

Course program

1st semester 2024/2025

Master 1

Semester 7 (4th year)

Public administrative establishment of the
Ministry of Culture and Communication

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Teaching unit:

M71CTID – Intra-domain transversal course 21H

Teachers:

BILLAUX Guillaume

ECTS credits: 1.5

Nbr of weeks : 14

Nbr of hours / semester : 21

Own work: 22

INTRA-DOMAIN TRANSVERSAL COURSE

AS-CTID711 Urban Sound Workshop

Objectives:

To put electroacoustic techniques at the service of the means of representation.

Content:

Introduction to sound recording, editing and mixing.
Master the principles of urban sound surveying, acquire sound techniques related to video or cinema images. In connection with the film courses and the audiovisual service.

Work required:

Theoretical courses (signal theory, techniques) and practical courses (handling of the devices, exercises in situation).

Course materials:

Teaching unit:

M71CTID – Intra-domain transversal course 21H

Teachers:

RESTREPO RESTREPO Esteban

REINERT Marie

REIP Hughes

PINATEL Flavie

ECTS credits: 1.5

Nbr of weeks : 14

Nbr of hours / semester : 21

Own work: 22

INTRA-DOMAIN TRANSVERSAL COURSE

AS-CTID733 Via Cinema 2 - Film Editing, Written Editing

Objectives:

Content:

Work required:

Course materials:

Teaching unit:

M71CTID – Intra-domain transversal course 21H

Teachers:

TUSCHER DOKIC Anne



ECTS credits: 1.5

Nbr of weeks : 14

Nbr of hours / semester : 21

Own work: 22

INTRA-DOMAIN TRANSVERSAL COURSE

**CCA-CTID719 Cognitive Science Elements for Architectural Design:
Psychology and Applied Neuroscience**

Objectives:

Over the past twenty years, knowledge about the impact of the built environment on the psychosomatic health of users has continued to grow thanks to the contributions of recent research on body-environment interactions, in disciplines such as environmental psychology, neuroscience and cognitive science in general. This knowledge paves the way for a different professional practice in architectural design, allowing for an important theoretical and methodological integration of this knowledge in order to improve the understanding of the user experience. Thus, in the United States or, closer to home, in Denmark, this type of research is already influencing - and perhaps even changing - the professional practice of architectural design. However, the results of research are often not directly transposable into design strategies, the crucial point being that there is a tendency to want to translate these research results too literally and prematurely into projects. The development of a new aspect in architectural education could perhaps help bridge this gap, preparing students for a form of interdisciplinary collaboration with scientists.

Content:

For the time being, the question addressed in this course is whether and how it is currently possible to apply these research results in the design practice of architects. The fundamental hypothesis is that emerging neuroscience research is changing the understanding of user needs and human interaction with the built environment, and thus has the potential to transform the design process. First, it is a question of introducing students to the existing links between architecture and cognitive sciences through a series of presentations. The second part of this teaching consists of asking the students (in groups of two) to start "testing" the possibility of a practical application, not directly in the project but in the search for documentation

upstream of the design. The aim is to list the difficulties of such an approach and to assess its feasibility, in order to possibly imagine complementary tools to facilitate it.

Work required:

Course materials:

Teaching unit:

M71CTID – Intra-domain transversal course 21H

Teachers:

NEUMAN Frédéric



ECTS credits: 1.5

Nbr of weeks : 14

Nbr of hours / semester : 21

Own work: 22

INTRA-DOMAIN TRANSVERSAL COURSE

CCA-CTID720 Floating Structures

Objectives:

Acquisition of scientific knowledge specific to the ship project and more generally any floating structure.

Learning about developable surfaces.

Exercises related to the design of a canoe for the Vogalonga, with experimentation by construction on a scale of 1.

Content:

Notion of finesse

Archimedes' principle

Mass Specification - Stability

Ship theory: the great equilibria

Geometry and design of developable surfaces

Structural principles of a plywood ship.

Work required:

This optional is intended for students of the Naval Architecture project.

The work is mainly oriented towards the design of a canoe for the Vogalonga. The teaching is organized around the following main themes:

- Hydrostatics: Archimedes principle, stability.
- Geometry: Drawing and modeling of developable surfaces on Rhino 3D
- Structure: how to structure a ship beam. Coherence between forms, functions and constructive principles.

The teaching offers theoretical courses and application exercises related to the construction of a canoe in developable surfaces for the participation of ENSAPLV in the Vogalonga.

Course materials:

Teaching unit:

M71CTID – Intra-domain transversal course 21H

Teachers:

VACHON Pauline



ECTS credits: 1.5

Nbr of weeks : 14

Nbr of hours / semester : 21

Own work: 22

INTRA-DOMAIN TRANSVERSAL COURSE

CCA-CTID721 Nothing will take place except the place

Objectives:

Carry out a thought of the project in a printed booklet.

Content:

The term "artist's book" refers to this form of experimental publishing that appeared in the twentieth century and sees artists take hold of an object — the book — to make it no longer the mediation medium of the work of art, but the work itself. In this idea, can we say that there is an "architect's book", no longer a book as a work of art but a book as architecture, or a book in which a certain form of the architectural project can be embodied? In what way can the book, or more generally the printed object (fanzine, booklet, pamphlet, etc.) be considered, by its morphology and its nature, as a relevant tool for constituting a thought in architecture and not only on architecture?

This is what we will try to explore in this optional, by making a booklet around the project developed during the semester. This small book will be seen as a place to deploy a thought, a thought of the underside but also of the beyond of the project in progress: in a way, to compile around it to better define its heart. In this place, references, intuitions and ideas, images (photographs, drawings, diagrams, etc.) and texts (whether theoretical, fictional, poetic, technical, etc.) will come to dialogue, any form that, when put together, contributes to building an architectural form.

Perhaps conventional (the adjective being understood without pejoration, the work on and with convention being eminently admissible), or rather experimental, serious or caustic, poetic or pamphleteer, modest or outrageous, the work produced will acquire its own and decisive identity, in the image of the architectural thought that will constitute it.

The challenge will therefore be to make an autonomous object, thought out in its entirety (content, format, typography, layout, materiality), so that it

embodies the idea of the project carried out during the semester in the most accurate way possible. For, although developed in parallel with the latter, this object will of course be anything but a communication medium, but a place for the realization of the critical, reflexive and poetic apparatus that constitutes it. An equivalent.

Work required:

Creation of a booklet (format and number of pages to be determined according to the student's project).

Knowledge of page layout software (InDesign) recommended

Course language: French

Course materials:

Teaching unit:

M71CTID – Intra-domain transversal course 21H

Teachers:

GABBARDO Denis



ECTS credits: 1.5

Nbr of weeks : 14

Nbr of hours / semester : 21

Own work: 22

INTRA-DOMAIN TRANSVERSAL COURSE

CCA-CTID725 History(s), Theory and Doctrine: Fabrication Shop

Objectives:

The aim of this course is to allow students to deepen their knowledge of concepts, notions, ideas as they are expressed in the architectural literature and to found, by manipulating these notions, their own theoretical approach.

