# A GUIDE FOR ERASMUS **STUDENTS** DISCOVERING SA AND MORE



# **Contents**



**ISIA** (Istituto Superiore per le Industrie Artistiche – Higher level institution for Artistic Industries) **is Italy's oldest institution in the field of Industrial Design.** It's the first public design school in Italy and it was founded in 1973 by Giulio Carlo Argan.



ISIA takes **inspiration from the Bauhaus method**: according to Walter Gropius the 'Bauhaus' had to be a school and not a movement. A place where the most extraordinary personalities of the world of art and of the '**Gestalt Psychology**' meet and work.

Faithfully to these principles, ISIA applies a method that is theoretical and practical at the same time, thus putting into practice both the 'learning by doing' and the 'learning by thinking' approach. This is why Isia does not provide students only with the knowledge and skills for a designer-to-be. Isia students will learn how 'to set questions' and carry out research. Team work, cooperative learning and individual research overlap each other and are the basic principles of daily lessons.

Each and every subject is important in helping Isia students to become wellrounded industrial designers. But each learning experience in the classroom is

connected to another one in order to create a whole, a network or a 'system' where every piece contributes to create the full picture.

The many theoretical courses that make up the study-plan will intersect with the practical ones leading students to research and develop their own projects. Students are able to create, present and propose their ideas.

Throughout the three years, Isia students learn to design not only the product, but also create the packaging, presentation, advertising, rendering and physical model for the project.

A further benefit of ISIA in its school management is what Italians would define as a 'sort of family' environment. With 30 students in each class at most, a family-like school is where you get to know everyone around you: students, teachers, service stuff and the Director himself.

You will always find someone to lend you a hand for any kind of issues.

As the lessons timetable is very demanding, students spend most of their school days together. Studying together, eating together and creating your own way to be



a designer together. This requires a lot of flexibility and, when it comes to individual competition, you may have to be open to criticism and suggestions exactly as in a 'family environment'. Professors are facilitators and coaches more than just teachers and know who you are and your attitudes. They follow your projects step-by-step and this boosts your preparation. In addition to routine lessons, students can attend bespoke talks where important guest speakers from different design fields are invited to the institute. These lessons are an opportunity for the students to explore different future carreer and help them enhance their cultural knowledge.



The institution is quite easy to reach because it is located in the heart of Rome; it is next to the church Santa Maria Maddalena, and in close proximity to the Pantheon.

Undergraduate students are on the first floor, while the students of the specialistic courses are on the second floor. The photography and modelling labs are on the third floor. Other than the classrooms, on the first floor you can find the "Aula Magna" where conferences and presentations are hald, and on the opposite side there is the director's office.



There is a study hall with printers which lads to the library and to the Erasmus office. The university is in the very centre of Rome, which gives you the possibility to be fascinated by art and history every day, however this also means space and public transport issues.

Language is a problem you may have to cope with, due to the fact that theoretical lessons are held in Italian. However, the Erasmus office will provide a 40hr Italian course to foreigners, and ISIA student tutors will help you to find your way around. Students are not provided with materials and they need to finance their own projects. Despite these cons, once you adopt ISIA's state of mind, everything you do is a chance to create. Even at a restaurant you may have a brilliant idea for an ISIA project and you may want to sketch it on a paper handkerchief, because why not, even a dish of pasta can be an inspiration.

The key to our 'good design' is the way we approach solutions and analyse lifestyles and environmental changes.

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One of the fundamental parts of design is to make prototypes.

ISIA has a wide range of materials for constructing prototypes: from the simplest to the most complex models. ISIA has a laboratory in which students can work on their projects. Inside the lab students can find many differents materials, such as:

- Plastics (Thermoplastics and thermosetting): some kind of plastics are shockproof such as polyurethane, polystyrene, PVC semi-expanded (Forex), methacrylate, polyethylene, ABS and epoxy resin;

- Wood: veneer, strips, multilayer, plywood and MDF which is artificial wood. These materials are used to build the body shape.

