STUDY PROGRAMS

Escola Superior de
Actividades Imobiliárias

This Program may change, please always consult our Services.

Praça Eduardo Mondlane, 7C, 1950-104 Lisboa
Tel.: 21 836 70 10 | Fax: 21 836 70 19 | esai@esai.pt | www.esai.pt

1. About ESAI

ESAI (Escola Superior de Actividades Imobiliárias) it´s private higher education institution and is the only school in Portugal, public or private, to teach higher education exclusively in the Real Estate area.

Established in 1990, by a group of companies and associations related to real estate, we were at the time of foundation, the pioneers in this type of education in Europe.

With more than 30 years of experience, ESAI provides a unique contribution, the foundation and operational tools to learn how to identify and grab Real Estate opportunities in Portugal and all over the world, in addition to a daily contact with the best professionals in the area.

A. Mission and Goals:

ESAI is a center of creation, development and transmission of science and culture that pursue the following goals:

- ✓ Higher education in the real estate area
- ✓ Scientific and technological research
- ✓ Training and cultural progress, scientific, technical, social and moral
- ✓ Community service
- ✓ Collaboration and partnership with public and private, national or foreign entities, that aimed to the study of education policy, science and culture
- ✓ Cultural, scientific and technical exchange with institutions worldwide that have the same goals and level as ESAI (Check ESAI Educational Project)

B. ESAI Research

Established in 2003, o Centro de Investigação Cientifica da Construção e do Imobiliário - CICCOI – (Scientific Research Centre of Construction and Real Estate) is the only national research unit that adopts exclusively as objects of study, those affecting directly the real estate row.

Although CICCOI is not a recognized unit by FCT (Foundation for Science and Technology) - all research effort is supported by ESAI as a long-term investment - the results are beginning gradually to emerge as proven by the many protocols with a wide range of public and private entities that seek for ESAI and its researchers to provide consulting services, asset valuation, property taxation and territory management.

Research, innovate and develop new work methods is one of the purposes that have guided the evolution and consolidation of CICCOI.

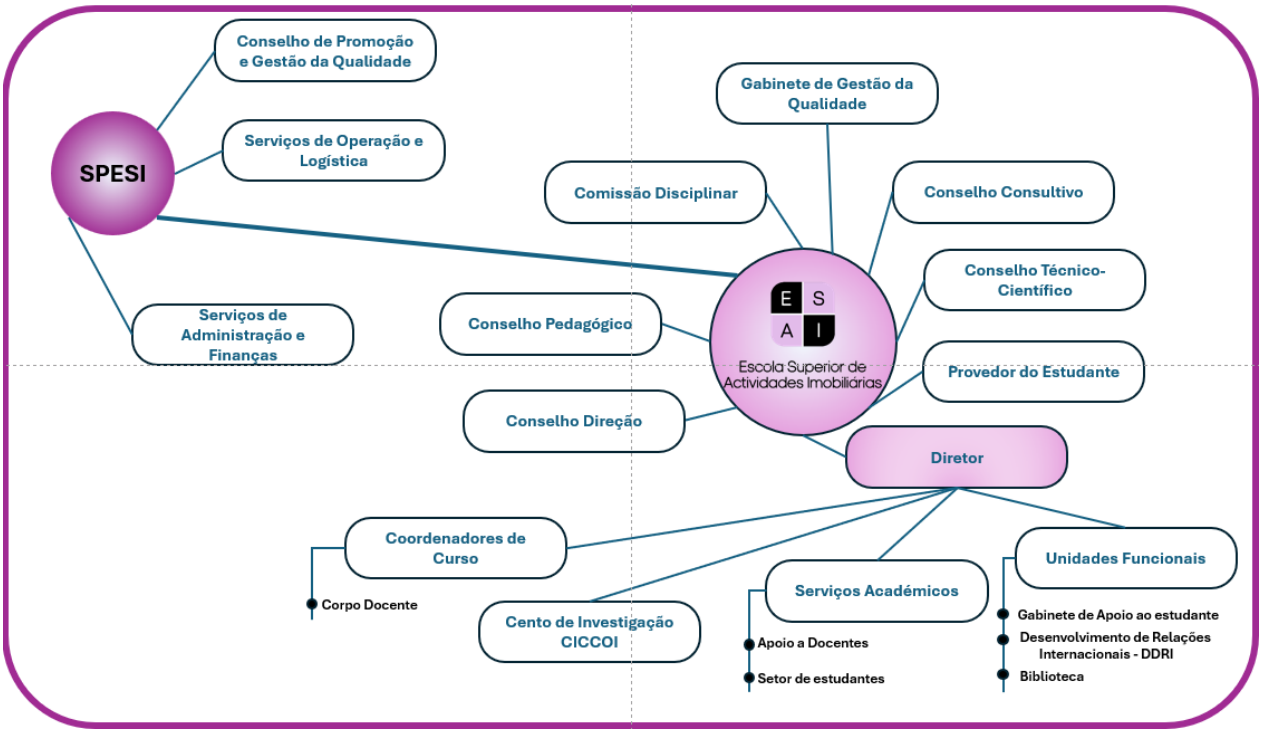
ESAI partnership with other institutions, experts in the area and or through its Teachers and researchers within the CICCOI, has developed a number of initiatives, themed events, scientific and technical forums, free and open to the public.

As the real estate area is characterized by a lack of knowledge and scientific production, this set of events aimed provide an informative view of experts in the field, as well as provide participants practical and specific information, exchange experiences and establish new contacts.

Scientific research, oriented research and professional high level development of teachers in Real Estate Management is at the moment one of the main priorities of ESAI. To do so, the institution has been promoting the participation of teachers, researchers and technicians on activities that leads to their educational, vocational, academic, technical and scientific improvement.

ESAI has always seek to establish partnerships and protocols with national and international institutions and entities.
With these partnerships ESAI has pursue to develop and stimulate a scientific mass through a strategy that promotes research in the field, visible thought articles, books and publications, through the participation in both national and international research networks, through the organization and participation in scientific meetings, exchange of teachers and students, research activity and research training, among others.

C. ESAI STRUCTURE:



D. ESAI PROGRAMS ACCESS REQUIREMENTS

The general conditions of higher education access appear in the Portuguese Higher Education System, provided by NARIC .

ESAI offers:

- The Bachelor's Degree (1st cycle) in Real Estate Management;
- The Bachelor's Degree (1st cycle) in Building and Construction Management
- The Bachelor's Degree (1st cycle) in Civil Engineering
- The Master´s Degree (2st cycle) in Valuation and Management of Property Assets

1st cycle degree achieved after 180 ECTS. The degree is awarded after the completion of a three-year study programme.

2st cycle degree achieved after 120 ECTS. The degree is awarded after the completion of a two-year study programme.

Post-graduate Diplomas: Five MBA´s - Short cycle programmes (between 35 and 60 ECTS) that may be taken as a part professional specialization.

Other specialized training courses in Real State and cross areas.

Access to **Bachelor's Degree (1st cycle)** can be done through the General Access Regime through the Institutional Entrance Competition.

Alternative forms of access to Bachelor's Degree are available: special contests (for technological specialization diploma holders, accessibility examination of over 23 years students, accessibility examination for senior and middle courses holders), special policy of access, change, transfer and re-entry on Higher Education Courses. All these alternative forms of access are formalized through an application in the institution.

MBAs access is made through direct application at ESAI.

E. Crediting Previous Learning

According to legislation, training undertaken by students in higher education institutions (national or foreign) can be credited (ie, crediting certified training), as well as their professional experience (ie, accrediting professional experience).

ESAI does the crediting of prior learning of student who joins a course in the institution. For student integration in their new training plan, crediting processes of certified training and professional experience must be submitted at the time of application to access or when registering for classes.

For more information about the crediting process in ESAI (moments, procedures and criteria for crediting processes please check: Regulamento Creditação de Competências

F. Examination Regulations, Evaluation and Classification

The examinations and evaluation process and regulations are defined in ESAI Estatutos.

G. Registration and Enrollment

The registration and enrollment at ESAI courses are made annually via Internet or in the Administrative services, in accordance with regulations and specific calendar.

The registration and enrollment of foreign students in mobility (Erasmus or other mobility resulting from protocols established with foreign higher education institutions) will be made through the International Department - DDRI).

H. ECTS GUIDE/ CREDIT SYSTEM

ECTS, the European Credit Transfer System, is a system based on allocation and transfer of academic credits developed by the European Commission to provide common procedures to guarantee the full transferability of credits for university studies abroad in order that they might count towards a final qualification in the home country. It provides a way of measuring and comparing academic merits and transferring them from one institution to another.

Courses are assigned a number of credits depending on the workload students need in order to achieve the expected learning outcomes.

Allocation of credits in ECTS is the process of assigning a number of credits to qualifications, degree programmes or single educational components. Credits are allocated to entire qualifications or programmes according to national legislation or practice, where appropriate, and with reference to national and/or European qualifications frameworks. They are allocated to educational components, such as course units, dissertations, work-based learning and work placements, taking as a basis the allocation of 60 credits per full-time academic year, according to the estimated workload required to achieve the defined learning outcomes for each component.

ESAI uses the ECTS and the Bologna principles in all its training courses and on student mobility.

The number of credits allocated to each course units/module are identified in the Study Program and is determined by: The workload is measured in: estimated hours of student work; The number of student working hours includes all forms of work provided (contact hours /training hours/ projects / field work / study and evaluation).

In ESAI the workload of a student for one academic year corresponds to 60 ECTS credits and 30 ECTS for a semester and about 20 ECTS, in case of a quarter.

A detailed analysis is made of Degree programmes of both Higher Education Institutions (HEI´s), outcoming and host. This analyses allows credit awarded by one higher education awarding body to be recognised and count towards the requirements of a programme at another institution; or that allows credit gained on a particular programme to contribute towards the requirements of a different one.

The mobility of an exchange student is guaranteed as long as the student respects the Learning or Training Agreement and gets positive evaluation.

Credits are awarded when appropriate assessment shows that the defined learning outcomes have been achieved at the relevant level.

The number of credits awarded to the student who demonstrates the achievement of learning outcomes is the same as the number of credits allocated to the component.

Evaluation methods include the whole range of written, oral and practical tests/ examinations, projects and portfolios that are used to evaluate the student's progress and ascertain the achievement of the learning outcomes of a course unit or module, whereas assessment criteria are descriptions of what the student is expected to do, in order to demonstrate that a learning outcome has been achieved.

The classification of each course unit/module is expressed through a note on a numerical scale from 0 to 20. The student is considered "approved" in a course unit/module if it obtains not less than 10.

The learning outcomes are classified by a national system and according to ECTS scale ordering the students on a statistical basis system.

The transcript of the notes is carried out in a document that indicates the name of the course unit/module in the institution of origin and the host and assigned respective ECTS (transcript of records). The conversion of notes is based on an official conversion tables used in the country. The mobility is referred in the Diploma Supplement.

For more information about the European Credit Transfer System check: ECTS Users' Guide

I. STUDY PROGRAMS

ESAI Study Programs is available and it provides information about ESAI, the Degrees and study programs offered by the School and also useful information to students.

Degrees and study programs offered at ESAI:

- The Bachelor's Degree (1st cycle) in Real Estate Management;
- The Bachelor's Degree (1st cycle) in Building and Construction Management
- Bachelor's Degree (1st cycle) in Civil Engineering
- The Master´s Degree (2st cycle) in Valuation and Management of Property Assets
- Post-graduate Diplomas: MBA´s - Short cycle programs (between 35 and 60 ECTS) that may be taken as a part professional specialization;
- Other specialized training courses in Real State and cross areas.

