INTERNATIONAL CLASS
INDUSTRIAL PRODUCTS – COURSES

DESIGN PROJECT

As in the real world, the know-how of the firm you will be working for is central to the Industrial Products project, and is the starting point. This option is mainly open to product design students, but is also open to those who want to work on the production phase.

The design approach focuses on industrial production and innovation. A wide array of tools are used in industry, you have to become knowledgeable with them, take them in account, implement them, but also be open to new design innovations.
This option isn't just product-centered, you may also have to include services and communications, but by taking account of the general environment and new customer behaviour it is clearly user-centered.

Firms are expecting you as designers to generate new products. By revealing intelligence on processes, social and legal aspects, semiotics, art, the market and final users, you will learn how to design new generations of products, with added values that create differentiations.

DRAWING FOR PRODUCT DESIGNERS

This course aims to develop students' skills in representation techniques including spontaneous sketching, constructed drawing, colour sketching and the preparation of research and project presentation slides.
Students will learn and develop the quick drawing skills required in product design.

TECHNOLOGY AND ANALYTICAL DESIGN

Students will revise knowledge of the proprieties of materials and transformation procedures, assembly and finishing.The course aims to give students sufficient knowledge in order to participate in real design projects and discuss technical details in concrete terms with partners.

SEMIOTICS

Students will consider design as a language, as a meaning set. Each design will be seen as a mini-narrative aimed to incite the « receiver » (the consumer, the customer, the user, the citizen etc) to act. Design is a production of meaning and semiotics is the science that focuses on it; where does meaning come from? How is it produced? Students will start by studying some concepts before using a tool to analyse the meaning of different designs.

CINTIQ/ INTRODUCTION TO SKETCH-UP /SOLIDWORKS LEVEL 1 AND 2

Introduction to the use of graphic tablets.
Introduction to Sketchup as a tool for 3D modelling to quickly sketch out three dimensional volumes.
Introduction to Solidworks, a computer-aided design application (CAD) frequently used to create 3D models in design agencies and departments.

VISUAL ARTS

The starting point of every visual art project is always an open subject. This class allows students to develop and create their own personal art project throughout the semester, starting with research, continuing with tests and models and ending with the realization of their art project. At the end of the semester, students organise a small exhibition to show their art to the public.

FRENCH LANGUAGE AND CULTURE

This class is aimed at students who are keen to learn both the French language and culture. After completing a placement test, students join one of 3 levels : Beginner (A1), Intermediate (A2), Advanced (B1/B2).
At the end of the term, students in the Beginners group should be able to deal with everyday situations such as buying groceries or booking a train ticket For the more advanced levels, students should also be able to give their opinion about French issues such as politics, society, art and media.
Throughout the semester, students have the opportunity to discover the French culture while visiting places of interest in Nantes and also in class through movies ,TV programmes and songs.

SCENARIO DRAWING (Semester 2 only)

User scenario is both a design research method and skills development of both analytical and short, dynamic, suggestive human figure drawing.
For an improved proposal of an industrial product according to the market, the user is placed in at least five sequenced situations. A single transparent paper roll contains the communicative process of ideas and development research sketches based on each sequenced situation, an exploded view and a final presentation drawing.

METHODOLOGY WORKSHOP

At the beginning of each semester students are familiarized with the design methodology applied at the school through a week-long workshop.

INDUSTRIAL PRODUCT WORKSHOP

A week-long Industrial product workshop working on a realistic project or a prospective subject. Students are given a design brief and, working in groups, are asked to follow the project through from the research phase to its final stages.

INTERNATIONAL WORKSHOP (Semester 2 only)

Teachers from our international partner schools are invited to the school to conduct a week long practical Product design workshop with students.

MODEL MAKING (Semester 1 only)

Students will develop a simple, yet innovative product within a given universe.
This product will meet sustainable design challenges : material and processes optimization, volume optimization, eco-friendly materials.
Among possible innovation areas we can identify : waste processing, tools ergonomics, design for all issues, storage, or small spaces challenges.
Within this class, we will concentrate on material experimentation : hybridization, state change, distortion, combination of properties… Various materials will be available, plus your ideas are welcome. The goal of this class is to realize finished and functional products.

