# student guide, master media design

#### Visting lecturers :

James Auger, Marie Dommenget, Lalya Gaye, Natalie Kane, Jürg Lehni , Anette Lenz, Matteo Loglio, Stéphanie Mader , Nicolas Tilly, Daniel Pinkas, Studio Z1.

#### Special events, workshops, study trip

- Atelier Media Design 1 Thinking Machines with Jürg Lehni and Douglas Edric Stanley
- Study trip and 3D workshop with Nicolas Nova and Marie Dommenget
- Atelier Media Design 2 New interfaces with Mitch Paone
- Summer School at EPFL ArtLab

Head of program : Alexia Mathieu

#### Assistants :

Félicien Goguey Nicolas Baldran

#### Teaching staff :

Nicolas Nova Mitch Paone Dominic Robson Pierre Rossel Gordan Savičić Daniel Sciboz Douglas Edric Stanley



**Workshop semaine de tous les possibles** ©HEAD — Raphaelle Mueller

#### Formation à la recherche 1

Module : 1MaDe11 ECTS : 2 Professors : Anthony Masure et al. Language : french and english Dates : 20 - 21.11. 2019 Time and place : 8h30 - 17.00, ECAL, Renens Students : MD1 et MD2

The module aims to help you understand the nature and issues of design research through an approach where theory and practice are closely linked. It allows you to differentiate between the practice of design and the practice of design research (understanding the epistemology of research). Several examples will allow you to understand the different aspects and possible approaches.

#### Workshop transversal 1

Module : 1MaDe12 ECTS : 3 Language : french and english Dates : 28.10-01-11 Time and place : 09h - 17h, room H3.09 and room H3.10 Students : MD1 and MD2

You will have the choice between two workshops. The first one will be led by Félicien Goguey and will focus on surveillance technologies. The second one will be led by James Auger and Dominic Robson, focusing on speculative design and new prototyping techniques.

#### Workshops à options 1 - Semaine Inaugurale

Modules : 1MaCH11 ECTS : 3 Professors : Anette Lenz and Nicolas Tilly Language : french and english Assistant : Nicolas Baldran Dates : 17.09 - 20-09 Time and place : 09h - 17h, room H3.09 Students : MD1

The objective of this workshop is to acquire basic methods and techniques (programming languages, electronics) useful for the implementation of interactive projects. Intensive, the workshop alternates demonstrations, exercises, practical classes and prototype. The most classic components (pixel, vector, color, button, circuit, ...) of the current media forms (image, sound, 3d, web, object, mobile, ...) are re-visited to allow to understand the way in which these objects are built. The program allows you to review the possibilities offered by new technologies in order to move to design as quickly as possible, where you will learn more during the rest of your studies.

#### Workshop à option 2 - Machine Learning

Modules : 1MaCH12 ECTS : 3 Professor : Matteo Loglio Language : english Dates : 07.10.2019 - 11.10.2019 Time and place : 09h - 17h, room H3.09 Students : MD1

Almost every day we hear news about artificial intelligence and machine learning, but what is it exactly and how can we use it in interaction design practice ? This workshop tries to shed light on artificial intelligence and its creative applications. Participants will learn how to integrate Al into their projects and experiment with simple tools designed for artists and designers. We will examine existing projects that use this technology in the fields of art, science, design and creativity in general. We will then begin to prototype ideas using machine learning as a design tool. Participants will learn about existing libraries and prototyping applications, and many examples will be provided for future reference. We will use simple programming tools, such as ml5.js, Wekinator and others. Some basic skills in processing or Javascript would be ideal, but not required. A laptop is required.

#### Atelier / Laboratoire MD 1

Module: 1MaDeOMD11 ECTS: 9 Semaines Boot Camp / Atelier Son/Arduino Professor : Layla Gaye Assistant : Félicien Goguey Dates : 23-09 - 27.09 Time and place : 09h - 17h, room H3.09 Students : MD1

This 4-days workshop with artist Lalya Gaye, aims to introduce the basic techniques of sound, electronics and their use in the context of interactivity. Focused mainly on practical work, it includes a visit to a recording studio, theoretical bases on acoustics, familiarization exercises to the creation of sound and the Arduino ecosystem, as well as mini-group projects in order to apply the knowledge gained during the workshop into case-studies.