Any questions can be answer via the Course Director, via the ERASMUS Coordinator or via the International Department (DDRI).

Since, all the courses are taught only in Portuguese, ESAI recommends, prior to the mobility, to take a Portuguese free course on the OLS platform (Online Linguistic Support). It is recommended that the student has at least the B2 level if the Common European Framework of Reference for Languages – CEFR).

J. CONTACTS AND ACESS TO ESAI

For further information, please contact:

Administrative services

Monday to Friday: from 01:00 to 09:30 pm
Telephone: +351 21 83 67 010
Fax : +351 21 83 67 019
Email: esai@esai.pt

Development Department and International Relations
Cristel Ferra: cristelferra@esai.pt

Office Hours:
Tuesdays and Thursdays from 3:00 to 5:00pm

Adress:

Praça Eduardo Mondlane, 7 C
1950-104 Lisboa

GPS Coordinates:
N: 38º44'37.23'' W:
9º06'48.69''

BUS:

755 From **Sete Rios (** **)** to **Poço Do Bispo**

759 From **Restauradores (** **)** to **estação do Oriente (** **)**

749 From **Estação de Entrecampos(** **)** to **ISEL (** **)**

K. ADDITIONAL INFORMATION

ESAI ERASMUS Charter

International Policy Statment

ECTS Guide/Credit System

Incoming Students

2. BACHELOR'S DEGREE (1ST CYCLE) IN REAL ESTATE MANAGEMENT

LEGAL FRAMEWORK

Despacho n.º 1968/2021 – Diário da República n.º 36/2021, Serie II de 2021-02-22

MAIN FIELD(S) OF STUDY FOR THE QUALIFICATION

Economics, Accounting, Financial Calculations, Financial Management, Business Management, Urban Planning, Real Estate, Property Assessment, Real Estate, Construction Technology, Project Management, Marketing, Real Estate, Law and Taxation

NAME AND STATUS OF THE AWARDING INSTITUTION

Escola Superior de Actividades Imobiliárias (Higher Education Institution) Recognized by Portaria 889/90 of 22 of September

LANGUAGE(S) OF INSTRUCTION/EXAMINATION

Portuguese

LEVEL OF QUALIFICATION

Bachelor - Level 5 (ISCED), Level 6 (EQF)

OFFICIAL LENGHT OF PROGRAMME

3 years | 6 semesters | 180 ECTS

ACCESS REQUIREMENT(S)

Entrance to the degree course can be made via General Access Regime through an Institutional Entrance Competition, via the Special Conditions of Access and Special Competitions of Access.

MODE OF STUDY

After working hours

PROGRAMME REQUIREMENTS:

The Bachelor's degree in Real Estate Management is awarded to students who demonstrate a full understanding of the economic, social, political and financial resources of Real Estate. A more technical preparation for the collection, analysis, manipulation and interpretation of data, and for the use of methodologies and techniques of investigation. A critical awareness of the reflex, the citizen and the community, the use of emerging issues, critical assessment, allocation and management of real estate taking into account, whenever appropriate, a European and global perspective. A thorough knowledge of the principles and solid theoretical and practical activity in this area, as well, as the ability to respond to contemporary challenges induced by rapid changes in the housing market, and problems of integration of economies in the European market

ACCESS TO FURTHER STUDY

The qualification allows applying for the degrees of Master (ISCED 5A) and Doctor (ISCED 6)

PROFESSIONAL STATUS

The degree in Real Estate Management is entitled to superior performing technical tasks in different areas of real estate. Whether in the fields of Construction, Property Development and Real Estate, whether in functions related to real estate and real estate investment funds in local governments, banking and other sectors which directly or indirectly live the real estate phenomenon. Also eligible to hold office as technical staff at the company level or under a legal professional, focusing on their performance in the areas of activity mentioned above

THE STUDY PROGRAMME'S GENERIC OBJECTIVES:

This study cycle main objective is to provide students with knowledge, understanding and critical awareness of the theory and practice of Real Estate Management, as well as to develop the analytical skills necessary to solve problems in such a vast field like real estate.

INTENDED LEARNING OUTCOMES (KNOWLEDGE, SKILLS AND COMPETENCES) TO BE DEVELOPED BY THE STUDENTS:

A clear understanding of the economic, financial, political and social aspects associated with real estate.

Aptitude for a critical awareness of the reflection, in the citizen and in the community, of the options for the use, allocation and management of real estate resources, in a European and global perspective.

Knowledge of research methodologies to collect, analysis, processing and interpretation of data, as well as developing their presentation and communication skills through the use of appropriate techniques in the oral and written field.

Human resources and team management skills to ensure better and greater performance and productivity of project teams, stakeholders or interlocutors with whom they deal in their day-to-day activities.

Negotiation skills and emotional intelligence to be able to respond effectively to the challenges, restrictions and aggressive environments of new business models and the complexity of real estate activity.
Entrepreneurship and real estate consulting skills to successfully create new real estate businesses, as well as provide technical and business consulting and advisory services within the real estate sector.
Analysis skills and deep understanding of the new paradigm of 'cities of the future' to know trends, sustainability solutions, demographic movements, new habits of the urban world, so that they can respond assertively to this new challenge.
Practical skills for effective application of the main technical and scientific knowledge of the real estate sector, through the application of theory and practice to a real problem of real estate activity.

COURSE DIRETOR: PhD. Doutor João Gomes

SCIENTIFIC AREAS AND CREDITS NECESSARY FOR AWARDING THE DEGREE

Scientific Area	Acronym	Mandatory ECTS
Real Estate Activities	IMOB	68,0
Management	GEST	29,0
Finance	FIN	5,0
Economy	ECON	9,0
Scientific Area	**Acronym**	**Mandatory ECTS**
Marketing	MARK	6,0
Accounting	CONT-FISC	10,0
Law	DIR	13,0
Architecture and Urbanism	ARQ-URB	8,0
Construction	CONST	13,0
I.T	INF	9,0
Math	MAT	10,0
		180,0

STUDY PLAN

1.º YEAR

Curricular Unit	Contact Hours	ECTS	Resume Syllabus
Real Estate Studies	48	4,0	Introduction to Real Estate Real Estate Investment Real Estate (RE) Real Estate Management (REM) Real Estate Valuation Real Estate Mediation
Quantitative Methods I	64	5,0	Introduction to Statistic Fundamental concepts

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			Measures of central tendency or location Measures of dispersion and asymmetry Index numbers
Innovation and Entrepreneurship in Real Estate	48	4,0	Entrepreneurship Innovation Analysis and business opportunities assessment Consultancy Developing a business plan
Introduction to Law	64	5,0	Social Order Legal Order Law structure Law sources Legal System Legal Techniques The application of the law Law enforcement in space
Introduction to Economics	42	5	Basic Principles of Economics Introduction to Microeconomics Introduction to Macroeconomics
Construction Technology	48	4,0	The architecture of the buildings: Introduction to the study, reading and interpretation of projects Understanding Project: Preliminary Program, a previous study, compared the project, final project and Screens The security requirements habitability, safety, efficiency and economy Quality construction The durability and cost The constituents of the buildings
Introduction to Scientific Methodology	48	4,0	Introduction to scientific thinking Instrumentalism and operacionalism Deductive Thought, inductive and hypothetical-deductive Research procedure. Interrogative question or statement under investigation Hypothesis Methods and data collection techniques The process of scientific research Research project Report Communication of research results Design and type of work: professional and academic
Quantitative Methods II	64	5,0	Variables. Data, measurement scales and random variables. Correlation and linear regression Pearson Spearman correlation coefficient Serial correlation Series Continuous distribution functions
Property Valuation I	64	6,0	Introduction to Property Assessment (PA) Comparative Method Income Method
Financial Calculus	64	5,0	Capitalization operations Interest Rates Discount operations Rents Loan Repayments

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Urban and Regional Economics	64	5,0	Scope and objectives of Urban and Regional Economics Main economic theories of location Regional economic development Regional policies and regional development Real Estate market
Accounting	64	5,0	Concept Company, and its classification The Evolution and role of accounting as a management tool Accountancy Divisions The Heritage Inventory and Assessment The Account Registration Accounting Methods Releases Journal and Ledger Balance Sheets and Statements The System of Accounting Standards - SNC Study Accounts End of Financial Operations
TIC - Information and Communication Technologies	48	4,0	Information technology and communication vs. Information Systems Navigation and Communication Network Applications and tools for information and communication

2.º YEAR

Curricular Unit	Contact Hours	ECTS	Resume Syllabus
Urbanism I	48	4,0	Concept of urbanism The city in history and the development of urban forms Duties and responsibilities of various levels of public administration Bases of land management and urbanism Land management system Land management tools Master municipal plan, urbanisation plan, detail plan Urban allotments Soil policies Indexes and urban parameters Demography and demographic indicators Urban design
Business Management	48	4,0	The Managers, the Management and the Companies The Management Thought Vision, Mission and Objectives Strategic Analysis Globalization and Internationalization of Companies How to Internationalize and Compete in Global Markets How to Organize the Company Market and Value Orientation Marketing Action Building Teams and Managing People Motivate and Lead the Team Ethics and Social Responsibility
Property Valuation II	50	5,0	Cost Method Valuation of the expropriation process Valuation of rustic assets

Financial Management	64	5,0	Financial Management Functional Balance Sheet Ratios Financial Analysis Profitability Analysis Risk Analysis Analysis of the funding sources available to the firm
Real Estate Law I	48	4,0	The Legal Value Introduction to Bonds Contracts in General
Marketing Principles	46	3,0	Basic concepts Consumer behavior Market segmentation and positioning Branding Marketing mix
Real Estate Promotion Project	64	5,0	The real estate business process The real estate development process The creation of value in the real estate project The inception of an idea The refinement of the idea.
Real Estate Marketing	46	3,0	Real Estate Marketing particularities Real Estate Marketing New Products and Services development Real Estate Marketing Plan Real Estate Marketing Online Personal Marketing Real Estate Prospecting Real Estate Marketing Analysis, Trends, Tools
Urbanism II	48	4,0	Demographics: demographic projections and indicators of local territorial planning Defining collective facilities Transports and urban planning - Sustainable Mobility Urban Politics Fundamentals of Geographic Information Systems Spatial data processing Spatial data analysis
Compared Real Estate	50	5,0	Concepts and definitions Real estate market analysis indicators Real Estate Markets – Offices, Commercial, Industrial and Logistic, Tourist, Housing Market
Construction and Sustainability	48	4,0	Basis of the sustainable development model Functional requirements for safety and comfort of buildings. Sustainable Construction Industry. Sustainability indicators. Environmental management. Technology and innovation on the development of Sustainable Construction.
Real Estate Law II	48	4,0	Rights in Rem Introduction Rights to use Security interests Pre-emption rights Possession Registries and Notaries

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TII - Information Technologies for Real Estate	64	5,0	Internet - Pages – Blogs - Portals Construction - structure optimization; Social networks Application to Real Estate Mobile APPs The use of APPS to support the Real Estate business; Development of simple APPs; 3D Modelling Development of models, sketches or images in 3D. Virtual Reality and Augmented Reality
Property Valuation III	64	5,0	Globalization as a driver of change in the Property Assessment (IA) Valuers and users organizations: the International The Valuer in Europe Valuation Methods - A Comparative Analysis of its use in several countries Valuation of Real Estate Assets Valuation for residential mortgage lending Valuation of Public Heritage Buildings

3.º YEAR

Curricular Unit	Contact Hours	ECTS	Resume Syllabus
Real Estate Brokerage	48	4,0	Real Estate and Listing Activity - Regulations and procedures Ethic in Real Estate Activity The Real Estate Business and Planning The Listing Process The Selling Process Marketing in the Real Estate Activity Managing People in the Real Estate Activity New Technologies in the Real Estate Market The Agent / Brokers of today and in the future - Conclusions / Brainstorming
Real Estate Promotion Managemen	48	4,0	The feasibility and information to the process The business plan The implementation The control The conclusion of the real estate project
Human Resource Management and Communication	46	3,0	HR Management The new frontiers of management-The Age of Knowledge Organizational Communication
Taxation	64	5,0	The Portuguese tax system Tax heritage The Municipal Property Tax - IMI Additional to the Municipal Property Tax - AIMI Municipal on transfers of Property Tax- IMT Income tax Income tax of individuals (IRS)
Funds and Asset Management	64	5,0	Introduction Property Management Management of Real Estate Asset Portfolios
Project Management	50	5,0	Introduction to project management Techniques of qualitative assessment of projects Parametric estimation techniques Network analysis through the CPM and Pert methods

			Planning process Control Process (EVM)
Cities of the Future	48	4,0	Introduction to the City (SDGs and Pizza Pie) Sustainable Urban Regional Development - SUR Index of a future project – creation of teams SUR – KPI's Mapping the City, empty areas, Equipment, Mobility, Real Estate Pathologies and unbalances Urban Market – Population – KPI's Investment Projects Urban Planning and management International Cities – population growth, quality of life Public Strategy – Private Dynamics – PPP's Project Presentation
Integrated Management of Services and Assets	64	5,0	Introduction to Real Estate Management Facility Management Management of condominiums.
Team Management and Negotiation	48	4,0	People management Psychological assessment of the other Team Management Negotiation
Real Estate Investment Analysis	64	6,0	Concepts of Investment The Process of Investment Concepts of Real Estate business The Investment Valuation Methods The Value in the Real Estate Project The Financing in Real Estate The Building Economics and several model analyses Practical Lessons
Operational Management of Buildings	50	5	Introduction to Operational Management of Buildings Technical Installations Contracting of services Operating conditions Computer tools for the management and maintenance of buildings Legislative framework Evaluation of the performance of the contracted services
Applied Project	40	10	Research methodologies and problem solving Cases presentation Tutorial: application of real estate management methodologies for problem resolution Public presentation and defense of projects

ADDITIONAL INFORMATION: https://esai.pt/lgi

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3. BACHELOR'S DEGREE (1ST CYCLE) IN BUILDING AND CONSTRUCTION MANAGEMENT

LEGAL FRAMEWORK

Despacho n.º 7571/2019 – Diário da República n.º 162/2019, Serie II de 2019-08-26

MAIN FIELD(S) OF STUDY FOR THE QUALIFICATION

Construction and civil engineering

NAME AND STATUS OF THE AWARDING INSTITUTION

Escola Superior de Actividades Imobiliárias (Higher Education Institution) Recognized by Portaria 889/90 of 22 of September in association with Escola Superior de Tecnologia de Tomar, Instituto Politécnico de Tomar

LANGUAGE(S) OF INSTRUCTION/EXAMINATION

Portuguese

LEVEL OF QUALIFICATION

Bachelor - Level 5 (ISCED), Level 6 (EQF)

OFFICIAL LENGHT OF PROGRAMME

3 years | 6 semesters | 180 ECTS

ACCESS REQUIREMENT(S)

Entrance to the degree course can be made via General Access Regime through an Institutional Entrance Competition, via the Special Conditions of Access and Special Competitions of Access.

MODE OF STUDY

Tendentially after working hours, established each year, considering the students preference

PROGRAMME REQUIREMENTS:

The Bachelor's degree in Building and Construction Management is awarded to students who demonstrate that they have the necessary knowledge, skills and competences to combine the technical knowledge of construction with that of management, allowing the execution of projects with more efficient technical and economic requirements

ACCESS TO FURTHER STUDY

The qualification allows applying for the degrees of Master (ISCED 5A) and Doctor (ISCED 6)

PROFESSIONAL STATUS

The degree in Building and Construction Management is qualified to perform superior technical tasks in the field of building and construction management, as well as in asset management, namely by participating in multidisciplinary teams, in the areas of real estate activity project management, direction and inspection of new construction or building rehabilitation/remodeling, in the public or

private sector, in training and applied research

THE STUDY PROGRAMME'S GENERIC OBJECTIVES:

This study cycle is a extensive training in construction management.

The creation of this study cycle aims to fill the shortage of specialized licensees in the field of building and work management, an area that has been growing in recent years and this trend is expected to continue.

The syllabus competes for a professional broadband profile aiming at the training and ability to apply students' knowledge in solving real problems in the sector of the construction economy.

It is intended that graduates should be able to exercise their professional activity in the management of buildings and civil construction works, as well as in the management of built heritage, namely in the participation in multidisciplinary teams in the areas of promotion, design, management and supervision of works, in the public or private sector, in training and applied research.

INTENDED LEARNING OUTCOMES (KNOWLEDGE, SKILLS AND COMPETENCES) TO BE DEVELOPED BY THE STUDENTS:

Up-to-date knowledge in the fields of construction management, integrating the problems arising from safety, quality, sustainability and the environment.

Apply, through scientific methodologies, the knowledge of the basic scientific areas and the specialty.

A critical spirit and ability to understand the real problems of the construction sector, to formulate, to solve them and to continue to learn with autonomy.

Domain of information technology, as a means of access, treatment and circulation of information and as a tool for problem solving in the field of construction management.

Oral, written and graphic skills to communicate the conclusions and reasoning behind them to both experts and non-experts in a clear and unambiguous manner.

COURSE DIRETOR: Professor Vítor Reis

SCIENTIFIC AREAS AND CREDITS NECESSARY FOR AWARDING THE DEGREE

Scientific Area	Acronym	Mandatory ECTS
Complementary Areas	AC	30,0
Business Sciences	CE	35,0
Construction Technologies	DT	65,0
Construction Management	GC	50,0
		180,0

STUDY PLAN

1.º YEAR

Curricular Unit	Contact Hours	ECTS	Resume Syllabus
Quantitative Methods I	42	5	Introduction to Statistic Fundamental concepts Measures of central tendency or location Measures of dispersion and asymmetry Index numbers
Technical English	42	5	The real-estate world: specific vocabulary, conversation strategies, expressing ideas and arguments in the professional context The economic crisis and its consequences to the real-estate world Changing Society Relevant grammar structures
Technical Drawing and Graphical Analysis	42	5	Design rules and standards for Technical Drawing: sheet layouts, scales, linetypes, dimensions, graphic elements. Orthographic views: orthogonal, oblique and pesrpective views Orthogonal Projections: multiple views (European system) Axonometric projections Sections Computer Aided design: drawing and editing tools
Construction Materials	42	5	Introduction to building materials Polymeric materials Composite materials New materials The sustainability of construction
Construction and Structural Sciences	42	5	Introduction Portuguese popular architecture Urban income buildings Description of construction systems, structural systems
Applied Physics	42	5	Basic concepts: Measurements and units International System of Units Measurements and errors Kinematics Dynamics Work and Energy Rigid body, statics and elasticity Vibration and wave motion
Quantitative Methods II	42	5	Variables. Data, measurement scales and random variables Correlation and linear regression Pearson Spearman correlation coefficient Serial correlation Series Continuous distribution functions
TII for Architecture and Construction Projects	42	5	Architectural and constructive elements of the building Organization and development of a working project Building Design Survey of architectural elements and buildings Introduction to BIM technology applied to architecture Introduction to BIM technology for the different specialties of a civil construction project

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Economics and Management	42	5	Basic Principles of Economics Introduction to Microeconomics Microeconomics concepts Macroeconomic concepts. Consumption and Investment. Fiscal policy and product. Money, Monetary Policy and the Commercial Banking. Monetary and Fiscal Policy: Effects on inflation and unemployment. Economic growth and international trade. Financial Markets and the Economy
Geotechnics and Building Foundations	42	5	General concepts Soil Mechanics Standardization and Regulation. Applied Geotechnics. Examples practical cases. Foundations Excavations

2.º YEAR

Curricular Unit	Contact Hours	ECTS	Resume Syllabus
Processes and Construction Techniques I	42	5	Introduction to construction Building Construction Processes and Techniques Constitution and requirements of various constructive details Formwork Special construction processes Pre-fabrication Construction and the environment Legislation applicable
Construction and Structural Systems	42	5	Building construction and structural systems Structural design Introduction to computer-aided analysis and design of structures Evaluation of the behavior of structural systems Simplified methods of structural analysis
Marketing and Business Strategy	42	5	Basic concepts Marketing concept Marketing strategic and operational marketing Consumer behavior Market segmentation and positioning Marketing mix
Survey Techniques in Buildings	42	5	Topography Photogrammetry and Remote Detection Photogrammetric surveys 3D laser scanning technology Methods and techniques for surveying existing constructions Survey of materials and registration of construction anomalies Freehand surveying of existing constructions Organization of information collected Development of technical drawings
Operational Management of Buildings	42	5	Introduction to Operational Management of Buildings Technical Installations Contracting of services Operating conditions Computer tools for the management and maintenance of buildings Legislative framework

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			Evaluation of the performance of the contracted services
Quality, Safety and Environment Management in Construction	42	5	Costs of Non-Quality, Prevention and Control in Quality Management Safety and Environment The Portuguese quality system Quality standards and identification of the main legal requirements associated with the realization of construction products Legislation applied to safety, hygiene and health at work Analysis of risks Security management system Methods and practices of Environmental
Processes and Techniques of Construction II	42	5	Buildings walls Ventilated facades and glass facades Solar technologies on facades Wall coverings Buildings roofs Roof coatings Drainage of rainwater in roofs Floor coverings in indoor and outdoor New materials and new construction processes
Processes and Reinforcement Techniques of Structures and Foundations	42	5	Structural systems; methodologies for intervention in structures Structural damage and decay Processes and Techniques of Strengthening of Structures Processes and Techniques of Strengthening of Foundations
Integrated Management of Services and Assets	42	5	Introduction to Real Estate Management Facility Management Management of condominiums
Scientific Methodologies	42	5	Introduction to scientific thinking Instrumentalism and operacionalism Deductive Thought, inductive and hypothetical-deductive Research procedure. Interrogative question or statement under investigation Hypothesis Methods and data collection techniques The process of scientific research Research project Report Communication of research results Design and type of work: professional and academic
Human Resource Management	42	5	HR Management The new frontiers of management-The Age of Knowledge Teams & Organizational Communication
Management of Construction Site	42	5	Measurement standards Construction budgets Resource planning and management Price adjustment Health ans safety at work Noise and vibration Prevention mechanisms On-site Safety

