

ECTS Information Package: Degree Programme

Bachelor's Degree in

LAND MANAGEMENT

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A - General Description

Programme Title - Gestão do Território

Qualification awarded - Bachelor's Degree in Land Management

Level of qualification - First-Cycle degree, ISCED Level 5, EQF Level 6

Specific admission requirements

General

In order to be eligible to this bachelor's degree, students must hold the high-school diploma or legally equivalent qualification. Application can also be made through the following special entry routes:

- Students coming from the Portuguese education system through re-admission, degree change and transfer schemes;
- Holders of a Foundation Course Diploma (CET);
- Adults aged more than 23 who have passed tailor-made examinations intended to assess their ability to pursue higher education studies;
- Holders of Intermediary or Graduate degree diplomas;
- Students coming from foreign higher education.

Specific

Applicants who have passed one of the following national access examinations are accepted for direct entry in the bachelor's degree in Land Management: (11) History or (09) Geography or (04) Economics.

Without prejudice to the general entry requirements and based on IPT's internal regulations, the following applicants may be admitted to the bachelor's degree in Land Management, but subject to admission quotas:

- applicants coming from the following regions: Castelo Branco, Leiria, Portalegre and Santarém (50%);

- the students who have completed the CET program in Geographic Information Systems offered by the School of Technology Tomar (ESTT).

Specific arrangements for recognition of prior learning (formal, non-formal and informal)

General

Procedures on the recognition of credits gained in previous learning are established in the regulations for the Recognition and Validation of Qualifications and Skills of ESTT-IPT available at <http://webmanager.ipt.pt/mgallery/default.asp?obj=4536>

Specific

Not applicable

Qualification requirements and regulations:

The course curriculum totals 180 ECTS credits distributed throughout 6 curricular semesters (3 years), each with 40 weeks of full-time study (20 weeks per semester). 1510 Total average study hours per year and 690 contact hours per year in average.

The ECTS credits are distributed per scientific area as follows:

- Social and Human Sciences: 62 ECTS credits,
- Exact and Natural Sciences: 52 ECTS credits,
- Technological Sciences: 28 ECTS credits,
- Other areas (optional modules): 31 ECTS credits
- Curricular Internship/Seminar: 7 ECTS credits

In the first and second year, in addition to the 5 compulsory semester modules, there are 2 annual modules. In the third year, there are only 5 modules per semester including the curricular internship to be undertaken in a public or private organisation under the terms of a written agreement signed by both institutions.

Profile of the program:

The study program aims at providing the students with a sound technical training that will allow them to contribute to land management at local, regional, national and European level keeping resource sustainability in mind.

This program provides training in a wide range of areas such as land planning and development; geographic information technologies; cultural and natural heritage; environment and economy.

Key learning outcomes:

Holders of this bachelor's degree in Land Management are expected to acquire specific skills that will allow them to design, implement and follow-up:

- Land management plans (special, regional, municipal and strategic);
- Inventories of land resources (thematic and risks);
- Environmental and heritage impact surveys;

The program will develop skills in the monitoring of land management programs, land resources management and articulation between the territorial, cultural and economic spheres.

Occupational profiles of graduates with examples:

Career prospects for graduates in Land Management include working in local, central and regional bodies or in public or private organisations engaged in land management and development.

Graduates from this study program are prepared to perform as:

- Land Management Technician
- Regional and Town Planning Technician
- GIS Technician

Access to further studies:

The licenciado degree allows access to postgraduate programs according to applicable admission regulations established for those programmes. Within the ESTT, it gives access to the Master's degree in Geographic Information Systems, Land Planning and Management. (IPT/ESTT and IPCB/ESA consortium).

Course structure diagram with credits

Course Title	Year	Semester	Credits
Territory: Geology, Biology, Ecology	1	A	15
Applied Mathematics	1	S1	4
History of the Portuguese Territory	1	S1	4
Land Planning and Development I	1	S1	5
Option I	1	S1	5
op: Option: Heritage Information Management (*)	1	S1	5
Planning Theory and Method	1	S1	4
Cartography and Topography	1	S2	6
Land Planning and Development II	1	S2	5
Option II	1	S2	5
op: Option: Inventory and Cataloguing (*)	1	S2	5
Representation Techniques	1	S2	4
Statistics	1	S2	3
Geographic Information Systems	2	A	14
Computer-Aided Design	2	S1	4
Economics I (Micro)	2	S1	4
Geography	2	S1	6
Geomorphology	2	S1	6
Option III	2	S1	3
op: Option: Environment and Landscape (*)	2	S1	3
Applied Geography and Urban Sociology	2	S2	6
Economics II (Macro)	2	S2	4
Laboratory and In-Office Techniques	2	S2	4
Option IV	2	S2	3
op: Option: WebSIG (*)	2	S2	3
Project Management and Analysis	2	S2	6
Biogeography and Human Ecology	3	S1	6
Environmental Risks and Impact Assessment	3	S1	9
Option V: Introduction to Scientific Research	3	S1	5

(*) This course may not be available in certain academic years. Please confirm availability with the Erasmus coordinator.

Course structure diagram with credits (cont.)

Course Title	Year	Semester	Credits
op: Option: Introduction to Meteorology and Climate (*)	3	S1	5
Planning and Management of Protected Areas	3	S1	5
Project	3	S1	5
Option VI:	3	S2	5
op: Option: Tourism, Territory and Touring (*)	3	S2	5
Regional and Municipal Planning and Monitoring	3	S2	6
Regional Policy and Development	3	S2	6
Seminar/Internship	3	S2	7
op: Internship/Placement (Optional) (*)	3	S2	7
op: Seminar (Optional) (*)	3	S2	7
Urbanism and Communications	3	S2	6

(*) This course may not be available in certain academic years. Please confirm availability with the Erasmus coordinator.

Examination regulations, assessment and grading

General

General assessment rules are in line with the Portuguese law and described in the Academic Regulations of ESTT-IPT available at <http://webmanager.ipt.pt/mgallery/default.asp?obj=4539>.

The licenciado degree is awarded a final grade between 10 and 20 within a 0/20 scale as well as its equivalent in the European grading scale.

Specific

In the third year, students must undertake a Practice Period - Internship (7 ECTS credits) which will be the subject of a final report assessed by an examination panel specially appointed for that purpose.

Graduation requirements:

Completion of this course of studies requires successful completion of all the specified modules so as to gain a total of 180 accumulated ECTS credits, of which 149 are compulsory and 31 are to be selected among optional modules available at IPT in accordance with general and specific assessment regulations.

Mode of study:

Full- or part-time.