It prepares you to:

- the explanation of the student's own intellectual and professional positioning,
- Writing dissertations
- Architectural research

Content:

The reflection is based on the analysis of reference texts and aims to identify their purpose (historical, analytical, critical, doctrinal, communicational), the main notions, the articulation of ideas.

The approaches of the different authors are placed in their historical context during lectures. They are then compared with each other during discussions around certain fundamental notions in order to identify the permanence or semantic evolutions, the relationships between the texts, the convergences or divergences between authors.

In parallel with this work of reading, analysis and discussion, students are invited to formulate a personal conceptual approach by re-examining the notions identified from a historical or operational angle. This investigation results in the development of a theoretical text explaining the student's personal reflection on one or more notions that seem relevant to his or her own questions.

Work required:

Choice of one or more texts by each student from a bibliography provided by the teacher.

Analysis of texts: content, articulation of ideas, operators. Development of a collection of citations and a concept map.

Personal theoretical construction based on one or more notions.

Course language: French

Language of communication: English

Course materials: Selection and collections of quotations.

Teaching unit:

M71CTID – Intra-domain transversal course 21H

Teachers:

BILLAUX Guillaume

ECTS credits: 1.5

Nbr of weeks : 14

Nbr of hours / semester : 21

Own work: 22

INTRA-DOMAIN TRANSVERSAL COURSE

HMU-CTID701 Aesthetic Acoustics

Objectives:

To move beyond the sole concern of the fight against noise, to approach the fact of sound as an object of aesthetic study on the one hand, and then as a dimension of architectural and urban space.

Content:

This teaching is based on a methodology of listening as a daily discipline, by means of group exercises during the course that will have to be practiced individually afterwards. The study of sound, a component and result of architectural and urban space, will be based on theoretical work (physical acoustics, writings by Murray Schafer and P. Mariétan) and on the acoustic-aesthetic analysis of remarkable urban sites.

Work required:

Lectures and practical exercises in the field.

Course materials:

Teaching unit:

M71CTID – Intra-domain transversal course 21H

Teachers:

SOUCARRAT CHAUDHURI Françoise

ECTS credits: 1.5

Nbr of weeks : 14

Nbr of hours / semester : 21

Own work: 22

INTRA-DOMAIN TRANSVERSAL COURSE

HMU-CTID702 Energy Transition and Eco-construction

Objectives:

ENSAPLV — 2ND CYCLE MASTER — 2021/2022

Intra-Domain Transversal Course —

CTID 702/902 Energy Transition and Eco-construction

Teacher: F. Soucarrat Chaudhuri

Wednesday - 11:30 am to 1 pm - room 210

The law on energy transition for green growth and the accompanying action plans will enable France to contribute more effectively to the fight against climate change and to strengthen its energy independence.

In this context, we will focus more particularly on Hemp and its use in construction, France being the leading European producer of hemp with about 11000 Ha cultivated. This observation and the climate and environmental challenges will lead us to think about the development of this sector in construction in order to move towards a positive ecology that removes the brakes, frees up initiatives and brings tangible benefits to everyone today. This concerns in particular the acceleration of the energy renovation of housing and the strengthening of the energy performance of new constructions.

In addition to being thermally efficient, the buildings of tomorrow will take into account four other dimensions:

- 1/ Man as a building user
- 2/ The territory and the connections between the building and its environment
- 3/ Health and comfort in buildings
- 4/ The life cycle of the building

Environmental and technological issues: a hemp field acts as a carbon sink: to develop, the plant absorbs carbon, traps it and stores it. In France, 25% of final energy is spent on residential and tertiary heating. Fighting against

energy expenditure in buildings is a duty of the entire profession towards users but also towards the planet. Construction systems combining hempcrete and lime plasters, interior and exterior, can provide solutions: 1 m² of 36 cm thick wall gives a thermal resistance $R > 4 \text{ m}^2 \cdot \text{K/W}$ (depending on manufacturer) with low embodied energy consumption and reduced greenhouse gas emissions.

We therefore have an insulating construction system that has interesting thermal advantages. The other advantage of the material is the fact that it combines the characteristics of both an insulator and a wall, which gives it a certain inertia allowing it to store heat to ensure comfort in summer and winter.

Hempcrete prepared on site can be poured between panels or sprayed using a machine. Hemp spraying machines have appeared on the market. There are different sizes, with different principles. The advantage of the machines is that you can spray continuously, further, higher and with less water, which reduces execution and drying times.

We will focus on the challenges of the use of hemp in construction/renovation, particularly in the Ile de France region, from the manufacture of hemp to the architectural realization but also in the field of STRAW CONSTRUCTION (the straw sector)

TIMBER CONSTRUCTION (The timber industry)

EARTH CONSTRUCTION (the earth sector) and bio-based building materials in the world.

Content:

Bio-based materials are derived from renewable organic matter (biomass), of plant or animal origin. They can be used as raw materials in construction and decoration products, fixed furniture and as a construction material in a building (see decree of 19 December 2012 on the content and conditions for awarding the bio-based building label).

The nature of these materials is multiple: wood, hemp, straw, cellulose wadding, recycled textiles, cereal bales, miscanthus, cork, flax, thatch, meadow grass, etc. Their applications are just as much in the field of building and construction: structure, insulation, mortars and concrete, plastic composite materials or in building chemistry (paint, glues, etc.).

They are above all construction materials that meet the requirements of the Construction and Housing Code through evaluations and technical documents to guarantee a level of quality to the structures and to secure the entire chain of actors involved in the act of construction. A large proportion of them are subject to professional rules, from Atec or Atex classifying them in the category of materials recognised by the Construction Quality Agency (AQC).

Thanks to their thermal phase shift and breathable properties, bio-based and geo-sourced materials have recognized performance in terms of both thermal insulation and hygrometric comfort. Their soundproofing capabilities are an additional technical asset guaranteeing a good quality of life for the inhabitants. The sectors are developing, with the active support

of the State, characterisation tests in the fields of thermal engineering, acoustics but also fire resistance, resistance to fungi or pests in order to remove all the prejudices that may still weigh on these materials.

Law No. 2015-992 of 17 August 2015 on the energy transition for green growth confirmed the interest of using these materials in the building sector. Article 5 specifies in particular that "the use of bio-based materials contributes significantly to the storage of atmospheric carbon and the preservation of natural resources" and that "it is encouraged by the public authorities during the construction or renovation of buildings".

This carbon storage capacity puts bio-based materials at the heart of the environmental performance of buildings advocated by Law No. 2018-1021 of 23 November 2018 on the evolution of housing, development and digital technology: "[The energy, environmental and health performance of new buildings and parts of buildings] meet energy saving objectives, limiting the carbon footprint by storing carbon from the atmosphere during the life of the building, using materials from renewable resources, incorporating recycled materials, using renewable energies and improving indoor air quality" (Article 181).

Source: <https://www.ecologie.gouv.fr/materiaux-construction-biosources-et-geosources>

Work required: PDF FILE (A4 format/30 pages maximum)

It is a question of writing a personalized document with a critical look at a subject of your choice (bio-based materials or upcycling) with supporting references (note the sources).

