UNIVERSITÀ
DEGLI STUDI
FIRENZE

DISEI
DIPARTIMENTO DI
SCIENZE PER L'ECONOMIA
E L'IMPRESA

CQF Institute

CFA Institute
University Affiliation
Program

Risk.net
Quant Finance
Master's Guide

MSc in FINANCE AND RISK MANAGEMENT

CFA Institute
University Affiliation Program

KEY FACTS

The MSc offers its prospective students an advanced education in finance, banking, financial accounting, insurance and quantitative risk management.

The MSc response to industry's strong demand in experts with quantitative expertise in risk management, finance, insurance and their interface

The MSc is a combination of economic theory for finance with mathematical methods (probability theory, statistics, computational methods) to quantify risk arising from, but not limited to, financial, economic and insurance applications

Strong basis in academic theory is crucial for long-term success, however, theory is symbiotic with application: the MSc mix theory and practice, academic lectures and interaction with finance practitioners and empirical sessions

KEY VALUES FOR THE STUDENT

- ✓ **Quantitative skills and data analysis**
- ✓ **Teaching style**
- ✓ **Relationship with leading companies in the financial industry**
- ✓ **English as an opportunity!**
- ✓ **International experiences**
- ✓ **CFA Institute Affiliated Program**

- https://infogram.com/quant-guide-2021-top-25-table-1h7v4pwwm98xj6k

https://www.risk.net/quant-masters-guide

IN 2021 MSC WAS RANKED IN THE TOP 25 FINANCE QUANT MASTER IN THE WORLD

Top 25 quant finance master's programmes, ranked

Rank	University/institution	Class size	Accept. rate	Students accepting	Industry-affiliated lecturers	Employment rate	Salary (US$, adjusted)
1	Princeton University (Bendheim Center for Finance)	20	6%	61%	21%	100%	115,000
2	Baruch College, City University of New York	21	8%	73%	64%	100%	116,917
3	New York University (Courant Institute of Mathematical Sciences)	42	17%	28%	92%	95%	115,000
4	ETH Zurich/University of Zurich	70	15%	53%	84%	100%	109,661
5	University of California, Berkeley (Haas School of Business)	96	17%	80%	14%	99%	115,132
6	Columbia University (Columbia Engineering)	85	11%	70%	68%	95%	106,833
7	Imperial College London	55	12%	58%	33%	90%	115,000
8	University of Toronto	30	13%	45%	62%	95%	95,000
9	Cornell University	45	17%	53%	53%	95%	101,500
10	Carnegie Mellon University	44	19%	47%	20%	99%	108,846
11	New York University (Tandon School of Engineering)	23	33%	16%	91%	94%	90,719
12	Georgia Institute of Technology	34	15%	34%	0%	100%	94,513
13	North Carolina State University	20	21%	29%	17%	94%	89,513
14	University of California, Los Angeles (Anderson School of Management)	61	24%	28%	6%	96%	97,500
15	University of Chicago	84	27%	20%	55%	95%	101,920
16	Paris-Sorbonne University/Ecole Polytechnique	72	25%	92%	31%	77%	94,211
17	Columbia University	70	26%	35%	16%	95%	102,335
18	Paris-Diderot University	50	28%	78%	20%	95%	67,000
19	EPFL	46	33%	91%	4%	91%	104,000
20	Collegio Carlo Alberto, University of Turin	14	56%	34%	44%	84%	N/A
21	University of Washington	41	47%	32%	67%	92%	79,111
22	University of Amsterdam	25	63%	66%	14%	90%	N/A
23	Fordham University	31	59%	11%	50%	91%	89,812
24	Paris-Saclay University	32	18%	58%	47%	90%	50,000
25	University of Florence	40	24%	128%	19%	89%	42,000

Download data

IN 2023-25 MSC IS RANKED IN THE RANGE 25TH-50TH BEST FINANCE QUANT MASTER IN THE WORLD

Our Goal

Student will be prepared for high profile careers across a wide range of sectors: in financial institutions, insurance and reinsurance companies, banks, accounting firms, private equity firms, management consulting, data analytics companies, industry, management and academia.