Program director or equivalente

Director: Rita Ribeiro de Carvalho Ferreira Anastácio

Erasmus coordinator: Luis Filipe Neves Carreira dos Santos

ECTS coordinator: Pierluigi Rosina

B - Description of individual course units

Course unit title	Territory: Geology, Biology, Ecology
Course unit code	98951
Type of course unit	Compulsory
Level of Course unit	First Cycle
Year of Study	First Year
Semester/Trimester when the course unit is delivered	Annual
Number of ECTS credits allocated	15
Name of Lecturer(s)	Pierluigi Rosina Luis Filipe Neves Carreira dos Santos
Learning outcomes of the course unit	At the end of the term the students should have acquired methodological and technical skills in the subject matters: geology, zoology, botanics, genetics, molecular biology and microbiology.
Mode of delivery	Face-to-face
Prerequisites and co-requisites	Not applicable.
Recommended optional programme components	Not applicable.
Course contentes	Methodological foundations of Geology. Principles and methodology for the recognition of geological elements. Genesis and classification of minerals. Introduction to the exploitation of mineral resources and its environmental impact. The significance of geological phenomena in the environmental evolution.
Recommended or required Reading	- Decourt, .. e Paquet, .. (1987). <i>Geologia. Objectos e métodos.</i> Coimbra: Almedina - Campbell, ..(2005). <i>Biology.</i> . : . - Marcadante, ..(1999). <i>Biologia.</i> . : . - Burton, R.(2001). <i>Biologia através dos números.</i> . : .
Planned learning activities and teaching methods	Lectures and tutorials in the three subject components: geology, ecology and biology.
Assessment Methods and criteria	Continuous assessment: Written test (80%)+ essays(20%) Final assessment: Examination (100%)
Language of Instruction	Portuguese Mentoring in English
Work placement(s)	Not applicable.

B - Description of individual course units

Course unit title	Applied Mathematics
Course unit code	98953
Type of course unit	Compulsory
Level of Course unit	First Cycle
Year of Study	First Year
Semester/Trimester when the course unit is delivered	First Semester
Number of ECTS credits allocated	4
Name of Lecturer(s)	Luís Miguel Merca Fernandes
Learning outcomes of the course unit	At the end of the term the students should be able to interpret and formulate problems in Mathematical Analysis and Linear Algebra and should have obtained the mathematical skills that will allow them to extrapolate mathematical problems to economic and social realities.
Mode of delivery	Face-to-face
Prerequisites and co-requisites	Knowledge of algebraic calculus.
Recommended optional programme components	Not applicable.
Course contents	1. Revisions of Algebraic Calculus 2. Functions of a real variable 3. Differential calculus 4. Concepts of integral calculus 5. Matrices 6. Determinants.
Recommended or required Reading	<ul style="list-style-type: none"> - Barnett, R. e Byleen, K. e Ziegler, M. (2011). <i>Calculus for Mathematics for Business, Economics, Life Sciences and Social Sciences</i>. USA: Pearson Education - Edwards, B. e Hostetler, R. e Larson, R. (2006). <i>Cálculo</i>. (Vol. 1). Brasil: McGraw-Hill - Strang, G.(2009). <i>Linear Algebra and its Applications</i>. USA: Wellesley Cambridge Press - Ferreira Amaral, I. e Manuel, A. (2008). <i>Álgebra Linear: Matrizes e Determinantes</i>. (Vol. 1). Portugal: Edições Sílabo
Planned learning activities and teaching methods	Lectures and tutorials.
Assessment Methods and criteria	The same methodology is used for both tests and examinations: 1 written closed-book test marked 0/20 comprising all the subject matters taught during the semester.
Language of Instruction	Portuguese
Work placement(s)	Not applicable.

B - Description of individual course units

Course unit title	History of the Portuguese Territory
Course unit code	98954
Type of course unit	Compulsory
Level of Course unit	First Cycle
Year of Study	First Year
Semester/Trimester when the course unit is delivered	First Semester
Number of ECTS credits allocated	4
Name of Lecturer(s)	Silvério Manuel Domingues Figueiredo
Learning outcomes of the course unit	At the end of the term the students should be familiarised with the landmarks of the history of Portuguese territory.
Mode of delivery	Face-to-face
Prerequisites and co-requisites	Not applicable.
Recommended optional programme components	Not applicable.
Course contents	1 – The Portuguese territory before Man 2 - From Prehistory to Arabian occupation 3 - The Christian Reconquest and the foundation of nationality 4 – The Second Dynasty an the Discoveries 5 – From globalisation to industrialialisation and the new urbanism 6 – The 19th century in Portugal 7 – The 20th century until 1974
Recommended or required Reading	- MEDINA, J.(2004). <i>História de Portugal: dos tempos pré-históricos aos nossos dias</i> . Lisboa: Ediclube - Saraiva, J.(1989). <i>História de portugal</i> . Lisboa: Alfa - Joaquim, S. <i>História de Portugal</i> . Lisboa: Ed. Verbo
Planned learning activities and teaching methods	Lectures.
Assessment Methods and criteria	Mid-term test (80%) Practical assignment (20%) Examination (100%)
Language of Instruction	Portuguese Mentoring in English
Work placement(s)	Not applicable.

B - Description of individual course units

Course unit title	Land Planning and Development I
Course unit code	98952
Type of course unit	Compulsory
Level of Course unit	First Cycle
Year of Study	First Year
Semester/Trimester when the course unit is delivered	First Semester
Number of ECTS credits allocated	5
Name of Lecturer(s)	Rita Ribeiro De Carvalho Ferreira Anastácio
Learning outcomes of the course unit	The students should understand the basic concepts of land planning, be familiar with the main instruments of land management, understand the issues and objectives at different scales of analysis and apply specific methodologies for territorial analysis and diagnosis.
Mode of delivery	Face-to-face
Prerequisites and co-requisites	Not applicable.
Recommended optional programme components	Not applicable.
Course contents	Planning principles and concepts Environmental variables in planning The Planning Process Planning levels Land Management tools; General legislation on territorial planning
Recommended or required Reading	- Lobo, M.(1999). <i>Planeamento Regional e Urbano</i> . Lisboa: Universidade Aberta - Partidário, M. <i>Introdução ao Ordenamento do Território</i> . Lisboa: Universidade Aberta - Fadigas, L.(2011). <i>Fundamentos Ambientais do Ordenamento do Território e da Paisagem</i> . Lisboa: Sílabo - Porto, M.(2008). <i>O ordenamento do território num mundo de exigência crescente</i> . Coimbra: Almedina
Planned learning activities and teaching methods	Lectures and practical classes supported by case study analysis.
Assessment Methods and criteria	Individual assignment. Presentation - 20% Team assignment. Report. Presentation - 30% Test/Exam (minimum score 8/20) - 50%
Language of Instruction	Portuguese Mentoring in English
Work placement(s)	Not applicable.

B - Description of individual course units

Course unit title	Option: Heritage Information Management (*)
Course unit code	989538
Type of course unit	Optional
Level of Course unit	First Cycle
Year of Study	First Year
Semester/Trimester when the course unit is delivered	First Semester
Number of ECTS credits allocated	5
Name of Lecturer(s)	Alexandra Águeda de Figueiredo
Learning outcomes of the course unit	On completion of this module the students should understand the concepts and procedures related with property management and recognise the technologies for analysing and managing heritage information.
Mode of delivery	Face-to-face
Prerequisites and co-requisites	Not applicable
Recommended optional programme components	Not applicable
Course contents	1. Concept of heritage: origins and evolution 2. International charts and conventions. Portuguese legislation. 3. International and national bodies in charge of heritage management and conservation 4. Heritage management 5. An introduction to information and heritage management 6. Implementation of databases.
Recommended or required Reading	-to be defined on the basis of the students choice of theme. .: . - VV, A.(1999). <i>Caminhos do Património</i> . Lisboa: Livros Horizonte - VV, A.(1998). <i>Centros históricos e conservación del patrimonio</i> . Madrid: Fundación Argentaria - VV, A.(2000). <i>Catalogación del Património Histórico</i> . Sevilha: Instituto Andaluz del Patrimonio Histórico
Planned learning activities and teaching methods	Lectures supported by case study analysis.
Assessment Methods and criteria	Two theoretical tests during the semester (20% of final mark) or final exam (40% of final mark. One practical project (60% of final mark).
Language of Instruction	Portuguese
Work placement(s)	

(*) This course may not be available in certain academic years. Please confirm availability with the Erasmus coordinator.