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3.º YEAR

Curricular Unit	Contact Hours	ECTS	Resume Syllabus
Sustainability of Buildings	42	5	Environmental sustainability. The role of the UN and its historical framework Ecosystems and the effects of man / industry Sustainability indicators The construction industry and the natural environment Framework Consumption of natural and energy resources Hazardousness / toxicity of building materials Energy incorporated in materials. Sustainable construction industry Management of construction and demolition waste Technological innovation in Sustainable Construction
Pathology and Rehabilitation of Buildings	42	5	Non-structural anomalies of the buildings Causes of non-structural anomalies Pathology of natural stone Pathologies of concrete and reinforced concrete Pathologies of timber elements Processes and rehabilitation techniques Wall cladding and coatings Practical examples of rehabilitation works in buildings Some notes about the costs of the rehabilitation interventions
Property Valuation	42	5	Concepts of Investment The Process of Investment Concepts of Real Estate business The Value in the Real Estate Project The Financing in Real Estate The Building Economics and several model analysis Practical Lessons
Project Management	42	5	Introduction to project management Techniques of qualitative assessment of projects Parametric estimation techniques Network analysis through the CPM and Pert methods Planning process Control Process
Building Maintenance	42	5	Buildings behavior in service Systems operation Behavioral theories of buildings Performance evaluation Building management Service information Cost of Life Cycle (CLC) Methods of evaluation and forecasting Integrated systems of maintenance Socio-economic maintenance framework: national legal framework
Construction Observation and Monitoring	42	5	Safety, functionality and durability of constructions; Diagnosis and inspection of buildings Measurement and instrumentation in structures Structural testing and monitoring techniques Durability testing and monitoring techniques
Building Remodeling	42	5	Interventions on heritage Adapting and functional renovation of buildings Interventions on building

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Integrated Management of Construction Technology	42	5	Introduction to construction management Use of BIM tools in the following activities Production of drawings and detailed drawings Coordination of project elements of the different specialties Construction management: 4D and 5D BIM Characteristics of a BIM model to support construction management Integration of information in BIM models
Construction, Rehabilitation and Refurbishment Management Project	84	15	The work plan for this course is established on a student-to-student basis and includes the completion of a one-year project. Projects are proposed by the relevant department and approved annually by the lecturer in charge of the course. Usually, the project builds on previous coursework undertaken as part of end-of-year courses/modules, thus taking full advantage of students' prior work.
Facility Management Project	84	15	The work plan for this course is established on a student-to-student basis and includes the completion of a one-year project. Projects are proposed by the relevant department and approved annually by the lecturer in charge of the course. Usually, the project builds on previous coursework undertaken as part of end-of-year courses/modules, thus taking full advantage of students' prior work.

ADDITIONAL INFORMATION: https://esai.pt/lgeo

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4. BACHELOR'S DEGREE (1ST CYCLE) IN CIVIL ENGINEERING

LEGAL FRAMEWORK

Despacho n.º 10366/2022 – Diário da República n.º 163/2022, Serie II de 2022-08-24

MAIN FIELD(S) OF STUDY FOR THE QUALIFICATION

Construction and civil engineering

NAME AND STATUS OF THE AWARDING INSTITUTION

Escola Superior de Actividades Imobiliárias (Higher Education Institution) Recognized by Portaria 889/90 of 22 of September in association with Escola Superior de Tecnologia de Tomar, Instituto Politécnico de Tomar

LANGUAGE(S) OF INSTRUCTION/EXAMINATION

Portuguese

LEVEL OF QUALIFICATION

Bachelor - Level 5 (ISCED), Level 6 (EQF)

OFFICIAL LENGHT OF PROGRAMME

3 years | 6 semesters | 180 ECTS

ACCESS REQUIREMENT(S)

Entrance to the degree course can be made via General Access Regime through an Institutional Entrance Competition, via the Special Conditions of Access and Special Competitions of Access.

MODE OF STUDY

Tendentially after working hours, established each year, considering the students preference

PROGRAMME REQUIREMENTS:

The Bachelor's degree in Civil Engineering is awarded to students who demonstrate that they have the necessary knowledge, skills and competences in the fields of structures, construction, geotechnics, foundations, hydraulics and planning and a strong component of specialization specifically aimed at construction management.

ACCESS TO FURTHER STUDY

The qualification allows applying for the degrees of Master (ISCED 5A) and Doctor (ISCED 6)

PROFESSIONAL STATUS

The degree in Civil Engineering is qualified to perform superior technical tasks in the various fields of Civil Engineering and to participate in multidisciplinary teams, in the areas of promotion, design, management and supervision of works, in the private sector and in public administration, in training and in applied research.

THE STUDY PROGRAMME'S GENERIC OBJECTIVES:

The study cycle of Civil Engineering is a broad-range training in the field of Civil Engineering in the specialties of Structures, Construction, Geotechnics and Foundations, Hydraulics and Planning, with a strong componente of specialization specifically aimed at the construction director.
The creation of this study cycle intends to make up for the lack of specialized graduates in construction director an area that is expected to grow in the coming years in Portugal.
The syllabus contributes to a professionalizing broadband profile aimed at training and the ability to apply students knowledge in solving real Civil Engineering problems.
It is intended that graduates will be able to exercise their activity in the various fields of Civil Engineering and participate in multidisciplinar teams, in the areas of promotion, design, direction and supervisiono f works, in the private sector and in public administration, in training and in applied research.

INTENDED LEARNING OUTCOMES (KNOWLEDGE, SKILLS AND COMPETENCES) TO BE DEVELOPED BY THE STUDENTS:

The study cycle must ensure the following learning objectives:
Have up-to-date knowledge in the fields of construction, structures, geotechnics, communications routes, hydraulics and land planning, integrating the problems arising from safety, quality, sustainability and environment.
Apply, through scientific methodologies, the knowledge of basic and specialty scientific areas.
Have a critical mind and the ability to understand the real problems of civil engineering, to formulate them, to solve them and to continue to learn independently.
Know and apply computer technologies as a means of accessing, processing and circulating information and as a problem-solving tool.
Have skills in oral, written and graphic expression and the ability to communicate the conclusions and the reasoning underlying them, both to specialists and non- specialists, in a clear and unambiguous manner.

COURSE DIRETOR: Professor Luis Filipe Rocha de Almeida

SCIENTIFIC AREAS AND CREDITS NECESSARY FOR AWARDING THE DEGREE

Scientific Area	Acronym	Mandatory ECTS
Mathematics	MAT	24,0
Physics	FIS	4,0
Chemistry	QUI	2,0
Geotechnics	GEO	24,0
Hydraulics	HID	10,0
Planning	PLA	5,0
Structures	EST	37,0
Constructions	CON	74,0
		180,0

STUDY PLAN

1.º YEAR

Curricular Unit	Contact Hours	ECTS	Resume Syllabus
Mathematical Analysis I	70	6	1. Real Numbers 2. Real functions of a real variable 3. Limits and Continuity 4. Differential Calculus 5. Integral Calculus
Linear Algebra	56	6	1. Matrices and Systems of Linear Equations 2. Determinants ans their Application to Solving Systems of Linear Equations and Calculating yje Inverse of a Matrix 3. Vector Spaces 4. Eigenvalues and Eigenvectors. Application to Matrix Diagonalization 5. Notions of Analytical Geometry
Applied Physics	40	4	1. Basic concepts: Measurements and units. International System of Units. Measurements and errors. 2. Kinematics. 3. Dynamics. 4. Work and Energy. 5. Rigid body, statics and elasticity. 6. Vibration and wave motion.
Applied Mechanics	56	6	1. STRUCTURAL SYSTEMS AND ACTIONS IN STRUCTURES OF BUILDINGS AND BRIDGES 2. RIGID BODY EQUILIBRIUM 3. 2D ANALYSIS of STRUCTURES 4. TRUSSES 5. INTERNAL FORCES AND DIAGRAMS 6. CABLES 7. MASS GEOMETRY
Construction Materials	42	4	1 Introduction; 2 Natural stones with application in construction; 3 Aerial and hydraulic binders; 4 Testing of mortars and concrete; 5 Earth as a building material; 6 Ceramic materials and sanitary ware 7 Glass; 8 Wood and their derivatives: plywood and chipboard; 9 Cork. 10 Ferrous and non-ferrous metals and alloys; 11 Polymeric materials: plastics, bitumens and paints; 12 Composite materials with polymeric matrix and others; 13 New materials: nano materials and phase change materials; 14 The sustainability of the construction materials
Technical Drawing and Graphical Analysis	42	4	1. Design rules and standards for Technical Drawing 2. Orthographic views 3. Orthogonal projections 4. Axonometric projections 5. Sections 6. Computer aided design
Applied Chemistry	16	2	1. Basic tools of chemistry. Classification of matter. SI units. Atomic theory and structure. Periodic table. Molecules and ions. Nomenclature of compounds. Mass relations. Mole and molecular mass. Chemical reactions and chemical equations. Stoichiometry. Types of reactions: precipitation, acid-base and oxidation-reduction. Thermochemistry. Heat involved in chemical reactions. 2. Chemical bonding. Lewis notation. Electronegativity. Ionic, covalent and metallic bonds. Intermolecular forces. Gases and gas laws. Ideal gas equation. Imperfect gases. Properties of liquids. Crystals and amorphous solids. 3. Electrochemistry. Redox reactions. Balance of equations. Standard reduction potentials. Spontaneity of reactions. Introduction to corrosion. 4. Chemical characteristics of building materials: polymers, composites, metals and alloys, ceramics, glass, plaster, lime, cement and bituminous materials. Chemical reactions that interfere in the durability of materials.
Mathematical Analysis II	70	6	I - Numerical Series and Function Series II - Real Functions of n Real Variables III - Multiple Integrals

Topography and Survey Techniques	42	4	1-Topography: geometric and trigonometric levelling, topographic survey, triangulation, displacement control and topographic monitoring. 2-Photogrammetry and remote sensing: digital imaging and image optimization techniques, photogrammetric surveys, 3D laser scanning technology. 3-Techniques and methods of surveying existing buildings: collecting information regarding existing buildings, surveying materials and recording constructions anomalies. Freehand survey of existing constructions. Organization of collected information. 4-Elaboration of technical drawings.
Strength of materials	42	5	Basic Concepts of Strength of Materials. Hooke's Law; small deformation hypothesis; principle of overlapping effects; principle of S.Venant; plane sections hypothesis; Linear piece. General safety criteria: characteristic values of the actions and strengths of materials. Ultimate resistance limit states and service utilization limit states. Simple traction and compression; Flexion; Flat and deflected bending concepts; bending deformation; Tangential stresses in simple bending: thin-walled beams, with open and closed section; Torsion of bars and deformations; Stress and strain states; Analysis of elements subject to combination of efforts; Elastic instability in compressed linear parts and in bent parts; Calculation of deformations.
General Construction Processes I	56	4	I.-Introduction; II-Processes and Construction Techniques: 1-Preparatory works; 2-Forms of implantation; 3-Demolitions; 4-Earth movements; 5-Provisional and definitive land containment: 6-Temporary and definitive exclusion of water 6-Foundations (direct, indirect and basements). 7-Formworks. 8-Building structures (concrete, wood and metal). 9-Traditional exterior walls. 10-Structure of roofs. 11-Special construction processes. 12-Prefabrication. 13-Innovative constructive systems. III.-Construction and the environment: Importance of soil, water, biodiversity, free services provided by nature and applicable legislation, the aim is to understand good performance practices in environmental terms and good compliance with applicable legislation.
Engineering Geology	T:21; PL:21	5	1-Origin of Engineering Geology. 2-Structure and composition of the Earth. 2.1 Internal Geodynamics. 2.2 Minerals and rocks. 3- Identification and characterization of geological structures. 3.1 Geotechnical classification of rock mass. 3.2 Excavatability of rock masses. 3.3 Rock Mechanics. 3.4 Geological Cartography.4- Soil Mechanics.4.1 Origin and types of soils. 4.2 Physical and mechanical properties.4.3 Standardization, testing and classification. 4.4 Water in soils.4.5 Compaction. 5- Stresses in the soil mass. 5.1 Stresses at rest. Effective stress principle.5.2 Stresses induced by external loads. 5.3 Brief reference to the Rheology of Materials.5.4 Applicability of the Theory of Elasticity solutions to induced stresses in earth masses. Elastic solutions. 6. Sustainability.7. Circular Economy. Practice: Identification of mineral and rock samples. Tests: classification and characterization of soils and compaction control. Resolution of exercises.
Digital Tools for Engineering and Construction Projects	42	4	I - Architectural and constructive elements of the building II - Organization and development of a working project. III - Building Design: graphic representation IV - Survey of architectural elements and buildings. V - Introduction to BIM technology applied to architecture VI - Design elements of the different specialties of a civil engineering project. VII- Introduction to BIM technology for the different specialties of a civil construction project. VIII - Detailing and detailed drawings