Course materials: Course and Communication Language: French

Teaching unit:

M71CTID – Intra-domain transversal course 21H

Teachers:

FENKER Michael

ECTS credits: 1.5

Nbr of weeks : 14

Nbr of hours / semester : 21

Own work: 22

Cours intensifs entre février et avril 2025 : cours accessible uniquement aux étudiants présents l'année complète

Intensive courses between February and April 2025: only available to students present for the full year

INTRA-DOMAIN TRANSVERSAL COURSE

HMU-CTID709 Architectural Design and Ergonomic Approach

Objectives:

This teaching has three objectives:

- To initiate the links between architecture and ergonomics in the design process of workplaces.
- Understand the contribution of an ergonomic analysis of work activities to architectural design.
- Understand the role and skills of the architect in interventions aimed at transforming work situations.

This course is open to students in S7 and S9.

Content:

This course offers an immersion in the ergonomics approach and the programming of workplaces by bringing together around a practical case the students of a Master 2 in ergonomics at the University of Paris 1 and the students of the CTID. The exercise consists of engaging participants in a co-design process of a crisis management room of a European institution. The aim is to develop a development proposal by taking into consideration the work activity of users through different crisis management scenarios. The manufacture and handling of a model will be used to simulate the uses of the room in order to understand the relevance of the spatial configurations envisaged.

This experience will allow us to engage in a dialogue with ergonomics students on the complementarity of the knowledge and know-how of the two disciplines in interventions aimed at transforming workplaces. The course will also include an introduction to architectural programming and a session on working between a project owner and a project manager.

The course will take place during the intersemester, from February 5 to 9, 2024 at ENSAPLV. A 1.5-hour preparation session will take place in January 2024.

Work required:

The course includes participation in sessions shared with ergonomics students of the Master 2 'Ergonomics, Organizations and Workspaces', co-organized by the University of Paris 1 and EnsaPLV.

Understanding of the ergonomic, social and spatial aspects of a workplace intervention through exercises and case studies.

Course materials:

Teaching unit:

M71CTID – Intra-domain transversal course 21H

Teachers:

DEHAN Philippe

ENGLISH FRIENDLY
communication language

ITALIAN FRIENDLY
communication language

SPANISH FRIENDLY
communication language

ECTS credits: 1.5

Nbr of weeks : 14

Nbr of hours / semester : 21

Own work: 22

INTRA-DOMAIN TRANSVERSAL COURSE

IEHM-CTID726 Heritage(s) and changes

Objectives:

Introduction to the notion of heritage and the evolution of the concept. Presentation of protection instruments, types of mutations, and forms of intervention. Reflection on the issues related to the transformation and management of built heritage, whether on the cultural, functional, urban or ecological levels. Constitution of a cultural, conceptual and technical corpus as a support for the project. Understanding of the professions and markets related to heritage issues.

This course prepares students for heritage projects and heritage-related professions (programming, management, etc.)

Content:

Heritage, historical, architectural and real estate: cultural, urban, real estate and ecological dimensions.

Typologies: the great recognized heritage, the great unknown heritage, the banal heritage, the ordinary heritage

Types of changes: functional changes, reconversion, social changes, rehabilitation, bringing them up to standard, ecological changes, adaptation of the built environment.

Issues: cultural and tourist memorials, economic-functional, ecological

Heritage and historical monuments: Birth and evolution of a concept: Riegl, Viollet-le-Duc, Boito, Choay, the Venice Charter, ...

Memory and heritage: Nora, Corboz, Morisset,

Extension of the concept: temporal, functional, spatial (urban, landscape, etc.).

Legal tools for heritage

- Premises: Protected sectors, AVAP (ex ZPPAUP), heritage lists of the PLU, etc.

- National: Inventory of Historic Monuments and supplementary inventory, Mountain and Coastal Laws, Natural Parks, etc.

- International: Unesco rankings, etc.

Actors, method and intervention tools

Historical studies, technical diagnostics, upstream studies, feasibility and change scenarios, master plans, optimization of real estate assets...

Concepts of intervention: conservation, restoration, reconversion, rehabilitation, maintenance, Opah, urban approaches.

Building in the built environment: Restoration techniques, Rehabilitation techniques, Sustainable rehabilitation, Management of major heritage.

Examples of practices:

- Enhancement of historical monuments
- Conversion of industrial assets
- Rehabilitation of modern heritage
- Mutation of ordinary assets
- Adaptation of ordinary assets
- Real Estate Asset Management
- Policy of large managers

Language of the course French

Languages of communication: English, Spanish, Italian

Work required:

Lecture + follow-up of the book choice (reading sheet) and writing of a small critical article.

Course materials:

Teaching unit:

M71CTID – Intra-domain transversal course 21H

Teachers:

ECTS credits: 1.5

Nbr of weeks : 14

Nbr of hours / semester : 21

Own work: 22

INTRA-DOMAIN TRANSVERSAL COURSE

MTP-CTID731 Architecture, Urbanism, Landscape, Light and Sound

Objectives:

Content:

Work required:

Course materials:

Teaching unit:

M71CTID – Intra-domain transversal course 21H

Teachers:

ECTS credits: 1.5

Nbr of weeks : 14

Nbr of hours / semester : 21

Own work: 22

Cours intensifs entre février et avril 2025 : cours accessible uniquement aux étudiants présents l'année complète

Intensive courses between February and April 2025: only available to students present for the full year

INTRA-DOMAIN TRANSVERSAL COURSE

MTP-CTID732 Past/present/future of a territory: architecture, urban planning, landscape

Objectives:

'Past/present/future' of a territory: architecture, urban planning, landscape, heritage, territory, politics, economy, sustainable development and various contexts.

In February 2020 several possible study territories, specifying that study work will be carried out on the selected site and at ENSAPLV in room 102 and computer room 103, that we will be welcomed by a ministerial team:
1/ Ile d'Yeu, island territory and place of study for the years 2014, 2013 and 2015 (pedagogical description following this sheet)

2/ Saint-Antonin Noble du Val and Najac medieval towns, in the gorges of the Tarn and relief territory of hills,

3/ Nant and La Couvertoirade and Cantalobre, 3 villages below and on the Larzac plateau,

4/ Villefranche de Rouergue, a medieval bastide, a highly touristic site,

5/ Joinville and its AVAP (architectural and heritage enhancement area), study site 2016 and 2017,

6/ Ile de Molène, island territory and place of study in 2018,

8/ Belle-Ile, island territory and place of study in 2019,

7/ Cooperation with the natural parks, in the Vosges, on the site of the town of Plombière les Bains, or in Lorraine on the site of the historic town of Fenetrance.

8/ Other territories? In Ile de France ...

The choice of the place of study stay, in December 2020, according to the accommodation possibilities of the host sites, for a stay in February 2020, possibility of selecting a site in Ile de France, accessible with a Navigo Pass.