B - Description of individual course units

Course unit title	Planning Theory and Method
Course unit code	98955
Type of course unit	Compulsory
Level of Course unit	First Cycle
Year of Study	First Year
Semester/Trimester when the course unit is delivered	First Semester
Number of ECTS credits allocated	4
Name of Lecturer(s)	Sérgio Paulo Leal Nunes
Learning outcomes of the course unit	On completion of the module the students should be able to write and present academic papers. They should therefore be familiar with writing standards, information sources, and research methods.
Mode of delivery	Face-to-face
Prerequisites and co-requisites	Not applicable.
Recommended optional programme components	Not applicable.
Course contentes	The research stages. Document space, bibliographic research and preparation of scientific papers. Sources of information. Reading record sheets. The structure of a report. Territorial planning methodologies: SWOT analysis and definition of territorial models.
Recommended or required Reading	- Oliveira, L.(2011). <i>Dissertação e Tese em ciência e tecnologia</i> . Lisboa: Lidel - Sousa, M. e Baptista, C. (2011). <i>Como fazer investigação, dissertações, teses e relatórios</i> . Lisboa: Pactor
Planned learning activities and teaching methods	Lectures and practical classes focusing of problem-solving exercises.
Assessment Methods and criteria	Reading Log Sheet. Individual assignment. Presentation - 15% Individual assignment. Report and Presentation - 30% Team assignment. Presentation - 15% Test(minimum score 8/20) - 40%
Language of Instruction	Portuguese Mentoring in English
Work placement(s)	Not applicable.

B - Description of individual course units

Course unit title	Cartography and Topography
Course unit code	989510
Type of course unit	Compulsory
Level of Course unit	First Cycle
Year of Study	First Year
Semester/Trimester when the course unit is delivered	Second Semester
Number of ECTS credits allocated	6
Name of Lecturer(s)	Rita Ribeiro De Carvalho Ferreira Anastácio
Learning outcomes of the course unit	An introduction of the basic concepts of topography, geodesics, cartography and GPS and its articulation with GIS tools. The students will also learn about reading, measurement and production of topographic charts as an experimental training project.
Mode of delivery	Face-to-face
Prerequisites and co-requisites	Not applicable.
Recommended optional programme componentes	Not applicable.
Course contents	Basics of Geodesy. Fundamentals of Cartography. Topography: Altimetry, Slope, Contours, Aspect. GPS
Recommended or required Reading	<ul style="list-style-type: none"> - Casaca, J. e Matos, J. e Baio, M. (2000). <i>Topografia Geral</i>. Lisboa: Lisboa - Gaspar, J.(2000). <i>Cartas e Projecções Cartográficas</i>. Lisboa: Lidel - Geográfico do Exército, I.(2002). <i>Manual de Leitura de Cartas</i>. Lisboa: IGEOE
Planned learning activities and teaching methods	Lectures and practical classes including group or individual assignments. Case study analysis and discussion.
Assessment Methods and criteria	Written test (80%) + written assignment (20%)
Language of Instruction	Portuguese Mentoring in English
Work placement(s)	Not applicable.

B - Description of individual course units

Course unit title	Land Planning and Development II
Course unit code	98957
Type of course unit	Compulsory
Level of Course unit	First Cycle
Year of Study	First Year
Semester/Trimester when the course unit is delivered	Second Semester
Number of ECTS credits allocated	5
Name of Lecturer(s)	Inês Domingues Serrano
Learning outcomes of the course unit	At the end of the term the students should be able to articulate the different levels of territorial intervention; develop critical skills; characterise, interpret and analyse urban space and develop strategies in line with legal specifications for urban planning.
Mode of delivery	Face-to-face
Prerequisites and co-requisites	Not applicable.
Recommended optional programme components	Not applicable.
Course contentes	1.URBANISM Urban, urbanism and urbanization, landscape and urban landscape. Urban Experiences in the nineteenth- and twentieth-century Europe. 2. URBAN SPACE ANALYSIS City shape and structure. Methodologies for reading and analysing urban space images. Urban parameters and ratios. Municipal Plans and Projects. 3. LEGAL FRAME RJIGT RJUE Other urban legislation
Recommended or required Reading	- Carvalho, J.(2003). <i>Ordenar a Cidade</i> . Coimbra: Quarteto - Goitia, F.(1996). <i>Breve História do Urbanismo</i> . Lisboa: Presença - Lamas, J.(1993). <i>Morfologia Urbana e Desenho da Cidade</i> . Lisboa: FCG/JNICT - Gravagnuolo, B.(1998). <i>Historia del urbanismo em Europa : 1750-1960</i> . Madrid: Akal
Planned learning activities and teaching methods	Lectures and practical exercises.
Assessment Methods and criteria	Two practical assignments(submission is a preresquisite to take the exam). Assessed classwork. 1 written test.
Language of Instruction	Portuguese Mentoring in English
Work placement(s)	Not applicable.

B - Description of individual course units

Course unit title	Option: Inventory and Cataloguing (*)
Course unit code	989537
Type of course unit	Optional
Level of Course unit	First Cycle
Year of Study	First Year
Semester/Trimester when the course unit is delivered	Second Semester
Number of ECTS credits allocated	5
Name of Lecturer(s)	Silvério Manuel Domingues Figueiredo
Learning outcomes of the course unit	On completion of this module the students should be able to define heritage and make an inventory of movable and immovable property and be aware of the significance of inventories to the safeguard of heritage.
Mode of delivery	Face-to-face
Prerequisites and co-requisites	Not applicable.
Recommended optional programme componentes	Not applicable.
Course contentes	Concept of heritage; Standardisation and inventory; Property classification; Inventory; Property enhancement; creation of a property database.
Recommended or required Reading	- Vários, A.(1999). <i>Inventário do Património Português</i> . (Vol. 1 a 3). Lisboa: IPPAR
Planned learning activities and teaching methods	Theoretical and practical classes.
Assessment Methods and criteria	Practical assignment (50%) + written test (50%)
Language of Instruction	Portuguese Mentoring in English
Work placement(s)	Not applicable.

(*) This course may not be available in certain academic years. Please confirm availability with the Erasmus coordinator.

