



2023/2024

Masters in Actuarial Science





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Welcome to next level of Actuarial Science in the heart of Lisbon.

ISEG presents a master's degree for people who want to make a difference in the insurance world. Our Masters in Actuarial Science offers students the chance to get a solid academic foundation in up-to-date actuarial knowledge, statistics and finance, providing them with the skills and background required to become successful actuaries.

We designed our masters programme, which is fully accredited by the UK's Institute and Faculty of Actuaries (IFoA) and listed by the US Society of Actuaries (SoA) to cover the new IFoA syllabus, which now has a strong computational component. Our sylabus covers the core syllabi of the Actuarial Association of Europe and the International Actuarial Association, with a few minor exceptions, related to concepts that must be covered by the professional association.

Actuaries deal with risk every day. The only risk here is not to take this course.









Top 7 reasons

to do the Masters in Actuarial Science @ISEG Lisbon

02.

This programme provides in-depth coverage of **the most up-to-date actuarial knowledge and skills** that actuaries are required to use.

04.

07.

ISEG has excellent modern

facilities, including an extensive

library, which is remarkably

complete in Actuarial Science.

Students can access study

rooms for prolonged hours.

03.

ISEG's Masters in Actuarial Science is **one of the 50 best masters in insurance** according to the Eduniversal Best Masters ranking (currently ranked 13th).

06.

This programme offers many internship opportunities, an advantage when students apply for jobs.

Rodrigue Kazzi
Alumnus Masters in Actuarial Science

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After finishing my bachelor studies, I wanted to pursue a Masters programme in Actuarial Science that could expand my knowledge and broaden my horizons as much as possible. Finding this Masters, which is simultaneously accredited by the Institute and Faculty of Actuaries (IFoA) in the UK and highly regarded by the Society of Actuaries (SOA) in North America, fulfilled my demand! During my two years at ISEG, I was more than satisfied with the professors, who are at the same time experts in their fields, modest, and caring! Additionally, living in Lisbon was a very joyful experience! I can confidently say that **the masters gave me a solid background in both the theoretical and practical aspects of Actuarial Science**. I could see this during my last two internships and my PhD studies so far. Actually, this **programme is highly regarded by the academic and industrial sectors** as I have **received several job offers** and have been admitted to a PhD programme in Actuarial Science without any additional requirement. Today, I can proudly say I made an optimal investment of these two years of my life!"

01

It's one of the few non-British programmes fully accredited by the Institute and Faculty of Actuaries (IFoA) in the UK. The new IFoA curriculum has been adopted since the 2018/19 school year. The masters is also on the UCAP list of the Society of Actuaries (SOA) in the USA.

05.

ISEG has a group of lecturers whose achievements in international research are on par with the best international schools of Actuarial Science. Some of them are practitioner actuaries. Our academic staff is dedicated and always willing to support and advise students.

As success in the professional world is not just about passing exams and gaining exemptions, ISEG helps students acquire other skills. Research seminars, seminars with speakers from the industry organised by the ISEG Actuarial Science Club, a career development programme, and a career development team, which provides counselling services, are also at students' disposal.

5



Study Plan

| | Course Units | Credits | Semester |
|-----------|---|---------|----------|
| YEAR 1 | Computation Tools for Actuaries IFoA: CS1-10% | 4 | 1 |
| | Financial Markets and Investments IFoA: CM2 -40% | 6 | 1 |
| | Financial Mathematics IFoA: CM1 -45% | 6 | 1 |
| | Probability and Stochastic Processes IFoA: CS1-15% CS2-30% | 8 | 1 |
| | Risk Models IFoA: CS1-35% | 6 | 1 |
| | Generalised Linear Models IFoA: CS1 - 30% CS2 - 10% | 4 | 2 |
| | Loss Reserving IFoA: CM2 - 10% | 4 | 2 |
| | Risk Theory IFoA: CS2 - 15% CM2 - 10% | 8 | 2 |
| | Survival Models and Life Contingencies IFoA: CM1 - 55% | 8 | 2 |
| | Time Series IFoA: CS2 - 20% | 6 | 2 |
| YEAR 2 | Course Units | Credits | Semester |
| | Models in Finance IFoA: CM2 - 40% | 8 | 1 |
| | Solvency Models | 4 | 1 |
| | Elective 1 | - | 1 |
| | Elective 2 | - | 1 |
| | Masters Final Work - MFW | | |
| | · Internship | 30 | 2 |
| | DissertationProject | 30 | |
| | · | | |
| Electives | Actuarial Data Science | 4 | |
| | Actuarial Topics IFoA: CS2 - 25% Asset-Liability Management | 6 | |
| | Finance and Financial Reporting IFoA: CB1 - 100% | 4 | |
| | Pension Funds | 6 | |
| | Ratemaking and Experience Rating IFoA: CS1 - 10% | 4 | |
| | Tator Taking and Exponence Nating ii on our 1070 | 4 | |

^{*} Students must pass a total of 18 ECTS in optional units. During the fourth semester students can take an internship at an insurance or consulting company, or write a thesis or a project.

