

## Quasar VISION

*Quasar Institute for Advanced Design is the first center for Exponential Learning™, where new creative minds meet with the best production experiences to shape the design of the future.*

## Quasar MISSION

Quasar Institute for Advanced Design is aimed at people and companies in the global marketplace, developing their potential and talent through advanced training, tailored services, local and international partnerships and ongoing support.

At Quasar we implement systems of mutual valorization of resources by promoting critical ability and human interaction, creating a widespread community that operates with care and passion.

Through a humanistic approach to research and production, our institute combines creativity and new technologies with shared and sustainable development.

The Quasar Way™.

Quasar Institute for Advanced Design opened in Rome in 1987 as a center for higher education in the field of design and in visual and multimedia communication.

At our institute, commitment and attention meet innovation and avant-garde. We also constantly keep up to date with the growing and accelerating developments in the labor market.

We promote **constant collaboration with Italian and international companies** through projects that explore every aspect of the creative process, from the concept to the prototyping phase.

QIAD courses issue **first-level academic degrees** recognized by the Italian Ministry of Education, University and Research (MIUR) and master's degrees valid worldwide.

Quasar Institute for Advanced Design is a team of designers, university professors and freelancers who acknowledge the need to develop a truly stimulating and effective teaching method. All of them are successful professionals in the fields of design, marketing and communication.

Our main goals:

- to focus on design, experimentation and collaboration with companies;
- to always be aware of the latest innovations in technology and creative thinking;
- to analyze the evolution of the labor market, not only to meet the request of specialized professionals but also to anticipate it.

For this reason, Quasar Institute for Advanced Design has always counted on a highly qualified staff of teachers and a training offer that meets the maximum quality standards.

Quasar Institute for Advanced Design is accredited among the Institutions of Higher Education for Fine Arts and Music (AFAM) and it is authorized by the Italian Ministry of Education (D.M. 250 of April 16<sup>th</sup> 2016) to issue First-level academic diplomas, which are equivalent for the purposes of public examination to three-year Bachelor's Degrees issued by universities, for the three courses in Habitat Design, Graphic and Communication Design, and Interaction Design/Interaction Design - Game Design curriculum.

## [INSTITUTIONAL FRAMEWORK OF CREDITS]

According to the Italian DPR 212 of July 8<sup>th</sup> 2005, one credit point corresponds to 25 hours of total workload per student. This workload includes the hours of class attendance (lessons, theoretical and practical activities, workshops), the hours of autonomous learning (individual study and preparation for the exam) and group activities (participation in exhibitions, projects, workshops, seminars, etc.).

The credits acquired for each exam are called Academic Training Credits (CFA in Italian). One CFA corresponds to 1 ECTS credit (European Credit Transfer and Accumulation System).

The lessons held during the QIAD courses guarantee the acquisition of a minimum of 4 to a maximum of 12 CFAs.

The teaching activities are developed through lessons, theoretical and practical activities and workshops, and are divided into basic training, characterizing activities and similar. For each Academic Degree course, you will find mandatory activities specific to each subject, but you can customize your curriculum with subjects of your choice.

Credits can also be earned through further training activities recognized by the Academy: seminars, workshops, lectures, participation in events of the art and professional system, internships organized and promoted by the Quasar Institute for Advanced Design, participation in contests, visits to exhibitions and trade fairs.

## [EXAMS AND GRADING SYSTEM]

Attendance is mandatory. To be admitted to the exams, students must attend at least 80% of the total number of hours of each class.

The preparation of the students is assessed through proficiency tests, divided into intermediate evaluation tests and final exams.

The number, characteristics and methods of the intermediate evaluation tests are established by the teachers, in compliance with the provisions contained in the regulations of the teaching structures. The intermediate evaluation tests will not be officially registered, but only recorded by the teacher for

personal use. At the beginning of each course, the teacher is responsible to inform students about the number and methods of the tests.

The assessment of the student's individual proficiency is expressed, after appropriate tests, through a grading scale of 30:

VOTO	ECTS	
18	E	SUFFICIENT
19		
20		
21		
22		
23	D	SATISFACTORY
24		
25		
26	C	GOOD
27		
28	B	VERY GOOD
29		
30	A	EXCELLENT
31		



## Graphic & Communication Design

The First-level academic degree courses of the School of Artistic Design for Business are aimed at ensuring an adequate knowledge of the methods and techniques of art, as well as the acquisition of specific disciplinary and professional skills. The main purpose is to provide students with both designing and expressive knowledge and procedures, in order to improve their use of graphical tools and artistic practices, with a focus on design, communication and industrial design.

The courses aim to develop design skills and application of expressive technological tools – both traditional and contemporary – concerning the use and management of space and the principles of communication and representation.

The graduates of the School of Artistic Design for Business courses must:

- a. have an appropriate technical-operational training on methods and contents in the fields of Graphic Design, Advertising Communication, Design, Installations and Product Design;
- b. have adequate methodological and critical tools for the acquisition of skills in the most advanced expressive languages, techniques and technologies;
- c. be able to speak at least one European Union language effectively, in addition to their native language, in the main field of expertise and for the exchange of general information;
- d. have knowledge of computer tools and digital communication in the specific areas of competence.

The graduates of the First-level academic degree in Graphic and Communication Design must:

- a. have an appropriate technical-operational training of methods and contents in the fields of Brand Design, Packaging Design, Publishing, Advertising Communication and Web Design;
- b. have adequate methodological and critical tools for the acquisition of skills in the most advanced expressive languages, techniques and technologies;
- c. have knowledge of computer tools and digital communication in the specific areas of competence.

The graduates of the First-level academic degree in Graphic and Communication Design of our Institute will develop a professional career in both public and private fields of design.

Students will have professional opportunities and great flexibility in several types of work activities applied to institutions, museums, small and medium enterprises and major companies; moreover, they will mainly focus on advertising communication, publishing, the organization of space as a communication vehicle – from the setting to the exhibition – and on business communication design.