B - Description of individual course units

Course unit title	Representation Techniques
Course unit code	98959
Type of course unit	Compulsory
Level of Course unit	First Cycle
Year of Study	First Year
Semester/Trimester when the course unit is delivered	Second Semester
Number of ECTS credits allocated	4
Name of Lecturer(s)	Carlos Manuel Galo Pedrosa dos Santos Machado
Learning outcomes of the course unit	At the end of the term the students should be able to visualise and describe through drawing any object regardless of its complexity. They must be able to draw perspectives, scratches, axonometric and conic perspectives.
Mode of delivery	Face-to-face
Prerequisites and co-requisites	Not applicable.
Recommended optional programme componentes	Not applicable.
Course contentes	Drawing standards Types of projections Views of solids Perspectives Urban drawing The graphic quality of drawing Scale and proportion Drawing sheets Representation of land
Recommended or required Reading	- Veiga da Cunha, L.(2010). <i>Desenho Técnico</i> . Lisboa: Fundação Calouste Gulbenkian
Planned learning activities and teaching methods	Lectures and practical exercises.
Assessment Methods and criteria	Ongoing assessment: classwork + written tests Pass requirements: attendance to 63% of taught lessons + ongoing assessment $\geq 9.5/20$ or Examination $\geq 9.5/20$
Language of Instruction	Portuguese Mentoring in English
Work placement(s)	Not applicable.

B - Description of individual course units

Course unit title	Statistics
Course unit code	98958
Type of course unit	Compulsory
Level of Course unit	First Cycle
Year of Study	First Year
Semester/Trimester when the course unit is delivered	Second Semester
Number of ECTS credits allocated	3
Name of Lecturer(s)	José Manuel Borges Henriques Faria Paixão
Learning outcomes of the course unit	At the end of the term the students should be able to process and analyse data, particularly with regard to economic indicators, with special emphasis on market research analysis.
Mode of delivery	Face-to-face
Prerequisites and co-requisites	Basics of algebraic calculus.
Recommended optional programme components	Not applicable.
Course contentes	1. Descriptive statistics. Descriptive measures and frequency distributions. 2. Combinatorial analysis 3. Probability and random variables. 4. Simple linear regression and correlation.
Recommended or required Reading	- Williams, T. e Sweeney, D. e Anderson, D. (2008). <i>Statistics for Business and Economics</i> . USA: South Western College Pub. - Schiller, J. e Srinivasan, A. e Spiegel, M. (2008). <i>Probability and Statistics</i> . USA: Schaum's Outline - Reis, E.(2009). <i>Estatística Descritiva</i> . Portugal: Edições Sílabo
Planned learning activities and teaching methods	Lectures and tutorials focused on problem-solving exercises.
Assessment Methods and criteria	The same methodology is used for both tests and examinations: 1 written closed-book test marked 0/20 comprising all the subject matters taught during the semester.
Language of Instruction	Portuguese
Work placement(s)	Not applicable.

B - Description of individual course units

Course unit title	Geographic Information Systems
Course unit code	989512
Type of course unit	Compulsory
Level of Course unit	First Cycle
Year of Study	Second Year
Semester/Trimester when the course unit is delivered	Annual
Number of ECTS credits allocated	14
Name of Lecturer(s)	Rita Ribeiro De Carvalho Ferreira Anastácio
Learning outcomes of the course unit	The students should understand the nature of geographic information and be able to choose the appropriate methods for processing spatial data. They should also be able to use specific software for the creation of spatial databases.
Mode of delivery	Face-to-face
Prerequisites and co-requisites	Fundamental computer skills.
Recommended optional programme componentes	Not applicable.
Course contentes	Introduction to Geographic Information Systems Coordinate Systems and Portuguese Cartography Data Input and Output Geographic modelling Geographic Information production techniques The features of a GIS Creation and management of a geographic information system Metadata Application Exercises in Quantum GIS and ArcGIS.
Recommended or required Reading	- Matos, J.(2008). <i>Fundamentos de Informação Geográfica</i> . Lisboa: Lidel - Grancho, N.(2006). <i>Origem e Evolução Recente dos Sistemas de Informação Geográfica em Portugal</i> . Lisboa: Bond Quimera Editores
Planned learning activities and teaching methods	Lectures. Practical sessions focused on the resolution of practical exercises and on the use of the Quantum GIS and ArcGIS software.
Assessment Methods and criteria	Individual work, analysis of a paper / GIS application - 20% Practical assignment - 20% Practical Examination - 30% Theoretical Examination - 30% Minimum score of 8/20 in all tests.
Language of Instruction	Portuguese Mentoring in English
Work placement(s)	Not applicable.

B - Description of individual course units

Course unit title	Computer-Aided Design
Course unit code	989513
Type of course unit	Compulsory
Level of Course unit	First Cycle
Year of Study	Second Year
Semester/Trimester when the course unit is delivered	First Semester
Number of ECTS credits allocated	4
Name of Lecturer(s)	Carlos Manuel Galo Pedrosa dos Santos Machado
Learning outcomes of the course unit	The students should be able to accurately visualise or describe any object, regardless of its complexity, with the aid of AUTOCAD regardless of its complexity, while complying with the representation standards in force.
Mode of delivery	Face-to-face
Prerequisites and co-requisites	Not applicable.
Recommended optional programme componentes	Not applicable.
Course contentes	Main drawing controls and configurations. Format, units, drawing area settings, squareness and captions. Two-dimensional drawing. Map digitisation. Three-dimensional drawing.
Recommended or required Reading	- Ferramacho, .(2009). <i>O Guia Prático do AutoCAD 2010 a 2-Dimensões</i> . Portugal: Centro Atlântico - Ferramacho, H.(2006). <i>O Guia Prático do AutoCAD 2007 a 3-Dimensões</i> . Portugal: Centro Atlântico - Inc, A.(.). <i>Manual do AutoCAD</i> .Acedido em10 de setembro de 2011 em http://docs.autodesk.com/ACD/2010/ENU/AutoCAD%202010%20User%20Documentation/
Planned learning activities and teaching methods	Lectures and practical exercises.
Assessment Methods and criteria	Ongoing assessment: exercises + 1 practical assignment. Examination requirement: a minimum mark of $\geq 5.5/20$ is required to take the examination.
Language of Instruction	Portuguese Mentoring in English
Work placement(s)	Not applicable.

B - Description of individual course units

Course unit title	Economics I (Micro)
Course unit code	989514
Type of course unit	Compulsory
Level of Course unit	First Cycle
Year of Study	Second Year
Semester/Trimester when the course unit is delivered	First Semester
Number of ECTS credits allocated	4
Name of Lecturer(s)	Ana Cláudia Leal Marques Pires da Silva Mendes Pinto
Learning outcomes of the course unit	The students should familiarise themselves with the concepts, theories, models and policies with interest to microeconomics, develop skills to identify, analyse and solve economical problems and understand modern calculus techniques.
Mode of delivery	Face-to-face
Prerequisites and co-requisites	Not applicable.
Recommended optional programme components	Not applicable.
Course contents	Why studying economics? The competitive market model. State intervention in the market economy. Elasticity. Consumer and producer surplus. Perfect competition market. Monopoly. Oligopoly. Monopolistic competition.
Recommended or required Reading	- Samuelson, P. e D. Nordhaus, W. (2005). <i>Economia</i> . Portugal: Mcgraw-Hill - Das Neves, J.(1997). <i>Introdução à Economia</i> . Lisboa: EDITORIAL VERBO - PAULO PITTA , C. e E CUNHA E MORAIS, L. (2008). <i>A EUROPA E OS DESAFIOS DO SÉCULO XXI</i> . Coimbra: ALMEDINA
Planned learning activities and teaching methods	Lectures including class debate and tutorials.
Assessment Methods and criteria	2 written tests. A minimum mark of 7/20 is required to take the second test. A minimum mark of 10/20 exempts students from taking the final examination.
Language of Instruction	Portuguese
Work placement(s)	Not applicable.

