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Aix-Marseille School of Economics is a department of the Faculty of Economics and Management within Aix-Marseille University

Master Econometrics Statistics

Double degree program
2024/2026

with **Università Ca' Foscari Venezia**
Data Analytics

Università Ca'Foscari Venezia

Dear candidate,

Aix-Marseille School of Economics promotes the idea of students acquiring international experience throughout their academic journey. This can be achieved through various avenues, including participating in a double degree program. The advantages of such international experiences are indisputable.

One of the key benefits is the opportunity to gain fresh perspectives. Experiencing education and life in a different country allows students to broaden their worldview, fostering a more comprehensive understanding of global issues and diverse cultural practices. This exposure to new ideas contributes significantly to personal and intellectual growth.

Moreover, engaging with a different academic culture can be intellectually enriching. Experiencing diverse teaching methods, research approaches, and academic environments can enhance a student's skill set and provide a well-rounded education. It encourages adaptability and flexibility, qualities that are increasingly valuable in our interconnected and rapidly changing world.

Beyond the academic realm, international experiences contribute to the expansion of personal and professional networks. Interacting with individuals from diverse backgrounds not only enhances cultural competence but also creates connections that can be valuable in both personal and professional spheres. Building a global network can open doors to future collaborations, career opportunities, and a deeper understanding of the interconnectedness of the academic and professional landscape.

In essence, Aix-Marseille School of Economics recognizes the multifaceted advantages of international experiences for students.

Best regards,

Karine Gente
Professor of Economics
Vice Dean International Relations

WHAT IS A DOUBLE DEGREE?

A Double Degree is a distinctive dual program that offers you the opportunity to:

- Study at two prestigious universities,
- Obtain two diplomas,
- Cultivate a unique differentiator for your CV,
- Spend the first academic year abroad and the second year at AMSE,
- Engage in programs taught exclusively in English.

WHY CHOOSE A DOUBLE DEGREE?

Opting for a Double Degree presents a multitude of advantages:

- Immerse yourself in new academic experiences and elevate your intellectual prowess,
- Expand your horizons through increased cultural and social exposure,
- Delve into a new business environment and broaden your understanding,
- Foster valuable connections worldwide for future professional collaborations,
- Spend a full academic year in an outstanding city and renowned school,
- Become an integral part of a diverse and inclusive international community,
- Equip yourself with the tools for a successful international career.

HOW DOES IT WORK?

- Eligibility: Students must hold a 180 ECTS Bachelor's degree
- Duration: Four semesters (two years)
- Language: English
- Accreditation: 120 ECTS
- The M1 takes place in Italy, Venezia.
- The M2 takes place in France at AMSE, Aix-Marseille University.

CURRICULUM

MASTER 1 DATA ANALYTICS FOR BUSINESS & SOCIETY

Courses - Semesters 1 and 2	ECTS
Computer Programming and Data Management	12
Statistical Learning for Data Science	12
Econometrics	6
Economics of Risk and Agent's Behaviour	6
Managerial Decision Making and Modelling	6
Data Analytics and Artificial Intelligence	12
Data Protection Regulation	6

MASTER 2, choose 1 track among 2

Track Econometrics Data Science (EDS) *

Courses - Semester 3	ECTS
UE 1. Machine Learning et Programmation I / Machine Learning and Programming I	9
Machine learning et statistical learning / Machine Learning and Statistical Learning	
Programmations / Programming	
Logiciels / Software	
UE 2. Econométrie I / Econometrics I	12
Méthodes de prévision / Predictive Methods	
Méthodes de réduction de l'information / Methods for Information Reduction	
Méthodes non paramétriques en économétrie / Non-parametrics Methods in Econometrics	
Séries temporelles / Time Series	
UE 3. Applications et projets I / Applications and Projects I	8
Utilisation de la science des données : limites et défis / Practicing data science in the real world: Limitations and Challenges	
Application: marketing quantitatif / Application: Quantitative Marketing	
Méthodologie des études économétriques et statistiques / Methods for work in econometrics and statistics	
UE 4. Préparation de l'insertion professionnelle / Preparation for entering the job market	1
Ateliers de professionnalisation / Professional training	
Courses - Semester 4	**ECTS**
UE 5. Machine Learning et Programmation II / Machine Learning and Programming II	6
Machine learning avancé / Advanced Machine Learning	
Interprétabilité et la causalité en Machine Learning / Interpretability and Causality in Machine Learning	
UE 6. Econométrie II / Econometrics II	3
Modèles de transitions et de durées / Transition and Duration Models	
UE 7. Applications et projets II / Application and projects II	3
Hackathon et Certification / Hackathon and Certification	
UE 8. Stage de fin d'études / End-of-studies internship	18
Rapport de stage avec soutenance / Internship report with oral defense	

Track Research in Econometrics *

Courses - Semester 3	ECTS
UE 1. Econométrie et mathématiques appliquées / Econometrics and applied mathematics	8
Econométrie approfondie / Advanced Econometrics	
Economie des réseaux / Network Economics	
Machine learning et Statistical learning / Machine Learning and Statistical Learning	
UE 2. Tronc commun en Economie / Core Classes in Economics	6
Macroéconomie approfondie / Advanced Macroeconomics	
Microéconomie approfondie / Advanced Microeconomics	
UE 3. Enseignements specialisés / Specialised Classes	6
Méthodes de réduction de l'information / Methods for information reduction	
Séries temporelles / Time Series	
UE 4. Analyse Econometrique et Financière (2 ECUE au choix) / Economic analysis (choose 2 among 4)	8
Méthodes de prévision / Predictive Methods	
Méthodes non paramétriques en économétrie / Non-parametrics Methods in Econometrics	
Finance d'entreprise approfondie / Advanced Corporate Finance	
Processus Stocastique et Application / Stocastic Processes and Application	
UE 5. Introduction à la recherche et professionalisation / Introduction to research and professionalisation	2
Questions de recherche / Research Questions	
Ateliers de professionnalisation / Professional training	
Courses - Semester 4	ECTS
UE 6. Modelisation économétrique (2 ECUE au choix) / Econometric modelling (choose 2 among 3)	8
Modèles de transitions et de durées / Transition and duration models	
Interprétabilité et la causalité en Machine Learning / Interpretability and Causality in Machine Learning	
Econométrie theorique / Theoretical Econometrics	
UE 7. Méthodologie et mémoire de recherche / Methodology and research thesis	22
Méthodologie de la recherche / Research methodology	
Mémoire de recherche ou stage de fin d'études, et soutenance / Research thesis or internship report, and oral defence	

*Curriculum currently being approved by the Faculty and University Councils

CONTACTS

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