Key Facts

Start Date:

September 2023

Schedule:

Daytime Classes

Duration:

3 Semesters of Classes 1 Semester for the Masters Final Work

Language:

English

Tuition Fees:

From within the EU: €5.550 From outside the EU: €7.000

Programme Directors:

Alfredo Egídio dos Reis Onofre Simões Alexandra Bugalho de Moura Agnieszka Bergel

Accreditation:



Ranking:



Ranked 13th in the World Top 50 Global Ranking Insurance



Student Research Case Study Challenge 2019 and 2018, promoted by the American Society of Actuaries (SOA). An ISEG team made of students of the Masters in Actuarial Science finished in the top 3 of the world's competition for 2 consecutive years.







Useful Information

Admission

Applications for all masters at ISEG are online. The deadline for the 2023/24 intake is April 30th, but you are advised to apply before February 28th, especially if you need a STUDENT VISA. We require a solid academic background in Mathematical Analysis and Statistics. This normally implies holding a bachelor's degree in Mathematics, Mathematics with Economics or Statistics, and some of the bachelor's degrees in Economics, Finance or Management. Applicants from other academic disciplines will be considered on a case-by-case basis. Accepted applicants have normally achieved a minimum of 14 out of 20 points in the Portuguese system or a 2:1 honours in the British system (or equivalent, e.g. G.P.A. 3.0). Candidates are selected according to their BSc grade, their CV details and possibly an interview. If you are in the last year of studies for your BSc, you may apply on the basis of your predicted grade and your application will be considered for a conditional offer.

Student Visa

If you are not an EU, EEA or Swiss citizen, then you need a Student VISA. After you have definitely decided joining the master and have paid the registration fee to secure your place, you will be able to download the acceptance letter on Fénix Portal, which you need to apply for a Study Visa. At this stage, you should contact the nearest Portuguese Consulate or Embassy, in your country, to find out which other documents are necessary. If there is no Portuguese Consulate or Embassy in your country, ISEG will let you know where to apply.



Application

Step 01

Fill out the online application form. You will need to attach some digitalized documents: photo, ID document (passport if you require a Student Visa), bachelor's degree certificate, academic transcript of records, and CV. You must also pay the application fee. You may submit these documents later on, and/or pay the application fee by logging on to our site, using the username and password that were previously supplied by us via E-mail. Your application will be considered valid only after all the documents have been submitted and the application fee has been paid. Payment can be made in three ways: ATM — only if you hold a Portuguese Bank Account, Bank Transfer or Paypal — if you live outside Portugal. Please note that you do not need to have a Paypal account, you just need to have a credit card that is accepted by Paypal. If the payment is made by Bank Transfer, then you need to send the respective proof to **smd@iseg.ulisboa.pt**.

Step 02

After your application has been validated, it will then be verified by ISEG (at this stage you may be contacted by the Programme Directors). You will receive an E-mail after a decision has been made.

Step 03

If you are accepted, and to secure a place for the Masters, you are given a deadline for acceptance (this is done online) and for the payment of a non-refundable registration fee. This can be done in the same way as the application fee.



Inês Carreira

Alumna Masters in Actuarial Science

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After finishing my first degree, I tried to search for a master's degree related to mathematics and statistics that would really be an asset to me. And I found the Masters in Actuarial Science at ISEG. It is a well-recognized master's degree and, therefore, I consider the specialization in this field a **great opportunity at a professional level, not only in Portugal but also abroad, thanks to the possibility of obtaining exemptions for some Core Technical (CT) exams of the Institute and Faculty of Actuaries.** The Master's structure combined with the quality of the professors provided me with an excellent knowledge base of the actuarial world, covering the areas of life, non-life and pension funds. In addition, it allows us to share experiences and knowledges with people coming from different parts of the world."





Masters in Actuarial Science

10 things you gain by joining ISEG

01. 02. 03.

You join one of the best European Schools. ISEG Lisbon entered the prestigious Global **Financial Times FT Rankings** since 2020, with the Masters in Finance. In 2022, ISEG also entered the European Business School Financial Times Ranking.

You enrich your curriculum. ISEG is accredited by **AACSB**, a distinction earned by only 5% of business schools in the world.

You're always connected. All classrooms are **technologically fully equipped** for a perfect learning experience, whether it's online, in-person, or hybrid.

04. 05. 06.

You broaden your horizons. ISEG is part of the University of Lisbon, the leading Portuguese university according to the selective Shanghai Ranking (ARWU), and has an impressive list of partnerships with topranked international schools.

You live like a "lisboeta". ISEG is perfectly located for **Lisbon's downtown lifestyle experience**. It's a vibrant, multi-cultural, and cosmopolitan European capital.

You're surrounded by knowledge. ISEG's **high quality research** centers are engaged in a diverse array of international research projects.

07. 08. 09.

You're part of an inclusive club. ISEG has a large, diversified, global network of talented and successful Alumni.

You become an asset. ISEG's graduates are highly desirable to top employers, both in the private and in the public sector, all over the world.

You join a winning team. ISEG's students and faculty are well known for winning international and national awards for best case studies, best dissertations and research output, applied projects, as well as in student competitions, such as the CFA® Research Challenge or the Junior Achievement Awards.

10.

You grab your future. ISEG's students benefit from a **collegiate and open-minded atmosphere**, in which the United Nations' Sustainable Development Goals (SDGs) play a special role, leaving them well prepared in quantitative subjects to become influential and conscientious leaders.

Apply now:

www.iseg.ulisboa.pt/actuarial-science

smd@iseg.ulisboa.pt (+351) 213 925 900

ISEG Rua das Francesinhas 1200-675 Lisboa · Portugal

E FUTURE.





Rankings:

















Accreditations and Partnerships:













