

**Curriculum MSc in Statistics / MSc en statistique (90 ECTS)**

GENERAL STRUCTURE	ECTS	Status
<b>a) Courses</b>	<b>60</b>	<b>compulsory</b>
Module 1	21	
Module 2	21	
Module 3 - Elective courses	18	
<b>b) Master thesis or internship with report</b>	<b>30</b>	<b>compulsory</b>
<b>Total ECTS MSc in Statistics</b>	<b>90</b>	

Modules / courses	Hours per week	Semester	ECTS per module/ course	Teacher(s)	Participant / contributor	Evaluation mode
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**a) Courses (60 ECTS)**

Module 1			21 ECTS			
Probability theory	2+2	A	6	Prof. A. Valette	Assist.	Oral, 30 minutes
Inferential statistics and test theory	4	A	6	Prof. J.-Y. Dauxois		Written, 2 hours
Advanced regression methods	2+2	A	6	Prof. Y. Tillé	Assist.	Written, 2 hours
Multivariate analysis	2	A	3	Prof. Y. Tillé		Written, 2 hours

Module 2			21 ECTS			
Seminar of statistical software	2	A	3	Prof. A. Matei		CA (graded)
Survey sampling 1	2	A	3	Prof. Y. Tillé		Written, 2 hours
Bayesian statistics	2	S	3	Dr P.-Y. Deléamont		Written, 2 hours
Generalized linear model	2	S	3	Dr P.-Y. Deléamont		CA (graded)
Seminar of applied statistics	2	S	3	Prof. J. Zuber		CA (graded)
Time series analysis	2+2	S	6	Dr C. Chevalier	Assist.	CA (graded)

Module 3 - Elective courses			Choose 18 ECTS			
Nonparametric statistics	2	A	3	Dr P.-Y. Deléamont		Written, 2 hours
Introduction to Stochastic Processes	1	A	3	Prof. B. Panahbehagh		CA (graded)
Statistical learning	2	S	3	Dr P.-Y. Deléamont		Written, 2 hours
Computational statistics	4	S	6	Dr A. Matei		CA (graded)
Design of experiments	2	S	3	Prof. Y. Tillé		Written, 2 hours
Survey sampling 2	2	S	3	Prof. Y. Tillé		Written, 2 hours
Other elective course (see list)		A or S	max. 6			

**b) Master thesis or internship (30 ECTS)**

<b>Master thesis or internship with report</b>			<b>30 ECTS</b>			CA (graded) <sup>1</sup>
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Modules / courses	Hours per week	Semester	ECTS per module/course	Teacher(s)	Participant / contributor	Evaluation mode
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**Elective courses list (max. 6 ECTS)**

Elective courses			max. 6 ECTS			
Informatique générale: Programmation I (in French)	2+2	A	6	Dr L. Leonini (prof. P. Felber)	Assist.	CA (graded)
Structure de données et algorithmique (in French)	2+2	A	6	Dr. A. Sandoz	Assist.	CA (graded)
<b>Courses at the Faculty of Economics and Business</b>						
<i>Business Analytics</i>	4	S	6	<i>Dr P. Cotofrei</i>		*
<i>Data Management</i>	4	A	6	<i>Dr E. Simon</i>		*
<i>Economic Statistics</i>	2	A	3	<i>Prof. M. Zarin</i>		*
<i>Asset Pricing</i>	4	A	6	<i>Prof. Kroencke</i>		*
<i>Derivatives</i>	4	A	6	<i>Dr F. Weigert</i>		*
<i>Portfolio Optimization</i>	2	A	3	<i>Prof. F. Sonney</i>		*
<i>Programming</i>	2	S	3	<i>Dr E. Simon</i>		*
<i>Applied Econometrics</i>	2+2	S	6	<i>Prof. M. Zarin</i>		*
<i>Corporate Finance</i>	4	S	6	<i>Prof. C. Salva</i>		*
<i>Global Supply Chain Management</i>	4	A	6	<i>Dr.Y. Nieto</i>		*
<b>Course at the Faculty of Arts</b>						
<i>Linguistique du français moderne: Linguistique de corpus: méthodes et analyse (In French)</i>	2	S	5	<i>Prof. C. Rossari</i>		*

<b>Total of Master in Statistics</b>	<b>90 ECTS</b>
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**Abbreviations**

CA (graded) = continuous assesment that is graded, modalities fixed in course descriptives

<sup>1</sup> Report (graded)

\* Check on course descriptive of the Faculty of Economics and Business of of the Faculty of Arts

A = autumn semester / S = spring semester

**Information**

Master coordinator: Prof. Y. Tillé (yves.tille@unine.ch)

**Exams and regulation**

Candidates must be registered in IS-Academia for both courses and exams

**For regulation, please consult the homepage of the Faculty of Sciences, [www.unine.ch/sciences](http://www.unine.ch/sciences) (règlement d'études et d'examens" and existing directives) or the administrative staff of the Faculty.**

**Examination modalities in the case of online exam sessions**

If an exam session has to be held online, the examination modalities mentioned in this study plan are maintained and will be following:

For **a written exam to be held during the exam session** (1h, 2h or 3h), the online exam will be of the duration mentioned by the study plan. An exception is made when the same exam evaluates two or more different courses simultaneously (indicated as a common or grouped exam in the study plan). In this case, the courses will be examined separately when the exam takes place online. The duration of each part of the on-line exam will be defined by the number of ECTS each examined course. A single mark will be notified for any such split up exam, as specified by the study plan.

For **oral exams to be held during the exam session**, the online duration of the exam is maintained as specified in the study plan.

**Continuous assessments (graded or ungraded)** remain unchanged even if the exam session is taking place online. If required, the evaluation modality will be adapted to the situation. The course description will be updated accordingly by the teacher in charge.

All exams and assessments that take place in other Faculties or Universities remain under their responsibility and the FS cannot be held liable for specific rules and regulations regarding those evaluations.