

Bocconi

MAFINRISK

MASTER OF QUANTITATIVE FINANCE
AND RISK MANAGEMENT

XXI EDITION
2024-2025



Università
Bocconi
MILANO

Bocconi. Knowledge that matters.

ABOUT MAFINRISK

PROGRAM DIRECTOR FRANCESCO CORIELLI

1

MAFINRISK is one of the few Master programs anywhere with a specific emphasis on quantitative finance and risk management. We will give you all the **theory** and the **operational tools** you need to tackle the world of modern quantitative finance.

2

You will be part of an **international class** sharing your learning experience with students that have different cultural and educational backgrounds.

3

Our experienced and **qualified faculty** is a carefully selected **mix of academics and practitioners** who will transmit to you a passion for finance.

4

MAFINRISK will give you the chance to explore the **FinTech** area, equipping you with **computational skills** and offering knowledge in the areas of **machine learning** and **quantitative asset management**.

5

We are in **Milan**, a lively, fashionable, culturally stimulating city: an environment which will make your year even more enriching and enjoyable.



6

The Bocconi Career Service, in cooperation with the MAFINRISK staff, helps students enter the job market by providing:

- **on-campus presentations**, career and recruiting events (Bocconi&Jobs, Investment Banking Days);
- **JobGate**, the online platform updated daily by employers, with internship and placement opportunities in Italy and abroad;
- **CV Book**, an annual publication collecting the CVs of MAFINRISK graduates

LEARNING OBJECTIVES

MAFINRISK's mission is to create **fully independent specialists**, combining quantitative and operational skills with institutional competencies. For this reason the technical skills developed in our program are complemented with courses dedicated to more general economic and institutional aspects of finance.

The program is of particular relevance to those planning to work, or currently working in:

- capital markets, sales and trading
- risk control and risk management
- investment management and hedge funds
- new product design and structuring
- derivatives pricing, trading and risk management
- financial modelling

CANDIDATE PROFILE

MAFINRISK is tailored to fit both the requirements of:

- **economics** graduates who want to develop applied skills in the field of quantitative finance and risk management;
- graduates in **non-economics quantitative subjects** (mathematics, physics, statistics, engineering, computer science, etc.), lacking a specific training in economics and finance;
- **young professionals**.

We look for talented, motivated individuals wishing to pursue a career in the field of applied finance and ready to dedicate 12 months of challenging, intense study to the achievement of this goal.

CLASS PROFILE

- **Undergraduate fields of study**
Business or Management, Economics, Finance and Banking, Engineering, Mathematics, Physics, Statistics, Computer Science
- **Limited working experience**

- **Average age** 25
- **Italian / Non-Italian students** 45% / 55%
- **GMAT score** 650-770
- **GRE score** 158-170
- **Countries represented** 38



PROGRAM STRUCTURE

The Master will allow you to pursue your passion for finance using a rigorous, skills-based approach. The program is completely **held in English** and is completed in **12 months, full-time**. MAFINRISK classes are held every day from Monday through Friday.

The learning process has a practical orientation and takes the form of structured lectures backed up by practical applications through case studies and visiting speakers, as well as project works and individual research.

To qualify for the Specialized Master Diploma, participants must successfully complete **18 courses** (i.e. 7 fundamentals, 5 core and 6 electives) and an individual project or an internship report.

The total number of **credits** to be obtained is **66**: 62 (classes) + 4 (final project or internship report).



WATCH OUR ALUMNI VIDEO



STUDY PLAN

CORE COURSES

They combine quantitative and risk management subjects. The focus is on the most technical aspects of asset pricing and hedging while highlighting institutional, organizational and regulatory aspects.

- Credit Risk: Measurement and Management
- Market Risks: Measurement and Management
- Computational Methods and Machine Learning
- Theory of Valuation
- Econometrics 2

An individual project or an internship report concludes the program.

SECOND TERM JANUARY - MARCH 2025

FINAL PROJECT / INTERNSHIP REPORT MID JUNE - SEPTEMBER 2025

FIRST TERM SEPTEMBER - DECEMBER 2024

FUNDAMENTALS

These courses aim to establish a common language between the faculty and the participants and to smooth out any differences in academic and working backgrounds.

- Accounting and Financial Statement Analysis
- Derivatives
- Econometrics
- Fixed Income
- Investments
- Mathematical Models for Finance
- Probability and Stochastic Calculus

