

STATISTICAL METHODS AND APPLICATIONS (SMA)

Academic year 2023-2024

Curriculum DATA ANALYST

120 ECTS

12 Exams + other educational activities

Educational Activities		ECTS	Year	Term
Characterizing		Mandatory: no choice		
51 ECTS	1. Stochastic processes	9	1	1
	2. Bayesian modelling or Probability and Statistics	9	1	1
	3. Advances in data analysis and statistical modelling or Probability and Statistics	9	1	1
	4. Sample surveys	9	1	2
	5. Applied Econometrics	6	1	2
	6. Spatial statistics and statistical tools for environmental data	9	2	1
Supplementary		Elective: you can choose courses for the corresponding number of ECTS		
24 ECTS	7-10. Algorithms and data structures	6	1	2
	7-10. Statistical learning	6	1	2
	7-10. Computational statistics	6	2	1
	7-10. Data driven decision making	6	2	1
	7-10. Multiple time series modelling	6	2	2
	7-10. Efficiency and productivity analysis	6	2	2
	7-10. Big data analytics	6	2	2
Free choice		Elective: you can choose activities/courses for the corresponding total number of ECTS		
12 ECTS	11-12. Free-choice exams from the list of available courses/AAF at Sapienza	12	1	1
Other educational activities		AAF on INFOSTUD: you can choose activities/courses for the corresponding number of ECTS		
12 ECTS	• Complementary activities	6	1	1
	• Complementary activities	3	1	1
	• Introduction to computer programming	3	1	1
	• Laboratory of stochastic processes	3	1	1
	• Case studies and statistical consulting	3	1	2
	• Laboratory of financial and monetary statistics	3	1	2
	• Laboratory of machine learning	3	1	2
• Laboratory of data driven decision making	3	2	1	
Master Thesis				
21 ECTS Master Thesis		21	2	2