

UNICAM- University of Camerino Faculty of Architecture

Guide for Class L- 4 Industrial and Environmental Design

UNICAM Branch

Ascoli Piceno

Academic Year 2009/2010

Course of Industrial and Environmental Design

Faculty of Architecture

Presentation

Design, as an esthetic expression of trends in projects of XIX and XX century, came about with the contrasting values affirmed during the Industrial Revolution and it is a clear manifestation of the creative and working trends of a civilization, in which a project knowledge is affirmed, aimed to unify both the material and formal dimension in a rational whole of objects. This circumstance has influenced instrumental, environmental goods and public services: all these fields to be explored and analyzed continuously if we want to count on the future on modern and wide spread projects with an attitude to criticism and self control, with an approach to the environmental quality.

Choosing the Degree in Industrial and Environmental Design means being aware of the rising importance that this particular kind of opportunity has reached in the contemporary world. Learning how to responsibly produce the system of objects we need to live in our modern industrial civilization, is becoming in fact an essential need that requests a training able to combine both intelligence and creative sensitiveness with a wide vision of complex problem and of the following processes that contemporary living takes into consideration. All of these in the reasonable consciousness that the whole quality of the human habitat is not an abstract value but it is based on the completeness of functional and symbolic qualities which define the single objects necessary to live.

Choosing the Degree in Industrial and Environmental Design at UNICAM means:

- A course structured with the most up to date planning methodologies.
- A restricted students that enables them to a direct relationship with the teachers based on a direct and continuous interaction besides a planning of the didactic activities and tutoring opened to the most up to date project experiments.
- Adequate and functional spaces and didactic structures
- Qualified relationship with the most important manufacturing industries at a stage level.
- Qualified relationship with famous national and international designers.
- Active research groups concerning innovation on process and product, who run projects and collaborate with a lot of universities both national and international.
- Opportunity of studying abroad, according to international agreements (Erasmus, Socrates), run together with other European universities.

Prerequisites for admission

To be admitted to the Course you should have passed the State Examination at High School.

Being the Course for the Degree at a fixed number at a national level, it is necessary to take part in the entry test, to verify the right preparation to be able to attend the Course and to take part in the list, written on the bases of the results.

Formative Objectives

In particular ,the Course of Industrial and Environmental Design has as the first objective to train project technicians , that is professional figures who are able to interact in a conscious and creative way in the process of finalization of an industrial product inside a real productive context. With this aim the training course is developed through three key words : shape, project, quality, on the basis of which the student will have to focus on his final examination. This one is aimed to assess the preparation through the development of an experimental project or a theoretical research on themes concerning the culture of design.

Knowledge and learning capacity

- Knowledge of the basic concepts ,of the instruments and methods of maths analysis, geometry and line algebra.
- Knowledge of the fundamental concepts of calculus of probability and statistic inference as well as the usage of the approximation formula, numerical calculation and programming.
- Theoretical and practical knowledge necessary to represent the shape of an object built in its detailed parts and in its completeness.
- The historical and critical instruments necessary to understand the social change and the main tendencies of the industrial societies.
- The instruments for an analytical study and critical understanding of the inner qualities of an industrial product.
- Theory and methodology to be able to understand the social and cultural events for the economical development , the formation of the demand, the company activity, technology and production of the objects, the transfer of technologies from external sectors , technical and management abilities, necessary for the planning of the mass produced articles and to create more room for the innovation in the firms.

Capacity to apply knowledge and understanding

- Demonstrating peculiar heuristic abilities
- Understanding and making others understand through adequate topics
- Being able to apply adequate methodologies to the developing process of a new product.
- Being able to consciously integrate in the project, the knowledge of the physical-chemical and mechanical characteristics of natural and artificial materials of the semimanufactured product and of the industrial components.
- To know and apply the necessary instruments
- Being able to apply the knowledge and the instruments for the evaluation and control of the resources employable in the productive cycle.

Self- judgement

- The skill of collecting and interpreting the data concerning a particular project
- The skill of critically analyzing the most important factors of innovation and their implications
- The skill of integrating and summarizing ideas, values, future plans in the project.