Risk manager
Asset manager
Actuary
Financial analyst
Financial consultant
Investment banks
Market analyst
Trader in financial markets
Data scientist
Credit risk analyst
ESG analyst
Fintech specialist
Treasury manager
Private banker/Wealth manager

INDUSTRIES: companies who have employed recent graduates from the MSc include

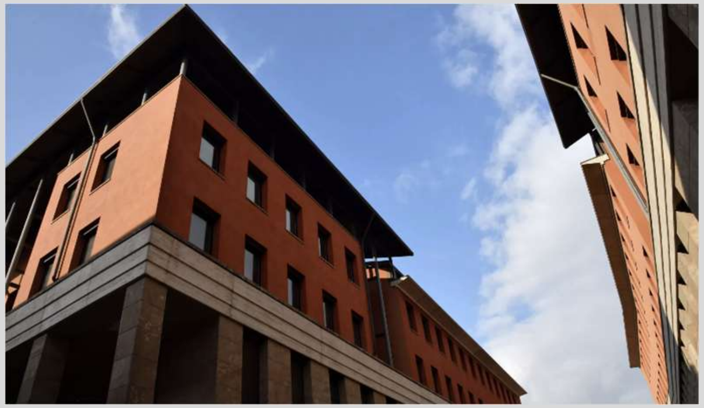
PLACEMENT

ABN AMRO ACCENTURE ALPIQ ASSIBONI AVIVA AXPO AZIMUT BCE BHGE BLOOMBERG BNP PARIBAS CAPGEMINI DELOITTE ENEL ERNST & YOUNG	FIDEURAM (Intesa San Paolo) FINDOMESTIC GALLALLAGHER REINSURANCE GENERALI GENERAL ELECTRIC GOLDMAN SACHS GRUPPO BANCA ETICA GRUPPO CERVED HSBC IFIS BANK IFIGEST ILLIMITY IMI BANCA	KPMG MARSH MENARINI MILLIMAN PROMETEIA P&G PWC BANCA SELLA SDG GROUP SOPRARNO SGR UNICREDIT WIDIBA YOOX TREEDOM Fondazione Cassa di Risparmio di Firenze

- ✓ FIRM Employement rate 85% within a year (national benchmark = 80%)

- ✓ FIRM Employement rate = 92% in 3 years
- ✓ Satisfaction rate = 95%

ADMISSION



CURRICULAR REQUIREMENTS

- **a I level degree** in:
  Economics/Business,
  Maths,
  Computer Science,
  Engineering,
  Statistics,
  Physics.

- B2 or higher level **English certificate or**
- **3 CFU English exam in the Bachelor's Degree**

PERSONAL PREPARATION AND MOTIVATION

- Minimum degree grade
- GMAT/GRE test
- Professional experience
- Personal curriculum
- Oral interview

COMMON TRACK 66 ECTS

COMPUTATIONAL ECONOMICS	6	SECS-P/02
COMPUTATIONAL FINANCE	6	SECS-S/06
CORPORATE FINANCE	6	SECS-P/09
FINANCIAL MARKETS AND INSTITUTIONS	12	SECS-P/11
ECONOMETRICS OF FINANCIAL MARKETS	9	SECS-P/05
QUANTITATIVE FINANCE AND DERIVATIVES	9	SECS-S/06
FINANCIAL STATEMENT ANALYSIS	6	SECS-P/07
QUANTITATIVE RISK MANAGEMENT	6	SECS-S/06

INTERNSHIP WORKSHOP 6 ECTS

Internship (B019480)	
Workshop in Corporate finance (B024220)	SECS-P/09
Workshop in Machine Learning for Finance and Insurance (B031083)	SECS-S/06
Workshop (B019482)	

MASTER THESIS 18 ECTS

BUILDING BLOCKS 12 ECTS

Choose one from:		
Insurance and Risk models (B028050)	Secs-s/06	12
Pensions, solvency and financial reporting – with Phyton modulus (B028053)		
Portfolio choice and Bond Markets (B029675)		