#### Semaines Boot Camp / Atelier Ethno-design

Professors : Nicolas Nova et Alexia Mathieu Assistant : Nicolas Baldran Dates : 30-09 - 04.10 Time and place : 09h - 17h, room H3.09 Students : MD1

The objective of this workshop will be double. Firstly, It will consist in introducing the students to the methods of field research (observation, interview). And this, in order to project these observations in the near future and produce a «design fiction». You will start by observing user behaviors that deviate from the norm in order to imagine a product / service / installation, in the form of a short filmed sequence. A second goal will be to experiment with video prototyping as a tool for designing and staging speculation.

#### Atelier Media Design 1 / Thinking Machines

Professors : Douglas Edric Stanley and Jürg Lehni. Assistant : Nicolas Baldran Dates : according to Master Media Design schedule Time and place : 09h – 17h, room H3.09 Students : MD1

Thinking Machines is a semester project in which students will revisit the concept of "personal computers" in the age of neural networks and explore how the creation of personalised assistants can reshape their creative workflow. Starting from the creation of their own personalised datasets, students will then train a unique artificial intelligence in order to build a unique tool capable of assisting them in their design pro-

cess. Throughout the semester, the project will revisit a number of important concepts and innovations from the history of computer science as a reminder that the idea of a "thinking" machine is as old as computing itself

#### Théorie et pratique 1

Module: 1MaDeOMD11 Professors: Nicolas Nova, and visiting lecturers Language : french and english Dates: according to Master Media Design schedule Time and place : 09h - 17h, room H3.09 Students : MD1

Conferences, readings, screenings, discussions and presentations by the students, allow to address the key concepts and theoretical foundations in the field of interaction design, their consequences in the fields of art and design as well as themes of history and the theory of the media (cinema, interactivity, video games) in connection with the evolution of the contemporary world.

#### Laboratoire / Creative Coding

Professor : Gordan Savičić Dates : according to Master Media Design schedule Time and place : 09h – 17h, room H3.09 Students : MD1

This course offers an introduction to creative programming and is intended for both inexperienced and experienced students. Students will learn to work beyond solving regular problems, to use the computer as a means of creation, either to produce generative design, games or art. We will focus on the understanding of computer concepts and their application in the field of design. A variety of methods for programming will be introduced, as well as their application for different media, ranging from 2D graphics to animation and visualization of data. The main part of learning lies in creating interactive experiences for the web, using p5js, processing and UNIX commands. To complete the course, students will submit their final projects, which will be put together in an interactive textbook.

#### Laboratoire / Electronique

Professor : Pierre Rossel Dates : according to Master Media Design schedule Time and place : according to Master Media Design schedule, room H3.09 Students : MD1

The goal of the lab is to lay the foundation for electronics prototyping so that you can understand how basic components work and how to handle them safely. We will also see how to make intelligent and / or communicating objects by associating them with a microcontroller, which will also allow us to approach the basics of programming. Students who have already learned the basics will be able to develop their skills more autonomously in individual projects.

#### Laboratoire / Photographie

Professor : Aurélie Petrel Dates : according to Master Media Design schedule Time and place : 09h -17h, room H3.09 Students : MD1

This laboratory will allow you to acquire the necessary skills to document your projects throughout your studies.



Workshop semaine de tous les possibles  $\ensuremath{\textcircled{OHEAD}}$  – Raphaelle Mueller

#### Formation à la recherche 2

Module: 1MaDe21 ECTS: 2 Professors : Anthony Masure et al. Dates : 27.02 - 01.03.2018 Time and place : 09h - 17h, ECAL, Renens Students : MD1

The module will enable you, on the one hand, to get to know the different research methods and their intellectual and practical implications and, on the other hand, to be able to grasp the issues at the level of their application. This module will also allow you to begin your Master's project by proposing coherently one or more relevant research questions, a summary of the work envisaged and a sketch of the actions to be undertaken.