## FIRST YEAR

### Basic Design

Cod. ABPR 15  
CFA 8  
Hours: 80

This course provides the tools necessary to understand the meaning of form, which is the theoretical basis for the development of a design methodology. In particular, the course aims to improve the basic design methodological skills, improving the student's abilities of identification, evaluation, cognitive analysis, synthesis and, consequently, management and application of the elements that constitute an artistic project.

This course will also provide students with elements concerning the formation, construction and representation of the image, as well as the analysis of the relationship between design, space, image, structure, technology and spatial qualities.

### Computer Graphics

Cod. ABTEC 38  
CFA 8  
Hours: 80

This course is based on the acquisition of skills related to the application of advanced digital tools to artistic visual languages: from the study and analysis of the basic concepts of vector and raster graphics to the ways in which color is used. The output functionalities are defined in the illustration and layout work environments by using various softwares and their tools, such as vector illustration, DTP, color management and raster-type image resolution.

### Graphic design

Cod. ABPR 19  
CFA 8  
Hours: 80

The course aims to explore graphic design from a project-based and methodological point of view, providing students with the basis for a correct approach to a graphic project. It starts with the development of a visual identity project that aims to develop a small graphic design artifact.

## Technical Drawing

Cod. ABPR16

CFA 4

Hours: 40

The course aims to provide students with knowledge of the principles and construction procedures of descriptive, projective and perspective geometry in order to acquire control in the representation of elements of the plane and space. Theoretical elements and operational methodologies are aimed at offering tools for graphic representation in correspondence with the themes developed in the field of design.

## History of Contemporary Art

Cod. ABPST47

CFA 8

Hours: 48

This course aims to provide students with knowledge of the history of visual communication, visual arts and design with a particular focus on the theoretical-critical aspect of the discipline. The main goal is to give students the critical skills needed to read a communication project in the differences of style and language, as well as the history notions related to the subject. Through this awareness, students will acquire a deeper and wider cultural education to be applied to Graphic and Communication Design. Starting from Toulouse Lautrec, this subject has been taught through the years until the present day by analyzing the excursus of the history of contemporary communication and design through a transversal approach that inevitably involves the history and history of contemporary art. The aim of the course is to provide knowledge, analysis and criticism of the work of graphic designers and their training schools that have defined, over time, the theoretical and practical guidelines of the profession.

## Lettering

Cod. ABPR 19

CFA 6

Hours: 60

The course aims to teach students the central role of lettering (print and video) in visual communication, starting from the study of calligraphy up to the techniques of typographic design, and to control the various components of type design.

As part of the course, students will learn the basic forms of the Latin alphabet, the history and morphology of lettering and the main rules for a conscious application in graphic design. The course is both theoretical and practical.

## Perception Theory

Cod. ABST 58

CFA 6

Hours: 36

The course aims to provide the basis of theoretical constructs concerning the theories of visual perception, the psychology of perception and visual thought as well as cognitive psychology. Students will explore the classic theories of cognitive psychology, form psychology (Gestalt) and then get to the most recent discoveries related to neuroscience. The course also focuses on the relationship between natural and cultural factors of perception, as well as the connection between the processes of mental image formation and aesthetic perception.

## Digital Photography

Cod. ABPR 31

CFA 6

Hours: 60

The course aims to teach the languages and techniques of contemporary photography. The fields of interest will be: the uses of photography in the digital archiving and sharing of images, as well as all the expressive, communicative and operational aspects introduced by digital technologies in the professional field.

## Aesthetics of the Visual Arts

Cod. ABST 46

CFA 6

Hours: 36

The course aims to provide students with the tools to identify and analyze the expression, creativity and intentionality of the most important communication movements produced between the 19<sup>th</sup> and 20<sup>th</sup> centuries. After the first part of the program that deals with the central themes of the discipline of aesthetics, the course will focus on the analysis and critique of visual communication produced in the last two centuries, starting from the birth of mass communication through the main steps of its development up to the present day with the crisis of modern, post-modern and digital. The purpose of this subject is to help students develop a critical attitude towards the discipline of graphic design and visual communication in general.

## SECOND YEAR

### Design History

Cod. ABST 48

CFA 8

Hours: 48

The course presents the history of design through the analysis of theories, authors and evolution of objects from the late 19<sup>th</sup> century to the present day: from the concept of applied arts to the definition of industrial design, with particular attention to the production of Italian design in the second half of the 20<sup>th</sup> century and the relationship with contemporary art.

### Graphic Art Techniques

Cod. ABPR 30

CFA 4

Hours: 40

The course is aimed at acquiring technical knowledge of the tools and materials used in graphic design and it focuses on the technical issue as a condition for greater awareness of artistic production. It will deal with topics related to the tools, machines and materials used in the various stages of work and their preparation. The course also includes some exercises in compliance with safety regulations.

## Design for Publishing

Cod. ABPR 19

CFA 8

Hours: 80

The course aims to provide students with all the historical, theoretical and practical knowledge of the main techniques of typographic production, and the main paper formats. To this end, the course includes the analysis and study of all the technical aspects related to the methodologies and digital tools for the electronic layout of publishing products.

The general objective of the course is to give students the right approach that a graphic designer has to adopt in order to achieve a perfect reproduction in print of products for visual communication.

## Product Design

Cod. ABPR17

CFA 6

Hours: 60

Designing a product is about conceiving and articulating all those functional, physical, technical, aesthetic-formal and communicative characteristics that determine its qualitative aspects in relation to its use and technological and production possibilities. The course in Product Design provides the opportunity to gain knowledge and techniques that allow the creative design and development of innovative products designed for people and to respond to the needs of the companies that produce them.

## Brand Design

Cod. ABTEC37

CFA 6

Hours: 60

The objective of the course is to provide students with a methodology to understand and select the design tools suitable for the development of the image of a brand. During the course students will reflect on how the basic activities of the design process can influence the choices made to develop new products and new communication strategies.

In a design-oriented vision, the implementation of the image construction process involves the transmission of values such as flexibility and adaptability, which are necessary for the company to ensure the achievement of strategic objectives and the consistency between values, personality and image.