EDUCATIONAL OBJECTIVES:

For example, in the case of the Ile d'Yeu territory, our preferred territory:

- Understand the functioning of a territory, with a strong cultural identity in architecture, urban planning, heritage, landscape, geography, economy and sustainable development.
- Reading, learning, developing:
 - Reports, geology, climatology, geography, natural resources and architecture, urban planning, agriculture, crafts, economy, demography,
 - historical scenarios of territorial, human and natural occupations,
 - identify the periods of construction from an architectural and urban reading of the stylistic periods,
 - understand and measure the importance of territorial resources, the importance of local materials, in the technical and constructive result of the island's buildings and urban planning,
 - understand the importance of social/political issues in architectural and urban choices and the relationship between architecture and urban planning and the territory and landscape,
 - understand the differences between "nature", "artificial nature", transformation of the territory, authentic and false culture, culture for tourism "artifice and counterfeiting",
 - make a fragmentary and global analysis of the landscape and study the past/present/future consequences on the landscape, agriculture, economy, urban planning, politics, tourism and other factors of change...
 - measure the advantages and disadvantages, the dangers, on the heritage, generated by tourist activities, the quality of transformations, renovations and rehabilitations, adequate or inadequate, sustainable or ephemeral, in relation to local architecture and urban planning and more broadly on a regional scale,
 - experiment with a method of analysis and observation (social history, geomorphology, parcel typology, architectural typology, urban chronology). To build a chronology of the emergencies of rehabilitation of the territory, this methodology must allow a lucid, far-sighted and cultivated rehabilitation, maintenance interventions, sustainable, respectful of the urban and landscape architectural heritage,
 - interpret at the time of the "Grenelle de l'environnement", the sustainable development applied to this island territory,
- Understand "island" social life and other mobility factors.

Content:

For example, the 2014, 2015 and 2016 program of the Ile d'Yeu stay:
 Sunday, walking route in the landscapes of the island, marshes, moors and hundred-year-old trees and along the coastal edge, by the 'customs officers' path, megalithic monuments, Gallic and then Gallo-Roman oppidum, 12th century castle, sailors' chapel, 2 tiny ports, cliff beaches, geology, climatology and others...
 Monday and Tuesday, visit of the territory, analyses and forecasts of elements of architecture, urban planning, heritage, landscape, geography, economy and others...

Wednesday, Thursday and Friday, in MAT, meetings and appointments, local elected officials, associations, technical services, urban planning, architect DPLG, ERDF-GRDF, Compagnie des Eaux, associations of traders, festivals, tourist office, actors concerned by our approach, in order to determine the expressions of the various needs, sometimes and often contradictory, by these various local authorities...

In APM, Antoine Da Lage and Denis Couillard, will intervene, in their fields of predilection and skills, with site visits, tutorials and other pedagogical experiences...

On Friday evening, the presentation of the scenarios and proposals was developed and formatted, and the presentation to the local jury made up of local elected officials and representatives of associations, a school director and inhabitants of this territory... **OBJECTIVE:** production of scenarios/proposals and recommendations/proposals, in groups of 2 students.

On Saturday MAT, public, verbal and computer presentation of the scenarios/projects, to a local jury composed of local elected officials and representatives of associations, politicians and traders, a school director, inhabitants of this territory...

Work required: Production of a conceptual and technical file, support for presentation to a jury.

Course materials: On-site and ENSAPLV study work.
Trip to the work site, with local technical means, and for ENSAPLV La Villette, course in room 103, internet support, images, videos, writings and other documents, tutorials in room 102.,

Teaching unit:

M71CTID – 42-hour intra-domain transversal course

Teachers:

PETITRENAUD Antoine

PEGAZ BLANC Denis

ECTS credits: 3

Nbr of weeks : 14

Nbr of hours / semester : 42

Own work: 35

Cours intensifs entre février et avril 2025 : cours accessible uniquement aux étudiants présents l'année complète

Intensive courses between February and April 2025: only available to students present for the full year

INTRA-DOMAIN TRANSVERSAL COURSE

AS-CTID713 Artistic experiments at the port no8rd of Châlon sur Saône

Objectives:

This course offers students the opportunity to work physically on the former port and river site of Chalon-sur-Saône. The implementation of experimental devices, urban scenography, architecture or ephemeral landscapes, consists in revealing the potentialities of the place, in producing possible urban imaginaries with the materialities present.

This intensive course will take place during the second week of the spring holidays
from Monday 2 to Saturday 7 May 2022

Content:

Before a redevelopment project is decided, this former port site offers the opportunity to experiment on the ground with various artistic, architectural and urban projects related to the potential of its industrial heritage. The machine tools on site, 3 cranes and 1 overhead crane are still in working order. These machines, as well as other port equipment such as silos or hoppers, can be reused as driving forces to explore new spatial, architectural and territorial dynamics.

We offer architecture students the opportunity to physically intervene on the premises by confronting the elements and materials still present. It is a question of inventing and manufacturing space devices on a scale of 1 to reveal possible imaginaries of this port place. It is a question of experimenting with new ways of reinvesting in this territory, of driving new rhythms of vision, of working on the urban future of this river port wasteland.

A mode of plastic intervention in an urban environment questioning spaces in the process of change. An attempt to revive spatial mechanisms from these neglected territories and heritages. Dare to make the gesture. The strength of the elements present requires clear responses in return, and the project is thus developed on the basis of practice. Plastic and architectural beginnings determine test areas, sites of the possible. How to hold the space, to make it spring through "risky manipulations"? Produce gestures? Acts - spaces, on, in, and through these territories awaiting transformation. Generate a constructive approach to material reaction that promotes the emergence of concepts and a potential for action. In this way, students are led to develop their own critical tools of representation and their own elaboration processes resulting from this experimental dimension of places on a scale of 1.

This intensive course will take place during the second week of the spring holidays
from Monday, April 26, 2021 to Saturday, May 1, 2021

NB/ This teaching module is in connection with the Master's seminar on Plastic Approaches and Urban Territories and the Persona grata project group. Urban Interference Mobile Structures, Design/Manufacture

For more information, please visit the website of our "Architecture Environment Landscape" research team (AMP/ENSAPLV) at the following addresses:

<http://amp.scribnet.org/>

<http://amp.scribnet.org/accueil/terrains/chalon-sur-saone-port-nord/?menu=1&sousmenu=3>

<http://amp.scribnet.org/formations/master/>

and on the North Port website at the following addresses:

<http://portnord.eu/>

<http://portnord.eu/rita/index.html>

Work required:

Course materials:

Teaching unit:

M71CTID – 42-hour intra-domain transversal course

Teachers:

PIGOT Bernard

ECTS credits: 3

Nbr of weeks : 14

Nbr of hours / semester : 42

Own work: 35

Cours intensifs entre février et avril 2025 : cours accessible uniquement aux étudiants présents l'année complète

Intensive courses between February and April 2025: only available to students present for the full year

INTRA-DOMAIN TRANSVERSAL COURSE

AS-CTID714 Scenography: project-workshops

Objectives:

Scenography will be defined as an art of place in that its vocation is to shape the place of representation relating to a given work. His spatial approach stems from a quest for sign and symbol, wielding metaphor as the effect of reality. In relation to acting, the movement of bodies and time, dramatic action, text, history and memory, she seeks an emotion of space.

Content:

The objective of this workshop is to give students the theoretical and practical tools of scenographic analysis and design in the field of theatrical performance: to discover the space of writing, to transform it into a scenographic device, to reflect on the relationship between stage and hall, to understand the constraints of the stage and the architectural space. A theoretical component will give some tools for understanding the scenographic space, the stages of its creation and realization. We will discuss the job of the scenographer and the intervention of the different actors.

