Study Plan

School: Institute for Research and Advanced Training
Degree: Doctorate
Course: Management (cód. 322)

Alternative Plan Tutorial Plan

1st Year - 1st Semester
Alternative Plan Tutorial Plan

Component code	Name	Scientific Area Field	ECTS	Duration	Hours
GES09795D	Development and Discussion of the Thesis Project	Management	30	Semester	780

1st Year - 2nd Semester
Alternative Plan Tutorial Plan

Component code	Name	Scientific Area Field	ECTS	Duration	Hours
Thesis					
Group of Free Options					

2nd Year - 3rd Semester
Alternative Plan Tutorial Plan

Component code	Name	Scientific Area Field	ECTS	Duration	Hours
Thesis					

2nd Year - 4th Semester
Alternative Plan Tutorial Plan

Component code	Name	Scientific Area Field	ECTS	Duration	Hours
Thesis					

3rd Year - 5th Semester
Alternative Plan Tutorial Plan

Component code	Name	Scientific Area Field	ECTS	Duration	Hours
GES09794D	Research Seminar I	Management	5	Year	130
Thesis					

3rd Year - 6th Semester
Alternative Plan Tutorial Plan

Component code	Name	Scientific Area Field	ECTS	Duration	Hours
Thesis					

4th Year - 7th Semester
Alternative Plan Tutorial Plan

Component code	Name	Scientific Area Field	ECTS	Duration	Hours
GES09796D	Research Seminar II	Management	5	Year	130
Thesis					

4th Year - 8th Semester
Alternative Plan Tutorial Plan

Component code	Name	Scientific Area Field	ECTS	Duration	Hours
Thesis					

Alternative Plan PhD Course

1st Year - 1st Semester
Alternative Plan PhD Course

Component code	Name	Scientific Area Field	ECTS	Duration	Hours
GES09597D	Research Methods I	Management	8	Semester	210
GES09598D	Analytical Models	Management	8	Semester	210

Group of Options

Component code	Name	Scientific Area Field	ECTS	Duration	Hours
GES09600D	Incentives and Contracts	Management	8	Semester	210
GES07986D	Decison Models	Management	8	Semester	208
ECN07070D	Econometrics	Economy	7.5	Semester	193
MAT07988D	Methods of Multivariate Statistics	Mathematics	6	Trimester	161
GES08001D	Topics in Corporate Strategy	Management	8	Trimester	203
GES07979D	Entrepreneuship and Innovation	Management	8	Semester	208
GES07997D	Topics in Organizational Behavior	Management	8	Trimester	203
GES07995D	Advanced Topics in Marketing	Management	8	Semester	208
MAT07546D	Advanced Financial Calculus	Mathematics	7.5	Semester	195
GES07999D	Topics in Corporate Finance	Management	8	Semester	208
GES08003D	Topics in Investiments	Management	8	Semester	208
GES09601D	Topics in Organization and Information Systems	Management	8	Semester	208
GES09602D	Advanced Topics in Accounting	Management	8	Semester	210
GES09603D	Topics in Logistics and Operations Management	Management	8	Semester	210
GES10991D	Prices and Markets	Management	8	Semester	210

Group of Free Options

1st Year - 2nd Semester
Alternative Plan PhD Course

Component code	Name	Scientific Area Field	ECTS	Duration	Hours
ECN09599D	Research Methods II	Management	8	Semester	210

1st Year - 2nd Semester
Alternative Plan PhD Course

Component code	Name	Scientific Area Field	ECTS	Duration	Hours
Group of Options					

Component code	Name	Scientific Area Field	ECTS	Duration	Hours
GES09600D	Incentives and Contracts	Management	8	Semester	210
GES07986D	Decison Models	Management	8	Semester	208
ECN07070D	Econometrics	Economy	7.5	Semester	193
MAT07988D	Methods of Multivariate Statistics	Mathematics	6	Trimester	161
GES08001D	Topics in Corporate Strategy	Management	8	Trimester	203
GES07979D	Entrepreneuship and Innovation	Management	8	Semester	208
GES07997D	Topics in Organizational Behavior	Management	8	Trimester	203
GES07995D	Advanced Topics in Marketing	Management	8	Semester	208
MAT07546D	Advanced Financial Calculus	Mathematics	7.5	Semester	195
GES07999D	Topics in Corporate Finance	Management	8	Semester	208
GES08003D	Topics in Investiments	Management	8	Semester	208
GES09601D	Topics in Organization and Information Systems	Management	8	Semester	208
GES09602D	Advanced Topics in Accounting	Management	8	Semester	210
GES09603D	Topics in Logistics and Operations Management	Management	8	Semester	210
GES10991D	Prices and Markets	Management	8	Semester	210

