

## Masters ACTUARIAL SCIENCE

The Masters in Actuarial Science was designed for students with a first cycle degree in Mathematics, Statistics, Economics, Finance or Management, who are seeking to enter the actuarial profession and who wish to follow this rewarding career. We require that the graduates have had in their first cycle degree modules in Mathematical Analysis and Statistics.

#### Presentation:

The main objective of the Masters in Actuarial Science is to train students for the actuarial profession, in its multiple components: life, nonlife, financial and pension funds. The programme offers a solid academic foundation in Actuarial Science, Statistics and Finance. The Masters was designed in accordance with international requirements for the actuarial profession. It aims to cover most of the course subjects that are indispensable for the accreditation of an actuary in the European Union, as designated by The Actuarial Association of Europe, as well as the majority of the subjects of the professional exams for admission as an Associate of the Institute and Faculty of Actuaries in the UK, or of the Society of Actuaries in North America.

The Masters in Actuarial Science at ISEG was evaluated by The Institute and Faculty of Actuaries (IFoA), in the UK.

From 2011 to 2016 an Exemption Recognition Agreement has been in force, according to which students who achieve good results in their degree, as determined by an independent examiner appointed by the IFoA, are exempted from a significant number of the UK professional actuarial examinations. Starting in 2017 the Masters Programme has been accredited as a whole, which can lead to exemptions based on the students overall performance during the masters.

The present study programme was also accredited by the Portuguese Agency for the Assessment and Accreditation of Higher Education - A3ES.



Scientific and Pedagogical Committee: Professor (Ph.D) Maria de Lourdes Centeno

Professor (Ph.D) João Andrade e Silva

Professor (Ph.D) Onofre Simões





RANKING Ranked nº15 in the world Top 50 Best Masters in Insurance Global Ranking (www.best-masters.com)

Quantitative Methods ACTUARIAL SCIENCE







# STUDY PROGRAMME

## 1<sup>st</sup> YEAR

CREDITS	1 <sup>st</sup> SEMESTER	CREDITS	2 <sup>ND</sup> SEMESTER
4	<b>COMPUTATION TOOLS FOR ACTUARIES</b> José Pedro Galvão	4	<b>GENERALISED LINEAR MODELS</b> Rui Paulo
6	FINANCIAL MARKETS AND INVESTEMENTS To define	4	LOSS RESERVING Walther Neuhaus
6	FINANCIAL MATHEMATICS Onofre Simões	8	<b>RISK THEORY</b> Maria de Lourdes Centeno
8	PROBABILITY AND STOCHASTIC PROCESSES Alexandra Moura	8	SURVIVAL MODELS AND LIFE CONTINGENCES Onofre Simões
6	<b>RISK MODELS</b> João Andrade e Silva	6	TIME SERIES Nuno Sobreira

### 2<sup>nd</sup> YEAR

CREDITS	1 <sup>st</sup> SEMESTER	CREDITS	2 <sup>ND</sup> SEMESTER
6	ACTUARIAL TOPICS Agnieszka Bergel	30	MASTERS FINAL WORK (THESIS/INTERNSHIP/ PROJECT)
4	ASSET-LIABILITY MANAGEMENT Walther Neuhaus		
8	<b>MODELS IN FINANCE</b> João Guerra		
4	<b>PENSION FUNDS</b> Fátima Pires de Lima		
4	RATEMAKING AND EXPERIENCE RATING Alfredo Egídio dos Reis		
4	SOLVENCY MODELS Hugo Borginho		
6	FINANCE AND FINANCIAL REPORTING Pedro Rino Vieira		