

# 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: 1<sup>st</sup> Year

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

# Interdisciplinary approach: 2<sup>nd</sup> Year

FINAL EXAMINATION	18
NUMERICAL ANALYSIS (I.C.)	
COMPUTER PROGRAMMING	6
NUMERICAL METHODS	6
<b>12 CREDITIS TO BE CHOSEN AMONG</b>	
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
<b>Electives: (12 ECTS)</b>	
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
<b>One activity to be chosen among (6 ECTS)</b>	
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



McKinsey&Company

# Where do QF graduates work?



Deloitte.



BMW Financial Services



Allianz 



accenture 

Unipol  
GRUPPO



European  
Investment  
Bank



EUROPEAN CENTRAL BANK  
EUROSYSTEM

Morgan Stanley



INTESA   
SANPAOLO

Deutsche Bank 

 UniCredit

# Further studies and Research



# Admission requirements and evaluation

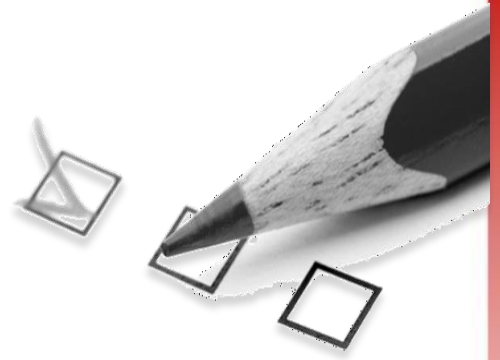


Adequate knowledge of **mathematics**,  
**economics** and **statistics** tools at  
undergraduate level

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

The screenshot shows the website's navigation menu with two red arrows pointing to the 'Students' and 'Staff' sections. The 'Students' section includes links for AlmaEnglish, AlmaEsami, AlmaRM, Certificates, Document and library services, Internships, Merchandising (unibostore), Studenti Online, Study plans, Teaching materials, Teaching Staff-Student Distribution lists, and Tesi. The 'Staff' section includes links for AlmaEsami, AlmaRegistri, AlmaRM, Cedolini web, Document and library services, Incarichi extraistituzionali, Internships, IRIS - Institutional research archive, NormAteneo, OrganiWeb, Personal Website, Platform for printed materials, Presenze web, Teaching materials, Teaching Staff-Student Distribution lists, Tesi Online, Titulus, Unibolmagine, and Web U-Gov - Projects Accounting Reporting. The main content area features sections for Prospective students, Current students, and Graduating students, along with a News section containing articles like 'Intensive Programme: Finance and Energy Market' and '2018 Society of Actuaries Student Research Case Study Challenge'. There is also an Events section and a Facebook link.



# 2023/2024 Admission procedure

Enter on Studenti Online

Studenti Online

and select *Entrance test procedure*

## Help desk Studenti Online

E-mail:  
[E-mail servizio di supporto informatico](mailto:servizio di supporto informatico)  
Telefono:  
+39 051 20 99 882  
Orari:  
Lunedì a Venerdì 9.30-13.00; 14.00-18.00

  
**Prove di ammissione - AlmaWelcome!**  
Iscriviti a una prova di ammissione

  
**Immatricolazioni - AlmaWelcome!**  
Iscriviti a un Corso di Studi

  
**Esami - AlmaEsami**  
Iscriviti agli esami e alle prove intermedie

  
**Libretto online**  
Controlla la tua carriera universitaria

  
**Piani di studio**  
Compila il tuo piano di studio

  
**Laurea**  
Presenta la domanda di laurea

  
**AlmaEnglish**  
Completare il questionario

  
**Passaggio di corso**  
Richiedi il passaggio a un altro Corso di Studi

  
**Situazione tasse**  
Verifica la situazione delle tasse ed effettua pagamenti

  
**Trasferimento**  
Richiedi il trasferimento verso un altro Ateneo

  
**Certificati e autocertificazioni**  
Stampa autocertificazioni e certificati con timbro

  
**Rinuncia agli studi**  
Compila la domanda di rinuncia agli studi

Fittizio Studente

14 richieste in corso

	Id	Tipo	Descrizione	Data inizio
Richiesta inserita	12193	Prova d'ammissione	Adattamento posturale: metodologie per la salute	03/07/2012 <a href="#">Vedi dettaglio »</a>
Richiesta inserita	127			03/07/2012 <a href="#">Vedi dettaglio »</a>
Richiesta inserita	1		ululum in 'health economics & management' (hem)	06/07/2012 <a href="#">Vedi dettaglio »</a>
Richiesta inserita	1		itarie	20/07/2012 <a href="#">Vedi dettaglio »</a>
Richiesta inserita	1			25/07/2012 <a href="#">Vedi dettaglio »</a>
Richiesta inserita	1		urgia	25/07/2012 <a href="#">Vedi dettaglio »</a>
Richiesta inserita	2		resa	28/07/2012 <a href="#">Vedi dettaglio »</a>
Richiesta inserita	2		ali a ciclo unico facoltà di farmacia	01/08/2012 <a href="#">Vedi dettaglio »</a>
Richiesta inserita	3			07/08/2012 <a href="#">Vedi dettaglio »</a>
Richiesta inserita	3			13/08/2012 <a href="#">Vedi dettaglio »</a>
Graduatorie pubblicate	4026			22/08/2012 <a href="#">Vedi dettaglio »</a>
Graduatorie pubblicate	51029	Prova d'ammissione	Scienze della formazione primaria	03/09/2012 <a href="#">Vedi dettaglio »</a>
Da completare	106364	Prova d'ammissione	Economics - Imec	12/02/2013 <a href="#">Vedi dettaglio »</a>
Richiesta inserita	10927	Prova d'ammissione	Innovation and organization of culture and the arts - gioca (scadenza 30/04/2013)	22/02/2013 <a href="#">Vedi dettaglio »</a>

Recapito per comunicazioni:  
Via Manzoni 45 - 40011 - Anzola

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

## Required 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.

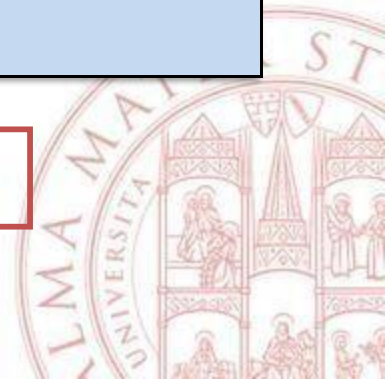


**No restricted access number**

**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*

**1 Term** Sept. - Oct.

**2 Term** Nov. - Dec.

### *2° Semester*

**3 Term** Feb. – March

**4 Term** Apr. – June

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

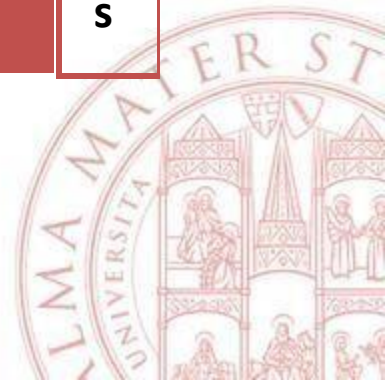


# Exams

- ✓ **Written** or oral test
- ✓ **ONLY three** possibilities per year



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



# 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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