

ACOUSTICS AND LIGHTING TECHNOLOGY

ACÚSTICA Y LUMINOTECNIA

COMPULSORY SPECIALTY INTERIOR DESIGN

5 ECTS

5 hours/week

SUBJECT MATTER: Materials and technology applied to interior design

3rd year

1st term

This course will provide students with the fundamental knowledge necessary to design spaces with optimal lighting and acoustic conditioning, tailored to the needs of users and the project's objectives, and to make appropriate technological decisions during their development.

The main objective is for students to acquire a rational working method that enables them to address technological solutions applicable to the acoustic conditioning of spaces, as well as the ability to develop lighting conditioning projects.

COURSE CONTENT:

Lighting design.

Digital technology applied to lighting design.

Acoustic conditioning and insulation.

ADVANCED CONSTRUCTION I

CONSTRUCCIÓN AVANZADA I

COMPULSORY SPECIALTY INTERIOR DESIGN

4 ECTS

3 hours/week

SUBJECT MATTER: Materials and technology applied to interior design

3rd year

1st term

The objective of the Advanced Construction I course is for students to expand their knowledge of contemporary construction systems. This will enable them to make decisions based on the correct and coherent use of the various construction techniques available to them, offering innovative solutions for the development and realization of their projects. The course continues the learning process of construction techniques, which were previously studied in the Materials, Interior Design, Construction I and II courses, and which will culminate in Advanced Construction II.

Advanced Construction I focuses specifically on delving into the importance of construction details; understanding ventilated and prefabricated facade systems; joinery and solar protection systems; and concluding with furniture construction using wood and textile systems in interior design. Throughout the semester, a series of theoretical concepts are taught and put into practice through the drawing of three-dimensional construction detail plans.

COURSE CONTENT:

Construction processes. Tools for assessing and planning the technical aspects of design. Three-dimensional representation of construction systems. Advanced construction techniques. Furniture elements. Joinery systems. Introduction to research and experimentation methods specific to the subject.

ADVANCED CONSTRUCTION II

CONSTRUCCIÓN AVANZADA II

COMPULSORY SPECIALTY INTERIOR DESIGN

3 ECTS

2 hours/week

SUBJECT MATTER: Materials and technology applied to interior design

3rd year

2nd term

The objective of the Advanced Construction II course is for students to expand their knowledge of contemporary construction systems. This will enable them to make decisions based on the correct and coherent use of the various construction techniques available to them, offering innovative solutions for the development and realization of their projects. The course complements the learning process of construction techniques, which were previously studied in the Materials, Interior Design, Construction I and II, and Advanced Construction I courses. The Advanced Construction II course focuses specifically on construction systems using plastic materials, membranes, and sheets, as well as bioclimatic and green building solutions. During the semester, a series of theoretical concepts are taught and then put into practice through the drawing of three-dimensional construction detail plans.

COURSE CONTENT:

Construction processes. Tools for assessing and planning the technical aspects of design. Three-dimensional representation of construction systems. Unique construction systems. Application of industrialized construction systems to interior design. Energy efficiency of construction processes and solutions. Bioclimatic solutions.

ADVANCED INTERIOR DESIGN PROJECTS I

PROYECTOS AVANZADOS DE DISEÑO DE INTERIORES I

COMPULSORY SPECIALTY INTERIOR DESIGN

6 ECTS

6 hours/week

SUBJECT MATTER: Interior design projects

3rd year

1st term

This course is designed as a continuation of the knowledge acquired in the second-year Interior Design Projects I and II courses, with the primary objective of further training students in a rational and useful working method for their future professional activity. It aims to equip them with the ability to provide a personal response to the various spatial problems they may encounter in the future, expressing their individual design vision. Students will be required to develop real-world interior design project proposals, taking a detailed approach to construction, paying particular attention to the concept, the idea itself, the degree of communication and expression, research methods, and the construction techniques and materials.

The development of the projects proposed throughout the semester, which aim to resolve problems of space and functionality, is geared towards achieving this goal within the parameters required of the profession.