## Packaging

Cod. ABTEC 37

CFA 6

Hours: 60

The course aims to address the principles of packaging design in all its phases: research, concept creation, development and graphic and structural aspects. The executive phases of experimentation are based on visual representations and execution of labels, packaging, interlocking folders, converting models and cutting dies to be made on paper and in digital format.

## Visual Design

Cod. ABPR 19

CFA 6

Hours: 60

The course aims to provide students with skills in illustration to create visuals for the communication project. This course deals with all the operations, methods and processes used for visual representation oriented towards visual communication. The program is divided into a number of activities ranging from the creation of visual artifacts, to the most recent procedures proposed by industry and the market - including off-line and online multimedia techniques - with particular reference to the knowledge of contemporary digital graphic techniques, suitable for the creation, visualization, presentation and communication of the graphic project.

## Design management

Cod. ABLE 69

CFA 6

Hours: 36

The ability to generate and develop new ideas is one of the key skills for the success of a company, providing support in satisfying increasingly demanding markets and scenarios. In this context, Design identifies the set of knowledge and skills that connect creativity and innovation. From the creation of "something new" to the experience of design thinking, Design represents a central competence in most manufacturing and service-based sectors, but also in institutions and non-profit organizations. This course explores the world of design, trying to build a bridge between the disciplines of design and management, promoting critical awareness of how to contribute to social well-being and environmental sustainability. From a managerial point of view, the course discusses the issues of coordination and negotiation between designers, the main corporate functions and the final user.

## THIRD YEAR

### Media Studies

Cod. ABPC65

CFA 8

Hours: 48

The course presents the analysis of the development of the media landscape through the analysis of the implicit narration in the following phenomena: photography, television (first, second and third generation), cinema and new media art in all its forms. Their evolutions will be discussed focusing on the languages that explore the problems of interactivity, connectivity and non-linearity, all peculiar to contemporary visual production. Students will also examine the new aesthetic trends of contemporary visual and advertising communication from a theoretical and practical point of view.

### Web Design

Cod. ABPR 19

CFA 8

Hours: 80

This course trains and prepares students for the management and implementation of graphic projects for the web. It provides students with basic knowledge of programming languages for dynamic sites, from installation to optimization of CSM applications. The practical part of the project consists in planning, developing and putting a website online.

The course also aims to analyze the main social media in order to understand their characteristics, choose the most appropriate for each campaign / action, design the right communication strategies on each of them and integrate them effectively with each other.

## Art Direction

Cod. ABTEC 37

CFA 4

Hours: 40

The aim of the course is to develop organizational, methodological and decision-making skills for the creation of an advertising campaign. The art director is the professional figure who studies the visual, graphic and typographic part of the communication of a product or service. This course, which is mostly laboratory-based, is divided into theoretical, methodological and practical parts. Its structure focuses on combining technical skills and creative qualities, aimed at creating the visual and conceptual part of advertising campaigns but also editorial projects and visual identity in general. In the development of the project, the course also includes a comparison with the profession of copywriter.

## Graphic Design 2

Cod. ABPR 19

CFA 8

Hours: 80

This disciplinary area covers all the operations, methods and processes used for the visual design oriented to business communication. This subject is structured in a plurality of approaches ranging from the design and production of advertising communications and editorial products, to the most recent procedures proposed by industry and the market; in addition, it also includes video-editing techniques and off-line and online multimedia techniques, with particular reference to the knowledge of contemporary digital graphics techniques, suitable for the creation, visualization, presentation and

communication of graphic design. The course aims to provide students with the methodology and tools to design and effectively create graphic components of immediate and simple understanding and that are visually satisfying, as well as integrated harmoniously with the design artifacts under examination in the final workshop.

## Information Design System

Cod. ABPR 17

CFA 6

Hours: 60

The course aims to provide a multidisciplinary design sensitivity oriented to the user experience and knowledge of the main methodologies and tools used in a user-centered process, with specific reference to the design of digital products and services.

The course also offers students the methodology and tools to effectively design and produce graphic information components that are easy to understand, visually satisfactory and harmoniously integrated with the design artifact.

## Web Marketing

Cod. ABLE 69

CFA 6

Hours: 36

The course aims to teach a methodology for the definition of digital communication plans, which can be integrated with marketing strategies and corporate communication. The course also has the objective of helping participants to understand how Search Engine Optimization (SEO) and Search Engine Marketing (SEM) tools work.

## HABITAT DESIGN

The graduates of the First-level academic degree in Habitat Design should have:

- a. an appropriate training in the fields of Interior Design, settings, Product Design and Land Design;
- b. the necessary critical maturity to respond to the problems related to the interventions of transformation in living environments.
- c. knowledge of techniques in the fields of construction and production - both craft and industrial - of environmental goods and objects of use.

The graduates of the First-level academic degree in Habitat Design of our Institute will develop a professional career in both public and private fields of design.

Students will have new professional opportunities and great flexibility in several types of work activities applied to institutions, museums, small and medium enterprises and major companies; moreover, they will mainly focus on Design, settings, Product Design, Land Design and in general on every request of organization and requalification of the anthropic environment.

## FIRST YEAR

### Design Methodology

Cod. ABPR15

TOF 1

CFA 6

Hours: 36

The purpose of this course is to introduce students to the understanding of the logical foundations of design as a creative act that is not only limited to the individual dimension, but also supported by the acquisition of knowledge and experiences from the past.

The course aims to introduce to the analytical and synthetic interpretation of a series of examples in order to induce the ability to transcend the real data, to interpret and experiment the processes of formal genesis, to identify and represent, with different instruments, the constitutive laws of objects and environment, the rules of the game and the genesis of "things".

The course gives students an insight into the world of design through experiences and analysis that allow them to understand the complexity and the rules of the design process. The expected result is to teach students the awareness and critical spirit to understand the meaning and motivation of creative work.

### **History of Applied Arts**

Cod. ABST48

CFA 6

Hours: 36

The scientific contents of this subject concern all forms of art that, despite having links with the visual arts in general or with architecture, are not directly related to these areas, because traditionally applied to industry and craftsmanship.

