



Faculté d'Économie  
et de Gestion  
Aix-Marseille Université



# 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)**

<b>Courses – Quantitative Economics</b>	<b>ECTS</b>
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)**

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

## 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 - Public policies econometrics	6
Contemporary economy issues - Applied economics issues - Big data and public policies - Transitions and economic policies	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
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
Non-linear models: theory and applications - Transition and duration models - Models for truncated and censored variables	6
Advanced econometrics I: theory and applications - Non parametric methods in econometrics - Multivariate and non-linear time series	6
Advanced econometrics II: theory and applications - Methodology of econometrics and statistical studies - Advanced econometrics	6
Languages, softwares and tools for Big Data - Programming for Big Data (Python, SQL, noSQL, etc) - Software for big data	6
Applications for Big Data: elective teaching units (choose 2 among 4) - Big data and public policies - 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 methods in Big Data - Automatic model selection methods - Predictive methods - Machine learning and statistical learning	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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