B - Description of individual course units

Course unit title	Geography
Course unit code	989516
Type of course unit	Compulsory
Level of Course unit	First Cycle
Year of Study	Second Year
Semester/Trimester when the course unit is delivered	First Semester
Number of ECTS credits allocated	6
Name of Lecturer(s)	Pierluigi Rosina Sérgio Paulo Leal Nunes Rita Ribeiro De Carvalho Ferreira Anastácio
Learning outcomes of the course unit	At the end of the term the students should understand the organisation of the national territory and its position in Europe and in the world, as well as the dynamics of evolution occurring in different components, according to a multidisciplinary perspective.
Mode of delivery	Face-to-face
Prerequisites and co-requisites	Not applicable.
Recommended optional programme components	Not applicable.
Course contentes	1. History of geography 2. Portugal in the Iberian Context 3. Portugal in Europe and the World 4. Territorial Organization 5. Population and Territory 6. The New Geography 7. Opportunities and Challenges.
Recommended or required Reading	- Bradford, M. e Kent, W. (1987). <i>Geografia Humana – Teoria e suas aplicações</i> . Lisboa: Gradiva – Publicações, Lda - Brito, R.(1997). <i>Portugal – Perfil Geográfico</i> . Lisboa: Editorial Estampa - Claval, P.(1987). <i>A Nova Geografia</i> . Coimbra: Livraria Almedina - Claval, P.(2006). <i>História da Geografia</i> . Lisboa: Edições 70, Lda.
Planned learning activities and teaching methods	Lectures focused on literature review and on the research, processing and analysis of statistical data.
Assessment Methods and criteria	Compulsory practical assignment. Written test. Final mark is the weighted average of the two assessment components (theoretical and practical).
Language of Instruction	Portuguese
Work placement(s)	Not applicable.

B - Description of individual course units

Course unit title	Geomorphology
Course unit code	989515
Type of course unit	Compulsory
Level of Course unit	First Cycle
Year of Study	Second Year
Semester/Trimester when the course unit is delivered	First Semester
Number of ECTS credits allocated	6
Name of Lecturer(s)	Pierluigi Rosina
Learning outcomes of the course unit	Principles, concepts and study methods of the main morphologic characteristics of the landscape. Introduction to structural, climatic, quantitative and applied geomorphology.
Mode of delivery	Face-to-face
Prerequisites and co-requisites	Not applicable.
Recommended optional programme componentes	Not applicable.
Course contentes	Introduction. Processes. Structural forms. Soil and rock decomposition. Slope modelling. Hydrological network problems. Description of the most common morphological occurrences on the Earths surface. Typical processes and forms of large climatic divisions. Man- made structures and forms. Topographic profiles. Hydrological basin delimitation.
Recommended or required Reading	- Strahler, A.(1974). <i>Physical Geography</i> . New York: Wiley
Planned learning activities and teaching methods	Theoretical and practical cartographic exercises
Assessment Methods and criteria	Continuous: Test (80%); group essay (20%). Final exam (100%)
Language of Instruction	Portuguese Mentoring in Italian
Work placement(s)	Not applicable.

B - Description of individual course units

Course unit title	Option: Environment and Landscape (*)
Course unit code	989535
Type of course unit	Optional
Level of Course unit	First Cycle
Year of Study	Second Year
Semester/Trimester when the course unit is delivered	First Semester
Number of ECTS credits allocated	3
Name of Lecturer(s)	Manuel Alberto Nogueira Henriques Rosa
Learning outcomes of the course unit	The students will acquire practical and theoretical skills to - write a scientific report; - make soil analysis; - make environmental analysis; - use all necessary equipments.
Mode of delivery	Face-to-face
Prerequisites and co-requisites	Not applicable.
Recommended optional programme components	Not applicable.
Course contents	1. Field analysis. 2. Soil analysis. 3. Water analysis.
Recommended or required Reading	- APHA, ..(1995). <i>Standard methods for the examination of water and wastewater</i> . .: American Public Health Association - Black, C.(1965). <i>Methods of soil analysis. Part 1. Physical and mineralogical properties, including statistics of measurement and sampling</i> . (Vol. 1). Madison: ASA Agronomy Series no. 9 - Black, C.(1965). <i>Methods of soil analysis. Part 2. Chemical and microbiological properties..</i> (Vol. 2). Madison: ASA Agronomy Series no. 9
Planned learning activities and teaching methods	Tutorials and labwork.
Assessment Methods and criteria	50% written exam / 50% laboratory reports.
Language of Instruction	Portuguese Mentoring in English
Work placement(s)	Not applicable.

(*) This course may not be available in certain academic years. Please confirm availability with the Erasmus coordinator.

B - Description of individual course units

Course unit title	Applied Geography and Urban Sociology
Course unit code	989518
Type of course unit	Compulsory
Level of Course unit	First Cycle
Year of Study	Second Year
Semester/Trimester when the course unit is delivered	Second Semester
Number of ECTS credits allocated	6
Name of Lecturer(s)	Inês Domingues Serrano
Learning outcomes of the course unit	On completion of the module the students should be able to understand the urban phenomenon and related concepts through an integrated spatial-behavioural approach based on the study of the city and its inhabitants.
Mode of delivery	Face-to-face
Prerequisites and co-requisites	Have an idea of existing types of spaces in the urban centres, according to the PDM and be familiar with statistical analysis.
Recommended optional programme components	Not applicable.
Course contentes	1. Notions and concepts 2. The city 3. The Urban Space 4. Urbanities.
Recommended or required Reading	- Beaujeu-Garnier, J.(1997). <i>Geografia Urbana</i> . Porto: Fundação Calouste Gulbenkian - Grafmeyer, Y.(1994). <i>Sociologia Urbana</i> . Mem-Martins: Pub. Europa-América - Salgueiro, T.(1992). <i>A Cidade em Portugal – Uma Geografia Urbana</i> . Porto: Ed. Afrontamento
Planned learning activities and teaching methods	Theoretical and practical classes focused on case study analysis. Class- and fieldwork.
Assessment Methods and criteria	Compulsory practical component includes preparation and presentation of a final assignment. Theoretical component includes written test. Overall mark: weighted average of both components.
Language of Instruction	Portuguese Mentoring in English
Work placement(s)	Not applicable.

