# Master of Science in Statistics

Welcome session September 2025



#### GENEVA SCHOOL OF ECONOMICS AND MANAGEMENT

About

**Study Programs** 

**Executive Education** 

Faculty & Research

Student Information

#### Master's Programs

**Economics** 

Responsible

Management

Statistics

Wealth Management

**Business Analytics** 

Commodity Trading

Frequently Asked Questions

Admissions

## Master of Science in **Statistics**



The Master of Science in Statistics focuses on data analysis, methodological problem-solving in a range of disciplines, and various types of statistics software, or mathematical statistics. The program is open to experts wishing to

#### Main features

#### **Program Length**

3 semesters (minimum) - 90 ECTS credits

of

#### Language Instruction

English

#### **Admissions**

Application deadline: 28 February. Please consult our web page on

**GENEVA SCHOOL OF ECONOMICS** AND MANAGEMENT



#### Core Courses - 72 ECTS

Linear Models for Dependent Data

Machine Learning

The Statistical Analysis of

Time Series

Master Thesis

Analytics Consulting

Applied Bayesian Statistics

Modern Flexible Regression

Multivariate Analysis

Master Thesis

Courses of the 1st semester may be followed during the 3rd semester - if the completion of a complementary program is necessary

#### Elective Courses - 18 ECTS

Choice from a list of courses, may also be followed in other GSEM Master programs and/or in other UNIGE Departments - subject to approval by the Scientific Committee.

Theoretical Statistics

Models and Empirical Methods for Asset Pricing

Financial Econometrics

Fundamental and Advanced Sampling Techniques

Optimization with Applications I

Research Seminar in Statistics

Stochastic Processes in Finance

Institutional Project

Advanced Topics in Machine Learning

Concepts et langages orientés objets

Data-Driven Impact Evaluation

Data Mining

Experimental Design: Theory

and Practice

Optimization with Applications II

Research Seminar in Statistics

Advanced Econometrics

Crowdsourcing and Al

Introduction à la planification et l'analyse des cas uniques

Modèles à équations structurales

Institutional Project

+ courses outside the Faculty

Courses of the 1st semester may be followed during the 3rd semester - if the completion of a complementary program is necessary

# GENEVA SCHOOL OF ECONOMICS AND MANAGEMENT



## **UNIGE** grading scale and information on exams

- UNIGE grading scale is based on 6.00 (0.00 to 6.00 with  $\frac{1}{4}$  of point, for example: 3.50, 4.00, 4.25 etc);
- **4.00** is the minimum grade to obtain (ECTS) credits;
- ❖ If you obtain the minimum grade of 4.00, you can not retake the exam to improve your grade;
- For grades between 3.00 and 3.75 (including the extrema), you have the possibility to validate up to 9 (ECTS) credits maximum (10% of the degree);
- There are three exam sessions: January/February, May/June and August/September.



## **Co-requisite courses**

- Some students have to complete and succeed in some complementary courses (so-called *co-requisite*) in addition to the courses in the master curriculum;
- ❖ To pass each co-requisite course, you need to obtain at least the minimum grade 4.00 by August/September of your 1st year;
- The co-requisite courses provide valid credits.
- Remark: to complete the Master, you need to achieve 12 (ECTS) credits by the end of the 1st semester and 30 (ECTS) credits by the end of your 1st year.



#### **RULES - Conditions for success**

- By the end of your first semester of study: you need a minimum of 12 (ECTS) credits in order to continue the Master cursus and avoid to be sidelined from the Master program (art 19 al.1a of the Regulation of GSEM);
- By the end of your first year of study: you need a minimum of 30 (ECTS) credits (art. 19 al.1b of the Regulation of GSEM);
- As soon as you can, you need to define a master thesis project through informal contacts with the master program's teachers
- No later than the end of the fourth semester (end of retake exam session in August/September):
  The project must be approved by the master thesis director(s) and, if necessary, the internship supervisor.
  The project is then submitted to the Master in Statistics Scientific Committee for approval (by email to the program director, with the master thesis director copied in).
- The fifth semester of study is the latest deadline to obtain the 90 (ECTS) credits required (see art 8 al. 2 of the Regulation of GSEM).