Group of Free Options

2nd Year - 3rd Semester
Alternative Plan PhD Course

Component code	Name	Scientific Area Field	ECTS	Duration	Hours
GES09795D	Development and Discussion of the Thesis Project	Management	30	Semester	780

2nd Year - 4th Semester
Alternative Plan PhD Course

Component code	Name	Scientific Area Field	ECTS	Duration	Hours
Thesis					

3rd Year - 5th Semester
Alternative Plan PhD Course

Component code	Name	Scientific Area Field	ECTS	Duration	Hours
GES09794D	Research Seminar I	Management	5	Year	130
Thesis					

3rd Year - 6th Semester
Alternative Plan PhD Course

Component code	Name	Scientific Area Field	ECTS	Duration	Hours
Thesis					

4th Year - 7th Semester
Alternative Plan PhD Course

Component code	Name	Scientific Area Field	ECTS	Duration	Hours
GES09796D	Research Seminar II	Management	5	Year	130
Thesis					

4th Year - 8th Semester
Alternative Plan PhD Course

Component code	Name	Scientific Area Field	ECTS	Duration	Hours
Thesis					

Conditions for obtaining the Degree:

*** TRANSLATE ME:

PLANO COM CURSO DE DOUTORAMENTO (Plano A):{\}newline

{\}newline

Para aprovação na componente curricular é necessário a aprovação (através de avaliação ou creditação) das seguintes unidades curriculares:

1º Ano

{\}newline

1º Semestre:{\}newline

2 UC obrigatórias num total de 16 Ects{\}newline

1 UC optativa num total de 8 ECTS{\}newline

Optativa Livre num total de 6 ECTS{\}newline

{\}newline

2º Semestre:{\}newline

1 UC obrigatórias num total de 8 Ects{\}newline

2 UC optativas num total de 16 Ects{\}newline

Optativa Livre num total de 6 ECTS{\}newline

{\}newline

{\}newline

Para obtenção do grau necessita de obter ainda aprovação a:

2º Ano{\}newline

{\}newline

3º Semestre:{\}newline

1 UC obrigatória num total de 30 ECTS

3º Ano{\}newline

{\}newline

5º Semestre:{\}newline

1 UC obrigatória num total de 5 ECTS

4º Ano{\}newline

{\}newline

{\}newline

7.º Semestre:{\}newline

1 UC obrigatória num total de 5 ECTS{\}newline

{\}newline

e aprovação nas provas públicas de defesa da Tese com inscrição na mesma a partir do 2º ano{\}newline

{\}newline

{\}newline

PLANO TUTORIAL (Plano B){\}newline

{\}newline

Para obtenção do grau necessita de obter aprovação em:

1º Semestre:

Uma uc obrigatória num total de 30 ects{\}newline

{\}newline

2º Semestre:{\}newline

- Optativas Livres (Créditos livres) num total de 16 ECTS{\}newline

{\}newline

5º Semestre:{\}newline

1 UC obrigatória num total de 5 ECTS{\}newline

{\}newline

7º Semestre:{\}newline

1 UC obrigatória num total de 5 ECTS{\}newline

{\}newline

e aprovação nas provas públicas de defesa da Tese com inscrição na mesma a partir do 1º ano

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Program Contents

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Development and Discussion of the Thesis Project (GES09795D)

This item is not relevant for this curricular unit. However, it is important to mention that students follow a guide in the preparation of the thesis project that is inspired by the forms used in the FCT PhD grant applications. The form imposes word limits in each of the fields and forces the student to be very succinct and direct. The fields are as follows:{\}newline
Abstract (max. 150 words) Literature review (max. 500 words) Objectives (max. 300 words); Detailed description (max. 1000 words) and References (maximum 30). The guide also draws attention to the fact that the literature review should be a critical review and that the detailed description should indicate the contributions of project to the literature, the methodologies used and the expected results of the project.

