Quantitative Finance

OPEN DAY

November, 28 2023

Department of Statistical Sciences

Who we are

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What can you expect from QF?

Interdisciplinary approach

International perspective

Intercultural environment

Intercultural environment: Our Faculty

Teachers from *international* universities

Teachers from UNIBO

Professionals

Interdisciplinary approach: QF study plan

1° Edition
A.Y. 2010/2011

Students' and Firms' Feedback

New study plan starting from **A.Y. 2014/2015**

- **1° Year Stronger preparation in probability** Two additional courses: *Statistics* and *Actuarial Mathematics*
- **2° Year More flexibility** elective courses 6 ECTS

Interdisciplinary approach: 1st Year

MATHEMATICS AND PROBABILITY (I.C)
CALCULUS
PROBABILITY
ACTUARIAL AND FINANCIAL MATHEMATICS (I.C.)
FINANCIAL MATHEMATICS
ACTUARIAL MATHEMATICS
CORPORATE FINANCE AND RISK MANAGEMENT (I.C)
CORPORATE FINANCE
FINANCIAL RISK MANAGMENT
ECONOMICS OF FINANCIAL MARKETS
STOCHASTIC PROCESSES AND ECONOMETRICS (I.C.)
ECONOMETRICS
STOCHASTIC PROCESSES
FINANCIAL MARKET REGULATION

Interdisciplinary approach: 2nd Year

FINAL EXAMINATION	18
NUMERICAL ANALYSIS (I.C.)	
COMPUTER PROGRAMMING	6
NUMERICAL METHODS	6
12 CREDITIS TO BE CHOSEN AMONG	
ECONOMETRICS OF FINANCIAL MARKETS	6
STATISTICS OF FINANCIAL MARKETS	6
CREDIT DERIVATIVES	6
ADVANCED INTEREST RATE MODELS AND MARKETS	6
ADVANCED TOPICS IN LIQUIDITY MANAGEMENT IN THE POST CRISIS ERA	6
COMPUTATIONAL FINANCE	6
MARKET MICROSTRUCTURE AND HIGH FREQUENCY FINANCE	
LIFE INSURANCE	6
NON LIFE INSURANCE	6
FUNDAMENTALS OF INTEREST RATE MODELS	6
ADVANCED METHODS OF RISK MANAGEMENT 1	6
COMPUTATIONAL FINANCE	6
Electives: (12 ECTS)	
INTERNSHIP	12
TOPICS IN LIQUIDITY RISK	3
ADVANCED MACHINE LEARNING	3
CREDIT RISK	6
INTRODUCTION TO MACHINE LEARNING	3
ADVANCED RISK AND PORTFOLIO MANAGEMENT	9
One activity to be chosen among (6 ECTS)	
INTERNSHIP	6
WORKSHOP IN QUANTITATIVE FINANCE	6
ADVANCED TOPICS	6

Professional profiles

Pricer
- provides market consistent evaluations of financial and insurance products

Risk manager
- provides measures of risk and solutions for the hedging and transferring risk

Asset manager
- provides techniques and strategies for investment and portfolio decisions

Insurance specialist
- designs insurance products and provides analyses of actuarial risks

Where do QF graduates work?

Further studies and Research

Admission requirements and evaluation

Adequate knowledge of **mathematics**, **economics** and **statistics** tools at undergraduate level

Admission is conditional on the assessment of the personal qualification by the ***Admission Board***

Assessment
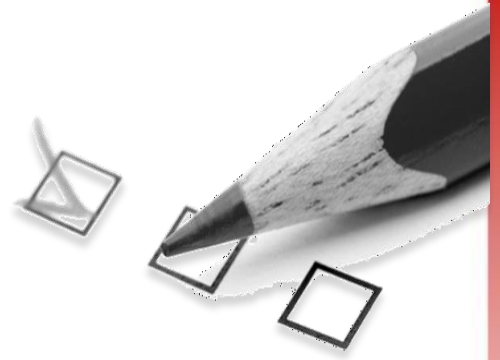
☐ Academic merit: **max 75 points**

☐ Reference: **max 20 points**

☐ English knowledge - B2 level is required: **max 5 points**

For admission: **min. 60 points**

How to apply

2023/2024 Admission procedure

Enter on Studenti Online

and select *Entrance test procedure*

Required documents

The «entrance exam» consists in the evaluation of these documents:

- [ ] ID

- [ ] Transcript (or Form F)

- [ ] Curriculum Vitae in English - QF CV form

- [ ] Reference letters from academics and scholars

- [ ] Statement of Purpose in English - QF letter form

- [ ] English proficiency certificate

English knowledge

The minimum level of proficiency in English to be considered for admission is B2.
It can be consider fulfilled with one of the following cases:

- Certification by the Centro Linguistico di Ateneo CLA (or University language centers like CLA);

- English Language certification among the following: TOEFL, ISE, IELTS, Cambridge English Language Assessment, Trinity College London (issued no longer than 5 years prior to the deadline for application);

- First cycle degree (bachelor's) taught in English;

- B2 level English exam in their Bachelor's study plan;

- The applicant is an English native speakers.

No restricted access number

Deadlines

QF APPLICATION SESSION 2023/2024					
INTAKES	OPENING	CLOSING	PUBLICATION OF RESULTS	OPEN TO NON-EU	OPEN TO EU AND EU ASSIMILATED
First	8 March 2023	4 April 2023 h 11:00 am CET	5 May 2023	YES	YES
Second	4 April 2023	4 May 2023 h 11:00 am CET	31 May 2023	YES	YES
Third	1 June 2023	30 June 2023 h 11:00 am CET	28 July 2023	NO	YES

Apply only once your documents are complete!
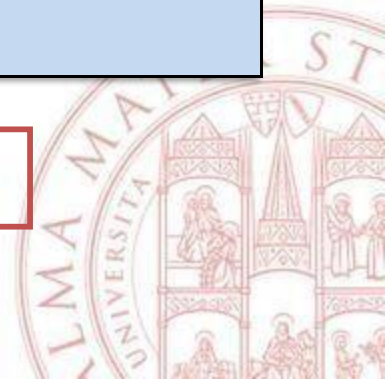
Classes

2 Semesters, 4 Terms

1° Semester

2° Semester

1 Term Sept. - Oct.
2 Term Nov. - Dec.

3 Term Feb. – March
4 Term Apr. – June

- **Laboratory (crash course) in reassessment of real analysis and advanced differential calculus** September
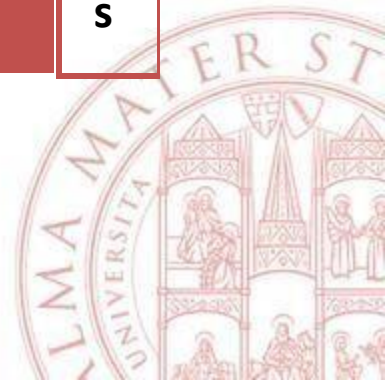
Exams

✓ **Written** or oral test

✓ **ONLY three** possibilities per year

Sep	Oct	E x a m s	Nov	Dec	E x a m s	Feb	March	E x a m s	April	May	E x a m s
TERM 1			TERM 2			TERM 3			TERM 4		

Enrolment and deadlines

Students can enroll to the QF
from end of July until end of October 2024

you can still enroll till November 2024 under a payment of a fine

Students who have not yet completed
their Bachelor's may also participate in
the selection process

BUT

NO ENROLMENT = NO EXAMS

Each year:

scholarships for first and second year students enrolled on the Quantitative Finance

donated by Prometeia and by Banca Intesa

or other stakeholders

unibo.it/qf

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