Communicative ability

- Being able to use the graphic, photographic and multimedial techniques of the physical and virtual models.
- Being able to present also to unauthorized people, through adequate programming techniques , his /her project work.
- Being able to creatively interact in the processes of advertising products on the market.
- Being able to transmit and compare his/her own specific technical-scientific know-how in the area of multidisciplinary work.

Learning Capacity

At the end of the Course the graduate will have developed levels of learning both in the humanistic and the technical-scientific field , that will enable him/her to draw up a project in industrial design in a multidisciplinary way and to describe its aspects efficiently.

Work environments

As the graduate in Industrial and Environmental Design , knows the methods of design , he/she will be able to work in different fields pertaining to the technology of commerce, with particular reference to the wide and dynamic production of the Marches. Moreover, employing the people trained at the Course, will be particularly useful amongst the different departments that, in the various firms , promote innovation through prototypes and the control of quality of the new products that are put on the national and / or global market.

The Course for the Degree is meant to answer the rising demand by the enterprises and public boards to get the cooperation of technicians, designers, consultants who have specific competence and knowledge in the field of design and are able to manage the project of the developing process of the new products.

Infact the graduate , gets a cultural and technical –scientific profile that will enable him to have an adequate and competitive position both in the field of productive firms of durable and consumer goods and in the field of studies which concern the design and more in the Research and Development centres of public and private structures, or a professional as a designer or consultant.

The Degree in Industrial and Environmental Design gives you the opportunity of taking part in all the public tests concerning jobs in the public work.

At the end of the Course the graduate will also be able to continue training, by enrolling for a Master’s Degree or to a 1st level Master Course.

Study plans

1 st Year	CFU
Mathematics and geometrical laws of the shape	8
Culture and history of the industrial design + History of contemporary art	8
Laboratory of basic design	16
Basics of automatic design	8
Laboratory of Industrial Design 1	12
Contemporary Industrial design	8

Study plans

2 nd Year	CFU
Aesthetics of the industrial product	4
Statistics of the resistant structures	4
Applied ergonomics	8
Methodologies of environmental design	8
Experimentation of innovative materials for the design	8
Computer design for the project	8
Preparation	12
Laboratory of Industrial Design 2	12

3rd Year

(starting in the academic year 2010-11)	CFU
Design of objects and living systems	8
Design for communication	8
Defence of intellectual property	4
English	4

Laboratory of Industrial Design 3	16
Students' choice of formative activities	12
Formative training	4
Computer ability	4
Final examination	4

Organization of didactics

The formative activities of the Science of Architecture Course are carried out in three academic years, in six semesters which coincide with the minimum dimension in respect to measuring the time, context and the coordination of the didactics.

The didactics of the first semester takes place between October and January and the one of the second semester is between March and June. The organization of the didactics includes laboratory activities, monodisciplinary teaching courses, integrated teaching courses, activities chosen by the student, stage and training activities, computer activities, integrated specialized seminars and the final examination.

Delegates for support services

- For tutoring activities:

Prof. Andrea Lupacchini – architer@libero.it

- For orientation activities:

Prof. Alessandra Meschini – alessandra.meschini@unicam.it

- For internationalization activities:

Prof. Cristiano Toraldo di Francia – c.toraldodifrancia@tiscali.it

- For tutoring and stage activities:

Prof. Lucia Pietroni – lucia.pietroni@unicam.it

Application for the entry test

The application must be handed in from the 15th of July to the 24th of August 2009 at the Students' secretary's Office – Ascoli Piceno, Corso Mazzini 210.

Entry test

The entry test will be held at the Faculty of Architecture, Largo Cattaneo, Ascoli Piceno, on the date which will be fixed at a national level by the MIUR, and based on the arrangement issued in the relative announcement which will be published on the Ateneo website (<http://www.unicam.it>) as well as on the Faculty website (<http://architettura.unicam.it>)

Registration

The first 120 students who pass the entry test, will have to enroll themselves within 15 days from the publication of the list, otherwise it will decay. The enrollment must be handed in, at the Students' secretary's Office – Ascoli Piceno, Corso Mazzini 210.

Transfers

5 students will be welcomed for transfers , attending the second and third year exclusively from the university course in Class 42 (DM 509) , and the university course L- 4 (DM 207) at a programmed number .The applications have to be presented from the 15th of July to the 24th of August 2009.