Work required:

1-the scenography of a theatrical play in the form of a workshop supervised by a director in charge of a creation of the theatrical season and in partnership with a theatre (national stage). An exhibition of the model-making work in this theatre can be envisaged.
2-Sensitive approach: a body expression workshop in order to apprehend space through actors' exercises.

Course materials:

Teaching unit:

M71CTID – 42-hour intra-domain transversal course

Teachers:

ROUBY Yves

DESSARDO Marco

ECTS credits: 3

Nbr of weeks : 14

Nbr of hours / semester : 42

Own work: 35

INTRA-DOMAIN TRANSVERSAL COURSE

AS-CTID715 Deviate

Objectives:

Analysis and modification of human circulation within the ENSAPLV by building constraining structures on a scale of 1:1 with corrugated cardboard. This course, offered by an engineer and a sculptor, will simultaneously address issues of architecture, sculpture, construction and urban planning on a local scale. It is divided into 2 intensive stages and two or three days of control: an intensive analysis and design period, and a production period in the form of a workshop. The final evaluation will be quantitative. Collaborations with other teaching and other institutions will be considered.

Content:

The exercise will focus on the diversion of human flows. It will modify the daily circulation of students, teachers and administrative staff.

- 1 course in analysis and proposals through drawing
- A stage of prototypes, mock-ups and 1:1 scale tests of the different proposals in 2 or 3 intensive days
- Intensive 2 or 3-day construction
- Observation of uses and improvement and monitoring of devices

Construction year 2013: only corrugated cardboard and glue.

Construction year 2014: only corrugated cardboard and packaging tape.

Construction years 2016, 2017, 2018, 2019: only corrugated cardboard

Construction year 2020: carried out on a scale of 1:1 in confinement

Construction year 2021: stairs only in cardboard, passable, from the ground floor of the atrium to the first floor through the windows (shortcuts: positive deviations)

Construction year 2022: stairs only in cardboard, passable, from the ground floor of the atrium to the second floor through the windows (shortcuts: positive deviations)

Work required:

Exercise taking place over two weekends of the first semester and two or three Mondays for corrections and preparations, in room 101B, 100 and under the glass roof of the atrium (dates specified in September).
Course language: French, corrections possible in English, French, Italian and Spanish

Course materials:

Teaching unit:

M71CTID – 42-hour intra-domain transversal course

Teachers:

REINERT Marie

RESTREPO RESTREPO Esteban

PINATEL Flavie

ECTS credits: 3

Nbr of weeks : 14

Nbr of hours / semester : 42

Own work: 35

Cours intensifs entre février et avril 2025 : cours accessible uniquement aux étudiants présents l'année complète

Intensive courses between February and April 2025: only available to students present for the full year

INTRA-DOMAIN TRANSVERSAL COURSE

AS-CTID717 To build (for) a story.

Objectives:

This cross-disciplinary intra-field course proposes to reflect, through a creative and immersive experience, on the way in which architecture is conceived in narrative arts such as literature and cinema, in order to highlight the critical powers and intensities that are revealed when it is produced in these disciplinary elsewhere.

We will therefore treat architecture as a "critical" setting in the manner of Orson Welles who, in the film *The Trial* – a film adaptation of Franz Kafka's novel of the same name – uses architecture both as a backdrop and host box to host the story but also as a protagonist charged with an active and critical dimension in the dramaturgy of the story itself.

Content:

The exercise will consist of creating, first, a very short literary text in which an architecture (real or fictional) will play a fundamental role. Literary aspects of architecture will be considered in this creative exercise, namely: the conception of one or more characters who will experience the architecture in question, the design of a type of narrator from which the architecture will be represented and transmitted to the reader, as well as a narrative sequence in which it will dramaturgically parade throughout the story itself, the design of a lexicon and syntax artistically treated (beyond the communicative constraints of language).

In a second phase, it will be a question of making a film adaptation of this text. We will reflect on the "traumatic" passage from text to scenario where architecture will have to abandon its textual character to become an image. Cinematographic aspects of architecture will be considered in this second part of the creative exercise, namely:

- the conception of the image: points of view, framing, light, color, grain.

- the conception of time: duration of shots, cutting, editing.
- Sound design: sound effects, music.

The "critical" work required of students will therefore relate to the knowledge and implementation of these literary and cinematographic choices concerning architecture.

concerning the architecture.

Work required:

Achievements: a 5-page story (max.), a 3-minute short film (max), and a 3-page critical text on the work done.

Course materials:

Teaching unit:

M71CTID – 42-hour intra-domain transversal course

Teachers:

ROUBY Yves

DESSARDO Marco

ECTS credits: 3

Nbr of weeks : 14

Nbr of hours / semester : 42

Own work: 35

Cours intensifs entre février et avril 2025 : cours accessible uniquement aux étudiants présents l'année complète

Intensive courses between February and April 2025: only available to students present for the full year

INTRA-DOMAIN TRANSVERSAL COURSE

CCA-CTID718 The Longest Bridge

Objective s: An interdisciplinary course in sculpture and construction on a 1:1 scale.

The objective of this course, proposed by an engineer and a sculptor, is to explore the problem of using a light, simple, economical and weak material for the construction of a medium-scale structure. The shaping of the material (folding, interlocking, cutting), made necessary by the prohibition of any material except cardboard, aims to make students explore on a real scale the elementary construction techniques, in particular those relating to assemblies and folding.

The objective of this course is simply to cross in a straight line from room 100 to room 101B on a passable corrugated cardboard bridge.

A sculpture course on the 1:1 scale.

The objective of this course, proposed by an engineer and a sculptor, consists in exploring the challenges of using a light, simple and economical material with little resistance to build a structure of medium scale.

Shaping the material (folding, interlocking, cutting), made necessary by prohibiting use of any other

material except cardboard, aims at enabling students to explore elementary construction techniques on

a real scale, especially those dealing with assembling.

During this lesson we use to build practicable practicable bridges.

Content: The exercise proposes to each group of students to make a bridge, a horizontal structure several meters long (+/- 9 meters), several meters high (+/- 5 meters from the ground), intended to be walked at the end of the exercise. This bridge will be built

from a single material module, the sheet of cardboard, the assemblies between modules having to be made without glue, tape or staples.

The choice of cardboard as the only material responds to several constraints:

- Mono-material design is one of the eco-design strategies
- The constraint of the single material allows for different joining strategies to be addressed
- the modest cost of cardboard and fast processing using simple and affordable tools
- In the absence of glue, cardboard is perfectly biodegradable and recyclable.

The idea of the teaching is to confront the students with a concrete constructive reality that goes beyond the structural dimension alone, by encompassing in particular a reflection on shaping (folding, cutting, etc.) and material experimentation (the structures will be used at the end of the 5 days of work, and their solidity/stability tested in practice by the students themselves).