#### Workshop transversal 2

Module: 1MaDe22 ECTS: 3

The subject of transversal workshop 2 will be communicated at the beginning of semester 2.

#### Workshop à option 3 et 4

Module: 1MaDe21 et 1MaDe22 ECTS: 6

#### Semaine de tous les possibles / Strange Font

Professors : Daniel Sciboz and Laurent Malys Assistant : Nicolas Baldran Dates: 17-28.02 2020 Time and place : 09h - 17h, room H3.10 Students : MA Media Design, BA Visual Communication and other

In movement, the letter attracts our attention : visual communication makes frequent use of it. Announced since the 1990s, the parametric and variable typography, entered the standards with an update in 2016 of the Opentype format. Other constraints are defined by animation software in which the movement of the letters hardly exceeds the typographic framework. How to draw letters and words in motion? How to push the norms of digital typography? How to put the letter in motion through computer programming? Which style effects and new possibilities for animating on-screen text can lead to generative design? How to stage, to move a word by writing for each element of the letters a role - the line: the good, the bar: the brute, the round: the mobster - you would then have to interpret? During the workshop, you will create generative stylistic games using Processing. The workshop alternates between practical presentations, readings and discussion around the theme.

Week 1 : Processing et typographic experimentation (4 days) lecture (1/2 day), presentation of the theme and sketches (1/2 day)

Week 2 : Experimentation and detailed design (2 day), and realization (3 days)

#### Atelier / Laboratoire MD 2

Module : 1MaDeOMD21 ECTS: 9 Atelier Media Design 2 Professor : Mitch Paone Dates : according to Master Media Design schedule Time and place : 09h -17h, room H3.09 Students : MD1

This workshop will focus on the design of new types of interfaces and new forms of interaction with artificial intelligences.

#### Atelier Media Design 3

Professors : Douglas Edric Stanley and Laure Krayenbuhl Dates : March – June 2018, according to Master Media Design schedule Time and place : 09h –17h, Salle H3.09 Students : MD1

This workshop will focus on designing connected objects and programming their behaviors.

#### Labortoire Unity VR

Professor : Pierre Rossel Dates : March – June 2018, according to Master Media Design schedule Time and place : 09h -17h, room H3.09 Students : MD1

General objectives : To study the main 3D modeling and animation tools offered by the Unity 3D software as well as relevant examples of contemporary digital design productions using these technologies. Acquire an advanced software proficiency for use in the professional setting, to model and animate objects for integration into prototypes or 3D productions for the digital entertainment field in the broad sense animation, video game etc.). Exercise these skills by carrying out practical work. At the end of this course, the student has a thorough knowledge of the Unity 3D software interface. He is able to model, enlighten and animate, in three dimensions, a simple scene and the objects that compose it.

#### Théorie et pratique 2 / Kick-off Master Thesis / Travail théorique

Professors : Nicolas Nova and visiting lecturers. Language : french and english Dates : according to Master Media Design schedule Time and place : 09h -17h, room H3.13 Students : MD1

Conferences, readings, screenings, discussions and presentations allow the student to address the key concepts and theoretical foundations of emerging technologies, their consequences in the fields of art and design as well as themes of history and the theory of the media (cinema, interactivity, video games) in relation to the evolution of the contemporary world. The study of the main currents of thought which are interested in the technique, its nature and its relation with the humans aims to build a realistic and critical look at current and past discourses on these issues. The proposed activities lead the student towards the definition of the question and the subject of their Master Thesis dissertation.

#### Voyage d'études et Workshop 3D

Professors : Nicolas Nova and Marie Dommenget Dates : TBC

#### Formation à la recherche 3

Module : 2MaDe11 ECTS : 2 Professors : Anthony Masure and al. Dates : 21-22.11.2019 Time and place : 8h30 - 17h Junior Research Conference, HKB/Berne Students : MD2

The module has two main objectives : The first aims at obtaining a critical feedback on the current thesis project that they present to 1st year students. The second is to actively participate in a national event that is the Junior Research Conference. This day is only dedicated to Swiss HES Master's students in 2nd year design.

