Study Plan

School: Institute for Advanced Studies and Research
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
GES9795D	Development and Discussion of the Thesis Project	Management	30	Semester	34

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
GES9794D	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
GES9796D	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
GES9597D	Research Methods I	Management	8	Semester	210
GES9598D	Analytical Models	Management	8	Semester	210

Group of Options

Component code	Name	Scientific Area Field	ECTS	Duration	Hours
GES9600D	Incentives and Contracts	Management	8	Semester	210
GES7986D	Decison Models	Management	8	Semester	208
ECN7070D	Econometrics	Economy	7.5	Semester	193
MAT7988D	Methods of Multivariate Statistics	Mathematics	6	Trimester	161
GES8001D	Topics in Corporate Strategy	Management	8	Trimester	203
GES7979D	Entrepreneuship and Innovation	Management	8	Semester	208
GES7997D	Topics in Organizational Behavior	Management	8	Trimester	203
GES7995D	Advanced Topics in Marketing	Management	8	Semester	208
MAT7546D	Advanced Financial Calculus	Mathematics	7.5	Semester	195
GES7999D	Topics in Corporate Finance	Management	8	Semester	208
GES8003D	Topics in Investiments	Management	8	Semester	208
GES9601D	Topics in Organization and Information Systems	Management	8	Semester	208
GES9602D	Advanced Topics in Accounting	Management	8	Semester	210
GES9603D	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
ECN9599D	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
GES9600D	Incentives and Contracts	Management	8	Semester	210
GES7986D	Decison Models	Management	8	Semester	208
ECN7070D	Econometrics	Economy	7.5	Semester	193
MAT7988D	Methods of Multivariate Statistics	Mathematics	6	Trimester	161
GES8001D	Topics in Corporate Strategy	Management	8	Trimester	203
GES7979D	Entrepreneuship and Innovation	Management	8	Semester	208
GES7997D	Topics in Organizational Behavior	Management	8	Trimester	203
GES7995D	Advanced Topics in Marketing	Management	8	Semester	208
MAT7546D	Advanced Financial Calculus	Mathematics	7.5	Semester	195
GES7999D	Topics in Corporate Finance	Management	8	Semester	208
GES8003D	Topics in Investiments	Management	8	Semester	208
GES9601D	Topics in Organization and Information Systems	Management	8	Semester	208
GES9602D	Advanced Topics in Accounting	Management	8	Semester	210
GES9603D	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
GES9795D	Development and Discussion of the Thesis Project	Management	30	Semester	34

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
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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
GES9796D	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

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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

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PLANO TUTORIAL (Plano B){\}newline

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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

Back

Development and Discussion of the Thesis Project (GES9795D)

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:
Abstract (max. 250 words) Literature review (max. 750 words) Objectives (max. 500 words); Detailed description (max. 1500 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.

Back

Research Seminar I (GES9794D)

This item is not relevant for this curricular unit.

Back

Research Seminar II (GES9796D)

This item is not relevant for this curricular unit.

Back

Research Methods I (GES9597D)

Qualitative research methods
- Qualitative research designs
- Interviews
- Focus groups
- Documental research
- Participant observation
- Qualitative data analysis
- Using Nvivo

Quantitative research methods
- Quantitative research designs
- Structured interviews and questionnaires
- Structured observation
- Secondary data analysis
- Introduction to measurement theory
- Development and validation of psychometric scales: reliability analysis and exploratory and confirmatory factor analysis

Multivariate data analysis
- cluster and discriminant analysis

Back

Analytical Models (GES9598D)

1. Introduction

2. Optimization
(a) Derivatives
(b) The chain rule and the implicit function theorem
(c) Optimization
(d) Constrained optimization with equality constraints
(e) Constrained optimization with inequality constraints

3. Linear Programming models
(a) Formalization
(b) The Simplex algorithm
(d) Sensitivity analysis and dual interpretation

4. Individual decision making under uncertainty
(a) Elements in a decision problem
(b) Decision criteria without probabilities
(c) Maximization of the Expected value and expected utility theory
(d) Behavioral aspects in decision making
(e) Utility extraction methods
(f) Sequential decision making

5. Decision in situations of strategic interdependence
(a) Formalization of a game
(b) Static games of complete information
(c) Dynamic games of complete information
(d) Static games of incomplete information
(e) Dynamic games of incomplete information

Back

Incentives and Contracts (GES9600D)

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

Back

Decison Models (GES7986D)

1 - Introduction
2 - Risk, Uncertainty and Ambiguity and Rational Decisions
3 - Probabilistic Reasoning and Known and Unknown Preferences
4 - Making Simple Decisions
5 - Making Complex Decisions
6 - Learning from Observations
7 - Learning Methods

Back

Econometrics (ECN7070D)

I. Topics on Linear Regression: Estimation and Specification Analysis; Endogenous Regressors; Instrumental Variables; Generalized Method of Moments.
II. Discrete and Limited Dependent Variable Models: Discrete Choice Models; Count Data Models; Fractional Regression Models; Tobit Models; Sample Selection Models.
III. Panel Data Models: Fixed and Random Effects Models; Specification Analysis.
IV. Time Series Models: ARMA Processes; Nonstationarity Series; Unit roots; Cointegration; Vector Autoregressive Models; ARCH models.