B - Description of individual course units

Course unit title	Economics II (Macro)
Course unit code	989519
Type of course unit	Compulsory
Level of Course unit	First Cycle
Year of Study	Second Year
Semester/Trimester when the course unit is delivered	Second Semester
Number of ECTS credits allocated	4
Name of Lecturer(s)	Sérgio Paulo Leal Nunes
Learning outcomes of the course unit	On completion of module the students should have acquired basic concepts of macro-economics and understand the performance of national economy and relevant economical policies.
Mode of delivery	Face-to-face
Prerequisites and co-requisites	Mathematics Statistics Microeconomics
Recommended optional programme componentes	Not applicable.
Course contentes	1. Measurement of the economic activity 2. Economical growth and productivity 3. Employment and salaries 4. Savings and captal formation 5. Aggregated demand and short-term production
Recommended or required Reading	- Bernanke, B. e Frank, R. (2003). <i>Princípios de Economia</i> . (pp. 433-689). Lisboa: McGraw-Hill - Moura, F.(1978). <i>Lições de economia</i> . Coimbra: Almedina
Planned learning activities and teaching methods	Theoretical-practical classes.
Assessment Methods and criteria	Assessment portfolio including monographs, reports, essays, reflections, etc. on taught topics up to 40% of overall mark. Written test: 60%
Language of Instruction	Portuguese Mentoring in English
Work placement(s)	Not applicable.

B - Description of individual course units

Course unit title	Laboratory and In-Office Techniques
Course unit code	989521
Type of course unit	Compulsory
Level of Course unit	First Cycle
Year of Study	Second Year
Semester/Trimester when the course unit is delivered	Second Semester
Number of ECTS credits allocated	4
Name of Lecturer(s)	Silvério Manuel Domingues Figueiredo
Learning outcomes of the course unit	On completion of this module the students should understand how a laboratory works and what are the main lab methods in the different subject areas.
Mode of delivery	Face-to-face
Prerequisites and co-requisites	Not applicable.
Recommended optional programme components	Not applicable.
Course contents	1. In-office methods and techniques 2. Lab methods and techniques 3. Portuguese laboratories with landscape related activities 4. The lab research in Portugal 5. The different lab and in-office techniques 6. Lab safety techniques 7. Technical and human means 8. Lab accreditation 9. Practical classes
Recommended or required Reading	- Pombeiro, A.(1983). <i>Técnicas e Operações Unitárias em Química Laboratorial</i> . Porto: Fundação Calouste Gulbenkian - Mateus, J. e Moreno-Garcia, M. (2003). Laboratório de Paleoeologia e Arqueobotânica. <i>Trabalhos de Arqueologia</i> , 29, pp. 104-188.
Planned learning activities and teaching methods	Lectures and lab classes.
Assessment Methods and criteria	Practical assignment.
Language of Instruction	Portuguese Mentoring in English
Work placement(s)	Not applicable.

B - Description of individual course units

Course unit title	Option: WebSIG (*)
Course unit code	989542
Type of course unit	Optional
Level of Course unit	First Cycle
Year of Study	Second Year
Semester/Trimester when the course unit is delivered	Second Semester
Number of ECTS credits allocated	3
Name of Lecturer(s)	Luis Filipe Neves Carreira dos Santos
Learning outcomes of the course unit	Students should learn competences to build a website; prepare WebGis platform; Integrate a GIS system in a website; and develop skills of autonomous work.
Mode of delivery	Face-to-face
Prerequisites and co-requisites	N/A
Recommended optional programme components	N/A
Course contents	1- WebGIS basics 2- Geographical information systems 3- Online WebGis
Recommended or required Reading	(). <i>Quantum Gis <1.8> Geographic Information System User Guide</i> . Acedido em 3 de maio de 2013 em http://download.osgeo.org/qgis/manual/ (). <i>Joomla</i> . Acedido em 3 de maio de 2013 em http://docs.joomla.org/
Planned learning activities and teaching methods	Lectures and computer laboratory tutorials, analysis of case studies.
Assessment Methods and criteria	Evaluation: Written exam (50%), practical exam (50%)
Language of Instruction	Portuguese
Work placement(s)	N/A

(*) This course may not be available in certain academic years. Please confirm availability with the Erasmus coordinator.

B - Description of individual course units

Course unit title	Project Management and Analysis
Course unit code	989520
Type of course unit	Compulsory
Level of Course unit	First Cycle
Year of Study	Second Year
Semester/Trimester when the course unit is delivered	Second Semester
Number of ECTS credits allocated	6
Name of Lecturer(s)	Sérgio Paulo Leal Nunes
Learning outcomes of the course unit	The students should acquire fundamental notions of financial, economical and social analysis that will allow them to examine, plan and manage varied projects in a context of uncertainty.
Mode of delivery	Face-to-face
Prerequisites and co-requisites	Mathematics Statistics
Recommended optional programme componentes	Not applicable.
Course contentes	1. The project evaluation process 2. The preliminary stages of a project 3. Basic financial analysis tools 4. The updating principle and the profitability criteria 5. Strategic analysis 6. Risk and uncertainty analysis 7. Economical and social evaluation
Recommended or required Reading	- Barros, C.(1999). <i>Avaliação Financeira de Projectos de Investimento</i> . Lisboa: Vulgata - Marques, A.(2000). <i>Concepção e Análise de Projectos de Investimento</i> . Lisboa: Edições Sílabo
Planned learning activities and teaching methods	Theoretical-practical classes
Assessment Methods and criteria	Assessment portfolio including monographs, reports, essays, reflections, etc. on taught topics up to 40% of overall mark. Written test: 60%
Language of Instruction	Portuguese Mentoring in English
Work placement(s)	Not applicable.

B - Description of individual course units

Course unit title	Biogeography and Human Ecology
Course unit code	989525
Type of course unit	Compulsory
Level of Course unit	First Cycle
Year of Study	Third Year
Semester/Trimester when the course unit is delivered	First Semester
Number of ECTS credits allocated	6
Name of Lecturer(s)	Luis Filipe Neves Carreira dos Santos
Learning outcomes of the course unit	TO n completion of this module the students should have familiarised themselves with ecological terminology; faunal and floral diversity and distribution in Europe and worldwide as well as evolutionary concepts.
Mode of delivery	Face-to-face
Prerequisites and co-requisites	Not applicable.
Recommended optional programme componentes	Not applicable.
Course contentes	- Biodiversity; - Distribution patterns; - Introduction to the study of Biomes; - Island Biogeography; - Impacts of glaciation in faunal and floral distribution.
Recommended or required Reading	- Tyvy, J.(1998). <i>Biogeography, a study of plants in the ecosphere.</i> .: . - Lacoste, .. e Salomon, .. (1999). <i>Elements de Biogeographie et Ecologie.</i> .: . - Campbell, B.(1983). <i>Ecologia Humana.</i> .: Edições 70
Planned learning activities and teaching methods	Lectures, Tutorials and practical classes.
Assessment Methods and criteria	60% written test 40% Reports, Essay and presentation. A minimum average mark of 10/20 will exempt students from taking the final examination.
Language of Instruction	Portuguese Mentoring in English
Work placement(s)	Not applicable.