Some materials need different tools for processing and assembling, so inside the Lab Zone you can find different kind of machinery such as:

- Drill press
- Dremel
- Disk and belt sanders
- Jig-saw
- Lathe
- Thermoforming machine
- 3D printer





## First year bachelor degree in design

BASIC COURSES		ID codes	Informal speech or examination	ECTS winter sem	ECTS spring sem	Total hours of lesson
Logics for design	Т	ISST/0I	Informal speech	4		32
History and colture of design I	Т	ISSC/0I	Informal speech	3	3	48
Semiotics I	Т	ISDC/01	Informal speech		4	32
Principles of technology I	T/P	ISST/02	Examination	4		48
Descriptive geometry	T/P	ISDR/02	Examination	3	3	72
DESIGN RELATED COURSES						
Computer Graphics	T/P	ISDR/03	Examination	2	2	48
CAD computer gtaphic I	W	ISDR/03	Examination		2	48
Design and drawing	W	ISDR/03	Informal speech	1	1	48
Image laboratoy	W	ISDC/03	Informal speech	2		48
Visual communication I	T/P	ISDC/05	Informal speech		2	24
Models workshop	W	ISDR/03	Informal speech	2		48
Basic design	T/P	ISME/02	Examination	4	4	96
Elements of design	T/P	ISME/01	Examination	4	4	96
English I	T/P	ISSE/02	Informal speech	2		24
Design workshop	T/P		Informal speech		4	48
TOTAL FIRST YEAR				31	29	760



T= theory T/P= theory+practice W= workshop ECTS= credits suggested courses

BASIC COURSES		ID codes	Informal speech or examination	ECTS winter sem	ECTS spring sem	Total hours of lesson
Mathematics for design	Т	ISST/OI	Examination	4		32
History and colture of design II	Т	ISSC/01	Examination	3	3	48
Semiotics II	Т	ISDC/01	Examination	4		32
Ergonomy I	Т	ISSU/04	Informal speech		4	32
Principles of technology	T/P	ISST/02	Examination	2	2	48
Psichology	Т	ISSU/03	Examination	3	3	48
DESIGN RELATED COURSES						
Meta design	T/P	ISME/02	Examination	4	4	96
Industrial economic	T/P	ISSE/01	Examination	3	3	72
Design and drawing II	W	ISDR/03	Examination	I	I	48
Product design l	T/P	ISDE/01	Examination	4	4	96
CAD Computer graphic II	W	ISDR/03	Examination	2	2	96
Visual communication II	T/P	ISDC/05	Examination		2	24
English II	T/P	ISSE/02	Examination	2		24
TOTAL SECOND YEAR				32	28	696

### Second year bachelor degree in design

T= theory T/P= theory+practice W= workshop ECTS= credits suggested courses

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## Third year bachelor degree in design

BASIC COURSES		ID codes	Informal speech or examination	ECTS winter sem	ECTS spring sem	Total hours of lesson
Hisotry and critics of design	T/P	ISSC/OI	Examination	3		36
Systemics	Т	ISTT/OI	Examination	4		32
Ergonomy II	Т	ISSU/04	Examination	4		32
DESIGN RELATED COURSES						
System analysis	Т	ISDE/03	Examination		6	48
CAD computer graphic III	W	ISDR/03	Examination	2	2	96
Product design II	T/P	ISDE/01	Examination	4	4	96
Visual communication III	W	ISDC/05	Examination		2	48
Typological innovation	W	ISDE/03	Examination	2	2	96
OTHER ACTIVITIES						
English III					3	36
Autonomous activity					9	
Intership R&S					9	
Dissertation					4	
TOTAL THIRD YEAR				19	41	520

