

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 prepare students for the actuarial profession, with its multiple components of: life, non-life, financial and pension funds. The degree offers a solid academic foundation in actuarial science, statistics and finance.

This 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 required for 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 assessed by The Institute and Faculty of Actuaries (IFoA), of the UK, resulting in the award of an Exemption Recognition Agreement. Those 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.

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

The "Training Positions MFE – Bank of Portugal" programme provides the opportunity to work as a trainee in the Economic Research Department of Bank of Portugal to the best students in the MSc. The main goal is to produce a dissertation supervised by a doctor in the department.



**Start Date:** September



**Duration:** 2 years



Schedule: Daytime



Students from UE: €5.500 Students outside UE: €6.000



Scientific and
Pedagogical Committee:
Prof<sup>a</sup>. Doutora
Maria de Lourdes Centeno

Prof. Doutor João Andrade e Silva

Prof. Doutor Onofre Simões



Language: English



Ranked n<sup>o</sup>18 in the world Top 50 Best Masters in Insurance Global Ranking (www.best-masters.com)







## STUDY PROGRAMME

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

CREDITS	1st SEMESTER	CREDITS	2 <sup>ND</sup> SEMESTER
4	COMPUTATION TOOLS FOR ACTUARIES Daniela Pateiro	4	GENERALISED LINEAR MODELS Rui Paulo
6	FINANCIAL MARKETS AND INVESTEMENTS Raquel Gaspar	4	LOSS RESERVING Walther Neuhaus
8	FINANCIAL MATHEMATICS Onofre Simões	4	RISK THEORY Alfredo Egídio dos Reis
8	PROBABILITY AND STOCHASTIC PROCESSES Maria de Lourdes Centeno	8	SURVIVAL MODELS AND LIFE CONTINGENCES Onofre Simões
6	RISK MODELS João Andrade e Silva	6	TIME SERIES Nuno Sobreira

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

_   _	TI V			
CREDITS	1st SEMESTER	CREDITS	2 <sup>ND</sup> SEMESTER	
6	ACTUARIAL TOPICS Agnieszka Bergel	30	MASTERS FINAL WORK	
4	ASSET-LIABILITY MANAGEMENT Walther Neuhaus			
8	MODELS IN FINANCE João Guerra			
4	PENSION FUNDS 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			