Doctoral Programmes







Welcome to ISEG Lisbon

At ISEG you will find an environment that is supportive of research, with a friendly atmosphere of sharing and interaction between faculty, researchers and PhD students. We bring together all the necessary means and resources to carry out advanced research in the most cutting-edge research topics.

Furthermore, a comprehensive programme of seminars and conferences takes place throughout the year, which you can attend, selectively choosing according to your interests. We thank you for your interest in our PhD Programmes, which cover different areas of specialization, each targeting a special profile of student. Hopefully we will meet you soon here in Lisbon! But, first, let us highlight three good reasons to choose ISEG for your PhD:



Clara Raposo Dean of ISEG Full Professor of Finance



João Peixoto Associate Dean for Research of ISEG Full Professor of Sociology

01. An Experience at the Leading Edge of Knowledge

to produce new knowledge - in

In our school you will find members

of faculty who are producing world-

class research that is published

in top international journals - our

PhD students are also expected to

present their work at reputed international conferences and publish

in high quality scientific journals

or in edited books. This is already

happening, and you can be next!

entific community.

Learning Advanced Skills

Unlike all other academic degrees, Whether from a more theoretical the main objective of a PhD is or from a more applied perspective, a PhD thesis should involve original research which is relevant knowledge which is relevant to the to society and respected by the sciegonomy and society as a whole. In any case, it must incorporate advanced research techniques and methodologies.

> With several decades' experience in educating PhD students, at ISEG we know how to identify and develop the critical skills required by these students: analytical skills, technical skills, confidence to be creative, and even soft skills associated with effective communication.

Many of our PhD alumni play important roles in academia and in the public and private sectors, as well as in the social economy area.

03. Excellent Faculty and Graduates

The scientific research carried out by our research units provides an essential support for our offer of PhD Programmes. Based on many consecutive years of experience, ISEG is the School of Economics and Management that produces the largest volume of scientific publication in refereed academic journals (WoS, SCOPUS) in its scientific areas in Portugal.

The "António Simões Lopes prize", for the best PhD thesis in the field of Economics carried out in Portuguese universities, was first awarded to Sara Proença for her PhD thesis at ISEG in the field of energy. This prize is sponsored by the Order of Economists, in partnership with PwC. Again in 2020 it was awarded to a PhD thesis from our school (Jorge Faria Silva).





Why ISEG Lisbon

ISEG is the oldest School of Economics and Management in Portugal, with a tradition of over 100 years in educating the Portuguese business and technical elite. With an experienced and well-prepared faculty, ISEG is also recognised for the extraordinary spirit of mutual understanding that is cultivated between its students and faculty. With an ever-increasing focus on internationalisation, ISEG offers a number of programmes taught in English, including three Bachelors degrees and eleven Masters, which attract more international students each year.

ISEG offers ten PhD Programmes, six in key fields of study, and another four in partnership with other schools and universities. A PhD enables students to learn up to the limits of knowledge in an academic environment where research experiences are shared, and ideas and methods are discussed, and where you can always find someone who has common interests. This is what ISEG has to offer in its PhD Programmes. Find out about these topics - and much more - in this brochure, or at iseg.ulisboa.pt.

10 reasons

01.

ISEG is accredited by AACSB, a distinction earned by only 5% of business schools in the world. ISEG's international standards have recently been acknowledged by the reputed Global Financial Times Rankings with the Master in Finance in 2020.

04.

02.

As part of the Universidade de Lisboa, ISEG belongs to UNITE! - University Network for Innovation, Technology and Engineering - a network that aims to foster cooperation between higher education institutions in Europe.

ISEG is located in downtown Lisbon, a vibrant, multi-cultural, cosmopolitan, and sunny European city.

ISEG is a School of the Universi-

dade de Lisboa, a leading univer-

sity as recognized by the selective

Shanghai ranking (ARWU).

05.

03.

ISEG's high quality research centres ISEG has a large, diversified, global are engaged in a diverse array of international research projects.

network of talented alumni.

ISEG students are highly sought after by top employers in government, private industry, and higher education around the world.

08.

case studies, best dissertation Goals (SDGs) for 2030. and research output, and applied

09.

06.

awards and recognition for best Nation's Sustainable Development

10.

07.

ISEG' students and faculty win ISEG is committed to the United ISEG students benefit from a collegiate and open-minded atmosphere with many opportunities to interact with their peers and with



PhD in Applied Mathematics for Economics and Management

The PhD Programme in MAEG (Applied Mathematics for The research topics are the following: Economics and Management) is designed to meet the needs of those who wish to enhance their knowledge of mathematical methods and techniques in order to make original contributions in a particular field or to develop and implement solutions for problems in the areas of Economics and Management.

