

## **DIGITAL MEDIA DESIGN - DETAILED CURRICULUM**

*for students with a background in graphic design, interaction design or multimedia design*

This program offers services in digital interactive media (web, interactive terminals, video, animation, computer graphics) through a user-centered approach.

*Students are required to bring their personal computer (which will be used when computer rooms are not available).*

### **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.

### **SEMIOLOGY / INFORMATION ARCHITECTURE (Semester 1 only)**

The aim of this class is to discover how semiology can be used in design and how to apply it to the domain of data visualisation.

Students will learn the tools which will allow them to produce graphic representations of static or interactive data.

The course covers the basics of semiology and is a panorama of usage and data visualisation tools. Students will learn to use Gephy and carry out a project from beginning to end. The course will focus on the collection, qualification and integration of information into Gephy as well as the analysis, formatting and restitution of maps on a given subject.

### **AFTER EFFECT (Semester 1 only)**

This course aims to teach students the notion of motion design and the use of After Effects software. Students will start by working on exercises to become familiar with UI and the tools of the software. They will then focus on the notion of rhythm and animation dynamics. By the end, students will create a full motion based on graphics created during the year.

Students will learn how to prototype an interface using a video compositing tool. By the end of the course, students will be able to create a video demonstrator to illustrate the use of an interface and its modes of interaction.

### **3DS MAX (semester 1 only)**

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.

### **METHODOLOGY WORKSHOP**

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

### **DESIGN PROJECT**

Project with an industrial partner giving students the opportunity to put into practice their technical and methodological skills (web design, mobile application, GUI) . The projects involve creation of digital services, creation or redesign of user interfaces and service design with connected objects.

The project is carried out in three phases (over 11 sessions) with teaching in the domain of social sciences, creativity, Human Machine Interface and Prototyping.

### **DMD WORKSHOP (Semester 1 only)**

A week-long Digital Media Design workshop: 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.

### **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.

### **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.

### **DRAWING**

This course will allow students to explore, through practice, the relationship between drawing and digital technology . Students will build upon their skills in visual, digital and hybrid forms of expression.

### **DIGITAL GRAPHIC DESIGN (SEMESTER 1 ONLY)**

This course focuses on the graphic aspects of digital interfaces.

Students will explore graphic choice and composition, trends in webdesign, space, colour and composition. They will explore in detail how to create a typographic grid, manage and establish a hierarchy for texts, and iconographic creation and composition.

By the end of the course, students will be able to produce storyboards, models, and website layouts.

### **ADVANCED WEB (Semester 2 only)**

This course teaches students the basics of JavaScript and «mobile interfacing » and teaches them how to represent data graphically and dynamically on the web, creating a link between a database and an interface.

### **3D REAL TIME (Unity) (Semester 2 only)**

This module teaches students how to use a 3D real time development system and to understand the design/integration chain of a 3D universe. Students will learn how to create a 3D interactive application and be able to import and animate 3D objects from a modelling software (3DS Max).

### **UX DESIGN / HMI PROTOTYPING (Semester 2 only)**

The UX design module aims to help students understand the process of user-centered interface design as well as the link between the study of usage and HMI design. This module also covers prototyping tools such as Adobe XD and Invision. .

### **INTERNATIONAL WORKSHOP (Semester 2 only)**

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

### **ILLUSTRATION (Semester 1 &2) 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 & 2) 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 (Semester 2 only) OPTIONAL**

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Compulsory for students in Digital Media Design and Retail & Interior Design Groups with no prior knowledge of this software)

### **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.

### **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.

### **DRAWING FOR PRODUCT DESIGNERS (Semester 2 only) OPTIONAL**

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