period	4 th period
Mathematical logic	Mathematical logic	Axiomatic set theory	Axiomatic set theory
Dependence logic	Dependence logic	Computability theory	Computability theory
5 credits of optional studies	5 credits of optional studies	5 credits of optional studies	5 credits of optional studies
Master's studies seminar I	Master's studies seminar I	Master's studies seminar I	Master's studies seminar I

Academic year 2024-25

1 st period	2 nd period	3 rd period	4 th period
10 credits of optional studies	5 credits of optional studies	5 credits of optional studies	5 credits of optional studies
Master's thesis	Master's thesis	Master's thesis	Master's thesis
Master's studies seminar II	Master's studies seminar II	Master's studies seminar II	Master's studies seminar II

Mathematical physics and probability specialization

Academic year 2023-24

1 st period	2 nd period	3 rd period	4 th period
Introduction to mathematical physics A	Introduction to mathematical physics B	5 credits of optional studies	5 credits of optional studies
Functional analysis I	Functional analysis II	5 credits of optional studies	5 credits of optional studies
Probability theory I	Probability theory II	5 credits of optional studies	5 credits of optional studies
Master's studies seminar I	Master's studies seminar I	Master's studies seminar I	Master's studies seminar I

Academic year 2024-25

1 st period	2 nd period	3 rd period	4 th period
Stochastic analysis I	Stochastic analysis II	5 credits of optional studies	5 credits of optional studies
Master's thesis	Master's thesis	Master's thesis	Master's thesis
	5 credits of optional studies		
Master's studies seminar II	Master's studies seminar II	Master's studies seminar II	Master's studies seminar II

Applied mathematics study track:

Mathematical biology

Academic year 2023-24

1 st period	2 nd period	3 rd period	4 th period
(LSI33003) Mathematics of infectious diseases	(LSI33003) Mathematics of infectious diseases	Adaptive dynamics	Adaptive dynamics
Mathematical modelling I	Mathematical modelling II	Bifurcation theory	5 credits of optional studies
5 credits of optional studies	5 credits of optional studies	Stochastic population models	Stochastic population models
Master's studies seminar I	Master's studies seminar I	Master's studies seminar I	Master's studies seminar I

Academic year 2024-25

1 st period	2 nd period	3 rd period	4 th period
10 credits of optional studies	Introduction to mathematical biology II	5 credits of optional studies	
Master's thesis	Master's thesis	Master's thesis	Master's thesis
Master's studies seminar II	Master's studies seminar II	Master's studies seminar II	Master's studies seminar II

Insurance and financial mathematics specialization

Academic year 2023-24

1 st period	2 nd period	3 rd period	4 th period
Risk theory	Risk theory	Mathematical finance I	Mathematical finance II
Probability theory I	Probability theory II	Advanced risk theory	Tariff theory
5 credits of optional studies	5 credits of optional studies	5 credits of optional studies	5 credits of optional studies
Master's studies seminar I	Master's studies seminar I	Master's studies seminar I	Master's studies seminar I

Academic year 2024-25

1 st period	2 nd period	3 rd period	4 th period
10 credits of optional studies	5 credits of optional studies	5 credits of optional studies	5 credits of optional studies
Master's thesis	Master's thesis	Master's thesis	Master's thesis
Master's studies seminar II	Master's studies seminar II	Master's studies seminar II	Master's studies seminar II

Inverse problems and imaging specialization

Academic year 2023-24

1 st period	2 nd period	3 rd period	4 th period
Inverse problems I	Inverse problems II	Fourier analysis and distributions	Introduction to complex analysis
10 credits of optional studies	Introduction to real and fourier analysis	10 credits of optional studies	10 credits of optional studies
	Inverse problems project work		
Master's studies seminar I	Master's studies seminar I	Master's studies seminar I	Master's studies seminar I

Academic year 2024-25

1 st period	2 nd period	3 rd period	4 th period
10 credits of optional studies	5 credits of optional studies	5 credits of optional studies	5 credits of optional studies
Master's thesis	Master's thesis	Master's thesis	Master's thesis
Master's studies seminar II	Master's studies seminar II	Master's studies seminar II	Master's studies seminar II

Statistics study track:

Statistics specialization

Academic year 2022-23

1 st period	2 nd period	3 rd period	4 th period
Multivariate analysis	Survival and event history analysis I	Time series analysis II	Asymptotic statistical inference
Computational statistics	Time series analysis I	10 credits of optional studies	Survival event history analysis II
Robust regression	High-dimensional statistics		Advanced Bayesian Inference
Master's studies seminar I	Master's studies seminar I	Master's studies seminar I	Master's studies seminar I

Academic year 2024-25

1 st period	2 nd period	3 rd period	4 th period
10 credits of optional studies	5 credits of optional studies	5 credits of optional studies	5 credits of optional studies
Master's thesis	Master's thesis	Master's thesis	Master's thesis
Master's studies seminar II	Master's studies seminar II	Master's studies seminar II	Master's studies seminar II