COURSE CONTENT:

Foundations and theoretical-practical study of interior design projects. Execution of projects in the various fields of the specialty. Definition and execution of interior design projects, applying project resolution, evaluation, and verification methodologies. Application of strategic decision-making criteria, innovation, and quality standards. Application of representation and presentation techniques for the complete definition and communication of the design, both for its comprehension and acceptance. Knowledge and analysis of current design trends for project research. Development of integrated, interdisciplinary projects. Evaluation and critique of the results obtained and the working method used. Research methods in design. The design process as research.

ADVANCED INTERIOR DESIGN PROJECTS II

PROYECTOS AVANZADOS DE DISEÑO DE INTERIORES II

COMPULSORY SPECIALTY INTERIOR DESIGN

6 ECTS

5 hours/week

SUBJECT MATTER: Interior design projects

3rd year

2nd term

This course aims to train students in developing a rational and practical work method for their future professional activity, allowing them to express their personal vision of design. Students will have to solve real interior design project proposals, developing them to the level of a construction project, paying special attention to the concept, the idea, the degree of communication, the construction techniques, and the materiality. The statements and exercises presented will be understood as the framework for a research project that makes the design methodology an integral part of the design itself, in an interactive process that encompasses everything from developing the program and preparing the necessary tools to choosing the most appropriate representation systems. In this sense, each project must propose its own systems for generating, evaluating, and comparing data based on the parameters used.

COURSE CONTENT:

Foundations and theoretical-practical study of interior design projects. Definition and execution of interior design projects, applying project resolution, evaluation, and verification methodologies. Application of strategy and decision-making criteria, innovation, and quality. Application of representation and presentation techniques for the complete definition and communication of the design, both for its understanding and acceptance. Knowledge and analysis of current design trends for project research. Development of integrated, interdisciplinary projects. Evaluation and critique of the results obtained and the working method used. Digital technology for project presentation and communication. Research methods in design. The design process as research.

COMPUTER MEDIA: INTERIOR DESIGN

MEDIOS INFORMÁTICOS: DISEÑO DE INTERIORES

COMPULSORY SPECIALTY INTERIOR DESIGN

8 ECTS

4 hours/week

SUBJECT MATTER: Materials and technology applied to interior design

1st year

annual term

The general objectives of this course are to foster an understanding of the theoretical foundations of digital language and to recognize the essential role that digital media has played, both conceptually and practically, in the evolution of interior design. It also aims to develop knowledge and appropriate use of industry-specific software tools, critically and creatively incorporating the possibilities offered by artificial intelligence into the ideation, development, and communication processes of projects. Furthermore, the course promotes the integration of these resources into students' regular workflows, while simultaneously encouraging a collaborative spirit and the capacity for self-directed learning in a constantly evolving technological context.

COURSE CONTENT:

Digital technology applied to interior design. Digital technology for project presentation and communication. Digital technology: Networks and communications. Introduction to computer science. Fundamentals of digital imaging. Digital language and techniques, beginner level: 2D image editing software. CAD drawing and modeling software. 3D digital rendering software. Use of online resources. Innovations in the field of digital editing, CAD software, and digital rendering. Computer-aided design. Research and experimentation methods specific to the subject.

CONSTRUCTION I

CONSTRUCCIÓN I

COMPULSORY SPECIALTY INTERIOR DESIGN

4 ECTS

4 hours/week

SUBJECT MATTER: Materials and technology applied to interior design

2nd year

1st term

The aim of this course is for students to acquire fundamental construction knowledge. This knowledge will enable them to make decisions based on the correct and consistent use of available construction techniques during the development and execution of their projects. The course builds upon the content covered in the Materials: Interior Design course, continuing with the content covered in Construction II (second year) and Advanced Construction I and II (third year).

Construction I focuses specifically on the construction techniques applied to building structural systems, vertical walls, and interior partitions. Throughout the semester, a series of theoretical concepts are taught and then put into practice through the creation of two-dimensional construction detail drawings.

COURSE CONTENT:

Structures and systems. Construction processes. Tools for assessing and designing the technical aspects of the design. Basic construction techniques: structural and envelope construction systems. Introduction to the two-dimensional representation of construction details.