B - Description of individual course units

Course unit title	Environmental Risks and Impact Assessment
Course unit code	989523
Type of course unit	Compulsory
Level of Course unit	First Cycle
Year of Study	Third Year
Semester/Trimester when the course unit is delivered	First Semester
Number of ECTS credits allocated	9
Name of Lecturer(s)	Pierluigi Rosina Luis Filipe Neves Carreira dos Santos
Learning outcomes of the course unit	Understand and interpret the main sources of natural hazards. Evaluate risk factors through the use of various metrics. Develop an Environmental Impact assessment using all technical resources.
Mode of delivery	Face-to-face
Prerequisites and co-requisites	Not applicable.
Recommended optional programme components	Not applicable.
Course contentes	- Volcanic activity; - Floods and landslides; - Storms, tornados and hurricanes; - Impact assessment; - Risk analysis; - Forecast and risk simulation; - Environmental impact assessment.
Recommended or required Reading	- Glasson, J. e Therivel, R. e Andrew, C. (2005). <i>Introduction to environmental impact assessment</i> . London: Routledge - Manahan, S.(1997). <i>Environmental science and technology</i> . New York: Lewis Publishers - Morris, P. e Therivel, R. (2001). <i>Methods of environmental impact assessment</i> . London: Spon Press - Partidário, M. e Jesus, J. (1994). <i>Avaliação de impacte ambiental</i> . Lisboa: Centro de Estudos de Planeamento e Gestão do Ambiente
Planned learning activities and teaching methods	Lectures and tutorials.
Assessment Methods and criteria	Written exam (50%) + essay with presentation(50%).
Language of Instruction	Portuguese Mentoring in English
Work placement(s)	Not applicable.

B - Description of individual course units

Course unit title	Option: Introduction to Meteorology and Climate (*)
Course unit code	989543
Type of course unit	Optional
Level of Course unit	First Cycle
Year of Study	Third Year
Semester/Trimester when the course unit is delivered	First Semester
Number of ECTS credits allocated	5
Name of Lecturer(s)	Cristina Maria Mendes Andrade
Learning outcomes of the course unit	It is intended that students should comprehend the basics of the composition and structure of the atmosphere and the climatic system. The student should also acquire skills that will allow a better understanding of the fundamental physical processes in meteorology and climate.
Mode of delivery	Face-to-face
Prerequisites and co-requisites	None
Recommended optional programme componentes	Not applicable
Course contentes	Chapter 1 - Introduction: the atmosphere and the climatic system Chapter 2 – Radiation, physical properties of the air and atmosphere statics Chapter 3 - Atmospheric Pollution and pollutants dispersion Chapter 4 – Clouds and precipitation Chapter 5 - Wind. Global, regional and local circulation Chapter 6 - Climate and climate variability
Recommended or required Reading	- Ahrens, D.(2006). <i>Meteorology Today. An introduction to weather, climate and the environment</i> . USA: West Publishing Company, ISBN-13: 978-0495011620 - Miranda, P.(2009). <i>Meteorologia e ambiente : fundamentos de meteorologia, clima e ambiente atmosférico</i> . (Vol. 219). (pp. 357). Lisboa: Universidade Aberta, ISBN: 978-972-674-655-3 - Oort, A. e Peixoto, J. (1992). <i>The Physics of Climate</i> . (pp. 520). NewYork: American Inst. of Physics, ISBN-13: 978-0883187111 - Ruddiman, W.(2008). <i>Earth's Climate Past and Future</i> . (pp. 388). USA: Freeman, ISBN-13: 978-0716737414
Planned learning activities and teaching methods	Theoretical and practical in-person lectures. Viewing of videos and documentary series about meteorology and climate. Practical classes with online analysis of various meteorological parameters (temperature, precipitation, among others).
Assessment Methods and criteria	Continuous assessment: submission and presentation of a written work (40%) and written test (60%). Assessment by Examination: only for students who had not accomplished the continuous evaluation and/or had had grade inferior to 10.
Language of Instruction	Portuguese Mentoring in English
Work placement(s)	Not applicable.

(*) This course may not be available in certain academic years. Please confirm availability with the Erasmus coordinator.

B - Description of individual course units

Course unit title	Planning and Management of Protected Areas
Course unit code	989524
Type of course unit	Compulsory
Level of Course unit	First Cycle
Year of Study	Third Year
Semester/Trimester when the course unit is delivered	First Semester
Number of ECTS credits allocated	5
Name of Lecturer(s)	Luis Filipe Neves Carreira dos Santos
Learning outcomes of the course unit	The students should have acquired competences on matters related with the management of natural heritage in protected areas and become familiar with the Portuguese legal framework and policies for the safeguard of protected areas.
Mode of delivery	Face-to-face
Prerequisites and co-requisites	Not applicable.
Recommended optional programme componentes	Not applicable.
Course contentes	The classification of protected areas. Natural resources management policies. Land development: the case of protected areas. Management and protection of agro-forest areas. Forest policies and land development. Modelling of agro-forest resources.
Recommended or required Reading	- Fabião, A.(2007). <i>A Floresta em Portugal.</i> . Lisboa: Instituto Superior de Agronomia - Tomé, M.(2003). <i>Modelação do crescimento e da produção de povoamentos florestais.</i> . Lisboa: Centro de Estudos Florestais, UTL
Planned learning activities and teaching methods	Lectures supported by audio-visual resources and practical classes focused on group work and presentations.
Assessment Methods and criteria	Written test (65%) Written assignment (35%)
Language of Instruction	Portuguese Mentoring in English
Work placement(s)	Not applicable.

B - Description of individual course units

Course unit title	Project
Course unit code	989526
Type of course unit	Compulsory
Level of Course unit	First Cycle
Year of Study	Third Year
Semester/Trimester when the course unit is delivered	First Semester
Number of ECTS credits allocated	5
Name of Lecturer(s)	Sérgio Paulo Leal Nunes
Learning outcomes of the course unit	Preparation of an applied research project in the area of Land Management. The project must present a concrete solution for a previously identified problem.
Mode of delivery	Face-to-face
Prerequisites and co-requisites	Not applicable.
Recommended optional programme components	Not applicable.
Course contentes	Theme Defining the real problem Objectives and goals Methodology and justification Theoretical and conceptual framework of the theme and the problem addressed Provisional index Initial bibliography Schedule
Recommended or required Reading	- .. <i>..to be defined on the basis of the students choice of theme.</i> ∴ .
Planned learning activities and teaching methods	Weekly monitoring of work.
Assessment Methods and criteria	An individual project on a topic of their choice. Final assignment - 100% There will be no written examination. Failure to submit the project will result in failure of the course. Grade improvements: oral (presentation)
Language of Instruction	Portuguese Mentoring in English
Work placement(s)	Not applicable.

B - Description of individual course units

Course unit title	Option: Tourism, Territory and Touring (*)
Course unit code	989544
Type of course unit	Optional
Level of Course unit	First Cycle
Year of Study	Third Year
Semester/Trimester when the course unit is delivered	Second Semester
Number of ECTS credits allocated	5
Name of Lecturer(s)	Luís Manuel Mota dos Santos Figueira
Learning outcomes of the course unit	To develop knowledge and skills to the conception and operationalization of touristic products which can promote the territory.
Mode of delivery	Face-to-face
Prerequisites and co-requisites	NA
Recommended optional programme componentes	NA
Course contents	1. Tourism as a territorial system: tourist geohistory 2. Tourism activities impact. 3. Geographic suport, concepts and tourism terminology. 4. How to make touristic processes in touring. 5. Touristic routes.
Recommended or required Reading	- Beni, M.(2012). <i>Turismo - planeamento estratégico e capacidade de gestão.Desenvolvimento regional, rede de produção e clusters</i> . São Paulo: Editora Manole Ltda - Cunha, L.(2009). <i>Introdução ao Turismo</i> . Lisboa: Editorial Verbo - Baurillard, J.(2008). <i>A Sociedade de Consumo</i> . Lisboa: Edições 70 - Boyer, M.(1996). <i>L'invention du tourism</i> . Paris: Gallimard
Planned learning activities and teaching methods	Theoretical and application classes.Case studies.
Assessment Methods and criteria	Continuous evaluation - presence (10%), performance (10%), practical exercise (30%), written test (50%). Final avaluation: practical exercise (50%), theoretical examination (50%).
Language of Instruction	Portuguese Mentoring in English
Work placement(s)	NA

(*) This course may not be available in certain academic years. Please confirm availability with the Erasmus coordinator.