2.º YEAR

Curricular Unit	Contact Hours	ECTS	Resume Syllabus
Numerical and Statistical Methods	56	6	PART I 1 Exploratory Data Analysis 1.2 Sampling Theory 1.3 Data classification 1.4 Graphic representations

			1.5 Location, dispersion and shape measurements 2 Bivariate analysis 2.1 Association between variables 2.2 Pearson's correlation coefficient 2.3 Least Squares Method 2.4 Prediction with the regression line 3 Statistical Inference 3.1 Estimation theory 3.2 Decision theory PART II 4 Numerical Methods for Systems of Linear Equations 4.1 Indirect or Iterative Methods 5 Numerical Methods for Nonlinear Equations and Systems of Equations 5.1 Location of roots 5.2 Iterative Methods 5.3 Newton's Method 6 Polynomial Interpolation 6.1 Lagrange, Newton and Hermite interpolating polynomials 6.2 Segmented and inverse interpolation 7 Derivation and Numerical Integration 7.1 Numerical Derivation 7.2 Newton-Cotes Formulas 7.3 Trapeze and Simple Simpson Rules 7.4 Trapezoid, composite Simpson and Gaussian formulas
Construction Management and Planning	42	5	1. Measurements 2. Budgets 3. Preparation and control of works from the contractor's point of view 4. Planning of works: Work scheduling/resource planning. Budgeting. Cost control
General Construction Processes II	56	4	1. Introduction 2. Building walls: masonry walls; wall panels; partition walls 3. Ventilated facades and glass facades 4. Passive solar technologies in buildings 5. Wall coverings: plasters, ceramics, natural stone, metals, composites, 6. Roofing coatings: small, medium and large 7. Coating of sloped roofs, flat roofs, garden roofs and self-supporting roofs 8. Rainwater drainage on sloping roofs and flat roofs 9. Floor coverings: indoor and outdoor, industrial, school, sports and hospital. 10. Exterior arrangements 11. New materials and new construction processes. Modiko System, Monolite System, ICF System, SLF System, MLC and MLCC Construction and others 12. Prefabrication in concrete and modular construction systems. 13. Special construction processes 14. Discussion of practical cases
General Hydraulics	42	5	1.Fluid Properties 2.Hydrostatics 3.Hydrokinematics 4.Fundamental Concepts and Principles of Hydrodynamics 5.Global Study of Liquid Flows 6.Uniform Flow Resistance Laws 7.Permanent Flows Under Pressure 8.Variable Flows Under Pressure. 9.Free Surface Flows 10.Notions of hydrology
Structure Analysis	42	5	1. Bases for structural design (EC0) 2. Quantification of actions according to EC1 3. Quantification of seismic action according to EC8. 4. General principles of the balance of solids and structures. Introduction to the analysis of structures. 5. Virtual work theorem. 6. Force method. 7. Energy methods. 8. Displacement method. 9. Cross method. 10. Introduction to the theory of influence lines

Soil Mechanics	56	5	I - Compressibility and consolidation of clay layers: stress-strain in soils under confinement conditions, weather effects, different types of clayey soils, edometric testing and determination of parameters for calculation of settlements and consolidation. Terzaghi Consolidation Theory. Two-dimensional and three-dimensional consolidation. Biot theory. Terzaghi Theory solutions for any distributions of the initial neutral pressure excesses. Secondary consolidation. Accelerating consolidation. 2 - Shear strength: Tresca and Mohr-Coulomb failure criteria, tests to determine the shear strength in laboratory, Mohr-Coulomb envelope based on the test results. Shear strength and stress-strain relationships in sands and clays. Neutral pressure parameters.3 - Earth impulses. 4-Stability of slopes in rock and soil. Methods for calculation. Techniques for stabilization. 5- Geotechnical investigation and testing. Exercise resolution.
Technical Direction and Construction Safety	40	4	1 - Introduction to the direction and supervision of work. 2 - Organization of construction companies. 3 - Phases of organization of an enterprise. 4 - Main construction legislation 5 - Coordination and supervision of works. 6 - Construction equipment. 7 - Organization and installation of the shipyard. 8 - Construction planning and cost control. 9 - Safety and health
Foundations	50	5	1- Direct and Deep Foundations. Types of foundations. Load capacity based on shear resistance and deducted from in situ tests. Admissible settlements. Formulation of safety criteria. EC7. Various types of direct foundations. Foundation beams and balance beams. Various types of Deep foundations. Evaluate settlement of piles. 2- Excavations and Soil Support Structures. Excavations: not supported and supported. Entivations. Stability of the digging bottom. Types of soil support structures: rigid and flexible. Draining the walls. Formulation and calculation of stability of rigid walls. Formulation and the methodology of stability of flexible walls. Application of software.
Applied Hydraulics	50	5	Part 1: 1-Drainage through orifices and spillways. Hydraulic measurements 2-Turbo hydraulic machines. Part 2: 1-Population and its evolution. Calculation of flow rates. 2- Valves and other related devices. 3-Collection of underground and surface water. 4- Adduction. Reservoirs 5-Distribution networks : general aspects and calculation 6- Distribution networks: computational models 7-Design of drainage systems 8- Domestic and rainwater wastewater 9- Dimensioning of drainage networks Part 3: 1-Classification of power systems. 2- Building water distribution networks. 3-Building networks for domestic wastewater drainage. 4- Building networks for rainwater drainage
Concrete Structures	60	6	1. Reinforced Concrete Structures: Generalities; Basis for the project; Materials; Durability and coating of reinforcements; Structural analysis; Ultimate limit states; Use limit states (SLS); Constructive provisions relating to reinforcement for reinforced concrete and prestressing (generalities); Constructive provisions relating to particular elements and rules. 2. Specific rules for concrete buildings (EC8).
Control and Tests	40	4	– Selection of measurement and testing equipment – Control and management of equipment – Techniques for installing equipment – Concept of approval and certification of materials – Labeling – Legislation, regulations, rules and specifications – Inspection and testing plans – Tests to control materials and structures – Compliance analysis
Work Preparation Project	60	6	1- Production management 2- Work plan 3- Overall review of the project

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			4- Preparation of work 5- Hiring subcontractors 6- Site plan

3.º YEAR

Curricular Unit	Contact Hours	ECTS	Resume Syllabus
Technical Installations and Maintenance	50	5	1. Building water supply systems: Background and importance of water distribution for human consumption; Environmental sustainability and water efficiency concept; Water supply systems and reservoirs; Sizing and flow of networks; Systems design Pressure conditions; Connection to public network. 2. Building systems for wastewater drainage: Environmental sustainability and efficient wastewater management; Drainage systems; General design of building networks and sizing criteria; Connection to the public network. 3. Fire fighting systems with water: Characterization of different systems (fire fighting systems, sprinkler and water curtain systems); Sizing and drainage criteria. 4. Technical installations of gas, electricity and lighting and air conditioning. 5. Maintenance: Framework and general concepts; Organization and maintenance activities. 6. Regulations and standards.
Building Physics	50	5	1. Basic concepts. Functional and regulatory requirements. Sustainability 2. Thermal and hygrothermal behavior of buildings: Heat and humidity transmission phenomena; Climatic characterization; Hygrothermal comfort concept Parameters associated with the thermal characterization of building materials and elements; Insolation geometry; Bioclimatic architecture; Renewable energy; Efficiency classes and energy certification 3. Natural Ventilation: Ventilation mechanisms; Ventilation requirements for residential buildings 4. Acoustic performance of buildings: Basic concepts; Acoustic correction (sound absorption and reverberation time concepts); Sound isolation to air conduction and percussion sounds; Simplified Calculation Methods 5. Fire behavior: Basic theoretical concepts; Classification of construction materials and elements; Fire safety requirements and quality rules 6. Applicable legislation 7. Constructive solutions
Masonry and Wood Structures	50	5	1. Masonry structures: Typology and functioning of structural systems. Physical and mechanical properties of materials. Design for ultimate limit states. Global stability of masonry structures. Serviceability limit states. Constructive details. Structural defects and reinforcing techniques. 2. Wood structures: Typology and functioning of structural systems. Physical and mechanical properties of materials. Design for ultimate limit states. Structural connections. Serviceability limit states. Constructive details. Structural defects and reinforcing techniques.
Constructive and Structural Systems	50	5	I- Constructions: -Constructions in wood (solid and lamellar), swimming pools (metal and concrete), bridges (metallic, anchorages, trolleys and successive advances), dams (in reinforced concrete, BCC and earth), water treatment plants water, WWTPs, water deposits, various sports facilities, tunnels (small and large diameters, excavation and embankment processes), exterior arrangements, service stations and railway. II-Structural system of buildings: 1. Bases for structural design of buildings. Structural behaviour of buildings. Structural system and actions. Structural safety criteria. Performance requirements of building structures. Regulatory framework. Defects caused by poor structural design and execution errors. 2. Modelling and analysis of building structures. Bases on models for analysis and verification of structural safety of buildings. Transmission mechanisms of vertical and horizontal actions. Seismic analysis of buildings. 3. Automatic calculation of building structures

Communication ways	50	5	1.Transports and their infrastructures. Comparison between rail, road and air transport 2.Road plans. Types of roads, their general characteristics and responsible entities 3.Design phase 4.Road alignments and profile. Its constraints. Relation with the road users 5.Cross section. Its relation with the service level 6.Intersections. Typology and characteristics of intersections and interchanges
Integrated Management of the Real Estate Development	T:28; TP:14; PL:14	5	1. The Real Estate Building Process; 2. Processes in the real estate building project (development, technical information, execution, management, among others); 3. Information flows and planning of the real estate building project using methodologies such as DSM (Design Structure Matrix), BPMN (Business Plan Model and Notation) and BIM management; 4. The building economics (investment valuation methodologies of properties such as NPV, IRR, LCC); 5. The economic planning of the real estate development (financial plan and the DCF method); 6. Practical preparation of a real estate development plan
Metallic and Mixed Structures	48	5	1. Introduction. Typology and functioning of structural systems. Physical and mechanical properties of materials. 2. Metallic structures: Stress analysis. Design to ultimate limit states. Serviceability limit states. Connections. Constructive details. Structural defects and reinforcement techniques. 3. Composite steel-concrete structures: Steel-concrete connection. Structural design of composite beams and slabs. M Composite solutions for structural rehabilitation.
Regional and Urban Planning	48	5	1. Introduction 2. Basic concepts. The city 3. Land use classification 4. Land use programs and plans 5. Urban planning indices and parameters 6. Demography and demographic indicators. Population projection models. 7. Land policies 8. Urban allotment operations 9. Urban design 10. Planning of collective equipments
Execution Project	96	10	1. Basis for the project design. Project elaboration phases. Analysis of design constraints. Compatibility of specialities. Functional and performance requirements. Regulatory framework. 2. Preparation and analysis of speciality projects. Analytical models and automatic calculation tools in project design. Verification of results. 3. Drawings and detailing of the projects. 4. Projects' description overview. Prescriptive and performance specifications. 5. Map of quantities and pricing
Technical Direction of Work Project	96	10	1- Production organization 2- Work plan, Equipment and Security 3- Preparation of the project for the work 4- Preparation of work 5- Equipment management 6- Planning and control of works 7- Management of the execution of the work 8- Technical control of the execution of the work 9- Provisional Reception of the Contract

ADDITIONAL INFORMATION: https://esai.pt/lec/

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5. MASTER´S DEGREE (2ST CYCLE) IN VALUATION AND MANAGEMENT OF PROPERTY ASSETS

LEGAL FRAMEWORK

Despacho n.º 8060/2020 – Diário da República n.º 161/2020, Serie II de 2020-09-18

MAIN FIELD(S) OF STUDY FOR THE QUALIFICATION

Real Estate and Construction

NAME AND STATUS OF THE AWARDING INSTITUTION

Escola Superior de Actividades Imobiliárias (Higher Education Institution) Recognized by Portaria 889/90 of 22 of September in association with Escola Superior de Tecnologia de Tomar, Instituto Politécnico de Tomar

LANGUAGE(S) OF INSTRUCTION/EXAMINATION

Portuguese

LEVEL OF QUALIFICATION

Master - Level 5A (ISCED), Level 7 (EQF)

OFFICIAL LENGHT OF PROGRAMME

2 years | 4 semesters | 120 ECTS

ACCESS REQUIREMENT(S)

Will be considered applications from holders of national academic degree or foreign equivalent to a 1st cycle in the areas of finance, property management, management, economics, accounting, applied mathematics to economics and management, engineering, law and architecture, with minimum work experience of 5 years and / or previous training on the scientific areas of Management and Property Valuation.

