

**STATISTICAL METHODS AND APPLICATIONS (SMA)****Academic year 2020-2021****Curriculum QUANTITATIVE ECONOMICS**

<b>Educational Activities</b>		<b>Ects</b>	<b>Year</b>	<b>Term</b>
<b>Characterizing</b>	<b>Mandatory Courses</b>			
48 ECTS	1. Stochastic processes	9	1	1
	2. Advances in data analysis and statistical modelling or Probability and Statistics	9	1	1
	3. Sample surveys	6	1	2
	4. Financial econometrics	9	1	2
	5. Efficiency and productivity analysis	9	1	2
	6. Advanced economic statistics	6	2	1
<b>Supplementary</b>	<b>Elective Courses</b>			
Choose for a total of 18 ECTS	- International monetary economics	9	1	2
	- Applied economics	9	2	2
	- Economic History	9	2	2
Choose for a total of 18 ECTS	- Algorithms and data structures	6	1	2
	- Statistical learning	6	1	2
	- Bayesian modelling	9	2	1
	- Gender economics	6	2	1
	- Computational statistics	9	2	2
	- Big data analytics	6	2	2
	- Development finance	6	2	2
<b>Other educational activities</b>				
Choose for a total of 9 ECTS	12. Free-choice exam from the list of available exams at Sapienza	9	1	1
Choose for a total of 6 ECTS	• Laboratory of stochastic processes	3	1	1
	• Complementary activities	3	1	1
	• Laboratory of financial and monetary statistics	3	1	2
	• Laboratory of machine learning	3	1	2
	• Case studies and statistical consulting	3	1	2
	• Reading seminars	3	1	2
	• Complementary activities	6	2	1
Master Thesis		21	2	2

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