BUILDING BLOCKS 9 ECTS

Choose one from:		
Merger and Acquisition Valuation (B020932)	Secs-p/09	9
Bank Management and sustainable finance	Secs-p/11	
Private Equity Risk Management and due-diligence Lab	Secs-p/09	

FREE CHOICE 9 ECTS

Optional courses – Choose one from:		
Insurance and Risk models – mod.A (B028051)	Secs-s/06	9
Pensions, solvency and financial reporting – mod.A (B028056)	Secs-s/06	
Portfolio choice and Bond Markets – mod.A (B029676)	Secs-s/06	
Merger and Acquisition Valuation (B020932)	Secs-p/09	
Bank Management and sustainable finance	Secs-p/11	
International accounting (B029665)	SECS-P/07	
Mathematics for Economics (B020834)	SECS-S/06	
Private Equity Risk Management and due-diligence Lab	Secs-p/09	
Other courses		

WORKSHOPS 2025/2026

- ✓ MACHINE LEARNING FOR FINANCE AND INSURANCE
- ✓ ADVANCED CORPORATE VALUATION
- ✓ CFA RESEARCH CHALLENGE
- ✓ CORPORATE FINANCE
- ✓ COMMODITY TRADING
- ✓ FINANCIAL MARKETS AND INFORMATION
- ✓ FINANCIAL RISK MANAGEMENT
- ✓ INVESTMENT MANAGEMENT

INTERSHIPS

3 CREDITS
6 CREDITS

MAIN TRACKS

Track: CORPORATE FINANCE and BANKING

BANKING MANAGEMENT & SUSTAINABLE FINANCE
PRIVATE EQUITY RISK MANAGEMENT AND DUE-DILIGENCE LAB
INTERNATIONAL ACCOUNTING
Workshop in Corporate Finance (Deloitte)
CFA Research Challenge
Workshop in Advanced Corporate Evaluation (Kon)
Worshop in Investment Management

Track: INSURANCE AND RISK MANAGEMENT

INSURANCE AND RISK MODELS
PENSIONS, SOLVENCY AND FINANCIAL REPORTING
Workshop in Financial Risk Management (Prometeia)
CFA Research Challenge
Workshop in Financial Market and Information

Track: QUANTITATIVE FINANCE

PORTFOLIO CHOICE &
BOND MARKETS
Workshop in Machine Learning for Finance
Workshop in Financial Risk Management (Prometeia)
Workshop in Commodity trading

SCHOLARSHIPS

- ✓ 2 scholarships financed by Prometeia
- ✓ 2 scholarships financed by Deloitte Financial Advisory
- ✓ 2 scholarships financed by Ernst & Young

TUTOR

- ✓ 1 tutor financed by Findomestic

INTERNATIONALIZATION

INTERNATIONAL LECTURERS

INTERNATIONAL STUDENTS

ERASMUS PROGRAMS

DOUBLE DEGREE

SGH WARSAW	active
KATOWICE	active
KONSTANZ	active

INTERNSHIP AND MASTER THESIS ABROAD

DOUBLE DEGREE (DD)
CALL FOR APPLICATIONS
JAN/FEB

<u>Admission requirements</u>

Can apply for the DD:

- by the deadline of the announcement, students regularly enrolled in the first year of the Master course in Finance and Risk Management of the University of Florence;

- at the time of submitting the application, students who have already achieved the exams according to call for application (different exams depending on the different DD applied).