According to d) of Article 17 of Decree Law 74/2006 of March 24, as amended by Decree-Law No 107/2008 of 25 June, are also evaluated other candidates deemed suitable by the scientific and pedagogic committee.

Applications will be reviewed based on the final classification of the 1st cycle, the curricular analysis and a possible interview, if necessary for eventual tie.

MODE OF STUDY

Mixed system, tending to after labor system, including Thursdays, Fridays and Saturdays

PROGRAMME REQUIREMENTS:

The Master's degree in Valuation and Management of Property Assets is awarded to students who demonstrate that they have the necessary knowledge, skills and technical and scientific skills in real estate sal and built assets management

ACCESS TO FURTHER STUDY

The qualification allows applying for the degree of Doctor

PROFESSIONAL STATUS

Professionals focused on real estate valuation and building assets management, trained with new research and work methodologies that guarantee excellence in performance, sustained by innovative skills developed in an academic environment focused on real estate and its stakeholders

THE STUDY PROGRAMME'S GENERIC OBJECTIVES:

The evolution of Portuguese real estate market, along with the European, has seen a strong increase in demand for real estate investment by both private investors and institutional entities and large international groups. This pressure in the search for real estate also motivates the demand for technical and scientific skills in real estate valuation and built heritage management for professionals working in the sector.

The Master's Degree in Valuation and Management of Property Assets thus aims to train professionals focused on real estate valuation and building heritage management, trained with new research and work methodologies that guarantee excellence in performance, sustained by innovative skills developed in an academic environment focused on real estate and its stakeholders.

INTENDED LEARNING OUTCOMES (KNOWLEDGE, SKILLS AND COMPETENCES) TO BE DEVELOPED BY THE STUDENTS:

Understand the real estate markets' functioning;
Know the theorical–practical aspects of Property Valuation and Management of Property Assets;
Learn and adapt the different value's notions, in case of the real estate buildings;
Know and to be aware of main techniques and methods of the projects' analysis of the real estate investments;
Understanding the concept of risk and its application in real estate investment evaluation;
Develop models of analysis and interpretation of the market;
Start the practice of research on real estate;
Acknowledge on the domain of property evaluation and management, merging the problems arising from safety, quality, sustainability and environment, energy efficiency and urban planning;
Acquire a critical mind and ability to understand the real problems of the construction and real estate sector;
Acquire oral, written and graphical skills and ability to communicate the conclusions and reasoning underlying them, clearly and unambiguously.

COURSE DIRETOR: Professor Vítor Reis

SCIENTIFIC AREAS AND CREDITS NECESSARY FOR AWARDING THE DEGREE

Scientific Area	Acronym	Mandatory ECTS
Economics	EC	6,0
Accounting and Taxation	CF	12,0
Law	DT	6,0
Construction	C	24,0
Urbanism	URB	6,0
Real Estate	IMOB	60,0
Management and Administration	GA	6,0
		120,0

STUDY PLAN

1.º YEAR

Curricular Unit	Contact Hours	ECTS	Resume Syllabus
Property Economics	42	6	Historical context of "property" and patrimony Economic circuit- application to real estate Mechanisms of supply and demand Real estate and its management Public Policy International attractiveness of property industry Foreign Investment and Financial Account Organization, planning and quality of life Urban economy and speculation
Accounting	42	6	The evolution of Accounting Accounting as management information Significant Financial Statements Principles of Accounting Relationship between IAS / IFRS and property valuation standards Functional Balance Cash Flow Statement Analysis Financial Ratios Economic Ratios Economic-Financial Ratios Breakdown of Asset Return Ratio Breakdown of the Return on Equity Ratio
Real Estate and Property Law	42	6	Real property rights and Real Estate Principle of contractual freedom and typical contracts Urban Rehabilitation Urbanism Law
Real Estate Taxation an Fiscal Law	42	6	Structuring Principles of Real Estate Taxation Real Estate Investment Tax Issues in IRS and IRC Terms Tax consequences of real estate investment on VAT Direct taxation of real estate Tax Evaluations
Technology and Construction Management	42	6	Introduction to construction Building Construction Processes and Techniques Structures (and pavements) of buildings Infra-structures Construction management Cost analysis and planned budgeting Planning procedures New IT methods and construction supervision
Conservation, Maintenance and Rehabilitation of Buildings	42	6	Fundamental concepts of conservation, maintenance and rehabilitation of buildings Functional and safety requirements of buildings Damaging factors and degradation mechanisms of buildings Observation and diagnosis of buildings. Methodologies for assessing the current state of building Criteria and techniques for building maintenance and rehabilitation
Operational Planning and Urbanism	42	6	Evolution and problems of planning and land management Morphological city Legal framework of land use planning Land management tools Concepts, indices and urban parameters

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			Systems implementing zoning plans Legal framework for urban operations Fees and municipal licenses Subdivision and land development operations Operations building (new construction and rehabilitation)
Digital Tools for Real Estate Asset Management	42	6	Introduction to digital tools on Architecture, Engineering and Construction industry (AEC) Concept of building modeling information (BIM) Parametric modeling. Interoperability. BIM normalization BIM implementation and coordination Surveying techniques and building representation Rendering techniques in building modeling BIM in building design, construction management, operational building management
Property Valuation	42	6	National and International Regulations Concepts of Real Estate Value Explicative variables of value Comparative Method Income Method Cost Method Operations, New Construction, Rehabilitation and Urbanisation Valuation of new and used building Valuation of Agricultural properties Valuation Report Valuation of Special Properties
Construction Sustainability	42	6	Basis of the sustainable development model Functional requirements for safety and comfort of buildings Sustainable Construction Industry Sustainability indicators Integration and interconnection of sustainable building principles Environmental management. Life Cycle Analysis Efficient management of energy and water resources. Construction and Demolition Waste Technology and innovation on the development of Sustainable Construction

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2.º YEAR

Curricular Unit	Contact Hours	ECTS	Resume Syllabus
Real Estate Finance	42	6	Thematic Analysis of Risk in Corporate Finance Analysis and Management of Operating and Financial Risk Techniques of Financial Planning Financial Markets Corporate Finance and Decision Making Concepts of Financial calculation Analysis and Evaluation of Bonds
Property Management and Property Investment Funds Management	42	6	Investment in real estate assets Value Analysis in real estate development Valences of exploration management and real estate asset maintenance Implementation of Global Cost (life-cycle cost model) Risk in investing in real estate assets Financing of real estate asset Types of Collective Investment Entities and their risk characterization Property Exploration Account Value creation Cost accounting Economic and financial analysis of real estate assets in exploration Final Consideration through methods of decision support
Advanced Real Estate Valuation Models	42	6	Economic and statistical concepts related to real estate valuation Valuation methods The Objective Value Probable market value Valuation of marginal variables Valuation using Monte Carlo simulation
Property Development and Investment	42	6	Analysis of Technical and Strategic Alignment with the Organization of Project Analysis of Tangible and Intangible Benefits of the Project Assessment of Stakeholders Survey of Business Requirements Macro Estimation of Costs and Time of Execution Economic and Financial Evaluation of Project Analysis of Uncertainty and Valuation of Implementation Scenarios Final Consideration by Decision Matrix
Facility Management	42	6	Concepts of Facility Management and Asset Management Integrated Management of Assets and Services Hiring services Contracting services based on models of variable remuneration Integrated service management Project management and works Evaluation of requirements Manage / Supervise operations and maintenance of buildings Manage / Supervise user services Selecting the best resources for the provision of services
Project	75	30	The work plan is defined for each student, according to the selected theme.

ADDITIONAL INFORMATION: https://esai.pt/mestrado/

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6. MBA´S

A. REAL ESTATE VALUATION

FRAMEWORK

This MBA has been developed in order to deepen your knowledge. With a 307.5 hour Hours, this MBA contains 19 curricular units, in which it will develop various skills and achieve its full performance potential in the Real Estate Valuation area.

QUALIFICATION

MBA/ Postgraduate studies

DURATION

1 academic year (2 semesters, a total of 307,5 hours)

ECTS

51,25

SCHEDULE

On Saturdays – classroom or remote access

GENERAL OBJECTIVES

Technical knowledge on Real Estate Valuation that allows a rigorous approach to an increasingly complex real estate market. Approach, in a clear and precise way, collateral disciplines to Real Estate Valuation, but essential to its perfect understanding and full performance.

To place, in a constantly expanding market, real estate appraisers with adequate academic training for the services they provide.

To provide the professionals in banking, real estate mediation, investment funds, civil construction and real estate promotion with a set of knowledge that will enhance their performance and consequent strategic positioning in the real estate sector.

ACCESS REQUIREMENTS/PROFESSIONAL ACTIVITIES

Graduates, ideally in Economics, Management, Real Estate Management, Engineering, Architecture, Law, Sociology or Geography or with relevant experience in the real estate sector. All those who in their course of study or professional need to develop specific skills in Real Estate Valuation area.

TRAINING METHODOLOGIES

Sessions using the expositive method and the "case studies".

There will also be complementary thematic sessions.

EVALUATION METHODOLOGY

The evaluation will be carrying out an individual work that will address themes explained in a set of previously defined modules. It is intended that the work has a practical component and a link to a concerted reality, chosen by the trainee. it will be possible to correct the elements identified as wrong or missing in the work.

STUDY PROGRAM

The course is organized in 19 modules with a variable workload from 7.5 hours and 30 hours.

