



# DOUBLE DEGREE PROGRAMME

## Quantitative economics

### with Università Ca' Foscari Venezia

M1 Master ECONOMICS FINANCE AND SUSTAINABILITY track QEM

M2 Master ECONOMICS track ETE or APE or EBDS

The first year will take place in Italy, Ca' Foscari Venezia

Track - Quantitative Economics master (QEM)

Courses - Quantitative economics	ECTS
Microeconomics I	7
Macroeconomics I	7
Optimization	7
Probability theory	7
Microeconomics II	7
Macroeconomics II	7
Econometrics	7
Behavioural economics	6
<b>4 ECTS credits to be chosen from the following exams</b>	
Italian as foreign language I	4
English as foreign language I	4
French as foreign language I	4
Spanish as foreign language I	4
German as foreign language I	4

The second year will take place in France, AMSE graduate school, Aix-Marseille University

The student chooses one programme between one of the three following tracks:

Track 1 - Empirical and theoretical economics (ETE)

Courses Empirical and theoretical economics - Term 3	ECTS
Common core - Advanced macroeconomics - Advanced microeconomics - Advanced econometrics	9
Economics of networks - Development economics - Economics of networks - Development economics	6
Introduction to research - Research questions	3
Elective teaching units (choose 1 among 2) - Political economy - Incentives theory - Macroeconomic cycles - Automatic model selection methods	6 6 6
Elective teaching units (choose 1 among 2) - Public choice - International trade - Health economics - Environmental economics	6 6 6
<b>Courses Empirical and theoretical economics - Term 4</b>	<b>ECTS</b>
Research methodology	4
Research dissertation or end-of-study internship with report and defence	20
Elective teaching units (choose 1 among 2) - Labor economics - Labor econometrics - Theoretical econometric - Dynamic macroeconomics	6 6 6



## Track 2 - Economic policy analysis (APE)

Courses Economic policy analysis - Term 3	ECTS
Methodology - Writing and oral communication training - Project management	6
Decision-making support: quantitative methods - Quantitative tools in economics - Econometrics of impact assessment	6
Contemporary economy issues - Applied economics issues - Transitions and economic policies - Big data and economics	9
Elective teaching units (choose 3 among 6) - Economics, finance and crises - Programming for Big Data (Python, SQL, noSQL, etc) - Development economics - Health economics - Environmental economics - Housing economics	9 3 3 3 3 3 3
Courses Economic policy analysis - Term 4	ECTS
Knowledge of the professional environment - Corporate strategy - Collaborating with public organizations	6
End-of-study internship with report and defence	24

## Track 3 - Econometrics, Big Data, Statistics (EBDS)

Courses Econometrics, Big Data, Statistics - Term 3	ECTS
Languages, softwares and tools for Big Data - Programming for Big Data (Python, SQL, noSQL, etc) - Software for big data	6
Advanced econometrics I: theory and applications - Methodology of econometrics and statistical studies - Advanced econometrics - Nonparametric methods in econometrics	9
Advanced methods in Big Data - Automatic model selection methods - Predictive methods - Machine learning and statistical learning	9
Applications for Big Data: elective teaching units (choose 2 among 4) - Big data and economics - Big data and quantitative marketing - Big data and finance - Big data: other applications	6 3 3 3 3
Courses Econometrics, Big Data, Statistics - Term 4	ECTS
Advanced econometrics II: theory and applications - Transition and duration models - Models for truncated and censored variables - Multivariate and non-linear time series	9
End-of-study internship with report and defence	21





## CONTACTS

Please do not hesitate to contact us if you have any question or concern.

Aix-Marseille School of Economics

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<http://amse-feg.univ-amu.fr/>

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