The aim of the course is to highlight the centrality of research on form, methods and processes in the historical development of the practice of design applied to the Habitat. Over the centuries, technical-artistic products have been characterized by additional expressive values that went beyond the ordinary use of the object itself: these values were a system of allusive, informative, expressive and – in the finest examples – poetic signs.

Therefore, research on form is the vehicle of relevant values that, throughout history, have led design from being mere applied art to assume, in some cases, an autonomous artistic value that detaches the object from its exclusive functional finalization.

### **History of Contemporary Architecture**

Cod. ABST50

CFA 6

Hours: 36

The contents of this subject refer to the history and practice of architecture, focusing on the project in its methodological aspects, in its historical development and in its process. The course aims to bring architecture - of both interiors and exteriors - back to the core of training, research and artistic production. Moreover, the course will help young designers to develop their skills by providing, on the one hand, the theoretical tools necessary for the development of a project ethic and, on the other hand,

the methodological tools needed to trigger a critical interpretation of the history and the existing, highlighting the indissoluble bond between the design act and all levels of society and culture.

## History of Contemporary Arts

Cod. ABST47

CFA 4

Hours: 24

The discipline studies the phenomena related to the history of visual arts, with particular reference to Western culture from the late 19<sup>th</sup> century to the present day. The aim of the course is to provide students with knowledge of the History of Contemporary Art and its contamination with other disciplines, to understand the value and sense of aesthetic and design choices necessary in a complete basic training. Through this awareness, the course aims to acquire critical skills for the interpretation of the languages of contemporary visual arts and a deeper and broader aesthetic and cultural formation to apply to Habitat Design.

## Technical and Design Drawing

Cod. ABPR16

CFA 8

Hours: 80

The objective is to recognize and use the most appropriate scales and methods of representation in order to provide an adequate description of the forms of construction and artifacts, and to provide the skills needed to draft project documents. Drawing is centrally assumed as a tool for construction, verification and definition of the project, both in its application to the architectural, general and interior design, and in the design of the object as well.

The course is also based on the study, analysis and application of basic concepts for the processing and post-digital production of images. Through the use of a proper software students will learn how to manage the graphics of vector and raster images; in this way, they will be able to import the digital image and reprocess it to adapt it to the graphic product, the illustration and the layout.

## Computer Design Basics

Cod. ABPR16

CFA 6

Hours: 60

The course aims to provide the necessary basic knowledge to achieve a good level of assisted design in order to create, modify and manage - in a technical context - the modalities used to represent projects through two-three dimensional drawings, and finally to transpose them onto paper. The project is defined through drawing, but afterwards it needs to be promoted and communicated to the client, to the operators of the sector and to an audience of non-experts, through visualization techniques that explain both the technical data and the formal aesthetic expressive qualities. The course teaches how to manage the technical graphic process of the project, at different scales, in a rapid but gradual manner, taking into account the differences between product design and architectural spaces.

## Materials Science

Cod. ABPR30

CFA 6

Hours: 60

The subject contents combine scientific enrichment with a design culture that expresses special characteristics and current aesthetic qualities, working through the correct and conscious use of materials, with a new ecological awareness. The main goal is to make the scientific contents interact with the verification within the project and to provide the technical and operative instruments to interpret the relationships between the object (architectural and design) with its forms of use; this can be achieved through the technological contribution of the materials, their static and mechanical behavior, their characteristics and potential offered by the new technologies and techniques of installation and processing also integrated with the traditional ones, which are to be applied within the project.

## Design Studio 1

Cod. ABPR17

S. D. Design

TOF 2

CFA 10

Hours: 100

This course of study combines theoretical and methodological aspects with a practice that covers the different specificities of Habitat Design; it gathers design experiments at the corresponding scales of intervention of architecture and product design with particular attention to the constraints imposed by economic, technological, commercial, distributional and environmental peculiarities. The aim of the course is to provide students with adequate tools to deal with the design of an elementary product, both on an architectural scale and in terms of product design; to experiment with the design definition process in its compositional and formal characteristics; to be able to conceive and control the design process in its aesthetic, technological, engineering, economic and communicative aspects; to deal with different themes, learning to control and respect a functional program; to deal with the main problems of "constructiveness" linked to the project, also taking into account the implications connected to the context, and in general to the place, its history and its materials.

### **Module A\_ Architectural design**

Hours: 60

Area in which students can experiment the application of the discipline to the habitat project in its multiple expressions, from the environment to the object of use.

### **Module B\_ Product design**

Hours: 40

Disciplinary area in which students can experiment the design process at the scale of the product and/or of innovative product systems in all areas of application, ranging from Industrial Design to the human habitat.

## **SECOND YEAR**

### **New Materials Science**

Cod. ABPR30

CFA 6

Hours: 60

The course aims to provide technical and operational training on the architecture of detail and product design.

The specific objectives of the course are:

- to provide methodologies and tools necessary for the understanding of technological issues, with particular reference to feasibility, so that there will be a consistent operational continuity between the timing of the choices of the "design" and the timing of the "technical implementation";
- to integrate the scientific content with the verification within the project;
- to provide the technical and operational tools to interpret the relationships between the object (architectural and design) with its forms of use, through the technological contribution of materials (natural, artificial and semi-finished) currently used in the design of supplies for indoor and outdoor spaces and in the production of objects of use;
- to investigate their static and mechanical behavior, their characteristics and the potential offered by the new technologies and techniques of installation and processing, while also taking into account the traditional techniques to be applied in the context of the project, at an in-depth scale that goes into detail.

## Digital Photography

Cod. ABPR31

CFA 4

Hours: 40

The objectives of this course are:

- introducing to the knowledge of the camera as a system, from analog to digital, with theoretical elements on the shooting, especially on the composition of the framing;
- to provide technical-application skills for support tools such as optics, lighting and filters;
- preparing students for the use of photographic equipment in order to produce appropriate images to document space, architecture and design elements.

Another objective of the course is to provide the basic skills for the collection of metric and dimensional information necessary to allow the reconstruction of an architectural work through technical drawing. The course is divided into a first phase of shooting of the artifact operated in the field, which can be either direct – measured manually –, or photogrammetric, with the help of the photographic device. In addition, this course offers a method to deal with the phase of restitution, during which all the collected information is finalized to the graphic representation of the detected spatial object.