#### Workshops à options 5

Modules : 2MaCH11 ECTS : 3 Work in progress Kick-off MA Thesis / Travail pratique Professors : Dominic Robson and Gordan Savičić Language : french and english Dates : according to Master Media Design schedule Time and place : 09h – 17h, Salle H3.10 Students : MD2

Three intense days to kick-start your reflections on your practical project.

Workshops à options 6 Modules : 2MaCH12 ECTS : 3 Language : français et anglais Dates : 28.10-01-11 Time and place : 09h - 17h, room H3.09 and room H3.10 Students : MD1 and MD2

You will have the choice between two workshops. The first one will be led by Félicien Goguey, which will focus on surveillance technologies. The second one will be led by James Auger and Dominic Robson, focusing on speculative design and new prototyping techniques.

#### Atelier / laboratoire MD 3

Module : 2MaDeOMD11 ECTS : 12 Work in Progress - thesis and project Professors : Alexia Mathieu, Nicolas Nova, Daniel Sciboz, Gordan Savičić, Dominic Robson and al. Assistants : Félicien Goguey and Nicolas Baldran Dates : September 2019 – January 2020, according to Master Media Design schedule Time and place : 09h – 17h, room H3.10 Students : MD2

The thesis offers the student the opportunity to develop the theme and scope of their Master's project, to organize the think-tanks necessary to build their thinking, to consolidate their position in the discipline of design. Throughout the writing phase, the student works autonomously, by appointment with a tutor, and participates in the intermediate presentations planned in the semester calendar. In support of the writing of the dissertation and with the aim of preparing the realization of the Master project, the student pursues their own practice of design, explores a new field of application, develops ideas and acquires complementary skills for the production of prototypes.

#### Laboratoire / Programmation avancée

Professor : Pierre Rossel Dates : november 2019 - january 2020, according to Master Media Design schedule Time and place : 09h -12h30, Salle H3.10 Studends : MD2

The laboratory offers, throughout the semester, by appointment, an individualized technical support that allows students to produce prototypes using advanced concepts of computer programming and electronics.

#### Laboratoire / Edition

Professor : Clovis Duran Dates : 01.10, 08.10, 05.11, 18.11, 09.01 Time and place : 14h - 16h, Bâtiment Encyclopédie Students : MD2

The objective of this laboratory is to give you the tools to edit your Master Thesis. This laboratory is structured around the following axes : development of a work schedule (layout, corrections, paper order, printing, binding, shaping), choice of format, development of template, choice of typography, respect for typography rules, hierarchy, layout, proofreading, management of lost funds; choice of paper (s), choice of printing and binding, development of a white model, printing, binding, shaping, finishing ...



The PillowBook Cassandre Poirier-Simon ©HEAD — Raphaelle Mueller

#### Master Thesis 1 - mémoire

Module: 2MaDe21 ECTS: 9 Professors : Nicolas Nova, Lysianne Léchot-Hirt, Daniel Pinkas, Emanuele Quinz, Daniel Sciboz, Alexia Mathieu Jury : 17.02.2020 Place : TBC Students : MD2

#### Master Thesis 2 - pratique

Module: 2MaDe22 ECTS: 21 Professors : Gordan Savičić, Douglas Edric Stanley, Dominic Robson, Mitch Paone, Alexia Mathieu, Nicolas Nova et al. Assistants : Félicien Goguey, Nicolas Baldran Jury : 17.06.2020 Lieu : CUBE, Bâtiment H Students : MD2

#### Laboratoire

Professor: Pierre Rossel Dates : février 2018 – juin 2018, according to Master Media Design schedule Time and place : 13h30-17h, Salle H3.10 Students : MD2

The laboratory offers, throughout the semester, by appointment, an individualized technical support that allows students to produce prototypes using advanced notions of computer programming and electronics.

#### Laboratoire / Communication

Professor : TBC Dates : april – june 2020, according to Master Media Design schedule Time and place : 09h -17h, Salle H3.10 Students : MD2

This laboratory will allow you to acquire the necessary skills to communicate your diploma projects through a scenography, visuals and texts



Al Facial Profiling Marta-Revuelta ©HEAD – Baptiste Coulon

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## master media design