The evaluation will be done in the form of a final competition and will take into account, for each solution above all:

- its performance, i.e. the distance covered (measured outside the piers) by a person in the group, before the (eventual) collapse of the bridge
- but will also be taken into account, especially in the event of a tie:
- its lightness, its constructive economy
 - its total range (between the stacks if there are any)
 - its elegance: technical and aesthetic coherence of the solution adopted.
 - its resilience

Work required: One cardboard bridge per group of students.
Exercise taking place during 1 full week during the inter-semester (from 5 to 9 February inclusive), in room 101B, 100 and under the glass roof of the atrium.
Course language: French, corrections possible in English, French, Italian and Spanish

Course materials:

Teaching unit:

M71CTID – 42-hour intra-domain transversal course

Teachers:

SILVESTRE Joaquim



ECTS credits: 3

Nbr of weeks : 14

Nbr of hours / semester : 42

Own work: 35

INTRA-DOMAIN TRANSVERSAL COURSE

CCA-CTID724 Digital Continuum of Collective Intelligence

Objectives:

The main objective is to put into practice a digital continuum from design to manufacturing and to learn about the challenges of Artificial Intelligence AI through participation in a corpus of collective intelligence.

The objectives of the digital continuum are to:

A 'generative design' approach will be the common thread of the teaching.

This generative process will be in a particular format that will be adapted to deep machine learning processing. (Deep learning)

A multitude of potential projects will be created using combinatorial logics, parametric modeling, or algorithms.

- From this multitude, design a digital model intended to be manufactured: use parametric modeling to adapt the design to the chosen materials, experiment with the assemblies.

- Make the physical mock-up using digital manufacturing tools: design the files for manufacturing, assemble and evaluate the physical mock-up.

- Identify what was a problem during the implementation and update its initial project generation system.

Content:

Introducing the concept of the digital continuum.

Presentation of the concepts of AI and more specifically of deep machine learning at the heart of recent developments.

Explanation of the rendering format for collective AI.

Reminders of parametric modeling and the use of Grasshopper (It is desirable that students have received prior training in the use of this software)

Introduction to visual programming and scripting techniques and modeling with manufacturing constraints.

Introduction to the design and modeling of models by assembling elements.

Introduction to the use of digital manufacturing tools: laser cutting, 3D printing, etc.

Implementation of a generative design approach on a small project.

Work required:

The first classes and tutorials take place in the computer room. They are continued by work in the school's model workshop.

Work requested:

- Realization of a generative project system.
- Design a digital model and physical model project.
 - Rendering of modeling files and physical mockup.
 - Conformal to machine learning-specific rendering format.
 - Production of a report on the project and on the design, modeling and manufacturing process operated.

Course materials:

A website has been set up to share theoretical contributions and productions between teachers and students. <http://sapi.paris-lavillette.archi.fr/CTID924/>
<https://atelier.dnarchi.fr/course/view.php?id=9>

Teaching unit:

M71CTID – 42-hour intra-domain transversal course

Teachers:

VALLECILLO Christophe

SECCI Claudio



ECTS credits: 3

Nbr of weeks : 14

Nbr of hours / semester : 42

Own work: 35

INTRA-DOMAIN TRANSVERSAL COURSE

HMU-CTID703 Transmitting Architecture

Objectives:

This course is an invitation to learn how to transmit architecture through exchanges with civil society.

The objectives are to:

- build cooperation processes between specialists and non-specialists
- Develop a common language for acting together
- recognize the interdependence of knowledge, popular knowledge and scholarly knowledge, in a symmetry aimed at no longer acting in vertical logics
- Produce knowledge with the other and not about the other or about the other.

Content:

WHY "transmit architecture? WHO transmits it to WHOM? WHAT to transmit and HOW?

Transmitting is never a simple inculcation of knowledge to someone else. It is always, simultaneously, the appropriation of knowledge and the construction of people in exchange.

Everyone has experienced architecture and the city. Empirical during the daily practices of space. Built during training in schools. As a result, the transmission of experiences and knowledge can only be multilateral: space specialists and inhabitants have to learn from each other...

This course therefore considers that "transmitting architecture" requires collective work that questions the circulation of knowledge and the sharing of experiences. It proposes to learn how to build a dialogue that allows everyone, space specialists and non-specialists, to mutually transmit

scholarly knowledge or popular knowledge in order to build a common project.

This experiment is proposed in a Parisian district, the Goutte d'Or in the 18th arrondissement, in that it offers a very dense network of associations.

Work required:

The approach proposes a reflective approach to an urban situation chosen with the aim of building the possible framework for a common action,

Thus, the course of the semester will follow this logic:

- to have a concrete experience of a transmission situation: to immerse oneself in the associative fabric of the Goutte d'Or to work with one or more associations
- build a critical collective reflection around a question or issue resulting from the exchanges and projects of the associations
- keep a field notebook allowing a material to be recorded throughout the semester, a subject prefiguring a "transferable" document, presenting a possible project to be carried out "by" (and if possible "with") an association.
- Organize and lead sessions with guests, teachers from the school or others, coming to share their experiences of collaboration between the school of architecture and civil society, between space specialists and civil society, etc. These testimonies will be recorded to help build the memory of the school (videos or podcasts).

This teaching is given in French. Other languages can be used in the exchange: English, Spanish and Italian.

Course materials:

Teaching unit:

M71CTID – 42-hour intra-domain transversal course

Teachers:

MAGNAC Daniel



ECTS credits: 3

Nbr of weeks : 14

Nbr of hours / semester : 42

Own work: 35

INTRA-DOMAIN TRANSVERSAL COURSE

HMU-CTID707 Design and production of moulded concrete objects

Objectives:

UHP concrete castings

To create an object in UHP concrete and wood that can be inserted into the urban fabric of Paris:

Through the exercise of moulding, from the design to the creation of an object in UHP concrete and wood, based on a targeted study by the LPO on the interaction between architecture and nesting of a species of Parisian gregarious bird, the objective is also to make the future architect aware of an environmental problem within the urban fabric.

Use the digital tool in its applications:

The emphasis is on the design of objects that will have to be made in whole or in part with the digital tools made available to students in close collaboration with the school's Model Workshop.

Please note that the number of places is limited to 15 people, 18 people maximum.

Content:

Through the UHP concrete casting experiment of a medium-sized object, during 14 sessions, the student will have to take on all the roles from design to execution.

He will design based on specifications and carry out his proposal.

We will work closely with a representative of the LPO Paris who will speak during the course.

The work is done individually or in groups.

Work required: Realization of the final object and presentation file

Course materials: Courses in volume workshop and model workshop.

Materials used and supplied by the school: UHP concrete, polystyrene and formwork wood.

Conference, LPO intervention

Teaching unit:

M71CTID – 42-hour intra-domain transversal course

Teachers:

SOUARRAT CHAUDHURI Françoise

ECTS credits: 3**Nbr of weeks :** 14**Nbr of hours / semester :** 42**Own work:** 35**INTRA-DOMAIN TRANSVERSAL COURSE****HMU-CTID708 Learning from India and its 29 states, culture and heritage****Objectives:**

ENSAPLV — 2ND CYCLE MASTER — 2021/2022

Intra-Domain Transversal Course —

CTID 708/908 Learning from India and its 29 States Culture and Heritage

Teacher: F. Soucarrat Chaudhuri

1:15 pm to 4:15 pm - room 112A

This course will critically address the history (800 years of colonization), traditional, modern, and contemporary culture, architecture, and urbanism in India. It will offer students the opportunity to participate in the reflection on an Indian modernity that is part of a tradition that is 10 thousand years old, a young democracy turned towards a possible future of identity after 70 years of independence. !