CONSTRUCTION II

CONSTRUCCIÓN II

COMPULSORY SPECIALTY INTERIOR DESIGN

4 ECTS

4 hours/week

SUBJECT MATTER: Materials and technology applied to interior design

2nd year

2nd term

The objective of the Construction II course is for students to acquire the fundamental construction knowledge necessary for the development of their projects. This knowledge will enable them to make decisions based on the correct and consistent use of available construction techniques during the development and execution of their projects. The course builds upon the content covered in the Materials: Interior Design and Construction I course, and continues with the content covered in the Advanced Construction I and II courses of the third year. Construction II focuses specifically on the construction techniques applied to the building envelope, roofs, and joinery; and to interior finishes and cladding. Throughout the semester, a series of theoretical concepts are taught and then put into practice through the drawing of two-dimensional construction detail plans.

COURSE CONTENT:

Construction processes. Assessment and design tools for the technical aspects of the design. Basic construction techniques: building envelope systems, finishes, and cladding. Two-dimensional representation of construction details.

DIGITAL REPRESENTATION I: INTERIOR DESIGN

REPRESENTACIÓN DIGITAL I: DISEÑO DE INTERIORES

COMPULSORY SPECIALTY INTERIOR DESIGN

3 ECTS

3 hours/week

SUBJECT MATTER: Materials and technology applied to interior design

2nd year

1st term

The subject has the following generic objectives: to understand the theoretical foundations of digital representation and sectoral applications, to know its correct use, to assimilate the creative and technical possibilities it offers, to integrate the digital tool into the student's usual communication and management processes and, finally, to promote a collaborative and self-learning spirit.

COURSE CONTENT:

Introduction to digital technology for modeling, texturing, lighting, and rendering solids. Introduction to photorealism techniques. Creation of simple spaces and interiors. Basic modeling techniques: splines, extrusions, revolutions, etc. File exchange with other applications. Creation of simple materials. Application to regular shapes. Introduction to rendering: Lighting of simple spaces and interiors. Local lighting. Digital technology applied to interior design. Research and experimentation methods specific to the subject.

DIGITAL REPRESENTATION II: INTERIOR DESIGN

REPRESENTACIÓN DIGITAL II: DISEÑO DE INTERIORES

COMPULSORY SPECIALTY INTERIOR DESIGN

3 ECTS

3 hours/week

SUBJECT MATTER: Materials and technology applied to interior design

2nd year

2nd term

The subject has the following generic objectives: to understand the theoretical foundations of digital representation and sectoral applications, to know its correct use, to assimilate the creative and technical possibilities it offers, to integrate the digital tool into the student's usual communication and management processes and, finally, to promote a collaborative and self-learning spirit.

COURSE CONTENT:

Research and experimentation methods specific to the subject
Creation of spaces and interiors of intermediate complexity.
Modeling techniques of intermediate complexity: organic forms
Creation and application of materials of intermediate complexity: organic forms
Use of model libraries.
Rendering: Lighting of spaces and interiors. Global Illumination (GI)
Processing of the rendered image in bitmap applications.
Case studies of intermediate complexity applied to Interior Design
Digital technology applied to Interior Design.

DIGITAL REPRESENTATION III: INTERIOR DESIGN

REPRESENTACIÓN DIGITAL III: DISEÑO DE INTERIORES

COMPULSORY SPECIALTY INTERIOR DESIGN

5 ECTS

4 hours/week

SUBJECT MATTER: Materials and technology applied to interior design

3rd year

1st term

The course Digital Representation III: Interior Design aims to introduce and apply the tools that enable the representation of photorealistic spaces and interiors of advanced complexity. It will also help students understand the theoretical foundations of digital imaging and vector applications, learn their correct use, assimilate the creative and technical possibilities they offer, integrate digital tools into their usual communication and management processes, and foster a collaborative and self-directed learning approach.

COURSE CONTENT:

Digital technology applied to interior design. Research and experimentation methods specific to the field. Representation of spaces and interiors of advanced complexity. Advanced modeling techniques. Creation and application of complex materials. Materials according to the rendering engine. Alternative rendering engines: characteristics and applications. Advanced GI. Creation of information panels in interior design: advanced compositing techniques in computer applications. Advanced cases of photorealism and compositing applied to interior design.