T= theory T/P= theory+practice W= workshop ECTS= credits suggested courses





THEORETICAL

TUTOR PRESENCE

#### Description

The Basic Design course helps students to develop a different and more complex point of view about spaces, as well as to better understand the entire shape process. The course has the goal to allow students to develop an awareness on the relationships among shapes, signs and meanings, a real shift from simplicity to complexity. The course addresses several areas: morphological and typological analysis, theory of communication and information. During the year the Professor Giuseppe Marinelli assign two different tasks: the first one consists of creating a 2D geometrical shape to be used as the basic module for as many patterns as the student can create with it; the second task consists of analysing the result of the fusion of a structured grid with lines arranged in different shapes. The final evaluation score is based on the results of the two tasks plus the evaluation of the final project which consists of a 3D pattern created inside a cube made of any material chosen by the student.

#### Needed

Personal Computer, notebook.



# COMPUTER GRAPHIC FOR COMMUNICATION

Length YearHours 48ECTS 4

Computer grafica per la comunicazione





#### PRACTICAL

THEORETICAL

TUTOR PRESENCE

#### Description

This course provides theoretical and practical knowledge and skills of communication softwares, catore tecniques and bitmap's representation project. Throughout basic tecniques and ones of the most important graphic communication computer's tools, the student will be able to create vector illustrations, picture editing, editorial layouts and project presentations.

#### Needed

Personal computer.





Length Semester Hours 24 ECTS 2



Description

Graphic design is a fundamental exam: the lst year course introduces the students to the basic concepts of graphic design: layout and composition, that will be studied in depth during the 2nd and the 3rd year. Initially dealing with theoretical principles, the course becomes more and more focused on the production and presentation of a product through a brochure or any kind of tool such as its packaging. The final evaluation consists of the presentation of the graphic tool developed during the course.

#### Needed

Personal computer and all the software you need to produce a graphic tool.

PRACTICAL

THEORETICAL







THEORETICAL

TUTOR PRESENCE

#### Description

This course will help the students to learn modelling objects through 3D modelling software, doing photo-realistic renderings and digital technical drawings On the second year the professor explains modelling programs and CAD programs step-by-step. Each lesson the students learn new commands through exercises. The software packages used during the year are Rhinoceros, basic and intermediate level, and Auto Cad. The final examination consists of a test in which the student has to model an assigned object and to put it on a technical drawing. On the third year, the professor explains Rhinoceros at an advanced level and teaches an additional 3D modelling software, Solid-works. During the course he also explains how to make a good render through a software, Key-shot, and a Rhinoceros plug-in, V-ray. The final evaluation consists of the delivery of all the exercises done during the course plus a final group exercise whose theme changes from year to year.

Length Year Hours 96 ECTS 8

#### Needed

Personal computer, software: adobe, rhinoceros, solidworks, keyshot, v-ray, Autocad.



# DESIGN AND DRAWING 1/2 Disegno operativo I, Disegno operativo II

Length Year/Sem. Hours 48 ECTS 2



#### PRACTICAL

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THEORETICAL

TUTOR PRESENCE

#### Description

The course is based on freehand drawing associated with the geometrical construction of the shapes. The goal of the course is to learn how to do renderings with pencil or marker and how to represent different types of materials like wood, plastics, aluminium, glass and so on. During the first year students learn how to use pencils while the second year is focused on the use of markers. The final evaluation of the course is based on all the drawings assigned during the courses.

#### Needed

Pencils, markers and everything you need to draw.

Personal computer and all the software you need to produce a graphic tool.







### Description

The course of Elements of Design aims to introduce the student to a first approach to industrial design, through the definition of the professional context and of project and method tools. The development of related analytical capabilities of every single product, for example the material, the dimensions and the production techniques. The professor explains relations and interactions between products of the same family, product and context, product and user.

At the end of the course students have to make a first prototype of their project.