## 3D Digital Modelling Techniques 1

Cod. ABTEC41

CFA 4

Hours: 40

The main goal of the course is to develop a correct approach to mathematical modelling of forms in space. Mathematical modelling is obtained by implementing the techniques and methods of geometric representation in a computer program. The advantage of the mathematical modeler is to allow the metric control of the generated entities and the possibility to represent surfaces of any shape. It is therefore clear how important this tool can be for the figure of the designer at a planning stage. This discipline is expressed through a process that includes the generation and management of digital representations of the physical and operating characteristics of an architectural or design work. Usually, this process results in creating models of the work that represent a form of shared knowledge among all operators, which can be used in all phases of the work's life cycle, from the earliest stages of conception to construction, management and, finally, demolition.

## Product design 1

Cod. ABRP17

CFA 6

Hours: 60

The aim of the course is to train a designer who is able to promote innovation dynamics of products or product systems and to support the strategic finalization of the project within a wide scope of application, ranging from Industrial Design to Human Habitat. A designer capable of conceiving and controlling the design process in its aesthetic, technological and engineering aspects, as well as its economic and communicative areas; from the concept to the verifications relating to the mechanical design and the prototyping of a product or a product system.

## Design 2

Cod. ABRP17

CFA 6

Hours: 60

The objectives of this course are:

- to acquire the capacity to synthesize in relation to the themes of the existing project;
- the study and apply the principles of redefinition of space, both internal and external;
- to gain knowledge of the construction principles for the transformation of existing buildings;

- the study and application of the control mechanisms of the inhabited space, light and environmental comfort, anthropometry and materials;
- to develop a "method", through an articulated succession of stages, to elaborate a project as a path of definition in its technical, compositional and formal characteristics according to the place.

### **Module A\_ Interior design workshop**

Hours: 50

A disciplinary area in which students experiment the design process applied to interior design.

### **Module B\_ Architectural survey**

Hours: 10

Additional module on the techniques of representation for the project.

## **Landscape design**

Cod. ABRP18

CFA 6

Hours: 60

The objectives of this course are:

- to provide the tools to understand and evaluate the physical-spatial and organizational characteristics of an open space;
- the study and application of the principles of transformation of the open space and/or small garden;
- acquiring the tools to manage the interaction among the different elements - both natural and artificial - that compose the space, even in their evolution over time;
- to learn how to design a quality open space, understanding the relationships of continuity or discontinuity between this space and the context in which it is located;
- directing gaze and movement;
- to define reception conditions and habitability;
- to facilitate the interaction of the theoretical and cognitive process with the design verification to a more detailed definition;
- to provide the technical and operative instruments to interpret the relationships between the external space (the garden) with its forms of use, according to the semiotic, functional and environmental value of the reference system through the technological contribution of natural materials and all those elements of negotiation between environment and landscape, in analogy with the types of movement, behavior and appropriation of the categories that use it.

## Aesthetics of the Visual Arts

Cod. ABST46

CFA 8

Hours: 48

The course aims to critically review the different manifestations of artistic activity that have followed one another over time, giving rise to the succession of movements and trends that have characterized the evolution of art. The knowledge of artistic movements, sociology of art and the theories of visual perception will be used to critically analyze the processes underlying the birth and development of visual arts.

The course aims to deepen the interpretation of the work of art with reference to the symbols represented, the civil history in which it was created and the events that followed its location. Therefore, it also addresses the issues and problems of aesthetic interpretation, which are fundamental to analyze the processes that led to the birth of the arts. At the same time, students will learn about the history of the arts and design in the areas of interest.

Other important objectives of this course are:

- to identify the critical coordinates needed to formulate judgements and define choices;
- to encourage the acquisition of critical awareness towards art making;
- learning about the historical development of the main aesthetic categories as well as the guidelines of some important contemporary aesthetic theories;
- to teach how to recognize the potential applications of the theories in each student's artistic field.

## Perception Theory

Cod. ABST58

CFA 6

Hours: 36

The course aims to provide students with the knowledge that psychology has developed around the problems of creativity and vision of art, as well as the conceptual and methodological elements that oversee the perceptual mechanisms and their impact in the communication and development of artistic languages. It also includes elements of psychology used in the fruition of the work with particular attention to the world of graphics, publishing, advertising and art.

## THIRD YEAR

### Product Design 2

Cod. ABPR17

CFA 6

Hours: 60

This subject requires a careful development of the constraints imposed by the economic, technological, commodity, commercial and distribution peculiarities of the client, considering the project both from an economic point of view and from an ethical and aesthetic one. The main element of Product Design 2 is the combination of the theoretical and methodological aspects with a practice that covers the different specificities of the sector. The course has the aim of making the student acquire - through an ideational training - the methodological and technical elements that allow to understand and control the processes of "structuring" and "production" of the form and to apply them to the realization of objects of use. The project will focus on the conception, development and technical/functional feasibility checks of objects of use - designed for extended use - that require serial production and consumption adapted to the needs of living.

### 3D Digital Modelling Techniques 2

Cod. BTEC41

CFA 6

Hours: 60

#### Module A\_ 3DS Max/VRay Digital modelling techniques

Hours: 30

The aim of the course is to provide a basic knowledge of the techniques of modelling and management of 3D geometries of the 3DS MAX software so that students are able to shape their ideas using the most suitable methods of image processing. During the course students will learn more about the digital representation methods in 3DS MAX through the study of standard light sources and the first studio lighting setups. After that, we will analyze the problems related to the processing of the base surface

materials and the management of the mapping coordinates of the models. The main objective is the pursuit of photorealism and image quality within the 3DS MAX software, also through the contribution of the V-Ray imagery rendering software: this combination is the standard currently in use in the productive realities of the sector.