India is experiencing a significant rural exodus, linked to its population growth and difficult living conditions in rural areas. This rural exodus led to the overpopulation of the cities, around which gigantic shantytowns had developed. Faced with their proliferation, the authorities have chosen to provide the slums with basic infrastructure — sewers, drinking water. Most cities suffer from significant air and noise pollution. Since 2015, India has wanted to build or redevelop 100 "smart cities" in a giant country with galloping and nightmarish urbanization. Half of the world's 20 most polluted cities are Indian, and one-third of the urban population has no access to tap water. In Delhi, only 17% of households are connected to the sanitation network. A note from the Treasury Department, published in June 2015, estimates India's urban infrastructure investment needs at 680 billion euros over the next twenty years. All sectors are concerned: from urban mobility to the construction of sewerage networks, including public lighting and treatment

waste. Enough to whet the appetites of companies... provided that they invest.

Because the government wants to promote public-private partnerships, a formula that saves public money and entrusts the project management to a special purpose vehicle, a body sheltered from the slowness and meanders of the Indian administration, composed of representatives of the municipality and investors.

That is to say, cities or neighborhoods managed like companies by managers. Entrusting the management of urban projects to public-private partnerships could accelerate the process of discrimination against the poorest by transforming the city into gigantic centres of economic production. In Indore and Bhubaneswar, several slums have been razed to the ground and not all families have been rehoused. Even if the 100 new towns must include in their projects the rehabilitation of slums or the inclusion of poor families, the budgets allocated to this ambition are often minimal. The project to create smart cities "does not take into account all those that make up an urban space," denounces Bhanu Joshi, a researcher at the Center for Policy Research in Delhi. Making land profitable by building chic enclaves is not enough to make an inclusive, viable or smart city."

Content:

The number of urban dwellers could increase by 500 million by 2050, meaning India will need to build the equivalent of two Singapores each year. However, several megacities such as Bangalore or Chennai (Madras) are already threatened by a depletion of the water table. Many of their inhabitants are supplied by tankers that fetch water from nearby rural areas.

Technology companies are positioning themselves in this market in the hope of selling data "intelligence" that would allow optimal use of these resources (sensors to alert the authorities to water pipe leaks, or turn on public lighting only in the event of pedestrians or vehicles).

Contrary to the model of energy-intensive megacities, the famous Indian architect and urban planner Romi Khosla advocates the creation of thousands of autonomous "natural cities", "home to a multiplicity of local cultures, each with a unique identity and mode of operation that protects them from the homogenization of globalization and climate change." These many modest-sized cities would be an alternative to megacities to meet the challenges of urbanization. An ideal that is not so far from that of Mahatma Gandhi, who proclaimed that India "existed in its villages". * !

The following themes will be addressed in turn:

- The 7 traditional places and towns (Kedarnath/Badrinath/Somnath/Puri/Dwarka/Rameshwaram/Varanasi)
- The protection of cultural heritage in India (pilgrimage sites and heritage sites)
- tourist)

- Traditional and classical Indian architecture (the science of Vastu Shastra)
- The 100 "smart cities" declared Smart Cities since 2015
- Metropolis cities (Mumbai/Kolkata/Delhi/Chennai/Bangalore)
- The question of modern Indian architecture (Chandigarh/Auroville)
- Contemporary Indian architecture (architects Romi Khosla/Rahul Mehrotra/ P.B. Sajan/ Satyah Prakash Varanashi/ Shirish Beri)
- The question of low-cost housing in India since Balkrishna Doshi/ Laurie Baker/ (policies, forms, uses)
- An urban model named Vidhyadhar Nagar, Jaipur
- The Rural-Villages and Swaraj villages
- The Panchayats!

*source: lemonde.fr/les-prix-de-l-innovation/article/2017/05/26/en-inde-des-projets-urbains-geres-par-des-managers

Work required:

Course materials:

Teaching unit:

M71CTID – 42-hour intra-domain transversal course

Teachers:

MERON Nava

BOUCHERON Olivier



ECTS credits: 3

Nbr of weeks : 14

Nbr of hours / semester : 42

Own work: 35

INTRA-DOMAIN TRANSVERSAL COURSE

HMU-CTID710 The Infraordinary of Modernity

Objectives:

LANGUAGE OF INSTRUCTION: French

LANGUAGE(S) OF COMMUNICATION: English, Spanish

To show, understand and comment in urban and rural areas on the spatial and cultural productions of:

- those who organize for others and impose on the greatest number of people
- those who organize themselves and take charge of what concerns them directly by managing contradictions and inventing their daily lives.

From these case studies, we must constitute a well-argued critique of modernity and its contemporary phase, that of metropolization.

Content:

The course is developed from the presentation by the teacher in charge or by guests of case studies divided into 'families':

- ETHNOGRAPHY OF A MODERN CITY
- THE REASONS FOR THE GRID
- URBAN VILLAGE
- THE IN-BETWEEN BARS
- THE TIME OF METROPOLISATION

Work required:

Course materials:

Teaching unit:

M71CTID – 42-hour intra-domain transversal course

Teachers:

PATTERSON Michael Brent

COURSE IN ENGLISH

ECTS credits: 3

Nbr of weeks : 14

Nbr of hours / semester : 42

Own work: 35

INTRA-DOMAIN TRANSVERSAL COURSE

IEHM-CTID727 Heritage in Conflict - Destruction, Ruin, and Reconstruction

Objectives:

From theoretical, philosophical, architectural and other disciplinary texts, lead students to develop a culture and knowledge of architectural theory. To build the conceptual tools that allow them to develop a critical eye on the discipline and its discourses.

Develop their research, representation, oral and written expression skills. This teaching also aims to help the student communicate in a foreign language. ENSAPLV offers this teaching in English to allow students to participate in international educational activities (international workshops and conferences organized by the school, exchanges in foreign higher education institutions). Course open to exchange students.

Content:

This course uses interdisciplinary theoretical frameworks to address contemporary debates on heritage, in relation to the approaches of international institutions (UNESCO, ICCROM, ICOMOS, World Monuments Fund, Aga Khan Trust, etc.), as well as local initiatives and more experimental methods to analyse the impact of conflicts and ecological disasters on heritage sites, including ordinary architecture and intangible heritage.

The course examines the work in relation to its evolving historical contexts and current economic and political systems, highlighting not only the need to know international and regional protection laws, how they are applied, the impact on the maintenance and management of sites and the populations concerned, new technologies and methodologies (e.g. Forensic Architecture), but also the broader ideological frameworks that influence this work (e.g. colonialism). The work of diagnosis cannot be reduced to technical or material concerns alone.

For several years, the work has focused on heritage in danger due to conflicts and/or the ecological crisis. Recent examples are numerous: Afghanistan, Syria, Yemen, Sudan, Mali, Ukraine, indigenous lands and cultures of the Americas, nature reserves, etc. These situations are often complicated by multiple risks.