#### Needed

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PRACTICAL

THEORETICAL



Length Year/Sem.Hours 72ECTS 6



#### PRACTICAL

THEORETICAL

TUTOR PRESENCE

#### Description

Descriptive Geometry is a branch of Geometry that explains the representation of objects with 2D and 3D geometrical structure.

The course starts with the basic Euclide's axioms (postulates) and include the study of the most important methods of geometrical representation like axonometry, virtual prospective, sections, projections and quotations. Notes and slides given by the teacher during each lecture are very important to create personal notebook indeed useful for future designers.

All this theoretical work is put into practice with geometrical technical drawings in A3 format.

At the end of the year the examination consists of showing all the work done: drawings, notebooks and an oral exam to evaluate the knowledge gained during the course.

#### Needed

Notebook, professor's handsout, ruler, compass, pencils, pens.







THEORETICAL

TUTOR PRESENCE

#### Description

The professor teaches the students the photography technique and the way to represent ideas and projects through captured images.

The course is formed by one theoretical and one practical part. During the lessons students can use own cameras or they can practice in the laboratory which is fully equipped with professional cameras and lights.

The final evaluation is based on the assignment of a task which consists of taking pictures on a series of themes that change every year, plus the evaluation of the student through some technical questions about photography techniques.

#### Needed

Notebook, camera\*.

\*Given by ISIA.





Length SemesterHours 48ECTS 2



PRACTICAL

THEORETICAL

TUTOR PRESENCE

#### Description

The course is split in two parts: a theoretical one, where materials and laboratory equipment are studied, and a practical one where the previously acquired knowledge is put into practice by directly handling materials and implementing practical projects. The theoretical part gives students the tools to understand processes and to use materials and machinery to build a prototype. The practical part takes place on the top floor of the university building where laboratories are located. In these laboratories, the knowledge acquired in the first part of the course is put into practice, thus allowing students to gain experience to handle, manage and use the materials previously studied. During the laboratory activities the students are supervised and guided by the professor, always ready to help and give tips and advices when needed. In the last few years, the final evaluation has been based on building a Pinhole Camera: a camera that imprints an image on film through a very small hole. Students could customize it as they preferred.

#### Needed

Notebook, \*cutter, scissors, glue, sand paper, modelling and materials such as: paper, cardboard, wood, Plexiglas\*.





Length Semester Hours 24/36 ECTS 2/3

- MOCRUP CO-DRAWING [] LETIZIA

#### PRACTICAL

THEORETICAL

TUTOR PRESENCE

#### Description

During the first year the lessons consist of the revision and the assimilation of the English basic topics, through many exercises on grammar and on pronunciation. Open conversations, games played in groups, and the help of the professor allow the students to improve their own skills of the language. The examination is based on the evaluation of the improvements made during the year.

On the second year the language is used to address design themes. Students practice with design specific terminology. At the end of the year they are evaluated through an oral examination. During the third year students deal with a thorough project in English.

#### Needed

Notebook, personal computer.







THEORETICAL

TUTOR PRESENCE

#### Description

The aim of this course is to let students understand different kinds of logic and being able to differentiate the logic of certainty and uncertainty. Specifically about the latter, the student will be able to make assesments in uncertainty conditions, to take a decision. Being able of coherently modifying its own probabilities evaluations in case of new informations, will be an important feature that will be taught.

#### Needed

Books, notebook.







THEORETICAL

TUTOR PRESENCE

#### Description

These two courses deal with the study of signs and how those signs or sign system are classified according to the way they are used. These studies can be applied to linguistic and non-linguistic sign system, such as visual communication. During the lessons the professor summarizes and explains the most relevant topics reported in the course books. The two final oral examinations are based on the content of the books and on two analyses conducted during the two years: on the first year each student has to choose and analyse a commercial while on the second year the student has to choose and analyse a product. Some of the books can be bought from a book-store, or from the fellow students.

The topics of the courses, which are held in Italian, are very interesting but, due to their very theoretical nature they can be a bit difficult to understand for a foreign student.