The entry requirements are a MSc or BSc degree (with a curriculum of four years or more) in Mathematics, Statistics, Economics, Finance, Management, Physics or Engineering. The degree syllabus and the grade obtained must provide evidence that the applicant has a strong background in Mathematics. Applicants who have not yet completed their degree may be accepted conditionally if they expect to do so before the start of the programme. Applicants who do not hold any of the degrees listed above may also be eligible for admission, provided that the curriculum is deemed suitable for the programme.

- Actuarial Science:
- Dynamical Systems;
- Financial Econometrics:
- Financial Mathematics:
- Macro and Micro-econometrics;
- Mathematical Analysis;
- Operational Research;
- Statistics:
- Time Series.

The PhD Programme takes three years to complete. The first year is devoted to coursework, and includes the preparation, presentation and viva voce defence of the thesis research project by the student before an examination panel. Please note that if if any non-Portuguese speakers are enrolled for the Programme, then lectures will be taught in English. The next two years are dedicated to research, leading to the design, writing and defence of an original dissertation in an area of Applied Mathematics for Economics and Management.

Taught in English

Scientific Committee

M. Teresa Chaves De Almeida (Coordinator) Full Professor

Filipe Serra De Oliveira Senior Associate Professor

Nuno Sobreira **Assistant Professor** This programme prepares students to carry out research work worthy of publication in scientific journals with a peer-review system.

It aims to develop the skills required to devise and implement new mathematical methods that can be used to tackle problems in the areas of Economics and Management.



Carlos Martins **Director of Create Business LDA.**

I believe Quantitative methods, and in particular Operational Research, can provide extremely valuable management decision systems for any organization. Pursuing a new direction in my professional career I decided to return to ISEG and enrol in the MAEG PhD programme looking to enrich and develop my skills in that scientific field. My objective was fully met. From the excellence lecturing faculty, supervisors, teaching and research resources through the material and administrative supporting conditions, the MAEG PhD ISEG programme delivered everything I was expecting. I strongly recommend it to anyone interested."



Liliana Pereira **Visitant Assistant Professor** at the Higher Professional Technical School of the Polytechnic Institute of Cávado and Ave

The MAEG PhD programme was an extremely enriching experience in personal, academic and professional terms. As I have an academic background in Mathematics and Statistics, studying for this PhD programme enabled me to explore a new, more applied area of research, developing knowledge and methodologies in an area as all-important as Finance. It is worth mentioning the quality of teaching and supervision provided by faculty throughout the programme, the environment for sharing experiences and knowledge, the motivation to participate in seminars and conferences, resulted in installing in all of us a critical spirit and constant questioning, which enabled us to grow as researchers and academics. It was a challenge that will certainly mark the rest of my life."



Faculty and **Subject Areas**

Alexandra Moura

PhD Politecnico di Milano, Italy Numerical Analysis, Statistics, and Actuarial Sciences

Alfredo Egídio dos Reis

PhD Heriot-Wa University, Edinburgh, UK, Actuarial Science

Amélia Bastos

PhD ISEG. Universidade de Lisboa. Economics and Statistics

Ana Margarida Neto

PhD Faculdade de Ciências, Universidade de Lisboa. Mathematics - Algebra

Artur da Silva Lopes

PhD ISEG. Universidade de Lisboa. Macroeconometrics

Carlos Oliveira

PhD Instituto Superior Técnico, Universidade de Lisboa, Stochastic Optimisation

Esmeralda Arranhado Ramalho

PhD University of Bristol, UK, Econometrics. Microeconometrics

Fernando Gonçalves

PhD University of Edinburgh, UK, Mathematical Finance and Numerical Analysis

Filipa Duarte de Carvalho

PhD ISEG, Universidade de Lisboa, Operational Research

Filipe Serra de Oliveira

PhD Université Paris-Orsay, France Partial Differential Equations

Graça Leão Fernandes

PhD ISEG, Universidade de Lisboa, Economics of Education

Isabel Proença

PhD Université Catholique de Louvain, Belgium, Applied Micro-econometrics and Panel Data

João Andrade e Silva

PhD ISEG. Universidade de Lisboa. Actuarial Science

João Guerra

PhD Universidad de Barcelona, Spain, Stochastic Analysis and Mathematical Finance

