Master of Science in Statistics
2016 - 2017

Curriculum M Sc in Statistics (90 ECTS)

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

Modules / courses	Hours per week	Semester	ECTS per module/ course	Teacher(s)	Evaluation mode

a) Courses (60 ECTS)

Modules / courses	Hours per week	Semester	ECTS per module/ course	Teacher(s)	Evaluation mode
Module 1			**21 ECTS**		
Probability and stochastic processes	2+2	A	6	Dr H. Mercier	CA (graded)
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	Written, 2 hours
Multivariate analysis	2	A	3	Prof. Y. Tillé	Written, 2 hours
Module 2			**18 ECTS**		
Time series analysis	2+2	A	6	Dr. C. Chevalier	CA (graded)
Survey sampling	4	S	6	Prof. Y. Tillé	Written, 2 hours
Nonparametric statistics	2	S	3	Dr. C. Chevalier	CA (graded)
Generalized linear model	2	S	3	Dr. A. Matei	CA (graded)
Module 3			**21 ECTS**		
Seminar of statistical software	2	A	3	Dr. A. Matei	CA (graded)
Computational statistics	4	S	6	Dr. A. Matei	CA (graded)
Seminar of applied statistics	2	S	3	Prof. J. Zuber	CA (graded)
Statistical modelling and design of experiments	2	S	3	Prof. Y-L. Grize	Written, 2 hours
Elective courses (see list)	4	A/S	6		

b) Master thesis or internship (30 ECTS)

Modules / courses	Hours per week	Semester	ECTS per module/ course	Teacher(s)	Evaluation mode
Master thesis or internship with report			**30 ECTS**		**CA (graded)** [1]

Total of MSc in Statistics			**90 ECTS**

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2016 - 2017

Modules / courses	Hours per week	Semester	ECTS per module/ course	Teacher(s)	Evaluation mode

Elective courses list (6 ECTS)

Elective courses (choose 6 ECTS)			**6 ECTS**		
Bayesian statistics	4	S	6	Dr J.-M. Freyermuth	CA (graded)
Informatique générale: Programmation I	2+2	A	6	Prof. P. Felber	CA (graded)
Structure de données et algorithmique	2+2	A	6	Dr A. Sandoz	CA (graded)
Mathématiques discrètes et applications	2+2	A	6	Dr. H. Mercier	Written, 2 hours
Statistical learning methods	2+2	S	5	Prof. J. Savoy	Written, 2 hours
Courses at the Faculty of Economics and Business					
Probabilistic Algorithms	*2/4*	*A*	*3/6*	*Dr P. Cotofrei*	*
Data Warehousing	*4*	*S*	*6*	*Prof. K. Stoffel*	*
Economic Statistics	*2*	*A*	*3*	*Prof. M. Zarin*	*
Asset Pricing	*4*	*A*	*6*	*Prof. M. Dubois*	*
Derivatives	*4*	*A*	*6*	*Prof. P. Roger*	*
Portfolio Optimization	*2*	*A*	*3*	*Prof. F. Sonney*	*
Programming	*2*	*S*	*3*	*Dr P. Cotofrei*	*
Applied Econometrics	*2+2*	*S*	*6*	*Prof. M. Zarin*	*
Corporate Finance	*4*	*S*	*6*	*Prof. C. Salva*	*
International Operations and Logistics	*4*	*A*	*6*	*Dr- Y- Nieto*	*

Abbreviations
CA (graded)= continuous assesment that is graded, modalities fixed in course descriptives
[1] Report (graded)
* Check on course descriptive of the *Faculty of Economics and Business*
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 Science, www.unine.ch/sciences (règlement d'études et d'examens" and existing directives) or the administrative staff of the Faculty.