**Needed** Books, notebook.







#### Description

During the first year, the professor illustrates the origin of design, from the 1851 Great Exhibition to the Bauhaus. The different movements and currents, with the help of historical images, will be explained. The final evaluation in based on an oral examination on the topics of the course.

**ECTS** 6

In the second year the course prosecutes in illustrating the development of design from the Bauhaus to the 50's. In addition, the second-year course includes a detailed study on the most important Italian designers who influenced the last century. The final examination is focused on the topics of the course and on the discussion on the assigned designer.

#### Needed

Books, notebook.

PRACTICAL

THEORETICAL

# **PRINCIPLE OF TECHNOLOGY 1/2** Tecnologie per il design I, Tecnologie per il design II

Length Year Hours 48 ECTS 4



### PRACTICAL

THEORETICAL

TUTOR PRESENCE

#### Description

The course aims to examine the properties of materials and their transformation during the industrial process, in order to start understanding limitations and potentialities of technology in the industrialization of the design products. During the first year, the professor teaches students some basic principles of physics to better comprehend how materials perform. At the end of the course, the students will be able to understand how a product has been produced and identify different materials, production steps and machinery. A further objective of the course is to acquire basic knowledge on alternative energy sources, inventing new possibilities and applications in the world of design.

The final evaluation consists in an oral exam on the course topics

#### Needed

Notebook, professor's handsout.







THEORETICAL

TUTOR PRESENCE

#### Description

Product Design I is the second year course of design. The professor decides year by year a different theme which will be the main subject of the course. During the first half of the course the professor gives student tips and suggestion on how to tackle a project in the chosen field. While during the second half student design his project. Product Design 2 is the course of design of the third year: the purpose of this course is to design an industrial product ready to be presented to a Company. In the first part of the year, students are divided into groups; each group has to choose and analyse a brand. The brand analysis is focused on: Logo analysis, colours and brand communication; a typological analysis; a competitor analysis; a final, new scenarios analysis which suggests the design direction that students have to follow. In the second part of the year, students design a product that might be sold under the analysed brand; in this part of the course students can choose either to work alone or to continue working in groups. The lessons are focused on personal projects, and students have regular face-to-face revisions with professors.

#### Needed

\*Given by ISIA. Notebook, personal computer and all the tools you need to make a prototype\*.





Length Year Hours 72 ECTS 6



#### Description

The professor holds theoretical lessons on private law and economics forward the industrial field. You learn how you could design your strategy to make your dreams come true: you can plan your products' marketing and understand the business laws. At the end of the course, you have to work in group to design your strategy to promote your projects and write an abstract about your business development. The final evaluation consists of reading ad analysing the business plan developed by the group. In June, the professor organizes a one day trip to which students can take part to a special trip to a fantastic Italian brewery during the "Beer Fest" in Borgo Rose, near Rome, and have good time enjoying good Italian food and beer made with craftsmanship's techniques.

#### Needed

Notebook, professor's handsout.



PRACTICAL

THEORETICAL



THEORETICAL

TUTOR PRESENCE

#### Description

Ergonomics is the study of the interaction among human body, products, systems and processes. This field takes inspiration from differents disciplines, such as psychology, engineering, biomechanics, industrial design, physiology and anthropometry. Through this discipline design equipment, devices and processes are set to fit the human body and its cognitive abilities. Ergonomics design is necessary to prevent repetitive strain injuries and other musculoskeletal disorders, which can develop over time and can lead to longterm disability.

Length Semester Hours 32 ECTS 4

During the second year students have to analyse an object or a space associated with the assigned theme, considering the ergonomic aspects and draw conclusions about the analysis.

During the third year, students have to study the components of an industrial product which has a man-machine interface. After this first assignment, students have to make a research on a topic among those discussed during lessons.

#### Needed

Notebook, professor's handsout.