### **Module B\_ Digital modelling through BIM tools**

Hours: 30

This module consists of a process that includes the generation and management of digital representations of the physical and operating characteristics of architectures. The result of this process is, in most cases, the generation of work models that represent a form of shared knowledge among all operators, which can be used in all phases of the work's life cycle, from the earliest forms of conception to construction, management and, finally, demolition.

The course aims to acquire a basic knowledge of the new design approach by using BIM technology. During the course students will analyze the main components for the modelling of an architectural work.

### **Design Studio 3**

Cod. ABPR17

CFA 8

Hours: 80

This subject requires a careful development of the constraints imposed by the economic, technological, commodity, commercial and distribution peculiarities of the client, considering the project both from an economic point of view and from an ethical and aesthetic one. The main element of Design Studio 3 is the combination of the theoretical and methodological aspects with a practice that covers the different specificities of the sector.

### **Module A\_ Interior Design Workshop**

Hours: 40

The course has the aim of making the student acquire - through an ideational training - the methodological and technical elements that allow to understand and control the processes of "structuring" and "production" of the form and to apply them to the realization of objects of use. The project will focus on the conception, development and technical/functional feasibility checks of objects of use - designed for extended use - that require serial production and consumption adapted to the needs of living.

### **Module B\_ Green Technology**

Cod. ABPR17

Hours: 20

The course aims to provide the tools to understand and evaluate the physical-spatial and organizational characteristics of an open space or a small system of open spaces. It includes the study and application to the project of the available techniques for the transformation of the open space and/or small garden. Botanical, horticultural and gardening techniques define the quality of the realization, including the relationship of continuity or discontinuity with the context. The main themes of this module will guide the student in the confrontation with concrete issues of a technical-practical nature aimed at the feasibility of the project.

### **Module C\_ Materials technology for Interior Design**

Cod. ABPR17

Hours: 20

The module consists of a technical-operational training on works related to the realization of interior projects. The specific purpose of the course is to provide students with the necessary know-how and the general method of technology, in particular with regard to feasibility, so that there is a consistent operational continuity between the time of the choices of the "design" and the time of the "technical realization".

### **Phenomenology of Contemporary Arts**

Cod. ABST51

CFA 4

Hours: 24

This subject deals with the history and practice of art, focusing on the most significant contemporary artistic movements in their methodological aspects, in their historical development, in their process and in their meaning in the current research. The course aims to bring art - in all its dimensions - and the artistic work, intended as a research device, back into education. The goal of the course is to provide the basic knowledge and the method of investigation and evaluation that allow the understanding of phenomena and historical precedents in art.

In addition, this course will be an opportunity for comparison and verification between subjective tools and objective data available and useful in the process of invention and design elaboration. The course aims to contribute to the training of young designers (interior, product and garden designers), providing the methodological tools to trigger, through art, an activity of conscious interpretation of the history

and the present, highlighting the indissoluble bond between the design act and all levels of society, culture and the many forms of contemporary artistic expression.

## Layout and Visualization Techniques

Cod. ABPR19

CFA 6

Hours: 60

The aim of the course is to provide students with illustration skills aimed at creating visuals for the communication project, through the use of common software for the production and post-production of images (Adobe/Photoshop, Illustrator, InDesign package) applied to projects that will be carried out during the year, with particular regard to the works of the final thesis. The course includes all the operations, methods and processes in use for the representation oriented to visual communication. The program will investigate the recent procedures proposed by the industry and the market focusing on the knowledge of contemporary digital graphic techniques, suitable for visualization, communication and presentation of the graphic design.

## Exhibit Design

Cod. ABVPA64

CFA 6

Hours: 60

This subject focuses on conveying methodological and practical tools regarding the design of temporary and museum exhibitions, which are mainly articulated in the design of the layout, in the functional distribution of services, in the search for suitable techniques - also from an ergonomic point of view - and in the presentation of the objects displayed. This course pays particular attention to the research of innovative solutions both in terms of conception, as well as in terms of the articulation of the exhibition areas and the communication tools.

## Multimedia Installations

Cod. ABPR36

CFA 6

Hours: 60

### **Module A\_ Multimedia Installations**

Cod. ABPR36

Hours: 40

It includes the study of methods, design, organization and implementation of the scenic action related to the visual arts, to be developed in the multimedia area, focusing on the aspects of direction and scenography in relation to projects of temporary settings to implement the potential of different communication tools applied to exhibition spaces and installations. The course will guide students through the use of new technologies applied to exhibitions.

### **Module B\_ Technology of materials for fittings**

Cod. ABPR36

Hours: 20

A technical-operative course on work processes, modular systems, structures and supplies for temporary set-up projects and exhibition spaces, paying particular attention to lighting too. The main objective of this course is to provide students with the critical methodologies and tools needed to understand the issues of technology, focusing on the feasibility in this specific project area, so that there is a consistent operational continuity between the time of the choices of the "design" and the time of the "technical implementation".

### **Design management**

Cod. ABLE69

CFA 6

Hours: 36

The ability to generate and develop new ideas is one of the key skills for the success of a business, and it helps satisfy increasingly demanding markets and environments. In this context, Design identifies the set of knowledge and skills that connect creativity and innovation.

From the creation of "something new" to the experience of design thinking, Design represents a core competence in most manufacturing and service sectors, but also in institutions and non-profit organizations. The course develops the theme of Design, trying to build a bridge between the two worlds of Design and Management, promoting critical awareness about how to contribute to social well-being and environmental sustainability. From a managerial point of view, the course focuses on the

issues of coordination and negotiation between designers, the main corporate functions and the final user.

## Theories and Techniques of Interaction

Cod. ABTEC42

CFA 4

Hours: 24

The artistic-scientific-disciplinary contents refer to the analysis, design and creation of interactive environments that involve gesture, space, light and sound. They also refer to the basic concepts of "image processing" and human-machine interaction oriented to the construction of objects and virtual scenarios of single- or multi-user interaction. This course will investigate the possibility of integrating programming through hardware platforms such as Arduino or other systems, applying integrated interactivity to design, to projects developed in Design 3 workshops and exhibitions.