HISTORY OF INTERIOR DESIGN I

HISTORIA DEL DISEÑO DE INTERIORES I

COMPULSORY SPECIALTY INTERIOR DESIGN

3 ECTS

2 hours/week

SUBJECT MATTER: History of interior design

2nd year

1st term

The subject of History of Interior Design I comprises a chronological journey through interior design, its main designers and artistic movements from the beginning of the 19th century, to the end of Modernism, through the analysis of its architecture and furniture, studying the connection and contextualization of these productions with the historical situation, the aesthetic trends and the prevailing artistic movements, their influences in the past through a brief overview, as well as with scientific development and technological progress.

COURSE CONTENT:

Knowledge, analysis, and historical significance of interior design. Movements, designers, and trends. Research methods specific to the field. Understanding the language and evolution of interior design in the 19th century, including relevant references to the past. The association of architecture and interior design with their time, considering the historical context, aesthetic trends, and artistic movements, as well as scientific development and technological progress.

HISTORY OF INTERIOR DESIGN II

HISTORIA DEL DISEÑO DE INTERIORES II

COMPULSORY SPECIALTY INTERIOR DESIGN

3 ECTS

2 hours/week

SUBJECT MATTER: History of interior design

2nd year

2nd term

The subject of History of Interior Design II comprises a chronological journey through interior design, its main designers and artistic movements from the first decade of the 20th century, when proto-rationalist ideas laid the foundations of the new aesthetic that would crystallize in the Modern Movement, up to the 1950s, through the analysis of its architecture and furniture, studying the connection and contextualization of these productions with the historical situation, the aesthetic trends and the prevailing artistic movements, as well as with scientific development and technological progress.

COURSE CONTENT:

Knowledge, analysis, and historical significance of interior design. Movements, designers, and trends. Research methods specific to the field. Understanding the language and evolution of interior design in the first half of the 20th century, including relevant references to the past. The association of architecture and interior design with their time, considering the historical context, aesthetic trends, and artistic movements, as well as scientific development and technological progress.

HISTORY OF INTERIOR DESIGN III

HISTORIA DEL DISEÑO DE INTERIORES III

COMPULSORY SPECIALTY INTERIOR DESIGN

3 ECTS

2 hours/week

SUBJECT MATTER: History of interior design

3rd year

1st term

The subject of History of Interior Design III comprises a chronological journey through interior design, its main designers and artistic movements from the sixties of the twentieth century, to the present, through the analysis of its architecture and furniture, studying the connection and contextualization of these productions with the historical situation, the aesthetic trends and the prevailing artistic movements, as well as with scientific development and technological progress.

COURSE CONTENT:

Movements, designers, and trends. Research methods specific to the field. Knowledge of the theories, trends, and leading designers in architecture and interior design from the 1960s to the present. Training in the various aspects involved in developing critical analysis skills for contemporary design, considering design as a form of communication, and the acquisition of tools for analyzing interior design. Knowledge, appropriate use, and research of visual languages, artistic techniques, and the development of symbolic values. Development of aesthetic sensitivity and analytical, synthesis, and critical thinking skills when faced with different works of art and design. Application of documentary sources and methodological concepts in their analysis.

INSTALLATIONS

INSTALACIONES

COMPULSORY SPECIALTY INTERIOR DESIGN

5 ECTS

5 hours/week

SUBJECT MATTER: Materials and technology applied to interior design

3rd year

2nd term

This course will provide students with the fundamental knowledge necessary to develop the installations required for interior design projects, as well as to make appropriate technological decisions during their development. The main objective is for students to acquire the ability to use a rational working method that allows them to address construction solutions and the suitability of materials applied to building installations, as well as the complete process of information gathering and development of the work required to carry out an installation project for a building. To this end, it is essential that they understand the construction terminology, techniques, and materials specific to each installation and possess the technical judgment to determine which solutions should be applied in each case, resulting in a final project similar to those they will develop in their professional practice as interior designers.

COURSE CONTENT:

Assessment and project tools for the technical aspects of design. Installations. Home automation applied to interior design. Energy efficiency of installations. Technical regulations applicable to installations.

INTERIOR DESIGN PROJECTS I

PROYECTOS DE DISEÑO DE INTERIORES I

COMPULSORY SPECIALTY INTERIOR DESIGN

6 ECTS

6 hours/week

SUBJECT MATTER: Interior design projects

2nd year

1st term

The aim of this course is to introduce students to the fundamentals of interior design project development. They will solve problems arising from projects within the field at a basic level, paying particular attention to the concept, the idea, and the degree of communication. Technical and creative elements and resources will be necessary for students to develop a useful working method for their future professional activity and to express their personal design vision. The development of the project proposed throughout the semester is geared towards achieving this goal within the parameters required by this profession.