For additional info look at:

https://www.unige.ch/gsem/index.php/download\_file/view/5859/10037/



# **RULES - Examination attempts**

Mandatory courses: 2 attempts maximum
1 registration = 2 attempts

Elective courses: 4 attempts maximum 2 registrations = 4 attempts



# Policy on the use of generative AI tools

- You can use generative AI tools for developing your group presentation(s) and/or individual assignment(s), unless otherwise instructed.
- You are provided with access to Microsoft Copilot (via your University login). You also may have (free) access to ChatGPT and Google Gemini (and possibly other generative AI tools such as Claude).
- When using generative AI tool(s) for your work, please add a maximum half-page declaration with the following information:
  - Identify the generative AI tool(s) you used for your work;
  - 2. Describe how you used the generative AI tool(s) by disclosing the parts of your work that were developed in collaboration with the generative AI tool(s) and by identifying the contribution of the generative AI tool(s) to these parts; and
  - 3. Explain your unique contribution above and beyond outputs provided by the generative AI tool(s).
- The University of Geneva statement on (generative) Al also applies (see also the insightful <u>guidebook on generative Al</u>):

unige.ch/en/university/politique-generale/statement-ai/



# **STUDY PLAN (core)**

https://www.unige.ch/gsem/en/students/masters/studyplans-schedules-calendar/

Master of Science in Statistics / Maîtrise universitaire en statistique

Core courses (72 credits) / Cours obligatoires (72 crédits)

Enseignement	Code	Disc. / Thém.	Semestre	Heures hebd.	Crédits
Analytics Consulting	S401016	Gestion d'entreprises Statistique	Р	3	6
Applied Bayesian Statistics	S411004	Statistique	Р	2 + 2	6
Modern Flexible Regression	S411001	Economie Statistique	Р	2 + 2	6
Linear Models for Dependent Data	S411014	Statistique	Α	2 + 2	6
Machine Learning	S403011	Statistique	Α	2 + 2	6
Multivariate Analysis	S411015	Statistique	Р	2 + 2	6
The Statistical Analysis of Time Series	S403107	Econométrie Statistique	Α	2 + 2	6
Master thesis *	S411022	Statistique	A/P		30

<sup>\*</sup> Deadline for submitting the Master thesis: in accordance with Article 17, paragraph 3 of the Study Regulations, the Master thesis must be submitted no later than 8 weeks before the end of the 5th semester. /

Date limite de dépôt du mémoire de maîtrise : conformément à l'article 17, alinéa 3 du Règlement d'études, le mémoire de maîtrise doit être déposé au plus tard 8 semaines avant la fin du 5ème semestre.





## **STUDY PLAN (elective)**

#### Elective Courses (18 credits) / Cours à options (18 crédits)

Courses to be selected in the following list and/or in other Masters programs of the Faculty or in other Faculties/Universities (subject to the agreement of the scientific committee and the written agreement from the teacher of the proposed course) / Cours à choisir dans la liste suivante et/ou dans d'autres programmes de maîtrise de la Faculté ou dans d'autres facultés / universités (sous réserve de l'accord du Comité scientifique et de l'accord écrit de l'enseignant-e de ce cours proposé).

Enseignement	Code	Disc. / Thém.	Semestre	Heures hebd.	Crédits
Theoretical Statistics Cours interdit aux étudiant-es ayant suivi le cours « Advanced Statistical Inference »	S403109	Statistique	Α	2 + 2	6
Advanced Econometrics	S403078	Econométrie	Р	2 + 2	6
Advanced Topics in Machine Learning	S411021	Statistique	Р	2 + 2	6
Concepts et langages orientés objets	12X003	Sciences	Р	HF	5
Crowdsourcing and Al	D400032	CUI	Р	HF	6
Data-Driven Impact Evaluation	S403116	Econométrie	Р	2 + 2	6
Data Mining	13X011	Sciences	Р	HF	4
Models and Empirical Methods for Asset Pricing	S413055	Comptabilité, finance	Α	4	6
Experimental Design: Theory and Practice	S411008	Statistique	Р	4	6
Financial Econometrics	S413056	Comptabilité, finance	А	2 + 2	6
Fundamental and Advanced Sampling Techniques	S411028	Statistique	Α	4	6
Master of Science in Statistics / Maîtrise universitaire en stat	istique 2025 – 202	6			2

