Master of Science in Statistics

Welcome session
September 2024

UNIGE grading scale and information on exams

❖ UNIGE grading scale is based on 6.00 (0.00 to 6.00 with ¼ 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

STUDY PLAN (core)

https://www.unige.ch/gsem/index.php/download_file/view/8649/10107/

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	P	3	6
Applied Bayesian Statistics	S411004	Statistique	P	2 + 2	6
Modern Flexible Regression	S411001	Economie Statistique	P	2 + 2	6
Linear Models for Dependent Data	S411014	Statistique	A	2 + 2	6
Machine Learning	S403011	Statistique	A	2 + 2	6
Multivariate Analysis	S411015	Statistique	P	2 + 2	6
The Statistical Analysis of Time Series	S403107	Econométrie Statistique	A	2 + 2	6
Master thesis *	S411022	Statistique	A/P	-	30

* 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)

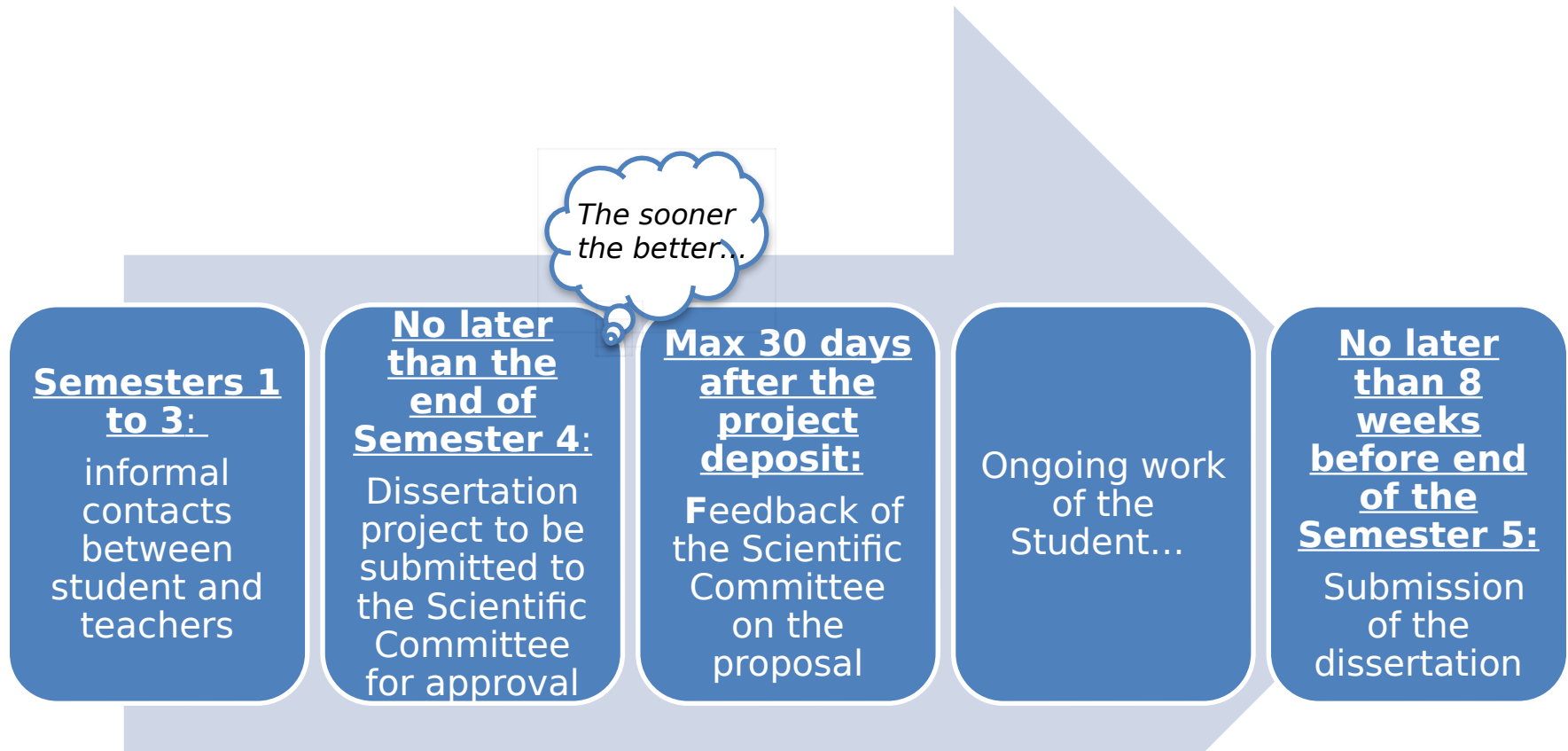## Elective Courses (18 credits) / Cours à options (18 crédits)