COURSE CONTENT:

Foundations and theoretical-practical study of interior design projects. Project execution in various fields within the specialization. Definition and execution of interior design projects, applying project resolution, evaluation, and verification methodologies. Application of strategic decision-making criteria, innovation, and quality standards. Knowledge and analysis of current design trends for project research. Evaluation and critique of the results obtained and the working method used. Execution of basic projects in various fields within the specialization. Application of representation techniques for communicating design, both for its comprehension and acceptance. Development of basic projects at a conceptual and functional level. Criteria for innovation and quality. Project resolution methods. Evaluation and verification. Practical application of analysis, synthesis, and methodological criteria. Decision-making criteria. Project resolution.

INTERIOR DESIGN PROJECTS II

PROYECTOS DE DISEÑO DE INTERIORES II

COMPULSORY SPECIALTY INTERIOR DESIGN

6 ECTS

6 hours/week

SUBJECT MATTER: Interior design projects

2nd year

2nd term

The course aims to consolidate students' understanding of the fundamental aspects of developing complex interior design projects. They will solve problems arising from projects within the specialization at a basic level, paying particular attention to the concept, the idea, the degree of communication and expression, and research methods. Technical and creative elements and resources will be necessary for students to develop a useful working method for their future professional activity and to express their personal design vision. The development of the projects proposed throughout the semester, which aim to solve problems of space, functionality, and technical feasibility, is geared towards achieving this goal within the parameters required by this profession.

COURSE CONTENT:

Foundations and theoretical-practical study of interior design projects. Implementation of projects in the various fields of the specialty. Definition and execution of interior design projects, applying project resolution, evaluation, and verification methodologies. Application of strategy and decision-making criteria, innovation, and quality. Knowledge and analysis of current design trends for project research. Evaluation and critique of the results obtained and the working method used. Development of basic projects at the conceptual, functional, and construction levels. Application of representation and presentation techniques for communicating the design, both for its understanding and acceptance. Accessibility regulations in the field of interior design. Criteria for innovation and quality. Practical application of analysis, synthesis, and methodological criteria. Decision-making criteria. Evaluation and verification methods. Introduction to research and experimentation methods specific to interior design.

INTRODUCTION TO INTERIOR DESIGN PROJECTS

INICIACIÓN AL PROYECTO DE DISEÑO DE INTERIORES

COMPULSORY SPECIALTY INTERIOR DESIGN

6 ECTS

6 hours/week

SUBJECT MATTER: Interior design projects

1st year

2nd term

In this course, students acquire the ability to use a rational working method that allows them to tackle projects. To do this, it is essential that they understand graphic language and apply it to the representation of spaces and forms in interior architecture. Once introduced to the methodological bases and theoretical foundations that influence project development, students are assigned several projects that address problems of space and functionality.

COURSE CONTENT:

Foundations and theoretical-practical study of interior design projects. Execution of projects in the various fields of the specialty. Definition and execution of interior design projects, applying project resolution, evaluation, and verification methodologies. Application of strategic decision-making criteria, innovation, and quality standards. Application of representation and presentation techniques for the complete definition and communication of the design, both for its comprehension and acceptance. Knowledge and analysis of current design trends for project research. Evaluation and critique of the results obtained and the working method used. Digital technology for project presentation and communication.

MARKETING: INTERIOR DESIGN

MARKETING: DISEÑO DE INTERIORES

COMPULSORY SPECIALTY INTERIOR DESIGN

3 ECTS

2 hours/week

SUBJECT MATTER: Interior design management

3rd year

2nd term

The Interior Design Marketing course aims to provide students with the knowledge necessary to make strategic marketing decisions in their professional practice. In today's highly competitive environment, designers need to acquire marketing skills that enable them to develop their commercial competencies and effectively connect with potential clients.

The course includes content on environmental analysis, competition, trends, communication, personal branding, and how to present and justify projects from a commercial perspective. In short, it combines analysis, strategy, and communication so that designers can position themselves and thrive in the professional field.