GENEVA SCHOOL OF ECONOMICS AND MANAGEMENT





# **STUDY PLAN (elective)**

Introduction à la planification et l'analyse des cas uniques	751515	FAPSE	Р	HF	3
Invited Lecture in Statistics (non donné en 2025-2026)	S411009	Statistique	Р	2	3
Modèles à équations structurales	751517	FAPSE	Р	HF	3
Modèles multiniveaux (non donné en 2025-2026)	751518	FAPSE	Р	HF	3
Optimization with Applications I	14M192	Sciences	Α	HF	5
Optimization with Applications II	14M193	Sciences	Р	HF	5
Research Seminar in Statistics	S411002	Statistique	AN	2	0
Selected Topics in Statistics (non donné en 2025-2026)	S411013	Statistique	Α	2 + 2	6
Stochastic Processes in Finance	S413054	Comptabilité, finance	Α	2 + 2	6
Institutional Project	S401034	Statistique	A/P	-	6

GENEVA SCHOOL OF ECONOMICS

AND MANAGEMENT

Research Institute for Statistics and Information Science



# Master thesis – timeline overview

The sooner the better...

# Semesters 1 to 3:

informal contacts between student and teachers

# No later than the end of Semester 4:

Dissertation project to be submitted to the Scientific Committee for approval

#### Max 30 days after the project deposit:

Feedback of the Scientific Committee on the proposal Ongoing work of the Student...

No later than
8 weeks
before end of
the Semester
5:

Submission of the dissertation

#### Reference documents:

- Regulation of Master programs (art. 17)
- Study plan 24-25
- Application directives
- Master thesis Guidelines
- > The program coordinator will contact you providing info **about documentary research** (most likely in March) and use of **Zotero** to organize your biblio references

## Fall 2025 Schedule



MSc. in Statistics 2025-2026

Fall 2025

	Monday		Tuesday		Wednesday		Thursday		Friday			
8h15 - 10h	S411014SE Linear Models for Dependent Data Assistant-es M S030	S413054SE Stochastic processes in finance Assistant-es M 1150	S201008CR <b>Statistical Modelling</b> <i>Prof. Eva CANTONI</i> M S130		S4031075E The Statistical Analysis of Time Series Assistant-es M 5290		S403109CR <b>Theoretical Statistics</b> <i>Prof. Davide LA VECCHIA</i> M 3020	S210016SE <b>Statistics</b> <i>Assistant-es</i> M R290	S2100165E <b>Statistics</b> Assistant-es M 1170	S203039CR Numerical Methods Dr. Ilir ROKO M 2193		
10h15 - 12h	S411028CR Fundamental and Advanced Samp Dr. Jean-Pierre RENFE M S040		S110001CR <b>Mathematics I</b> <i>Prof. Tobias MUELLEF</i> M S160		S413056CR Financial Econometrics Prof. Olivier SCAILLET  M R170	S203031CR Probability & Statistical Learning Prof. Eva CANTONI M 2130	S413055CR Model and Empirical methods for Asset Pricing Fabio TROJANI M 3220		S11000  Mathema Assistani  11h15-13h00  V 300  S411002CS  Research Seminar in Statistics			
12h15 - 14h			S413056CR Financial Econometrics Prof. Olivier SCA/ILET SCIII 0019 11/11, 18/11, 25/11		S413055CR Model and Empirical methods for Asset Pricing Fabio TROJANI M 1160		S203031SE Probability & Statistical Learning Assistant-es M S030		Prof. Davide LA VECCHIA  M 5220			
14h15 - 16h	S411028CR Fundamental and Advanced Sampling Techniques Dr. Jean-Pierre RENFER M 4050	S201008TP Statistical Modelling Assistant-es M 5290	S411014CR Linear Models for Dependent Data Romain PIC M R040	S210016CR Statistics Prof. Arnold VIALFONT M R080	S403109SE <b>Theoretical Statistics</b> <i>Assistant-es</i> M 5393	S203039SE Numerical Methods Dr. Ilir ROKO Pavillon Ansermet 119	S403107CR <b>The Statistical Analysis of Time Series</b> <i>Prof. Davide LA VECCHIA</i> M 3220		The Statistical Analysis of Time Series Mat Prof. Davide LA VECCHIA As		S110001SE <b>Mathematics I</b> Assistant-es M S160	
16h15 - 18h			S403011CR <b>Machine Learning</b> Prof. Sebastian ENGELKE M R030		S413054CR  Stochastic processes in finance  Dr. Gilles GRITON  M S040		S403011SE <b>Machine Learning</b> Assistant-es SCIII - 15081					

