

OUTLINE OF COURSES (alphabetical order according to the original Italian version)

Market Analysis and Project Management ISIA-F DS1 AMG1

1st year

Lecture hours 75

Credits: 8

Oral exam

The aim of this course is to give a designer the skills that concur to realize the planned work; as completed a plan it is essential to take up the next step, perhaps more challenging, "how to realize the work of own talent". After learning the techniques of "memorization" in order to make efficient the studies and the job, marketing techniques applied to the planning are faced with particular reference to the strategic planning and to the "4 P" of marketing mix: *product, price, placement* and *promotion*. The course deepens the organizational principles on which it is established and developed an institution for profit, common to work institutions also of little dimension and with a big rate of creativity and innovation; they must take part on the professional background of a designer, who can work as employee or interact as a professional consultant.

Finally the mechanisms underlying the formation of the product cost are analysed: in a globalized market, more and more selective, the price is, in fact, to parity of other factors, the "competitive advantage" that may determine the manufacturability and therefore the success of the work that the talent of the designer has generated.

Cultural Anthropology ISIA-F DS1 ACU2

Two-year course Product Design, 1st year; Two-year course Communication Design, 1st year

Compulsory Course

Lecture hours: 60

Credits: 8

Oral exam

This course deals with the relationship between man, the evolution of his habitat and the relative cultural forms. In this context the relationships between different cultures in different historic eras are examined.

Contexts such as metropolitan landscapes, abandoned territories, urban related problems, employment and entertainment issues, in a perspective that form the historic context leads to the contemporary situation. Particular attention is dedicated to the "Non-Places" concept as formulated by Marc Augé's (Non-Places. Introduction to an Anthropology of Supermodernity).

The aim is that of offering a stimulating perspective to the young designer, allowing the student to confront a cultural and contemporary expressive context.

Product Atelier ISIA-F DSP1 AP

1st year

Compulsory Course, integrated with Physical modelling workshop

Lecture hours 125

Credits 8

Oral exam, presentation of projects

The problems of feasibility have disappeared, slogans concerning form and function are no longer in, terms like re-design and style provide no appeal (the old aunts of design do not approve), those standardised and impersonal "methodologies" have become obsolete, and the dichotomies between art and design...regarding what to do and what not to do no longer make sense.

A kind of evolutionism (Darwinism) of ideas makes it possible to agree that the survival of certain ideas over others is to be found in their formal evolution and adaptation of the cultural environment. The aim is a place in the sun, guaranteed by this "emotional bread", not given by the ideas themselves, but by who pronounces them.

It goes without saying, that if it works, it will continue to survive, but a regenerating push in the right direction is necessary. The biological factor may represent an appropriate model for the representation of the vitality of ideas and of the geometries that are self-designed as the forms of life (plants, organisms, animals, but also minerals, cities, organisations....) which represent the best of the "possible" worlds and their synthesis is nothing more than any kind of observation point. Thus, the synthesis is the crystallisation of an event, be it slow or fast. Form is its syntax, the observation point is the filter: minimal, pop, optical, etc.

Form is the emotional content: nutrition, psychosomatic food competing with a kind of evolution of contents (obsolescence?).

Minimalist organics or organic minimalists, diamond shape, newedge or smartspline, all terms looking to find a place in the sun and that will not waste time in making their way.

A world of ideas that form inwards (that provide or get their form from) in art, technology, design, literature, music, this world is invaded by "technical" features from which the potential to achieve a transgenic semiological manipulation, which is also philological and last but not least a view of a ladder relationship: Bateson hypothesised a mind without a nervous system, but made up of relationships and of a new ecology.

This is the paradigm of the cybernetic world, of software, of the internet, of the environmental and human resources, but also of the new humanistic disciplines with a neuro-linguistic approach.

And I think that all of this has to do with those who operate in the world of ideas.

Communication Atelier Alternative

Those students of the 1st year who would like to make a further in depth study into the issues of communication may follow a parallel Atelier course regarding the issues of communication and which are subdivided into the following topics. This is in alternative to the *Product Atelier* course and it carries the same number of 10 Credits.