Back

Methods of Multivariate Statistics (MAT7988D)

1. Introduction. Overview of Multivariate Statistical Methods. Dependence (DT) and Interdependence Techniques (IT). Extentions.
2. Preliminary and Exploratory Multivariate Data Analysis. Cluster Analysis
3. Multiple Regression, Path Analysis and Factorial Analysis. Exploratory versus Confirmatory Factorial Analysis
4. Introduction to Structural Equation Modeling
5. Advanced topics in Multivariate Statistics: Data Mining, Tree-based Classification,
Partial Least Squares (PLS), Stochastic Frontier Models- Efficiency and Productivity Analysis, Generalized Linear Models, Multi-level Models, and Discriminant Analysis.

Back

Topics in Corporate Strategy (GES8001D)

1 - Value creation and unique resource;
2 - Strategic competences and incompetences;
3 - "Coopetitives"dynamics and internationalization;
4 - Paradoxes of strategic management;
5 - Innovation, strategy and complexity;
6 - Strategic in action: organizational performance and strategic management;
7 - Strategy: the present and future of research in strategy.

Back

Entrepreneuship and Innovation (GES7979D)

Part I
1.1 Entrepreneurship Characterization
1.2 Comparison and Analysis (Macro) of Entrepreneurship
1.3 The entrepreneurial process
1.4 Intra-entrepreneurship or corporate entrepreneurship
1.5 Understanding innovation and connection with entrepreneurship

Part II
2.1 Dynamics of Innovation: Technology as innovation agent
2.2 Dynamics of Innovation: The innovator´s dilemma
2.3 Dynamics of innovation: Dominant design
2.4 Dynamics of innovation: An integrated model
2.5 Diffusion of Innovation

Back

Topics in Organizational Behavior (GES7997D)

Module 1 - Trends in Organizational Behavior models - Confluence of Perspectives and Models
Module 2 - Structure, Culture and Organizational Leadership - Relationships, Interactions and Contradictions
Module 3 - Social and Organizational Impacts of Technology - From Taylorism to Modern Post-Taylorism
Module 4 - Innovation, Creativity and Organizational Change - The Responsibility to Reinvent Organizations

Back

Advanced Topics in Marketing (GES7995D)

Module 1- Green Marketing
Module 2 - Neuromarketing
Module 3 - Social Networking Marketing
Module 4 - Social Marketing
Module 5 - Marketing on-line e Mobile Marketing
Module 6 - Experiential Marketing

Back

Advanced Financial Calculus (MAT7546D)

1. Introduction to Stochastic Differential Equations and applications:

1.1 Wiener Process and diffusions.

1.2 Martingales, adapted processes.

1.3 Stochastic integrals.

1.4 Sketch of the construction of the Itô integral, and use of Itô's Theorem.

1.5 Existence and Uniqueness theorem for Stochastic Differential Equations.

1.6 Strong and weak solutions

1.7 Formula of Feynman-Kac.

2. Financial Applications of Stochastic Differential Equations

2.1 Model of Cox-Ross-Rubinstein.

2.2 European e american options of buying and selling. Generalization of the methodology to other financial assets.

2.3 Statement and interpretation of Girsanov?s theorem, transition to the risk-neutral probability.

2.4 Derivation of the Black-Scholes formulas.

2.5 The model of Black-Scholes at the stock exchange, implicit volatility.

Back

Topics in Corporate Finance (GES7999D)

Understand the role of financial theory and evidence.
Risk, return and Markets Efficiency.
Advanced topics about capital budgeting and investment decision.
Informational asymmetries and capital structure.
Dividend policy: empirical evidence and applications.

Back

Topics in Investiments (GES8003D)

1. Basic notions of stochastic calculus

2. Basic notions of arbitrage based valuation applied to dynamic financial models

a) Pricing e Hedging
b) Fundamental theorem of asset valuation
c) Derivatives valuation (European and American type)
d) Cox, Ross, and Rubinstein binomial model (discrete time)
d) Deduction of Black-Scholes formula
d) Complete versus incomplete markets

3. Interest rate models

a) Models for short term interest rates
b) Models for the Forward interest rate

4. Optimization problems

a) Portfolio optimization
b) Risk minimization
c) Valuation in incomplete markets

Back

Topics in Organization and Information Systems (GES9601D)

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.

Back

Advanced Topics in Accounting (GES9602D)

Issues on Financial Accounting
1. Conceptual framework
2. Financial reporting
3. Research methods in financial accounting
4. Emergent issues on financial accounting
Issues on Management Accounting
5. Conceptual framework
6. Management accounting research
7. New developments in management accounting

Back

Topics in Logistics and Operations Management (GES9603D)

Module 1 – Logistics and supply chain management
- Logistics and management of logistics chains
- Logistics chains strategies
- Decisions under risk and uncertainty in logistics chains

Module 2 – Flows management in logistics chains
- Aggregated planning and transports management
- Inventory management and demand forecast
- Information management in logistics chains
- Marketing and e-commerce in logistics chains management

Module 3 – Planning logistics chains
- The design of new logistics chains
- Schedule of logistics projects and networks
- Schedule of logistics services

Back

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

Back

Research Methods II (ECN9599D)

1. Sampling methods
2. Estimation and statistical inference
3. Linear Regression Model: estimation; specification, models with qualitative explanatory variables; endogeneity.
4. Discrete and limited variable models.
5. Introduction to time series models.
6. Introduction to panel data models