João Janela

PhD Instituto Superior Técnico, Universidade de Lisboa. Numerical Analysis

João Lopes Dias

PhD Cambridge University, UK, Dynamical Systems

João Nicolau

PhD ISEG. Universidade de Lisboa. Financial Econometrics

Jorge Caiado

PhD ISEG, Universidade de Lisboa, Econometrics and Forecasting

José Passos

PhD University of Bristol, UK, Micro-econometrics

José Pedro Gaivão

PhD University of Warwick, UK, Dynamical Systems

Leonor Santiago Pinto

PhD ISEG, Universidade de Lisboa, Operational Research

Lígia Amado

PhD ISEG, Universidade de Lisboa, Operational Research

Manuel Castro Guerra

PhD Universidade de Aveiro, Optimisation and Control Theory

Margarida Moz

PhD ISEG, Universidade de Lisboa, Operational Research

Margarida Vaz Pato

PhD Faculdade de Ciências, Universidade de Lisboa, Operational Research

Maria Cândida Mourão

PhD ISEG. Universidade de Lisboa. Operational Research

Maria de Fátima Fabião

PhD ISEG, Universidade de Lisboa, Mathematical Finance and Differential Equations

Maria Do Rosário Grossinho

PhD Faculdade de Ciências. Universidade de Lisboa. Mathematical Finance and Differential Equations

Maria Teresa Almeida

PhD London School of Economics, University of London, UK, Operational Research

Nicolea Rosati

PhD Università di Padova, Italy, Econometrics and Panel Data

Nuno Crato

PhD University of Delaware, USA, Econometrics and Time Series

Nuno Sobreira

PhD Universidade Nova de Lisboa. **Econometrics and Time Series**

Onofre Simões

PhD ISEG. Universidade de Lisboa. Actuarial Sciences

Pierre Hoonhout

PhD University College London, UK Econometrics and Panel Data

Raul Brás

PhD ISEG. Universidade de Lisboa. Operational Research

PhD Duke University, USA, Statistics

Telmo Peixe

PhD Faculdade de Ciências. Universidade de Lisboa, Dynamical Systems

Details and Study Plan

Schedule:

Start Date:

Evening Lectures

September

Participating Centres:

APPLIED MATHEMATICS (CEMAPRE), ECONOMICS (UECE). **Tuition Fees:**

€3.000 - 1st Year:

€2,000 - 2nd - 3rd Years; €1,000 - 4th - 6th Years

	Course Units	Professor	Credits	Semester
	Advanced Topics of Econometrics*	Pierre Hoonhout	10.0	1
	Advanced Topics of Statistics*	Rui Paulo	10.0	1
	Analysis and Optimisation*	Manuel Castro Guerra	10.0	1
YEAR1	Computational Mathematics*	João Janela	10.0	1
	Elective	-	6.0	1
	Seminar I	Teresa Chaves de Almeida	4.0	1
	Elective	-	6.0	2
	Preparation of the Thesis Project	Teresa Chaves de Almeida	24.0	2

^{*}The Scientific Committee of the PhD chooses two out of the four course units for each student

YEAR 2	Course Units	Professor	Credits	Semester
	Thesis (Research Seminar)	-	60.0	-

YEAR 3	Course Units	Professor	Credits	Semester
	Thesis (Research Seminar)	-	60.0	-

	Course Units	Professor
	Advanced Risk Theory	Alfredo Egídio Dos Reis
	Financial Econometrics	João Nicolau
Floativos	Macroeconometrics	Artur Da Silva Lopes
Electives	Mathematical Methods for Finance	João Guerra
	Operational Research	Teresa Chaves De Almeida
	Panel Data	Isabel Proença
	Time Series Analysis and Forecasting	Jorge Caiado



Funding Opportunities at ISEG

PhD Scholarships

Applicants for the School's PhDs can apply for a variety of scholarships, namely FCT scholarships (granted by FCT or by ISEG research centres) and, in some cases, ULisboa scholarships. The criteria, rules and regulations for applying for scholarships are detailed on our website.

GTA Programme

The GTA (Graduate Teaching Assistants) Programme recruits every year a number of PhD students to teach and grade in the undergraduate or masters' programmes at ISEG. A good opportunity for a first contact with teaching and also to help finance the PhD programme tuition fees. For further information, contact the PhD coordinator.

Research Centres

In some cases, PhD students can be enrolled in projects hosted by the research centres or be supported by them. For further information, contact the PhD coordinator.



Rankings:







Member:











Accreditations and Partnerships:

















ISEG's Campus is Certified COVID SAFE







Rua do Quelhas 6 1200-781 LISBOA

iseg.ulisboa.pt phds@iseg.ulisboa.pt

OPEN MINDS. GRAB THE FUTURE.