B - Description of individual course units

Course unit title	Regional and Municipal Planning and Monitoring
Course unit code	989528
Type of course unit	Compulsory
Level of Course unit	First Cycle
Year of Study	Third Year
Semester/Trimester when the course unit is delivered	Second Semester
Number of ECTS credits allocated	6
Name of Lecturer(s)	Rita Ribeiro De Carvalho Ferreira Anastácio
Learning outcomes of the course unit	Concepts and principles of Municipal Planning. Municipal structure. Monitoring processes and plans. Development of analytical and critical skills(characterization study, interpretation and diagnosis) and solution proposal.
Mode of delivery	Face-to-face
Prerequisites and co-requisites	Basics of Land Planning and Managment
Recommended optional programme componentes	Not applicable.
Course contentes	Municipal Planning Regional Planning Planning procedures and Municipal Management Assessment and Monitoring of Municipal and Regional Planning Sector monitoring
Recommended or required Reading	- Correia, P.(1993). <i>Políticas de solos no planeamento municipal</i> . Lisboa: FCG
Planned learning activities and teaching methods	Lectures and practical classes focused on case study analysis.
Assessment Methods and criteria	Test / Examination / Make-up Examination - 40% (minimum mark 10/20) Compulsory assignment(s) to be established - 60%
Language of Instruction	Portuguese Mentoring in English
Work placement(s)	N/A

B - Description of individual course units

Course unit title	Regional Policy and Development
Course unit code	989529
Type of course unit	Compulsory
Level of Course unit	First Cycle
Year of Study	Third Year
Semester/Trimester when the course unit is delivered	Second Semester
Number of ECTS credits allocated	6
Name of Lecturer(s)	Sérgio Paulo Leal Nunes
Learning outcomes of the course unit	On completion of the module the students should be able to acknowledge the importance of space in land planning, know the main regional development paradigms, the key spatial analysis tools as well as the key spatial policy elements.
Mode of delivery	Face-to-face
Prerequisites and co-requisites	Mathematics Statistics
Recommended optional programme components	Not applicable.
Course contents	1. The Space problematics. From object space to subject space and land order. 2. Regional theories and models. 3. Space analysis tools 4. Space planning and policy
Recommended or required Reading	- Costa, J.(2002). <i>Compêndio de Economia Regional</i> . Coimbra: APDR - Lopes, S.(1995). <i>Desenvolvimento Regional</i> . Lisboa: Fundação Calouste Gulbenkian
Planned learning activities and teaching methods	Theoretical-practical classes
Assessment Methods and criteria	Assessment portfolio including monographs, reports, essays, reflections, etc. on taught topics up to 40% of overall mark. Written test: 60%
Language of Instruction	Portuguese Mentoring in English
Work placement(s)	Not applicable.

B - Description of individual course units

Course unit title	Internship/Placement (Optional) (*)
Course unit code	989541
Type of course unit	Optional
Level of Course unit	First Cycle
Year of Study	Third Year
Semester/Trimester when the course unit is delivered	Second Semester
Number of ECTS credits allocated	7
Name of Lecturer(s)	Rita Ribeiro De Carvalho Ferreira Anastácio
Learning outcomes of the course unit	The students will be integratedd in real land planning projects either in public institutions (municipalities) or in private companies or in research projects developed at IPT.
Mode of delivery	Face-to-face
Prerequisites and co-requisites	Not applicable.
Recommended optional programme componentes	Not applicable.
Course contentes	N/A
Recommended or required Reading	- ..to be defined on the basis of the students choice of theme. .: .
Planned learning activities and teaching methods	Tutorial guidance at the host institution and supervision by the lecturer in the charge.
Assessment Methods and criteria	Training report. The report will be assessed by a peer committee that will meet within 30 days after report submission.
Language of Instruction	Portuguese
Work placement(s)	Internship in a public or private body or research project at IPT.

(*) This course may not be available in certain academic years. Please confirm availability with the Erasmus coordinator.

B - Description of individual course units

Course unit title	Seminar (Optional) (*)
Course unit code	989540
Type of course unit	Optional
Level of Course unit	First Cycle
Year of Study	Third Year
Semester/Trimester when the course unit is delivered	Second Semester
Number of ECTS credits allocated	7
Name of Lecturer(s)	Silvério Figueiredo
Learning outcomes of the course unit	The students will develop skills that will allow understand real land planning activities developed by public institutions (municipalities) or private companies.
Mode of delivery	Face-to-face
Prerequisites and co-requisites	Not applicable.
Recommended optional programme components	Participation in seminars and events in the area of land management.
Course contents	Case study analysis in the area of land management.
Recommended or required Reading	- ..to be defined on the basis of the students choice of theme. .: .
Planned learning activities and teaching methods	A series of conferences and study visits in the area of land management.
Assessment Methods and criteria	Final report. The report will be assessed by a peer committee that will meet within 30 days after report submission.
Language of Instruction	Portuguese
Work placement(s)	There is the possibility of carrying out an internship/placement(contact the lecturer in charge).

(*) This course may not be available in certain academic years. Please confirm availability with the Erasmus coordinator.

B - Description of individual course units

Course unit title	Urbanism and Communications
Course unit code	989530
Type of course unit	Compulsory
Level of Course unit	First Cycle
Year of Study	Third Year
Semester/Trimester when the course unit is delivered	Second Semester
Number of ECTS credits allocated	6
Name of Lecturer(s)	Sérgio Paulo Leal Nunes
Learning outcomes of the course unit	The students should understand the processes and factors underpinning urban concentrations, urban growth and development, urban network, urban systems and communication networks, transportation policies and be able to apply analysis and case study methodologies.
Mode of delivery	Face-to-face
Prerequisites and co-requisites	Mathematics; Statistics
Recommended optional programme components	Not applicable.
Course contentes	1. Spatial organisation trends 2. The urban phenomenon: analysis 3. Communications and transportation: mobility factors 4. Urban network and system: a cohesion and development tool 5. The European transportation policy for 2010-2020 6. The Portuguese transportation and accessibility system.
Recommended or required Reading	- O'Sullivan, A.(2006). <i>Urban economics</i> . .: McGraw-Hill - Pólese, M.(1998). <i>Economia Urbana e Regional</i> . Coimbra: APDR
Planned learning activities and teaching methods	Theoretical-practical classes.
Assessment Methods and criteria	Assessment portfolio including monographs, reports, essays, reflections, etc. on taught topics up to 40% of overall mark. Written test: 60%
Language of Instruction	Portuguese Mentoring in English
Work placement(s)	Not applicable.