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	A	2 + 2	6
Advanced Topics in Machine Learning	S411021	Statistique	P	2 + 2	6
Concepts et langages orientés objets	12X003	Sciences	P	HF	5
Data-Driven Impact Evaluation	S403116	Econométrie	P	2 + 2	6
Data Mining	13X011	Sciences	P	HF	4
Models and Empirical Methods for Asset Pricing	S413055	Comptabilité, finance	A	4	6
Econometrics	S403106	Econométrie	A	2 + 2	6
Experimental Design: Theory and Practice	S411008	Statistique	P	4	6
Financial Econometrics	S413056	Comptabilité, finance	A	2 + 2	6
Fundamental and Advanced Sampling Techniques	S411028	Statistique	A	4	6

STUDY PLAN (elective)

Introduction à la planification et l'analyse des cas uniques	751515	FAPSE	P	HF	3
Invited Lecture in Statistics *(non donné en 2024-2025)*	S411009	Statistique	P	2	3
Modèles à équations structurales	751517	FAPSE	P	HF	3
Modèles multiniveaux *(non donné en 2024-2025)*	751518	FAPSE	P	HF	3
Optimization with Applications I	14M192	Sciences	A	HF	5
Optimization with Applications II	14M193	Sciences	P	HF	5
Research Seminar in Statistics	S411002	Statistique	AN	2	0
Selected Topics in Statistics *(non donné en 2024-2025)*	S411013	Statistique	A	2 + 2	6
Stochastic Processes in Finance	S413054	Comptabilité, finance	A	2 + 2	6
Institutional Project	S401034	Statistique	A/P	-	6
Workshop 2A: Practice of Sustainable Human Development	Sxxxxxx	Economie	P	HF	12

Master thesis – timeline overview

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

The sooner the better...

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 cordinator will contact you provind info **about documentary research** (most likely in March) and use of **Zotero** to organize your biblio references

Fall 2024 Schedule

MSc. in Statistics 2024-2025

Fall 2024

	Monday		Tuesday		Wednesday			Thursday		Friday		
8h15 - 10h	S411014SE **Linear Models for Dependent Data** *Assistant-es* M S030		S201008CR **Statistical Modelling** *Prof. Eva CANTONI* M S130		S403107SE **The Statistical Analysis of Time Series** *Assistant-es* M 5290			S210016SE **Statistics** *Assistant-es* M R290		S210016SE **Statistics** *Assistant-es* M 1170 M S130 : 22/11		S203039CR **Numerical Methods** *Dr. Ilir ROKO* M 2193
10h15 - 12h	S411028CR **Fundamental and Advanced Sampling Techniques** *Dr. Jean-Pierre RENFER* M S040		S403109CR **Theoretical Statistics** *Prof. Davide LA VECCHIA* M 5050	S110001CR **Mathematics I** *Prof. Tobias MUELLER* M S160	S403106CR **Econometrics** *Prof. Aleksey TETENOV* M S030	S413056CR **Financial Econometrics** *Prof. Olivier SCAILLET* M R170	S203031CR **Probability & Statistical Learning** *Prof. Eva CANTONI* M 2130			S403106SE **Econometrics** *Assistant-es* M R290	11h15-13h00 S411002CS **Research Seminar in Statistics** *Prof. Davide LA VECCHIA* M 5220	S110001SE **Mathematics I** *Assistant-es* U 300
12h15 - 14h	S413054SE **Stochastic processes in finance** *Assistant-es* M 1170		S413056CR **Financial Econometrics** *Prof. Olivier SCAILLET* SCIII 0019					S203031SE **Probability & Statistical Learning** *Assistant-es* M S030				
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** *Dr. Alban MOOR* M R040	S210016CR **Statistics** *Prof. Enrico Alberto CHAVEZ* M R080	S403109SE **Theoretical Statistics** *Assistant-es* M 5393	S203039SE **Numerical Methods** *Dr. Ilir ROKO* Pavillon Ansermet 119		S403107CR **The Statistical Analysis of Time Series** *Prof. Davide LA VECCHIA* M 3220		S413054SE **Stochastic processes in finance** *Assistant-es* M 1193		S110001SE **Mathematics I** *Assistant-es* M S160
16h15 - 18h			S403011CR **Machine Learning** *Prof. Sebastian ENGELKE* M R030	S413056SE **Financial Econometrics** *Assistant-es* M R040	S413054CR **Stochastic processes in finance** *Dr. Gilles GRITON* M S040			S403011SE **Machine Learning** *Assistant-es* SCIII - 1S081				

- Cours obligatoires
- Cours électifs
- Co-requis

Programme des cours : https://pgc.unige.ch/main/study-plans?searchTerm=master&year=2023&fac=14460

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 ...
⌐⅄- At the RISIS: I draw your attention to F.A.S.T. (OFS external lecturers) which has a new format and syllabus, with topics related to the use of ML techniques in official statistics. This is connected to the course "Experimental Design: theory and practice" (Nestlé external lecturer)

Ask the Scientific Committee

3. Consider wisely the load of your semester.

NEED HELP ?

Contact **Margot Richert**

By email : gsem-masters@unige.ch

or at GSEM Student Services
Uni Mail – 3rd floor