## INTERACTION DESIGN

The graduates of the First-level academic degree in Interaction Design should have:

- a. an appropriate training in the fields of Product Design, environments, systems and digital services, Interactive Design;
- b. the appropriate methodological and critical tools for the acquisition of skills in visual and spatial languages, in the field of material and immaterial culture;
- c. knowledge of computer tools and programming languages oriented to research and experimentation on new project spaces generated by the development of information technology.

The graduates of the First-level academic degree in Interaction Design of our Institute will develop professional activities in different areas, related to the artistic profession in the field of new technologies, by collaborating – in relation to different fields of application – to the planning, design and implementation of specific interventions of new technologies, from the design and implementation of audiovisual, multimedia and interactive works and virtual modelling.

## FIRST YEAR

### Interface Design

Cod. ABTEC 38

CFA 10

Hours: 100

#### Module A\_ Human-Centered Design

Hours: 40

The module, with a theoretical and practical nature, aims to provide students with the theoretical and methodological elements of Human-Centered Design, including user research techniques (interviews and observation), conception, prototyping and validation (comparative techniques, user testing, etc..). The course will also introduce design thinking through classroom exercises.

#### Module B\_ Design of user interfaces 1

Hours: 60

The module aims to provide students with the theoretical, methodological and technical elements to set up a user interface project (UI design) through the creation of lo-fi and hi-fi prototypes. Students will be able to deal with interfaces related to web applications, mobile applications, physical devices, with critical examples and classroom exercises, as well as with the realization of an examination project in all its phases. This will include the use of the main tools for prototyping (including paper prototyping) as well as the main software in the sector (Sketch, etc.). Finally, we will deal with the basic elements of the information architecture.

### Computer Graphics

Cod. ABTEC 38

CFA 8

Hours: 80

#### Module A\_ Video Editing

Hours: 40

The module aims to introduce, through theoretical and practical activities, the tools and techniques for audio-visual editing, through a process that integrates editing and post-production of images, video content and animations. This will include an introduction to the principles of framing and audiovisual

language, also through the critical analysis of examples. The course aims to provide students with the basic skills for the manipulation of the audiovisual raw material as well as for the representation of their own design ideas.

### Module B\_ Multimedia animation

Hours: 40

The module aims to teach students the culture of the animation project, on a theoretical and practical basis. We will introduce the necessary general notions and specific knowledge to give the student the opportunity to develop an animation project for multimedia. The objective of the course is to monitor the entire production process, which consists in the conception, design and development of the animated subject, also aimed at the effective communication of design ideas.

### Digital Image Processing

Cod. ABTEC 38

CFA 6

Hours: 60

### Module Graphic design

Hours: 60

The module offers an introduction to the culture of graphic design, through cultural knowledge of the context and the main techniques of execution. While developing a critical sensitivity, this course provides the basic elements for the construction of a project through direct applications: starting from the study of a concept, students will proceed to the construction of a layout, going into typographical characters, image selection, choice of colors and techniques of reproduction and printing.

The module aims to develop the student's detailed knowledge of the tools and techniques, as well as common methods, to work with the main software for graphic design and digital processing of vector and photographic images (Illustrator, Photoshop, InDesign). It also aims to provide students with elements of illustration and effective representation of a design idea.

## Programming

Cod. ABTEC 42

CFA 12

Hours: 120

### Module A\_ Fundamentals of Multimedia Languages

Hours: 40

The module presents the history and origins of programming languages, especially for web and creative applications. The course focuses on the JavaScript language. The aim of the course is to provide students with all the basic knowledge for the use of scripting language useful for future designs of interactive web pages.

### Module B\_ Web technologies 1

Hours: 40

The module aims to provide students with technical knowledge related to HTML and CSS languages, as well as web technologies in general. This course will deal with the architecture of a web application, and it will explore the process of transforming a hi-fi prototype into a working web page.

## Theories and Techniques of Interaction

Cod. ABST 45

CFA 8

Hours: 48

This course aims to provide the theoretical and methodological elements for the design of an interactive product, applying the techniques of Human-Centered Design to a physical computing project. Students will also focus on creative coding through the study of the Processing language and the realization of an examination project based on interactivity.

## Multimedia Communication

Cod. ABST 45

CFA 8

Hours: 48

### Module A\_ Multimedia Communication

Hours: 36

The module aims to provide the theoretical and methodological elements for the design of multimedia and interactive products for the purpose of exhibition communication, especially in the arts and cultural heritage.

### Module B\_ Communication elements

Hours: 12

The module aims to provide the student with the essential tools to set up a communication project.

### Drawing Techniques – 3D Modelling

Cod. ABPR 16

CFA 4

Hours: 40

The course offers the basic technical knowledge for three-dimensional modelling through the use of 3D Studio Max software. After a brief introduction to two-dimensional drawing, we will proceed to the creation of simple 3D models. These elaborations are finalized to the manipulation of the raw material and to the creation of interactive and immersive products that will be discussed in the following years.

### Laws of Information and Digital Communication

Cod. ABLE 70

CFA 4

Hours: 24

The course deals with the legal and economic aspects, but also with the regulatory and management framework to which operators and companies operating in the field of art and multimedia and interactive production must refer. Together with the lessons of the basic legal principles, we will discuss the main aspects related to copyright (copyleft licenses, Creative Commons, etc.) and privacy-by-design, with practical examples for the acquisition and processing of audiovisual material and for the correct design of services that process personal data.

## SECOND YEAR

## Technology and Digital Applications

Cod. ABTEC 38

CFA 6

Hours: 60

## Video post-production and motion graphics

Hours: 60

The module explores the use of tools and techniques for audio-visual editing and video post-production, as well as the correct application of advanced methods and techniques of motion graphics, aimed at the creation of a video graphics project that makes combined use of videos, illustrations, photos, objects and 2D/3D texts.

## Mass Media Studies

Cod. ABPC 65

CFA 6

Hours: 36

This course introduces the student to the different types of audiovisual work. It highlights - also through the analysis of case studies - the basic elements of shooting and editing, not forgetting the impact of electronic technologies on the different arts, including: photography, cinema, dance, theater, net art, interactive art and robotics.