Cours obligatoires

Cours électifs

 $Programme\ des\ cours:\ \frac{https://pgc.unige.ch/main/study-plans?searchTerm=statistics\&year=2025\&fac=14460\&level=196$ 





# **Spring 2026 Schedule**



MSc. in Statistics 2025-2026

Spring 2026

	Monday	Monday Tuesday Wednesday Thursday		Friday						
8h15 - 10h	S411004CR <b>Applied Bayesian Statistics</b> <i>Dr. Shahin TAVAKOLI</i> M 2193	S403078SE Advanced Econometrics Prof. Stefan Andréas SPERLICH U 159	Pro	13X011CR <b>Data Mining</b> If. Roland BOUFFAN BA 316-8	IAIS		751515CR Introduction à la planification & l'analyse des cas uniques Prof. Olivier RENAUD M 2170		8h15 -11h S401016CR Analytics Consulting Prof. Diego KUONEN	
10h15 - 12h	S403078CR Advanced Economet Prof. Stefan Andréas SPE U 159		Data N Prof. Roland BA 3:	n11EX Mining BOUFFANAIS 14-15 22-23	751517CR Modèles à équations structurales Prof. Paolo GHUSLETTA M 5020		12X003EX  Concepts & langages orientés objets  Dr. Jean-Luc FALCONE  BA 314-15		M R160 11h15-13h 5411002CS	
12h15 - 14h	S411015CR <b>Multivariate Analys</b> <i>Dr. Shahin TAVAKO</i> I M 2170		S411001CR  Modern Flexible Regression  Prof. Eva CANTON!  M S040			S411015SE <b>Multivariate Analysis</b> <i>Assistant-es</i> M 5290	5411004CR Applied Bayesian Statistics Dr. Shahin TAVAKOLI  M S040  751515CR Intro à la planification & Yanalyse Prof. Olivier RENAUD  M S130		Research Seminar In Statistics <i>Prof. Davide LA VECCHIA</i> M 4220	
14h15 - 16h	S403116CR <b>Data Driven Impact Eval</b> <i>Prof. Stefan Andréas SPE</i> M 5220		Mod	S411001SE lern Flexible Regre: Assistant-es M 5290	ssion	S411008CR Experimental Design: Theory and Practice Dr. Andreas RYTZ  102 - Maraîchers				
16h15 - 18h	S4031165E <b>Data Driven Impact Eval</b> <i>Assistant-es</i> M 5220	uation	S411021CR Advanced Topics in Mach Learn Prof. Sebastian ENGELKE M 4020	D400032 Crowdsourcing and Al Prof. François GREY Battelle A - RDC	12X003CR Concepts & langages orientés obj. Dr. Jean-Luc FALCONE  BA 404-7	S411008SE Experimental Design: Theory and Practice Assistant-es  102 - Maraîchers	S411021SE <b>Advanced Topics in Mach</b> in <i>Assistant-es</i> M 2140	e Learning		

Cours obligatoires

 $Programme \ des \ cours: \ \underline{https://pgc.unige.ch/main/study-plans?searchTerm=statistics\&year=2025\&fac=14460\&level=196.$ 

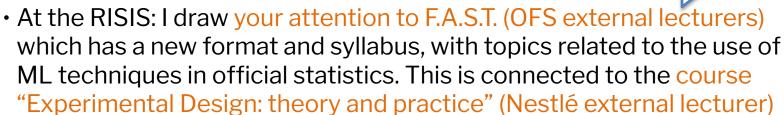
Cours à options

GENEVA SCHOOL OF ECONOMICS AND MANAGEMENT



## Some remarks

- 1. Seminar series no longer compulsory, but highly recommended
- 2. You have 18 ECTS for elective courses:
- Mathematically (theory and methods) oriented
- Application oriented
- From other faculties and/or Universities ...



3. Consider wisely the load of your semester.





#### **NEED HELP?**

## Contact Margot Richert

By email: <a href="maskers@unige.ch">gsem-maskers@unige.ch</a>

or at GSEM Student Services Uni Mail – 3rd floor