Communication atelier ISIA-F DSP1 C3

	CFA – Academic Credit System	Hours of Lectures	
Packaging design	2	30	Two-dimensional and three-dimensional. Packing and packaging: what is a packaging. Introduction to packaging project. An outline of history about packaging. The existential way of packaging. Social and Communicative looks. Branding and packaging. The job of packaging designers. Applied design: developing one or more subjects design.
Communication technologies	2	35	The classification of printing and the specific features; traditional printing and digital printing; colour reference standards; relationship between paper/colour/character; analysis of the print; fundamental parts of a book; layout of a print; the use of non-paper support; production quality control; the main printing systems.
Audiovisual workshop	4	60	The language of images; types, professional roles, production departments; framing as the basic unit of filming, meanings and the construction of an image, light, the camera movements; scenography, the space in which actors and actresses move, internal and external locations; sound effects; the idea, the subject; scriptwriting; the story-board, the working plan; filming; editing – techniques and use of the PREMIERE programs on a Windows platform and FINAL-CUT on a Mac platform; screening, promotion and distribution.
Total	8	125	

Research activity ISIA-F DSP2 AP4

2nd year

Activities alternating partially or totally with the company placement.

Lecture hours from 0 to 188

Credits from 0 to 25, awarded in a proportional manner

Design and laboratory activities dealing with emerging issues in product design chosen according to the opportunities offered by the teaching staff.

The course includes a free attendance 60 hour module called *Creative thinking and product innovation course* (directed towards research and work transition).

The aim of the Atelier course is to carry out research for the preparation of the final diploma thesis.

Communication ISIA-F DSP1 C5

1st year

Compulsory Course

Lecture hours: 100

Credits: 4

Oral exam, presentation of projects

This course aims at providing a continuation and detailed study of the *Communication Design* course (*ISIA-F DT3 DC5*). Complex practical tasks are offered as well as professional based simulations, in addition issues involving contemporary communication are developed with the aim of integrating the know-how acquired in two years of specialisation during which the main attention is aimed at product design.

The course is sub-divided into three parallel aims: monographic lectures regarding key-topics of the discipline; *technical* lessons on the professional methods for creating communicative products; practical tasks and group discussions regarding research topics put forward by the lecturer.

The main topics dealt with are:

Editorial graphics

Company communication

Advertising communication

Social utility communication

Multi-media design and web design

The latest trends in communication design

Surface Design ISIA-F DSP1 DS6

1st year

Lecture hours 50

Credits: 4

Oral exam, presentation of projects

During the career of the designer the problem of combining design with interior decoration may need to be faced. Over the history of objects, and also in the Ceramics Industry sector, this issue is usual in that whilst the forms are renewed on a less regular basis, the surface, the so-called skin of the object is changed more often.

Therefore the designer is involved in creating those surface-cladding aspects, which, according to the culture of that precise time in history, are expressed in a more marked decorative way even with simple surface treatments, creating a kind of non-decoration solution. At times then, the pure functionality of the objects is added or even replaces a mere decorative function.

The course aims at providing the tools for analysing and understanding the quality of a decoration applied to an object by means of the theoretic awareness of the processes and the experimentation of direct decorative design. The course wants the students to acquire those skills necessary for recognising a real decorative process, to assess its features, eventual production difficulties, costs, to define the design constants and variables; in addition it aims at teaching a methodology for creating polychrome patterns for artistic industrial use or of small-scale serial production.

At the end of the course assessment is based upon a recognised competence of defining the decorative factor of a product, through the attribution of quality based values, complexities,

innovation and economics; the personal aesthetic research shall also be examined, as well as the design activities with reference to the pictorial and compositional tools employed.

Product Design ISIA-F DSP1 DP7

1st year

Lecture hours 150

Credits: 12

Oral exam, presentation of projects

The project design is currently experiencing the complexity of our society between continuous demands for news coming from the increasingly saturated markets, technological innovations that change our behavior and the globalization that exacerbates the concept of seriality (global brand) but also feeds the desire for diversity and uniqueness, self brand and mass entrepreneurship.

