



TSM Master in Finance, Financial Markets and Risk Evaluation (FIRE) track (one-year program) Application requirements

Check your eligibility

- You are a soon-to-be or recent graduate with limited work experience.
- You should hold, or plan to achieve by the time the Master in Finance, FIRE track starts, a 1-year (or the first year of a) Master degree or a 4-year Bachelor degree with excellent results from an internationally recognized university.
- Quantitative proficiency is required for this program.
- Strong English language communication skills are crucial.

Key attributes expected of the candidate

The FIRE track of the TSM Master in Finance seeks to attract highly qualified students from all over the world who show a **strong motivation to pursue their careers in the financial sector** both in France or at an international level.

Our target student profile is **pre-experience French and international students**. Indeed, the TSM Master in Finance program is a postgraduate program tailored to recent graduates and early-career professionals looking to enhance their financial expertise. The typical student is between 21 and 26 yo.

We mainly target **students with** (or planning to achieve by the time the FIRE track starts), **a 4-year bachelor's AND/OR a one-year or the 1st year of master's degree in finance, economics, or related studies**. Admission is also open to students with strong quantitative backgrounds (e.g., **engineering, actuarial science, mathematics, econometrics**) who show a specific interest in finance. Finally, we target students from partner institutions, such as TSE, INSA, ENSEEIHT, HEC Liège.

Candidates who have completed the first year of the TSM Master in Finance (TSM M1 Finance) or the first year of the TSE Master in Economics (TSE M1 économie voie standard) are given priority.

Delivery mode

A **full-time program** allows students to concentrate on their studies and arrive at their objectives in a shorter amount of time. The choice to be **on campus** allows students to be in close contact with peers, teachers, and administrators and to fully benefit from School's facilities.

Attendance is mandatory. The TSM Master in Finance cannot be combined with an apprenticeship.

A large part of the finance sector nowadays is embedded in an international setting. To be able to succeed in the world of finance, students should be able to communicate in English in both oral and written form. Therefore, **the official language of the program is English**, ensuring a global learning environment.

Prerequisites for internal candidates (TSM, TSE, ENSEEIHT, INSA and HEC Liège)

- Successful completion of, or plan to achieve by the time the FIRE track starts, 240 ECTS.
- An English proficiency test:
 - If you are a TSM M1 Finance student (including INSA double degree students), no English proficiency test is required.
 - For all other internal candidates, since the program is 100% in English, adequate command of spoken and written English is required for admission (B2 required). Please see below for more information.
- For HEC Liège students: at the start of the program, all students are expected to have a **working knowledge of calculus** and should **know the basics of vectors and matrices, probability, statistics, and econometrics**. Students will have to follow a preparatory class in VBA / programming language.
- For ENSEEIHT students: at the program's start, all students are expected to have a basic knowledge of financial analysis, corporate finance, and asset pricing. A summer reading list is available.

Prerequisites for all other candidates

- Successful completion of, or plan to achieve by the time the Financial Markets and Risk Evaluation track starts, 240 ECTS. You will usually need a bachelor's degree and/or a one-year or the 1st year of master's degree with a minimum overall grade of 15/20 (international equivalents are: at least A or 90% or an overall GPA of 3.0 out of 4.0/4.3 or 4.0 out of 5.0).
- Applicants must have passed in the first exam session and achieved a minimum grade of 15/20 (international equivalent are: at least A or 90%) in the following modules throughout your academic training: Finance; Economics and/or Microeconomics; Econometrics; Mathematics and/or Probability.
- An English proficiency test (C1 required): please see below for more information.
- A part-time or full-time work experience before applying to the program is not required. TSM Master in Finance is a pre-experience program. Nevertheless, a minimum of a 6-month professional experience in Finance is mandatory, and we have students with up to two or three years of working experience in Finance. Professional experience in market finance, or having a 6-month professional experience in finance in the same company (internship or employment) is a plus.
- Finance prerequisites:
 - Finance, including net present value, interest rates, exchange rates, risk and return, diversification, market efficiency, cost of equity, weighted-average cost of capital, CAPM, APT, ESG, CSR, dividend, stock repurchase, IPO, earnings announcement,

- hedging, capital structure, dividend policy, information asymmetry, and agency costs.
- Standard financial instruments, including bonds, forwards, futures, swaps, and options.
 - Financial markets, including currency markets, money markets, derivative markets, capital markets, a basic knowledge of standard market regulation.
 - Financial analysis (ratio analysis of financial statements, computation of free cash flows).
 - Basics of corporate valuation, including DCFs and multiples.
 - Financial derivatives, including directional strategies, the notion of pricing by arbitrage, the Cox-Ross-Rubinstein model, the use of the Black Merton Scholes formula to price a European call or put option.
 - Bank debt, including type of debt, seniority, pricing, liquidity.
 - Financial modelling.
 - Asset Pricing.
- Non-finance prerequisites:
 - Introduction to VBA. An introduction to Python is a plus.
 - Microeconomics, including expected utility, preferences, risk aversion, rational choice, market equilibrium, elasticity, and perfect competition. A course in intermediate microeconomics is recommended.
 - Statistics, including descriptive statistics, random sampling, correlation, student and normal distributions, hypothesis testing (t-test, F-test, p-value), confidence intervals, type I and type II errors, degree of freedom, skewness, kurtosis, functions (polynomial, exponential, logarithms).
 - Econometrics, including OLS estimator, estimate simple statistical tests of hypothesis, economic and statistical interpretation of a regression output, event-study methodology, endogeneity, R.
 - Mathematics and probability, including algebraic rules, solving single and multiple equations, random variables, expectation, general moments, conditional expectation and variance, binomial distribution, normal distribution, central limit theorem, cumulative density function.

