

Master Finance

Double degree program 2024/2026

with University of Tübingen





















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 Germany, Tübingen.
- The M2 takes place in France at AMSE, Aix-Marseille University.

CURRICULUM

MASTER 1 European Economics

Courses - Semesters 1 and 2 (60 ECTS)

Core Studies (18 ECTS)

Within the core studies students choose two out of four focuses earning 9 ECTS in each of the two focus

Econometrics

Advanced Time Series Analysis (9 ECTS)

Advanced Microeconometrics (9 ECTS)

Finance

Continuous-time Derivative Pricing (9 ECTS)

Advanced Corporate Finance (9 ECTS)

Specialization Studies (33-42 ECTS)

In the specialization studies, students have to obtain a minimum of 33 and a maximum of 42 credits. Modules chosen within this area must be assigned to the focuses chosen in the area of Core Studies. Within each of the focuses, a minimum of 6 ECTS must be obtained. In brackets are the semester as well as the ECTS of the courses.

Specialization Studies Focus Econometrics

Numerical Methods for Macroeconomics (6, WS)

Advanced Time Series Analysis (9, WS)

Empirical Asset Pricing (9, SS)

Machine Learning in Econometrics (6, SS)

Statistics of Financial Markets (9, WS)

Advanced Microeconometrics (9, SS)

Specialization Studies Focus Finance

Advanced Corporate Finance (9, WS)

Continuous-time Derivatives Pricing (9, SS)

Theorie der Bank (9, SS)

Empirical Banking (6, SS)

Monetary Economics (6, SS)

Open Economy Macroeconomics (6, WS)

Numerical Methods for Macroeconomics (6, WS)

Empirical Asset Pricing (9, SS)

Financial Economics (9, WS)

Elective Studies (up to 9 ECTS, depending on the Specialization Studies)

All courses off ered at the School of Business and Economics

(One can find a complete overview in our module handbook (link below) or either on ALMA our online course catalogue)

Language courses

Courses from other related subjects such as Psychology, Sociology,...



MASTER 2, choose 1 track among 3:

- Track Financial Modelling: see below
- Track Financial Risks and Sustainable Finance: page 6
- Track Research in Finance: page 7

Track Financial Modelling *

Courses - Semester 3	ECTS
Risque et modélisation / Risk and modeling	5
Risque et décisions / Risk and decisions	
Modélisation des risques financiers / Financial risks modeling	
Mesures de risque / Risk measures	5
Econométrie de la finance / Financial econometrics	
Modèles de risque de crédit / Credit risk models	
Stratégies d'investissement / Investment strategies	6
Finance d'entreprise / Corporate finance	
Gestion de portefeuille / Portfolio management	
Finance appliquée / Applied finance	
Problèmes financiers contemporains / Current financial problems	5
Economie, finance et crises / Economics, finance and crises	
Finance durable / Sustainable cinance	
Projet de fin d'étude / Project in finance	3
Une UE au choix parmi / One unit among 3	
Mathématiques financières / Financial mathematics	6
Calcul stochastique / Stochastic calculus	
Modèles de volatilité / Volatility models	
Modèles de taux / Fixed income models	
Financement / Financing	6
Financement structuré / Structured finance	
Financement de projet / Project finance	
Ateliers en financement d'entreprise / Workshop on corporate finance	
Actuariat / Actuarial science	6
Economie de l'assurance / Insurance economics	
Actuariat 1 / Actuarial science 1	
Actuariat 2 / Actuarial science 2	
Courses - Semester 4	ECTS
Professionnalisation et communication / Soft skills	11
Soutenance de stage ou d'alternance / Internship defense	10
Ateliers de professionnalisation et engagement / Professional training	1
Mémoire de stage ou d'alternance / Internship report	19

Track Financial Risks and Sustainable Finance *

Courses - Semester 3	ECTS
Evaluation d'actifs financiers / Financial Assets Valuation	4
Pricing d'options / Derivation pricing	
Obligation verte et produits structurés / Green bonds and structured products	
Gestion d'actifs financiers / Financial asset management	4
Gestion de portefeuille et mesures de performance / Portfolio management and perfomance measures	
Allocation d'actifs et décarbonisation / Asset allocation and decarbonisation	
Mesures de risque / Risk measures	5
Modèles de risque marché / Market risk models	
Modèles de risque de crédit / Credit risk models	
Econométrie de la finance / Financial econometrics	
Gestion des risques financiers / Financial risk management	5
Risque et conformité / Risk and compliance	
Gestion obligataire et risque de taux / Bond management and interest rate risk	
Gestion du risque climatique / Climate risk management	
Techniques numériques en finance / Numerical methods in finance	4
Méthodes d'optimisation en finance / Optimization methods in finance	
Finance computationnelle et gestion d'actifs / Computational finance and asset management	
Financement / Financing	5
Analyse financière et extra-financière / Financial and extra-financial analysis	
Financement structuré / Structured finance	
Finance durable / Sustainable finance	
Projet de fin d'études / Project in finance	3
Courses - Semester 4	ECTS
Mémoire et stage / Master thesis and internship	20
Research methodology / Méthodologie de la recherche	
Atelier de Professionnalisation / Professional training	
Mémoire appliqué ou de recherche / Applied or research thesis	
Grand oral / Oral exam	10

Track Research in Finance *

Courses - Semester 3	ECTS
Econométrie et mathématiques appliquées / Econometrics and applied mathematics	8
Econométrie approfondie / Advanced Econometrics	
Economie des réseaux / Network Economics	
Visualisation de données pour l'analyse économique / Data visualisation for economic analysis	
Tronc commun en Economie / Core Classes in Economics	6
Macroéconomie approfondie / Advanced Macroeconomics	
Microéconomie approfondie / Advanced Microeconomics	
Enseignements specialisés / Specialised Classes	6
Méthodes de réduction de l'information / Methods for information reduction	
Séries temporelles / Time Series	
Analyse Economique et Financière (2 ECUE au choix) / Economic and Financial analysis (choose 2 among 4)	8
Theorie des jeux / Game theory	
Décision publique / Public Decision	
Finance d'entreprise approfondie / Advanced Corporate Finance	
Processus Stocastique et Application / Stocastic Processes and Application	
Introduction à la recherche et professionalisation / Introduction to research and professionalisation	2
Questions de recherche / Research Questions	
Engagement, participation aux career days et ateliers de professionnalisation / Engagement, Carrer Days and Professional Training	
Courses - Semester 4	ECTS
Modelisation des marchés (2 ECUE au choix) / Market modelling (choose 2 among 4)	8
Macroéconomie dynamique / Dynamics Macroeconomics	
Cycles macroeconomiques / Macroeconomic Cycles	
Gestion de portefeuille empirique / Empirical Portfolio Management	
Sujets avancés en finance / Advanced Topic in Finance	
Méthodologie et Mémoire / Methodology and master thesis	22
Méthodologie de la recherche / Research methodology	
Mémoire de recherche ou stage de fin d'études / Master thesis or internship report	



CONTACTS

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