

STATISTICAL METHODS AND APPLICATIONS (SMA)

Academic year 2019-2020

Curriculum OFFICIAL STATISTICS

Educational Activities		Ects	Year	Term
Characterizing	Mandatory Courses			
	1. Stochastic processes	9	1	1
	2. Bayesian modelling	6	1	1
	3. Sample surveys	9	1	2
	4. Data management in official statistics	9	1	2
	5. Data quality and other issues in official statistics	6	1	2
	6. Spatial statistics and statistical tools for environmental data	6	2	1
	7. Advanced economic statistics	6	2	1
Supplementary	Elective Courses			
Choose one course for a total of 9 ECTS	- Advances in data analysis and statistical modelling OR Probability and Statistics	9	2	1
	- Financial econometrics	9	2	2
Choose one course for a total of 6 ECTS	- Big data for official statistics	6	1	1
	- Algorithms and data structures	6	1	2
	- Financial Econometrics	6	1	2
	- International Demography	6	2	1
	- Big Data Analytics	6	2	2
	- Computational statistics	6	2	2
	- Efficiency and productivity analysis	6	2	2
	- Survey methodology	6	2	2
Other educational activities				
Choose from the list of available exams at Sapienza	11. Free-choice exam	9	1	1
	12. Internship/Stage	9	1	2
Choose from the displayed activities for a total of 6 ECTS	• Laboratory of stochastic processes	3	1	1
	• Laboratory of statistical decisions	3	1	1
	• Laboratory of financial and monetary statistics (mandatory)	3	1	2
	• Laboratory of machine learning	3	1	2
	• Case studies and statistical consulting	3	1	1
	• Complementary activities	6	1	1
Master Thesis		30		