If this is the scenery, the objective of the course is to rethink the features and the profiles of the things and spaces that surround us through a project carrier of thought and quality, able to transform ideas into aesthetic experiences.

A project aware and open to an evolved living that focuses on research the man with his needs, his dreams and his future.

Physical modelling workshop: integrated with the Product Atelier and Product Design courses; see the section First level Academic Diploma/Outline of courses.

Product Workshop ISIA-F DSP1 LP8

1st year;

Compulsory Course

Lecture hours: 50

Credits: 4

Oral exam, presentation of projects

These activities are integrated with the Product Design course, see the relative outline for programme details; a physical assessment of the project and the realisation of models and eventual prototypes represent the tools for assessment.

Thesis Workshop ISIA-F DSP2 LT9

2nd year

Compulsory

Hours of participation: 62

Credits: 5

Interview and assessment on behalf of the Thesis Workshop Commission

Assistance and guidance for students who are involved in research for their respective thesis projects. This workshop can boast of collective and individual revision activities mainly carried out at the Institution.

Integrated Product Design ISIA-F DSP1 PIP10

1st year

Lecture hours 100

Credits: 8

Oral exam

Design and the product

Aim of the design. Systematic design. The basics of engineering systems. The design process. Design in the total quality context. Product responsibility. Patents and safeguarding the invention. Company organisation.

An outline of structure modelling

Speed and acceleration. Force. Work and power. Rigid body motion. Degree of freedom of body. Friction. Stress in body. Tension and deformations. Material models. Building regulations. Elastic materials. Modelling waste materials. Fragile material and ductile material. Thermal effects. Resistance of materials. Analysis of stress. Experimental analysis of the tensions. Numerical analysis of the tensions and deformations.

Structural attachments

Glues and adhesives. Dimensioning glued joints. Classification of adhesives. Attachments with nails and rivets. Attachments with threaded elements. Welding.

General design criteria

Structural design. Principles of structural design. Design in particular environmental conditions. Design according to unification and standardisation. Design for production. Design in assembly. Preventing malfunctioning. Development of dimensional series and modular products. Product reliability and maintenance.

Company experiences (Case studies)

The design of thermo-plastic components. Choosing finishing and connecting elements. (Together with technicians of the industry)

Machine safety

Machine Regulations. Application Questionnaire in relation to the Regulations. Market launch and installation. Free circulation of the products in the Economic Community. The manufacturers' obligations. Risk analysis.

Green Design.

The exam consists in a written exam and in the presentation of the design of a product with relative engineering of the most important components. The lecturer provides handouts relating to the lessons.

Company Placement ISIA-F DSP2 SA11

2nd year

Activities alternating partially or totally with the Product Atelier Course, 2nd year

Hours: up to a maximum of 625

Credits: up to a maximum of 25, awarded in a proportional manner.

Combined assessment by the thesis Advisor and the Company Tutor

Active presence in a company context with the aim of carrying out research for the thesis.

Assessment of the Life Cycle ISIA-F DSP1 VCV12

1st year;

Compulsory Course

Lecture hours: 50

Credits: 4

Oral exam

The methodology for assessing the life cycle of industrial products (LCS – Life Cycle Assessment) makes it possible to quantify the environmental impact of the entire life of a product and in this way backs the integration of the environmental aspect during the design phases.

The course provides an introduction to applicative cases applied to the methodology and involves the use of calculation systems that allow for the modelling and engineering of the life cycle of the products and back the phases of an LCA study: the definition of the product systems; the collection and processing of the consumption data and the emissions of the industrial processes; the assessment of the environmental impacts and the interpretation of the results for the definition of research solutions for a better ecological quality.

During the course the students assess an industrial product with the backup of software systems and databanks available at the ISIA Institute.

A *Green Design* module is also included in the course; it is structured year by year by the lecturer according to set methods.