## Digital Photography

Cod. ABPR 31

CFA 4

Hours: 40

The course introduces the basic techniques of digital photography, working in constant relationship with the analog system. Students will learn about basic photography tools and techniques as well as the fundamentals of multimedia photography. At the end of the course the student will be able to create well-made materials, which will help to build a personal image bank and can be used professionally.

In addition, the course aims to study advanced computer graphics tools and techniques for the creation of multimedia projects. It also will develop the necessary skills to make designers autonomous in choosing and designing the workflow, which is more effective for the creation and finalization of a graphic project. This course will focus on modern techniques for digital image processing and post-production.

## Multimedia Design

Cod. ABTEC 40

CFA 8

Hours: 80

### Module A\_ Web technologies 2

Hours: 50

The module explores the technologies related to HTML and CSS languages as well as the web in general, providing the tools for the complete management of a product development for the web. Students will study Bootstrap and jQuery technologies; the focus will be on the design of responsive interfaces.

### Module B\_ Audio Authoring

Hours: 30

The module aims to provide a first introduction to the complex field of multimedia communication, with particular emphasis on aspects related to the acoustic and sound component, both in physical and perceptive terms. It will also deal with advanced techniques of recording and editing of signals and audio samples. The student will be able to elaborate and plan complex projects in the field of sound transmission.

## Interactive Software Design

Cod. ABTEC 42

CFA 10

Hours: 100

### Module A\_ Visual Design

Hours: 40

The module aims to provide theoretical and practical tools related to Visual Design. There will be an introduction to Basic Design, Brand Design and Graphic Design. The course will examine high-level

examples linked in particular to the multimedia and digital world, with great attention to the web world. The laboratory activities will be focusing on the creation of a graphic project with important visual and creative features, which is aimed at the web and therefore preparatory to the module of Design of user interfaces.

### **Module B\_ Design of user interfaces 2**

Hours: 60

This module aims to develop the design of user interfaces (UI design) through the creation of lo-fi and hi-fi prototypes, user research and testing. The student receives a concrete case study, which will be followed by an entire design and prototyping process aimed at both web and mobile devices. The subject will also focus on the User Experience, providing theoretical and methodological tools for its implementation. We will revisit the concepts discussed during the first year of Human Centered Design and we will study design methods and outcomes through the critical analysis of practical cases.

### **Interaction Design**

Cod. ABTEC 42

CFA 10

Hours: 100

### **Module A\_ Interactive environments**

Hours: 32

The module aims to provide theoretical, methodological and technical tools for the realization of interactive installations, including immersive ones. The student will be guided to the creation of an artistic or museum concept starting from a set of constraints and objectives, and then to the installation's technical design and work planning. The planned installation will not be realized, but rather represented using drawing, animation and video editing tools. It is however possible to conduct this course in synergy with the Physical Computing course in order to realize what has been designed in the present module.

### **Module B\_ Physical Computing 1**

Hours: 68

The module aims to provide the technical tools for the realization of interactive prototypes based on electronics and mechanics, as well as on three-dimensional printing. Students will learn about technologies related to Arduino and other popular electronic prototyping tools (Raspberry Pi, etc.), including an overview of sensors, actuators and radio transmission mechanisms. Then, we will discuss

motion capture technologies, including Kinect. Students will have the opportunity to work on a specific topic for an exam under the teacher's supervision.

## Web Marketing

Cod. ABLE 69

CFA 6

Hours: 36

The course aims to introduce students to the world of web marketing. Students will gain basic knowledge of marketing and will highlight the strategic role of the web and social media in contemporary communication. They will then analyze the main available tools through exercises and case history.

## THIRD YEAR

## Sound Design

Cod. ABTEC 44

CFA 4

Hours: 40

The course will teach students how to design and produce sound and music effects for application in different fields of communication and media, focusing on the design of digital installations and interactive environments. We will examine examples of applications and offer students a design path aimed at the production and manipulation of their own sound material for a multimedia project.

## Interactive Systems

Cod. ABTEC 42

CFA 10

Hours: 100

## Module A\_ Web technologies 3

Hours: 50

The module explores the HTML and CSS technologies as well as the web in general, providing the tools for the complete management of a project to develop a product for the web. It will focus on Bootstrap and jQuery technologies, with particular emphasis on animations and the process of moving from a prototype to a working website.

### Module B\_ Physical Computing 2

Hours: 50

The module aims to provide the technical tools for the realization of interactive prototypes based on electronics and mechanics, as well as on three-dimensional printing. Students will learn about technologies related to Arduino and other popular electronic prototyping tools (Raspberry Pi, etc.), including an overview of sensors, actuators and radio transmission mechanisms. Then, we will discuss motion capture technologies, including Kinect. Students will have the opportunity to work on a specific topic for an exam under the teacher's supervision.

### Integrated New Media Technologies

Cod. ABTEC 43

CFA 6

Hours: 36

This subject focuses on aspects related to the promotion, enhancement and funding of design projects, taking into account integrated communication techniques, physical and virtual dissemination strategies (with particular attention to social platforms) and participation in notices and competitions.

### Multimedia Installations

Cod. ABPR 36

CFA 10

Hours: 100

### Module A\_ Design of user interfaces 3

Hours: 50

This module aims to develop the design of user interfaces (UI design) through the creation of lo-fi and hi-fi prototypes, user research and testing. The student receives a concrete case study, which will be followed by an entire design and prototyping process aimed at both web and mobile devices.

## Module B\_ Design of applications for mobile devices

Hours: 50

The module aims to provide technical tools for the design of prototype applications for mobile devices through multi-platform technologies (React, Ionic or similar).

## Exhibit Communication

Cod. ABVPA 64

CFA 8

Hours: 80

### Exhibit Communication / Virtual and Augmented Reality

The course aims to provide theoretical and technical tools for the design of installations, devices and products based on Virtual Reality and Augmented Reality technologies. We will examine concrete cases of applications in different areas of use (for museums, teaching, entertainment, art, etc.), focusing not only on technical aspects but also on those related to the context, communication, content conception and the approach to a work that integrates the different skills needed for a complete multimedia project.