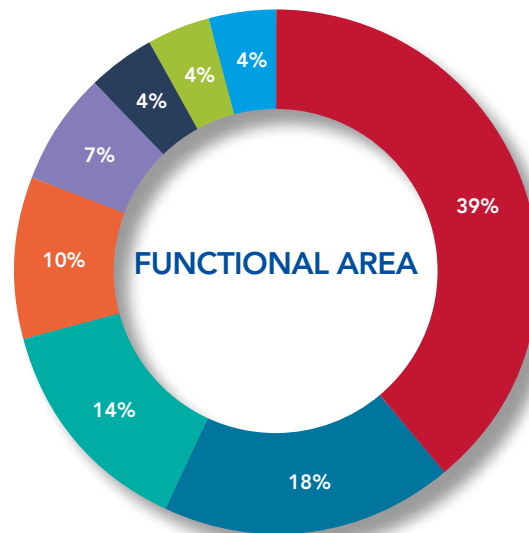
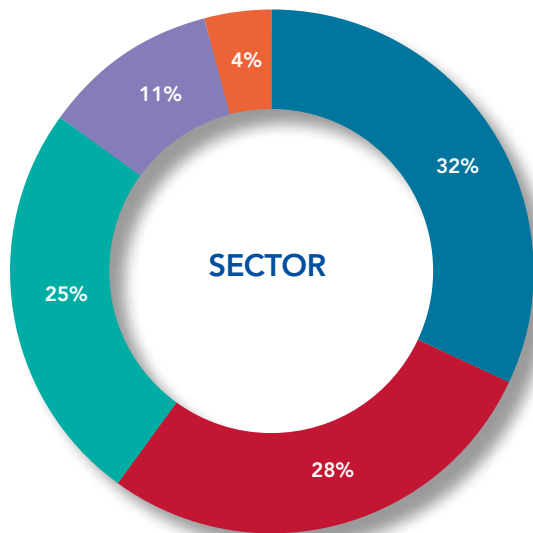
ELECTIVES

6 electives among a wide menu of optional courses, each dedicated to several specific aspects of applied finance.

- Accounting, Risk Evaluation and Financial Analysis for Banks
- Corporate Financial Risk Management
- Data Driven Investments
- Derivatives Credit Risk
- Exotic Derivatives
- Machine Learning in Finance
- Market and Counterparty Risk
- Market Microstructure
- Operational and Reputational Risk
- Portfolio Performance Evaluation
- Structured Products
- Term Structure Modelling
- The Practice of FX Markets
- Topics in Numerical Methods
- Topics in Structuring

Bocconi reserves the right to change programs and schedules indicated in this brochure

PLACEMENT STATISTICS*



■ Investment Bank
■ Investment Company
■ Consulting Company / Advisory
■ Commercial Bank
■ Insurance Company

■ Risk Management
■ Asset Management
■ Trading
■ Research/Analysis
■ Sales
■ Structuring/Organization
■ Corporate Finance
■ Management Consulting

* 2021 graduates, one year after graduation

ATTENDANCE AND PROGRAM ASSESSMENT

Students are required to attend **at least 80%** of each course and are expected to be fully involved in all activities the program offers. Each course is assessed on the basis of an end-of-course examination or final project. In some courses, class participation and oral report presentations might be graded.

TUITION AND FINANCIAL AID

Tuition and fees for the 2024-2025 edition of the program is €16,000. Tuition and fees cover attendance to classes, course materials, use of Bocconi facilities, access to the Library, Career Services and MAFINRISK online databases.

A limited number of **tuition waivers** partially or fully covering tuition and fees may be offered by MAFINRISK corporate partners on the basis of merit criteria.

Moreover, students can benefit from special agreements between Bocconi University and some banks, which offer the possibility of requesting a loan at advantageous conditions.

Find out more at www.unibocconi.eu/specializedmasterloans

APPLICATION AND TIMELINE

Candidates may apply by one of the two application deadlines, submitting either the GMAT/GRE or taking the Bocconi online selection test. Places are offered at the end of each round.

- FIRST ROUND application deadline: **19 March 2024** (3:00pm CET)
- SECOND ROUND application deadline: **11 June 2024** (3:00pm CEST)

For detailed information about the admission process and the Bocconi online test www.unibocconi.eu/mafinrisk.

Artem Chernichin (Russia) – Class of 2019
Global Markets Analyst

My year at MAFINRISK gave me a very unique life experience. Practice-oriented projects and teamwork with very different people helped me cultivate skills which are very important in a modern banking setting: the ability to manage your hours efficiently, divide tasks but help each other, present and defend your point of view. Comprehensive pricing, modeling and statistical courses introduced me to techniques and approaches that are widely used in the industry. I am currently working at Deutsche Bank's e-trading division in London, dealing with bonds and swaps; the Fixed Income and Term Structure Modeling courses helped me become familiar with how these products are priced and how risk is managed. I'm convinced that MAFINRISK greatly contributed to my chances of getting this job.

Elena Costanzo (Italy) – Class of 2021
Market & Financial Risk Management

MAFINRISK was the most exciting experience I've had in my academic career. With a degree in Theoretical Physics, I was looking for a program that could match both financial and scientific approaches and this Master does this perfectly. I enjoyed studying the theory and practice of financial concepts and mathematical models, as well as participating in group projects, which allowed me to deal with real job situations and work with classmates from different countries and with different academic backgrounds. The hard and soft skills I developed helped me to succeed in job interviews and in the first steps of my career. I'm quite sure that I wouldn't have gotten an internship in the Market and Financial Risk Management department at Intesa Sanpaolo and performed so well in it without my MAFINRISK experience.



For information
MAFINRISK
 Bocconi University
 tel. +39 025836.5979
mafinrisk@unibocconi.it
www.unibocconi.eu/mafinrisk