ANTHROPOLOGY (Semester 2 only)

The objective of this course is to introduce the different anthropological disciplines (social, cultural, biological) to design students and to show them how can anthropology be useful for a designer and vice versa. Anthropology can tell us something about the roles of design in everyday life. If we know and use it properly it provides us with valuable information that can be used to design "better" things or to design nothing at all. Have you ever wondered how could you do "better" design in order to improve the other peoples' lives? Have you ever wondered what tools you can use so the result actually matches expectations and reflects the real need of the users? Anthropology can show us how to explore, learn about and interpret the life of other people (in our own and other cultures) and also how to reach an objective understanding of their way of living. Students will also discover the methodology of ethnographic research using ethnographic tools. Ethnography can be a very subjective "adventure", but knowing how to correctly perform it makes it a source of valuable information not only for the ethnographer but also for a designer.

ILLUSTRATION (Semester 1 only) OPTIONAL

The illustration workshop takes place in English and the object of the course is to encourage young designers to explore illustration, to discover how its' use can enrich and enhance every type of text, to see how the power of a good illustration can and reinforce any kind of presentation.

The challenge will be to see how we can interpret and express an idea or tell a story by creating a unique and original visual.

Two projects will be proposed, one individual project and one group project and without needing to be good at drawing, with a pencil or a piece of string, students will explore different styles and techniques to create illustrated documents.

PHOTOGRAPHY (Semester 1 only) OPTIONAL

"This is not a technical process" - a workshop about illustrative photography

As a medium to illustrate a concept or a slide-show, photography seems an obvious choice because it has become really easy to find or produce.

But this impression of easiness can be deceiving as finding the picture that best illustrates an idea is a task that requires more skills than just typing a few words in a browser, and sorting out a picture among hundreds of others to represent the quintessence of your last summer holidays is tough.

This workshop designed for beginners and advanced photographers is an opportunity to discover or improve your awareness of the relationship between technical, emotional and intellectual aspects of this medium to simply be a better illustrative photographer.

We will spend 20 hours (10x2hrs) in both the studio, field and post-production room to help you improve in every stage of the digital photographic production process.

Students are allowed to use their own photographic equipment, and for the non equipped, digital cameras and tripods are available at the school's studio.

3DS MAX Level 1 (Semester 2 only) OPTIONAL

3ds Max is the main Autodesk design and visualization software. It is the most used 3D design software, because of its power and its number of users. This 3D is Multi-function tool, offers artists a comprehensive creative toolset, and amazingly powerful and complex software for modeling, texturing, lighting, rendering and animating. This top-tier application for digital content creation provides students with everything they need to get off to a good start. This course covers modeling with polygons, curves, and subdivision surfaces; defining surface properties with materials, shaders and maps; setting up cameras and lights; animating objects and final output rendering.

TECHNICAL DRAWING (Semester 2 only) OPTIONAL

The purpose of this course is to understand technical drawing as an essential tool for analysis, representation and to design any project. The different techniques of geometrical drawing (plan, section, elevation, axonometry) will be explored through concrete subjects. This course will be based on drawing by hand to reveal representation complexity. Students will develop their skills of representation and comprehension of a space, a piece of furniture, a product or a technical detail. The course will be divided into several individual exercises, accompanied by theoretical courses giving the necessary technical bases. The aim is to give each student the essentials skills of technical drawing in order to understand its usefulness in the project approach, from conception to communication.

SOLIDWORKS (Level 1 Beginners) (Semester 2 only) OPTIONAL

Introduction to Solidworks, a computer-aided design application (CAD) frequently used to create 3D models in design agencies and departments.

DRAWING FOR PRODUCT DESIGNERS (Semester 2 only) OPTIONAL

Students will learn and develop drawing techniques used in product design.