COURSE CONTENT:

Marketing applied to interior design. Marketing fundamentals and concepts. Marketing of professional services. Positioning and competition. Quality as a differentiating factor in service. Market segmentation. Market research. Promotional tools for interior designers. Commercial communication. New communication trends. Digital and social media communication: fundamentals.

MATERIALS: INTERIOR DESIGN

MATERIALES: DISEÑO DE INTERIORES

COMPULSORY SPECIALTY INTERIOR DESIGN

6 ECTS

2 hours/week

SUBJECT MATTER: Materials and technology applied to interior design

1st year

annual term

The Interior Design Materials course, part of the Materials and Technology Applied to Interior Design program, focuses on the study and acquisition of the fundamental knowledge required by interior designers. Its objective is to develop the ability to solve technical problems that may arise both during higher design studies and in professional practice. It is considered a key tool in the student's training.

COURSE CONTENT:

Physical, chemical, and mechanical properties of materials. Energy balance and life cycle analysis of materials, products, and processes. Research and experimentation methods specific to the subject. Obtaining and recycling materials. Testing and quality control of materials.

RENOVATION PROJECTS

PROYECTOS DE REHABILITACIÓN

COMPULSORY SPECIALTY INTERIOR DESIGN

5 ECTS

5 hours/week

SUBJECT MATTER: Interior design projects

3rd year

1st term

This course is designed with the primary objective of training students in a rational and effective working method within a very specific field: interventions in environments that include pre-existing elements.

Furthermore, it aims to consolidate students' understanding of the fundamental aspects of developing complex Interior Design projects. They will have to solve problems arising from projects within the specialization, paying particular attention to enhancing the value of the building being intervened, the concept, the degree of communication and expression, and research methods.

COURSE CONTENT:

Application of strategy and decision-making criteria, innovation, and quality.

Application of representation and presentation techniques for the complete definition and communication of the design, both for its understanding and acceptance.

Knowledge and analysis of current design trends for project research.

Evaluation and critique of the result obtained and the working method used.

Research methods in design.

The design process as research.

Theoretical and practical foundation and study of rehabilitation projects.

Execution of rehabilitation projects.

Constructive solutions in rehabilitation projects.

Sustainable solutions in rehabilitation.

Tools for evaluating and projecting the technical aspects of design.

STRUCTURAL ANALYSIS I

CÁLCULO DE ESTRUCTURAS I

COMPULSORY SPECIALTY INTERIOR DESIGN

3 ECTS

3 hours/week

SUBJECT MATTER: Materials and technology applied to interior design

2nd year

1st term

The subject aims to help students understand conceptually and intuitively the functioning of simple structures through the fabrication of working models: axial tensile or compressive forces, shear forces and bending moments, actions, and elasticity theory.

COURSE CONTENT:

Structures and systems. Construction processes. Tools for assessing and projecting the technical aspects of design. Mechanical stresses. Mechanical behavior of structural elements. Modeling of structural systems.

STRUCTURAL ANALYSIS II

CÁLCULO DE ESTRUCTURAS II

COMPULSORY SPECIALTY INTERIOR DESIGN

3 ECTS

3 hours/week

SUBJECT MATTER: Materials and technology applied to interior design

2nd year

2nd term

This course prepares students for the calculation and preliminary design of very simple structures they may encounter in their professional practice, such as mezzanines, pergolas, and platforms.

The following prior knowledge is recommended for this course: Completion of the course Scientific Foundations of Structural Design and Calculation I.

COURSE CONTENT:

Structures and systems. Assessment and design tools for the technical aspects of design. Applicable regulations for structural calculations. Design and calculation of structural systems. Digital technology applied to structural calculations.

THEORY OF RESTORATION

TEORÍA DE LA RESTAURACIÓN Y LA REHABILITACIÓN

COMPULSORY SPECIALTY INTERIOR DESIGN

2 ECTS

1 hours/week

SUBJECT MATTER: Materials and technology applied to interior design

3rd year

1st term

The subject will provide students with the fundamental knowledge that will allow them to plan and develop interventions in existing buildings characterized by a significant pathological state and/or heritage value, as well as make the appropriate construction decisions in the project of the same.

COURSE CONTENT:

Building Pathologies. Design and assessment tools for the technical aspects of design. Diagnosis and treatment of pathologies. Restoration theory: intervention methodologies. Heritage laws.