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Research Seminar I (GES09794D)

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Research Seminar II (GES09796D)

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Research Methods I (GES09597D)

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Analytical Models (GES09598D)

1. Introduction
2. Individual decision making under uncertainty{\}newline
(a) Elements in a decision problem{\}newline
(b) Decision criteria without probabilities{\}newline
(c) Maximization of the Expected monetary value and expected utility theory{\}newline
(d) Behavioral aspects in decision making{\}newline
(e) Utility extraction methods{\}newline
(f) Sequential decision making{\}newline
(g) Software for decision making under uncertainty
3. Linear Programming models{\}newline
(a) Formalization {\}newline
(b) The logic of the Simplex algorithm{\}newline
(d) Sensitivity analysis{\}newline
(e) Solver and interpretation of the results{\}newline

4. Optimization{\}newline
(a) Derivatives{\}newline
(b) The chain rule and the implicit function theorem {\}newline
(c) Optimization{\}newline
(d) Constrained optimization with equality constraints{\}newline
(e) Constrained optimization with inequality constraints
5. Decision in situations of strategic interdependence{\}newline
(a) Formalization of a game{\}newline
(b) Static games of complete information{\}newline
(c) Dynamic games of complete information{\}newline
(d) Static games of incomplete information{\}newline
(e) Dynamic games of incomplete information

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Incentives and Contracts (GES09600D)

1. Incentives in Management and Economics
2. The moral hazard problem
3. The adverse selection problem
4. The problem of hidden information
5. Signaling to improve contracting
6. Dynamic principal-agent models
7. Limitations and extensions of the principal-agent model

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Decison Models (GES07986D)

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Econometrics (ECN07070D)

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Methods of Multivariate Statistics (MAT07988D)

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Topics in Corporate Strategy (GES08001D)

1 - Theory and Strategic Practice: from intentionality to emergency
2 - Concepts, Tools, Approaches and Application Contexts: From a market-based view to a resource-based view
3 - Strategic Think and Strategic Action for Competent Management: Competitive, Coopetitive, Innovation and Internationalization Dynamics
4 - The Global Aproach to Strategic Planning: From classic to modern
5 - Innovation, strategy and complexity;
6 - The present and future of research in strategy.

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Entrepreneuship and Innovation (GES07979D)

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Topics in Organizational Behavior (GES07997D)

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Advanced Topics in Marketing (GES07995D)

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Advanced Financial Calculus (MAT07546D)

Section 1. Introduction to Stochastic Differential Equations: Wiener process and diffusion processes. Stochastic integrals. Sketched construction of the Itô integral. Use of Itô theorem. Reference to the Stratonovich integral. Existence and uniqueness theorems for stochastic differential equations (SDEs). Strong and weak solutions. Dynkin and Feynman-Kac formulas. Boundary classification for unidimensional diffusion processes. First passage times. Stationary solutions of unidimensional SDEs. Ergodicity. Monte Carlos simulations of SDEs.Section 2. Financial Applications of Stochastic Differential Equations: Black-Scholes model for stocks: detailed study, including simulation, estimation and prediction. Models for interest rates and exchange rates. Interpretation of Girsanov theorem. European and American call options and derivation of Black-Scholes formula. Cox-Ross-Rubinstein model. European put options. Generalization of the methodology to general models with several financial assets.

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Topics in Corporate Finance (GES07999D)

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Topics in Investiments (GES08003D)

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Topics in Organization and Information Systems (GES09601D)

Module 1 - Basic concepts. Information Society and Knowledge Society.
Module 2 - Strategy, IS/ICT and Management Model.
Module 3 - Activities of Management of Information Systems.
Module 4 - New developments on Information Systems.

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Advanced Topics in Accounting (GES09602D)

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Topics in Logistics and Operations Management (GES09603D)

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Prices and Markets (GES10991D)

1. Markets and Market Structure
Revision of the perfect competition and monopoly models
Monopolistic Competition
Market definition and concentration measures

2. Topics on Monopoly theory
Price discrimination
Multiproduct monopoly
Quality and Advertising

3. Oligopoly Models
Cournot Model
Bertrand Model
Stackelberg Model
Solutions to Bertrand paradox
Price competition with capacity constraints

4. Product Differentiation
Horizontal differentiation models
Vertical differentiation models
Switching costs and imperfect information
Advertising

5. Repeated Interaction and Colusion
Non sustainability of collusion in the short-run
Conditions for collusion to be sustainable
Collusion with demand fluctuations
Collusion with non-observable prices

6. Strategic behaviour, entry, exit and acommodation
Blocked entry, detered entry and acommodated entry
Taxonomy of firm strategies
Strategic behaviour and incomplete information

Research Methods II (ECN09599D)