If you do not match those criteria, you should apply in the first year of the Master in Finance ([M1 level](#)).

English language requirements

If you are a TSM M1 Finance student (including INSA double degree students), no English proficiency test is required.

For all other candidates, you will need to prove your English language capability through one of the below means if you are not a national of a majority English-speaking country as defined by the Immigration Office, including Antigua and Barbuda, Australia, The Bahamas, Barbados, Belize,

British Overseas Territories, Canada, Dominica, Grenada, Guyana, Ireland, Jamaica, Malta, New Zealand, St Kitts and Nevis, St Lucia, St Vincent and the Grenadines, Trinidad and Tobago, UK, USA.

Proof of fluency in English:

1. Successfully completed a full-time degree-level course of a minimum of nine months within two academic years of the start date of the Corporate Finance track, at a recognised institution, where the medium of instruction and assessment was entirely in English. Evidence must be provided by submitting an official letter from your institution stating that the medium of instruction throughout your program was English.
2. If you cannot provide a letter from a recognized institution stating that the medium of instruction throughout your program was in English, you must provide an English proficiency test dated within the last 2 years. A list of the English language certificates accepted is available [HERE](#).

Summer reading list (for engineers)

A. For the basics of financial theory (asset pricing & corporate finance)

"Financial Theory and Corporate Policy: Pearson New International Edition, 4th Edition", Thomas E. Copeland, J. Fred Weston, Kuldeep Shastri.

I. FINANCIAL THEORY.

1. Introduction to Capital Markets, Consumption and Investment.
2. Investment Decisions: The Certainty Case.
3. Theory of Choice Under Uncertainty: Utility Theory.
4. State-Preference Theory.
5. Objects of Choice.
6. Market Equilibrium: CAPM and APT.

II. CORPORATE POLICY.

14. Valuation and Tax Policy.
15. Capital Structure.

Similar topics are covered in the book "Principles of Corporate Finance," by Brealey Myers and Allen.

B. For the basics of financial analysis

"Corporate Finance: theory and practice" (or "Finance d'Entreprise" in French), by Pierre Vernimmen.

(http://www.vernimmen.net/Vernimmen/Plan_du_livre.php).

Partie 1 "Diagnostic Financier"

(Partie 3 « Valeur »)

C. For the basics of derivatives and hedging

"Derivatives Markets (3rd edition)," by Robert L McDonald.

1. Introduction to Derivatives
- 2.1 to 2.5 Forwards and Options
- 3.1 to 3.2 Other strategies
- 4.1 to 4.3 Risk management
- 5.1 to 5.3 Pricing a forward
- 9.1 No arbitrage bounds
- 10.1 to 10.4 & 11.2, 11.B Binomial option pricing
- 12.1 to 12.2 The Black-Merton-Scholes equation

D. For the basics of financial econometrics

"Introductory Econometrics – A modern approach", by Wooldridge

https://economics.ut.ac.ir/documents/3030266/14100645/Jeffrey_M._Wooldridge_Introductory_Econometrics_A_Modern_Approach_2012.pdf

Parts 1 and 2

Tuition fees, IT equipment, scholarships and costs of living in Toulouse, France

- Tuition fees are available [HERE](#)
- Mandatory IT equipment information is available [HERE](#)
- Scholarships, please click [HERE](#)
- Housing in Toulouse, please click [HERE](#)
- Eating in Toulouse, please click [HERE](#)
- Guide for international students, please click [HERE](#)
- [Here](#) is a good way to anticipate your expenses
- You can also check the University Welcome Desk, please click [HERE](#).

For more information

First, please check the FAQs available [HERE](#).

Then, for more information,

- If you are a student at HEC Liège, please contact the Double Degree Officer at doubleddegrees@tsm-education.f
- For all other candidates, please contact the Program Administrative Officer at m2.finance@tsm-education.fr

The application steps

1. Online application
2. Admissibility and preselection for oral tests/interviews based on the application file
3. If needed, oral tests and/or interviews with pre-selected candidates
4. Final admission

You can apply in English or French. If some of the documents are in a language that is not English or French, an official translation has to be provided.

Further information about the application process and calendar will go out shortly on TSM [website](#).