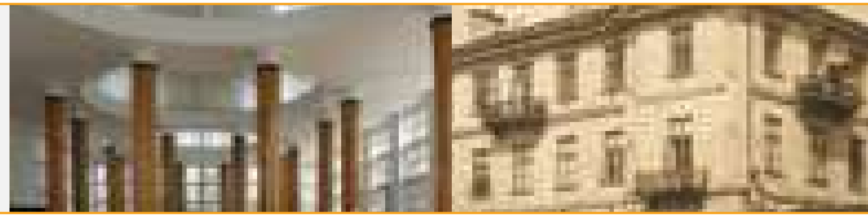
DOUBLE DEGREE PROGRAM SGH

I YEAR AT UNIVERSITY OF FLORENCE

60 ECTS

Quantitative Risk Management
Computational Finance
Corporate Finance
Quantitative Finance & Derivatives

Econometrics of Financial Markets
Insurance and Risk Models
International & Financial Economics
Workshop o Internship 6 ECTS



II YEAR AT SGH UNIVERSITY

Business Law
Financial and Tax Law
Managerial Economics
Bank Management
Business Ethics
Advanced Financial Accounting (ACCA)
M&A of enterprises
Auditing
Financial crisis Financial Stability

Management Accounting
Monetary Policy

one among:
Risk in Insurance Company
Derivatives Markets
Market and Operational Risk Management

Thesis

60 ECTS

First year - UNIFI

ETCS	Exam Unifi	semester
6	**Corporate Finance**	I
6	**Computational Finance**	I
9	**Quantitative Finance & Derivatives**	I
6	**European Market Law**	I
12	**Corporate Governance and Financial Institutions**	II
9	**Econometrics of Financial Markets**	II
6	**Financial Statement Analysis**	II
6	**Workshop**	II

DOUBLE DEGREE PROGRAM

KATOWICE

University

Second year - KATOWICE

Exam Katowice	ETCS
Module 7: Risk Management for Banks	**12**
Module 8: Asset and Liability Management and Risk Management for Insurance	**9**
Choose between: **(1) (4+2=6) Programming and database + Equity and Foreign Exchange Derivatives** **(2) Integrated Aspects of Asset Management** **(3) 6 ECTS between:** **Module 4: Risk Measurement OR** **Module 5: Asset Management**	**6**
Advanced Issues in Corporate Finance 6 ECTS **Fixed Income and Credit Derivatives 4 ECTS**	**10**
Erasmus exams 2nd semester * **(eg Global Financial Markets)**	**5**
Seminar Master Dissertation	**18**
	60
Final	**120**

DOUBLE DEGREE PROGRAM KONSTANZ

MSc in International Financial Economics

Universität Konstanz

First year at UNIFI			
ECTS	**Modules UNIFI**	**Recognized for Modules at UKON**	**ECTS**
6	**Corporate Finance**	*Seminar International Financial Economics*	*6*
9	**Portfolio Choice**	*Portfolio Management*	*6*
9	**Computational Finance**	*Elective course in the area International Financial Economics, e.g. Financial Econometrics*	*9*
6	**European Market Law**	*Seminar*	*6*
12	**Corporate Governance and Financial Institutions**	*Elective course in the area International Financial Economics, e.g. International Monetary Economics*	*12*
9	**Private Equity or Banking Management**	*Elective course in the area International Financial Economics, e.g. Bank Management*	*9*
6	**Financial Statement Analysis**	*Elective course in the area International Financial Economics, e.g. Accounting Theory*	*6*
6	**Quantitative Risk Management**	*Risk Management*	*8*
Sum: 63			*Sum: 62**

Second year at UKON			
ECTS	**Recognized for Modules UNIFI**	**Modules UKON**	**ECTS**
9	*Econometrics of Financial Markets*	**Advanced Econometrics**	**10**
9	*Advanced Macroeconomics (free choice)*	**Advanced Macroeconomics I**	**10**
6+6	*Computational Economics + WP in Economics and Finance*	**Advanced Microeconomics I**	**10**
18+ 9 +3	*Master Thesis+ Quantitative Finance & Derivatives+ WP in Finance*	**Master Thesis**	30
Sum: 60			**Sum: 60**
Min. 120	**Final**	**Final**	**Min. 120**

ALUMNI NETWORK

Ex FIRM Alumni in top jobs and relevant positions in Italy and abroad, created an international network that has brought employment opportunities directly to our current students as former graduates and their employers look to hire the very best.

The MSc encourages all alums to connect with them and to keep us updated as their careers progress.

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