Modules	Resume Syllabus	Ects
Real Estate Economy	The Real Estate Economy Basic Concepts of Economic Nature on the Real Estate Market Brief considerations on the Analysis of the Real Estate Market Macroeconomic, demographic and urban economy aspects more decisive in real estate supply and demand Factors of location of activities and demand of real estate organization of space and infrastructure Interrelations between the Real Estate Market, the Financial Market and macroeconomic structures Empirical studies for the case Portuguese	2,5
Real Estate Taxation	Real Estate Taxation and Real Estate Investment	2,5
Ethics and Deontology in Real Estate	Framing of international standards Framing and understanding real estate ethical standards from an international perspective RICS Code of Conduct Understand, decide and communicate what is "correct" Practical application of ethical challenges Practical Cases Practical application of rics ethical standards - Practical cases	1,25
Real Estate and Building Law	The Right to Property The most commonly used bond contracts in the Real Estate Sector Urban Rehabilitation Urbanism Law	2,5
Planning and Operational Urbanism	Evolution and problems of the planning and management of the territory Morphological elements of the city The soil: multidimensionality, value formation, policies and their instruments; Legal framework for spatial planning Territorial management instruments, with special focus on municipal spatial planning plans: content and analysis of plans from the perspective of real estate management Concepts, indexes and urban parameters Systems for the execution of perished plans Legal framework for urban operations, typology of operations and their respective prior control procedures	2,5
Construction Techniques	The Architecture of Buildings Project The Requirements of Safety, Habitability and Economy Quality in Construction Durability and Costs Building Construction Process The Constituent Elements of Buildings Buildings General Criteria for the Rehabilitation of Housing Buildings (EH) Pathology of Buildings and Their Materials Structural and Constructive Anomalies in HS	2,5
Traditional Methods of Real Estate Valuation	Traditional Methods of Real Estate Valuation	5
Real Estate Financing Instruments	Introduction to financing policy Sources of Long-Term Financing Long-term Financing Real Estate Investment Financing/Financial Leverage Interest Rate Risk Real Estate and Financial Markets	2,5

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Financial Accounting Principles	The evolution of the role of the Accounting Financial Manager as management information Main financial statements Accounting Principles Functional Balance Analysis of cash flow statement financial ratios Economic Ratios Economic-Financial Ratios Breakdown of the Asset Profitability Ratio Breakdown of the Equity Profitability Ratio	**3,75**
Research and Analysis Technicians for Consulting	Analysis of Areas of Influence Gravity Model Retention Levels Model Location Model or Survey Study	**2,5**
General Notions on Real Estate And Real Estate Markets **Investment Funds**	The financial system and the securities market Collective Investment Bodies Real estate investment bodies	**2,5**
Real Estate Finance	The Theme of Risk in Corporate Finance Operational and Financial Risk Management Sources of Financing available to Technical Financial Planning Companies Finance and Decision-Making Financial Markets Financial Calculation Concepts Bond Analysis and Assessment Analysis and Evaluation of Actions	**2,5**
Investment Analysis Real estate	Characterization of the different types of Real Estate Investment Methodologies and evaluation criteria	**3,75**
Equation Systems in Urban Planning	Legal framework for systems for the implementation of perished plans Urbanization contracts: rights and obligations arising from perished plans and forms of obligation Registered aspects of the property related to the execution of municipal spatial planning plans and their execution Analysis of municipal spatial planning plans with equal equation mechanisms Resolution of exercises and practical aspects of urban operations	**2,5**
Tax Assessments	Tax framework / general concept of building for tax purposes Tax concept of Rustic Building, Urban Building and Mixed Building Concept of Land for Construction and Urban Buildings of Type 11 other 11 Real estate tax assessment Evaluation bodies and their competences Means of reaction of owners to the fixing of the tax asset value Effects of tax asset value on the tax sphere of the owners	**2,5**
Advanced Real Estate Valuation Models	Statistical and economic concepts related to real estate valuation Valuation methods based on statistical procedures Probable market value Regression analysis (Practical case) Evaluation of marginal variables Evaluation using Monte Cario simulation	**3,75**
Evaluation of Tourist Properties	Hotel and other Similar Property Reviews Concepts about Real Estate And Building in Value Creation or as a Generator of Effective Income Value Creation in Real Estate (value concepts, "goodwill", "worth") Economic Valuation Methodologies Investor Decision Criteria The Property Exploration Account (CIS) The REVPAR Room Average Price Multiple Technique and other indicators The Real Estate Valuation Process The Application of the CIS in The Real Estate Valuation Application in other situations	**2,5**

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Evaluation of Historical and Public Heritage	Evaluation of Historical and Public Heritage The framework of real estate valuation in the Accounting Standardisation System for Public Administrations (SNC-AP) The evaluation of State Heritage under Decree-Law 280/2007 of August 7 The Evaluation of Historical Heritage The classification of historical heritage - from UNESCO to the Municipality Accounting Standards *International* standards of real estate valuation Specific models for the valuation of historic properties	**1,25**
International Standards and Org. for Real Estate Valuation	The issue of "Fair Value" in Real Estate Valuation The Valuation of Real Estate Assets The Process of Harmonisation of Real Estate Assessments Asset Valuation for Financial Reporting	**2,5**

ADDITIONAL INFORMATION: https://esai.pt/mba-ai/

B. REAL ESTATE MANAGEMENT AND BROKERAGE

FRAMEWORK

Being one of the fastest growing sectors in Portugal in recent years, Brokerage has lacked professional training at the level of Higher Education. With an increasingly informed consumer and growing competition, it is imperative that professionals in the sector become professional and differentiate themselves from others.

This MBA has proven professionals in the sector and in the subjects they teach, in addition to covering the various areas of specialization that will allow you to succeed in this market.

QUALIFICATION

MBA/ Postgraduate studies

DURATION

1 academic year (2 semesters, a total of 270 hours)

ECTS

45

SCHEDULE

On Saturdays – classroom or remote access

GENERAL OBJECTIVES

Evolution of the real estate market and trends in relation to the Sustainable Development Goals (ODS)

Strategic Planning, Strategic Thinking and Strategic Management

Marketing applied to Real Estate reality

Strategies for launching and maintaining a Real Estate product

Techniques and tactics of Negotiation in Real Estate Brokerage

Prospecting

Coaching and management of teams in the Real Estate industry

Value chain and sales funnel

NLP and sales-adapted tools
PropTech in Real Estate
Technological trends for Real Estate
Entrepreneurship in Real Estate
Personal marketing for Real Estate success
Recruitment strategies
Financial management and financial analysis tools
Financing source
Financial Planning
Legal framework and legal solutions
Technologies in the Real Estate sector
Taxation
Financial System and the Securities Market
Collective Investment Undertakings and Alternative Investment Undertakings
Financing for different types of real estate investment

ACCESS REQUIREMENTS/PROFESSIONAL ACTIVITIES

Real Estate Consultants looking to develop their careers or form a Team, Team Managers and Commercial Directors, Operations and Recruitment Managers, Brokers and Agency Owners, Investors and Entrepreneurs in the Real Estate sector.

TRAINING METHODOLOGIES

Sessions using the expositive method and the "case studies".

There will also be complementary thematic sessions.

EVALUATION METHODOLOGY

The evaluation will be carrying out an individual work that will address themes explained in a module or in a set of previously defined modules. It is intended that the work has a practical component and a link to a concerted reality, chosen by the trainee. it will be possible to correct the elements identified as wrong or missing in the work.

STUDY PROGRAM

The course is organized in 18 modules with a workload of 15 hours.

Modules	Resume Syllabus	Ects
Real Estate Market Trends	Market trends leading to presentation of individual articles on the transition of real estate processes to models based on Sustainable Development	2,5
Management Principles and Business Strategy	Up-to-date Business Management The current situation of Strategic Management The importance of presenting Case Studies	2,5
Real Estate Marketing	Basic Marketing Concepts Real Estate Marketing Policies Inbound Marketing research methods Real Estate Marketing Policies Online Marketing Launching real estate products and services	2,5
Lead Generation 2.0.	Basic concepts Definition of Objectives in Prospecting Personal Contacts The Offline Channel	2,5

	The Online Channel Types of Prospects Marketing in Real Estate Types of Prospecting Agents	
Negotiation and Sales Techniques	Preparation and Strategy Commercial Action Plan The Visits Handling Objections Closing and Loyalty General Trading Notions Types of Real Estate Negotiation Competencies and Stages of Negotiation Study cases	**2,5**
Coaching and Team Management	Introduction, Expectations, Definitions and Game Rules at coaching, leadership and management Differences between Coaching, Management and Consulting Human needs Identity Iceberg Change management Maturity Stages and Dunner-Kruger chart Awareness. Intervention styles Evaluation of Progress and "Gap Analysis" Ability to observe vs. evaluate Coaching Session Techniques of Feedback and Feedforward Speedrating, retention techniques, relationship management and earning results Keys to High Performance Teams and Team Dysfunctions Good practices in recruitment, selection, integration and evaluation of performance of a team of real estate consultants Sharing learning, questions and answers	**2,5**
Real Estate Process and Buyers	Definition and Interpretation of the real estate sales funnel The 1st contact with the buyer customer - Lead The motivational and financial qualification interview with clients buyers with NLP techniques The selection of real estate solutions that match the needs of customers The virtual presentation of the selected properties and the preparation of visits Explanation of the real estate process to buyer customers	**2,5**
NLP and Communication in Sales	Public Speaking and Presenting Your Project – How to Fix and Eliminate crutches that build noise in communication Types of Communication What is positive language and a proactive stance vs reactive stance Recognition of the product, company and its purpose Creative Problem Solving Communication Type Analysis Practical tools of Neuro-Linguistic Programming	**2,5**
Innovation and New Services in the Sector	PropTech - general definition and its sub-categories Cryptocurrency - a reality that is here to stay The various uses of the main real estate technologies and what are the priorities for my activity The role of the real estate industry in achieving the goals of sustainability for 2050 Considerations about the future of the real estate sector based on the technology and what its expected consequences	**2,5**
Entrepreneurship	Entrepreneurship Analysis and business opportunities assessment	**2,5**
Personal Marketing and Recruitment	Understanding the Why and Vision of Personal Marketing Personal Marketing Plan	**2,5**

	Implementation of the Marketing Plan Recruitment Strategies (Ads, Networks of importance, among others..) Recruitment Funnel and Metrics	
Financial Management in Real Estate	Financial Management Functional Balance Ratios Financial Analysis Profitability Analysis Risk Analysis Analysis of Financing Alternatives available to the Company The Importance of Financial Planning	**2,5**
Real Estate Law	Property Rights versus other rights The most used bond contracts in the sector Judicial challenges in the activity Judicial sale of real estate and related rights the pledge Consignment of income Practical examples	**2,5**
New Technologies for Real Estate	History of Technologies in Real Estate From Offline to Online Investment in technology. To what end? New verticals created by technology (ibuyers, Big data...) Introduction to technologies that impact Real Estate Marketing Impact The most used technologies in real estate	**2,5**
Taxation	Principles and sources of the Tax System Analysis of IRS issues Analysis of IRC issues Analysis of VAT issues Analysis of IMT/IMI/Stamp Duty issues Main real estate investment structures in Portugal	**2,5**
Real Estate Valuation	The Financial System and the Securities Market Collective Investment Undertakings Pension Funds UCITS Evolution of Legislation New general regime, new regulation and new tax regime Undertakings for collective investment in securities and alternative investment undertakings Real Estate Investment Undertakings Real Estate Investment Funds Real Estate Investment Companies Special Real Estate Investment Funds	**2,5**
Real Estate Investment Analysis	Types of Real Estate Investments Profiles and risk characteristics of Real Estate Investors Real Estate Financing Models Profitability Analysis of Real Estate Investment Real Estate Credit Risk Concept	**2,5**
Real Estate Financing Instruments	Real Estate Financing Concept Real Estate Financing Products Real Estate Financing Structure Adequacy of real estate financing to the type of investment Bank Financing Risk	**2,5**

ADDITIONAL INFORMATION: https://esai.pt/mba-gmi/

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C. URBAN REHABILITATION, REGENERATION AND REQUALIFICATION (R3U)

FRAMEWORK

The real estate sector currently has a unique opportunity to requalify and its main actors to re-submit to the market, as those who have transformed a sector that has gone from being eminently building to being a sector that promotes value by creating urban **environments of excellence,** and thus **essentially based on the valuation of property assets.**

For traditional clients who bought apartments, we must now include financial institutions operating in the transformation market through project financing, but also those that manage assets during their life cycle such as investment funds and pension funds.