#### Description

During this course Professor teaches students to comprehend how the brain works in front of visual input. During the first part of the year students learn how the brain works in a technical and scientific way: for example they study how the brain process light input and transform them into images. During the second part the course focus

is based on colours: Professor teaches students all the different colors theory and then each student have to choose one of the theory and develop a project which explains that theory. The course is held in Italian so in might be a little bit complicated for foreign students.

#### Needed

Book, notebook.

PRACTICAL

THEORETICAL



Length Semester Hours 32 ECTS 4



#### Description

The mathematical approach to Design gives the students a key of interpretation for the many aspects of Design. Throughout the course, the professor teaches the theory of probability which examination exercises are based on. Furthermore, students are introduced to the analysis of mathematical issues within more general themes and disciplines like for examples fractals in vegetables, fl owers and lightning. The final examination consists of a research associated with one of the above themes.

#### Needed

Notebook, professor's handsout.



PRACTICAL

THEORETICAL





THEORETICAL

TUTOR PRESENCE

#### Description

This course is a little different from other design courses; this is a course in which students focus on experimental projects and not on making a finished and functional project.

The course of Meta Design aim to design the structural qualities and environmental impact of object; to gain knowledge and competences about spatial control and methodical coherence of formal evolution. This discipline study textures, structural organization of forms, order and disorder of aggregative process as a result of geometries applied to materials such as: polymers, wood, glass, steel. During lab' s workshop we verify empirically those factors as a methodological integration of what we analysed during previous studies. The professor chooses year by year the course theme. The final evaluation consists in a presentation of the project developed, in groups or alone, during the year.

#### Needed

Personal Computer, all the software and *material you need to develop your project\*.* 

\*Given by ISIA.







Description

The course is intended as an extension of the course of "Systemics": during this course students has to put into practice what they theoretically learned during the Systemics lessons. Each student has to choose and analyse a system: the focus should be on the process of the system and on the interaction with the users. At the end of the analysis students have to hypothesize and describe an improvement of the system.

#### Needed

Notebook, personal computer.

PRACTICAL

THEORETICAL





Length Year Hours 96 ECTS 4



#### PRACTICAL

THEORETICAL

TUTOR PRESENCE

#### Description

Typological Innovation let the student think in different ways, to design products and services in order to design the innovation before the product itself. Professor chooses every year a different theme which will be the only connection between all the students projects. Even if the field of application changes yearon-year the main characteristic of the products will always been innovation. Students learn how to produce a competitive project in industrial and social field thanks to its powerful characteristics. Students have to study all the characteristics about their project and find different ways to get a new design.

#### Needed

Notebook, professor's handsout, personal computer.







THEORETICAL

TUTOR PRESENCE

#### Description

The course addresses all relevant aspects associated with a system: the rational behind its creation, the way it develops, the rules to maintain its own order or to control chaos, the way to manage its items and to cope with problems. During the course the students familiarize with the proper technical language to handle all the above issues. This course is connected with another one third-year course (System Analysis) where students analyse in a technical way a chosen system. The final evaluation is based on a research conducted on a specific system selected by the student.

#### Needed

Notebook, professor's handsout.



# **HISTORY AND CRITIQUE OF DESIGN** Storia e critica del Design contemporaneo

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Length Semester Hours 36 ECTS 3



#### Description

The course consists in theoretichal lessons on the history of exhibitions. Within the course each student has to choose an exhibition held in Rome or other notable ones held around the world, and to do in-depth analysis of the exhibition. The lessons are also focused on a research project about Italian Design Companies. The project can be done individually or in groups. During the semester the professor organizes at least two visits to museums in Rome that host exhibitions relevant to the course topics. The final evaluation score is given by the sum of the results of the two assignments carried out during the semester.

#### Needed

Personal computer, notebook.



PRACTICAL

THEORETICAL

THANK YOU AND SEE YOU ΙΝ **ROME!** 