On the other hand, national, regional and municipal governments today have to respond to increasingly demanding customers (voters) both in the creation, maintenance and animation of public space, and in managing the built heritage of which they are responsible.

Today we have a competition between cities looking for solutions to offer guarantees of sustainability (offer a better future to the population, the environment, investors).

In addition to ensuring sanitation and electricity, the population today demands the defense of biodiversity, ecological footprints, green mobility solutions, higher education, qualified employment, public participation, safe urban centers, with business life, with commercial life, with cultural life, with lives of people of all ages and all social classes.

It is necessary to **think again and create new business models** within the promoter companies, within the construction companies and even in the mediation and evaluation organizations, as well as the public organizations that guarantee the final quality of the transformed space.

This is the challenge that this MBA in R3U responds to, taking advantage of the crisis to develop new business and promote the quality of urban life.

QUALIFICATION

MBA/ Postgraduate studies

DURATION

1 academic year (2 semesters, a total of 252 hours)

ECTS

42

SCHEDULE

On Saturdays – classroom or remote access

GENERAL OBJECTIVES

To provide trainees with a multidisciplinary vision, integrated into urban development and the role of the real estate sector in general and urban rehabilitation as drivers of the transformation of today's cities into sustainable cities.

In this sequence, it is intended to transmit to trainees' knowledge and tools so that they can be better actors, in the development and implementation of urban policies, of valuation of the built heritage, but also of the environmental and social heritage.

It also seeks, through a teaching method particularly based on practical cases, to promote entrepreneurship, both for the development of private organizations for profit and organizations oriented to the defense of public, social and environmental cause.

Considering the complexity of the development of the built environment, in the greatest demand in financing projects, particular attention is given to aspects related to financial management, as well as risk analysis, fundamental, to develop financing solutions.

- To promote Sustainable Cities (attractive to the population, and to investors)
- To value the heritage of cities (from both public and private perspectives)
- Developing entrepreneurship and new real estate business
- To analyze risks and opportunities, develop financing solutions for real estate projects.

Access Requirements/Professional Activities

Graduates, all those who in their course of study or professional need to develop specific skills in Urban Rehabilitation, Regeneration and Requalification.

- Asset Managers - Capital managers related to real estate assets;
- Asset Developers - Managers of assets in transformation;
- Financial managers responsible for real estate assets;
- Financial and Structuring Engineers;
- Real Estate Investment Fund Managers;
- Toxic real estate asset managers;
- Urban and real estate developers;
- Builders of buildings, infrastructures, utilities, public spaces;
- Managers of urban maintenance companies;
- Managers of urban entertainment companies;
- Jurists and Lawyers, process and project managers of Urbanism and Real Estate;
- Architects and Managers of Urbanism and Architecture programs;
- Managers of Building and Utilities Infrastructure Engineering companies;
- Urban, Rural and Real Estate Asset Mediators;
- Real Estate Appraisers and Consultants.

Training Methodologies

Sessions using the expositive method and the "case studies".

There will also be complementary thematic sessions.

Evaluation Methodology

The evaluation will be carrying out an individual work or written test for each module or a set of modules. It is intended that the work has a practical component and a link to a concerted reality, chosen by the trainee. it will be possible to correct the elements identified as wrong or missing in the work.

Study Program

The curricular structure is based on 6 large areas of knowledge from an essentially public management perspective, and in the second semester of private management.

There are areas of study that seek to transmit knowledge and tools, whose main topics covered in each module are indicated in the table below, this being an indicative description of the topics to be developed.

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	Modules 1st Semester					
	Area 1 R3U business strategy and assembly	Area 2 Space Management and Projects	Area 3 Economics, Finance and Investments	Area 4 Urbanism Law, real estate and Rehabilitation	Area 5 Evaluation and Management of Heritage	Area 6 Market and Territorial marketing and Real Estate
Syllabus	Code: 200 **Sustainable Urban and Regional Development** DS = SRU's S3	Code: 201 **Management of Urban Space and Public Space** Spatial planning Urbanism Public space Architecture	Code: 202 **Financial** Management of Balance Sheet **Organizations** Statement of Treasury Results	Code: 203 **Urbanism Law** PdM's detail plans Allotments Licensing Requalification	Code: 204 **Real Estate Valuation** Location Evaluation methods	Code: 237 **Market Studies** Facilitate the decision-making process within the organization, providing a rational and disinterested view of the project under analysis
ECTS	3,5	3,5	3,5	3,5	3,5	3,5

	Modules 2nd Semester					
	Area 1 R3U business strategy and assembly	Area 2 Space Management and Projects	Area 3 Economics, Finance and Investments	Area 4 Urbanism Law, real estate and Rehabilitation	Area 5 Evaluation and Management of Heritage	Area 6 Market and Territorial marketing and Real Estate
Syllabus	Code: 206 **Assembly of the Urban Rehabilitation Business** Promotion of urban rehabilitation business PPP's (private public partnerships) PFI's (Project finance initiative)	Code: 207 **Investment Project Management and Rehabilitation** Asset Acquisition Licensing Planning Marketing Budgets Financing	Code: 208 **Analysis of Real Estate Investments** Investment models Main indicators Risk analysis Methods of financing equity and other people's capital	Code: 209 **Real Estate Law** CPCV's Deeds Companies vehicle Statutes Parassocial Real estate investment funds	Code: 210 **Heritage Management** Yield management lifecycle Facilities management Asset management	Code: 238 **Territorial Marketing** Marketing and Communication of the City Attraction investment and Marketing
ECTS	3,5	3,5	3,5	3,5	3,5	3,5

D. Real Estate Business Management and Promotion

Framework

This MBA was structured in order to deepen the knowledge in the area. With a 307.5 Hours, this MBA contains 18 curricular units, in which it will develop various skills and achieve its full performance potential in the area of Real Estate Management and Promotion.

Qualification

MBA/ Postgraduate studies

Duration

1 academic year (2 semesters, a total of 307,5 hours)

ECTS

51,25

SCHEDULE

On Saturdays – classroom or remote access

GENERAL OBJECTIVES

Providing the students with knowledge and critical awareness about the theory and practice of Real Estate Management and Promotion, allowing them to have a competent approach to the emerging issues of the use, allocation and management of Real Estate resources.

To transmit information about the Economic, Financial, Social and Political mechanisms that condition the Real Estate market.

To provide knowledge in all areas that make up one of the most transversal economic activities of our economy.

To develop in the trainees the ability to apply theory to professional practice. To instil the entrepreneurial spirit of Management, Leadership and Teamwork, increasingly necessary in contexts of increased business competitiveness.

ACCESS REQUIREMENTS/PROFESSIONAL ACTIVITIES

Graduates, ideally in Economics, Management, Real Estate Management, Engineering, Architecture, Law, Sociology or Geography or with relevant experience in the real estate sector. All those who in their course of study or professional need to develop specific skills in Real Estate Management and Promotion area.

TRAINING METHODOLOGIES

Sessions using the expositive method and the "case studies".

There will also be complementary thematic sessions.

EVALUATION METHODOLOGY

The evaluation will be carrying out an individual work that will address themes explained in a set of previously defined modules. It is intended that the work has a practical component and a link to a concerted reality, chosen by the trainee. it will be possible to correct the elements identified as wrong or missing in the work.

STUDY PROGRAM

The course is organized in 18 modules with a variable workload from 7.5 hours and 30 hours.

Modules	Resume Syllabus	Ects
Real Estate Economy	The Real Estate Economy Basic Concepts of Economic Nature on the Real Estate Market Brief considerations on the Analysis of the Real Estate Market Macroeconomic, demographic and urban economy aspects more decisive in real estate supply and demand Factors of location of activities and demand of real estate organization of space and infrastructure Interrelations between the Real Estate Market, the Financial Market and macroeconomic structures Empirical studies for the case Portuguese	2,5

Real Estate Taxation	Real Estate Taxation and Real Estate Investment	2,5
Ethics and Deontology in Real Estate	Framing of international standards Framing and understanding real estate ethical standards from an international perspective RICS Code of Conduct Understand, decide and communicate what is "correct" Practical application of ethical challenges Practical Cases Practical application of rics ethical standards - Practical cases	1,25
Real Estate and Building Law	The Right to Property The most commonly used bond contracts in the Real Estate Sector Urban Rehabilitation Urbanism Law	2,5
Planning and Operational Urbanism	Evolution and problems of the planning and management of the territory Morphological elements of the city; The soil: multidimensionality, value formation, policies and their instruments; Legal framework for spatial planning; Territorial management instruments, with special focus on municipal spatial planning plans: content and analysis of plans from the perspective of real estate management; Concepts, indexes and urban parameters; Systems for the execution of perished plans; Legal framework for urban operations, typology of operations and their respective prior control procedures;	2,5
Construction Techniques	The Architecture of Buildings Project The Requirements of Safety, Habitability and Economy Quality in Construction Durability and Costs Building Construction Process The Constituent Elements of Buildings Buildings General Criteria for the Rehabilitation of Housing Buildings (EH) Pathology of Buildings and Their Materials Structural and Constructive Anomalies in HS	2,5
Traditional Methods of Real Estate Valuation	Traditional Methods of Real Estate Valuation	5
Real Estate Financing Instruments	Introduction to financing policy. Sources of Long-Term Financing Long-term Financing: Real Estate Investment Financing/Financial Leverage Interest Rate Risk Real Estate and Financial Markets	2,5
Financial Accounting Principles	The evolution of the role of the Accounting Financial Manager as management information Main financial statements Accounting Principles Functional Balance Analysis of cash flow statement financial ratios Economic Ratios Economic-Financial Ratios Breakdown of the Asset Profitability Ratio Breakdown of the Equity Profitability Ratio	3,75
Research and Analysis Technicians for Consulting	Analysis of Areas of Influence; Gravity Model; Retention Levels Model; Location Model or Survey Study	2,5
General Notions on Real Estate And Real Estate Markets Investment Funds	The financial system and the securities market Collective Investment Bodies Real estate investment bodies	2,5
Real Estate Finance	The Theme of Risk in Corporate Finance Operational and Financial Risk Management Sources of Financing available to Technical Financial Planning Companies Finance and Decision-Making Financial Markets Financial Calculation Concepts	2,5

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	Bond Analysis and Assessment Analysis and Evaluation of Actions	
Investment Analysis Real estate	Characterization of the different types of Real Estate Investment Methodologies and evaluation criteria	3,75
Environment, Location and Search for Real Estate	Real Estate Environment Location and Search for Real Estate The Future of the Real Estate Market	2,5
Property Management	The different forms of real estate and the different real estate holders Asset Management in Collective Investment Bodies Real Estate Portfolio Management	3,75
Facility Management Principles	Introduction to Facility Management Facility Management Tools Integrated Management of Services and Assets	2,5
Strategy and Assembly of Real Estate Projects	Analysis of real estate business cases with different characteristics with regard to investment volume, complexity, maturity, type of products and time limits of Development.	3,75
Building Management and Maintenance	Facility management and wealth management Services in buildings Practical cases FM model Reporting models SLA's - KPI's service level agreements - Key performance indicators Contracting of facilities management services Integrated management of building and facilities management services IT tools to support building management	2,5

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