This destruction eradicates the visibility or possibility of existence of certain identities and legacies. But this destruction is not very visible in the history of our discipline. By evoking a counter-history of architecture, we look for other historiographical approaches, in addition to practical solutions. Can the analysis of cases of destruction allow us to take a different look at history and heritage, at the way they are represented? What happens to these destruction sites? How should we read the ruins? How can we understand them historically and also their current impact, how can we document them and explore other critical approaches? How to address the challenges of reconstruction and restoration? How can we deal with commemoration, 'places of memory', but also forgetting? What is the role of architects?

Work required: Presentations, critical mapping, poster with images and critical text, etc.

Course materials:

Teaching unit:

M71CTID – 42-hour intra-domain transversal course

Teachers:

TABOADA Varinia



ECTS credits: 3

Nbr of weeks : 14

Nbr of hours / semester : 42

Own work: 35

INTRA-DOMAIN TRANSVERSAL COURSE

IEHM-CTID728 Architecture and tangible and intangible heritage in Latin America

Objectives:

SEMESTER 7 (728) Architecture and Tangible and Intangible Heritage in Latin America

In order to raise students' awareness of the tangible and intangible heritage of other cultures and to reconnect with the ancestral culture of the Andean region, this course is open to students from 7 semesters. It ensures consistency with CTID 828 master 1 and the P808 Latin American Cities project group.

This course aims to intervene on tangible and intangible heritage, on the urban landscape, on the architecture of yesterday and its resonance of today in a specific context. It focuses on the Andean region located in Latin America, with a view to exemplifying earthen constructions and the resulting social, heritage and urban development.

- To foster a permanent dialogue between heritage architectural production in Latin America and France
- To contribute to the necessary renewal of the architectural and urban project approach confronted with the disused heritage in quest for architectural quality and the challenge of sustainable development.
- Reflect on architectural practice and good quality developments, but also on the quality of use, the quality of social life of the product areas
- Discover and learn construction techniques from the Aymara and Quechua (Inca) cultures from elsewhere and appropriate them to enrich themselves
- Reconnect with the ancestral Aymara-Inca culture in the Andean region (Bolivia, Peru, Ecuador) of South America.

- To raise students' awareness of the 'tangible and intangible' heritage of deprived territories, supported by committed architecture
- To share and found a critical thought based on openness to new and ancestral knowledge

This CTID will provide you with the methodological tools and body of knowledge that will allow you to train in the

different architectural cultures of Argentina, Bolivia, Chile, Ecuador and Peru.

Content:

The history of the pre-Columbian empires and the great Aymara/Inca territory of today

In Bolivia, Peru, Ecuador, the architecture and territories of the Aymara and Inca are currently unknown in France. However, it offers a world in motion, complex, abundant. The inhabitants keep a remarkable know-how related to intangible heritage including music, dance, fabrics, the layout of the city. In Tiawanacu in Bolivia, a UNESCO World Heritage Site, architecture is part of the landscape, like water and mountains.

In the north of Chile, Aymara territory, is Iquique, where the Chilean agency Elemental, created by Alejandro ARAVENA, is dedicated to the absorption of the favelas.

In Buenos Aires, Villa 31 is an example of the absorption of slums in Latin America.

- History of heritage practices and policies in the Andean region (Peru, Bolivia, Ecuador)
- Historic centres of the Andean city, models, old city, contemporary city, examples of restructuring, criticism of planning instruments
- Urban, micro-urban typology, programming, expression and representation.
- Analysis at the territorial and urban scale: history, environment, landscape, morphology, uses.
- Urban phenomena in UNESCO World Heritage sites

The study of a village, a neighborhood (historical, social, technical, landscape, sensitive) emphasizing the heritage and environmental qualities in a concrete, historical, urban and economic context, whether in Europe or South America.

The different courses will first address the ancient Aymara and Inca cultures still present in Ecuador, Bolivia and Peru as well as the challenges of the various existing projects and their renewal. Urban rehabilitation and architecture projects will be constantly analysed with historical collections, in osmosis with the actors of the urban space and the cultural landscape.

A critical analysis of a project on a territorial and urban scale will open up a reflection on the scales of intervention of a heritage project and the forms of the mix of urban functions and raises the question of a local, sustainable development project.

The in-depth study on the architectural production of vernacular housing self-built in earth will be an opportunity to produce summary sheets.

The architects recognized in the Andean region will be the subject of a detailed study: Handel Guayasamin (Ecuador), Juan Carlos Calderon (Bolivia), Luis Longhi (Peru), Sandra Barclay and Jean-Pierre Crousse (Peru), Rodo Tisnado (Peru/France)

Work required:

A tutorial on the cartography of Latin America 1 plate A3
Heritage diagnosis studies, contextual sketches 1 A3 plate
A tutorial will be requested in a trio with a Peruvian student and a Bolivian.1 Plate A3
A total of 3 tutorials will be requested throughout the semester

Course materials:

Courses in French and Spanish throughout the semester

Teaching unit:

M71CTID – 42-hour intra-domain transversal course

Teachers:

DENNEULIN Chimène



ECTS credits: 3

Nbr of weeks : 14

Nbr of hours / semester : 42

Own work: 35

INTRA-DOMAIN TRANSVERSAL COURSE

IEHM-CTID729 Industrial heritage: Art/Architecture

Objectives:

PATRIMOINE INDUSTRIEL : ART/ARCHITECTURE - INDUSTRIAL HERITAGE :
ART/ARCHITECTURE
ICONOGRAPHIE et PHOTOGRAPHIE - ICONOGRAPHY and PHOTOGRAPHY

Translation below. The teacher speaks english. Do not hesitate to contact her for further information

TRIP TO THE NORD PAS DE CALAIS MINING BASIN from 9 to 11 November 2024

Details about the trip:

- Departure Saturday morning return Monday evening
- 2 nights at the Nœux-les-Mines Accommodation Centre
- 20 students maximum
- accommodation budget + travel by TER and BUS + visits = between 50 and 60 euros to be paid by each student to be paid imperatively on October 8 for reservations (by LYDIA)

SATURDAY, NOVEMBER 9

- Visit of the Louvre-Lens
<https://www.louvrelens.fr>
- Visit of the base 11/19
<https://tourisme-lens.fr/fiche/la-base-11-19/>
- Hike on the slag heaps of Loos en Gohelle
<https://www.pas-de-calais-tourisme.com/archives/les-terris-jumeaux/>

SUNDAY, NOVEMBER 10

- Visit of Nœux-les-Mines and Loisinord
<https://www.bethunebruay.fr/fr/loisinord>
- Visit of the Cité des électriciens de Bruay La Buisnière

<https://citedeselectriciens.fr/fr/patrimoine-en-mouvement-construire-un-avenir-durable>

- Visit of LaBanque, contemporary art center (according to schedule)
- Visit of the centre of Béthune

<https://www.bethune.fr/bethune-brille/patrimoine-historique/la-grand-place-558.html>

MONDAY, NOVEMBER 11

- Visit of the Mining Museum of Nœux-les-Mines

<https://www.tourisme-bethune-bruay.fr/a-voir-a-faire/culture-patrimoine/le-musee-de-la-mine-de-noeux-les-mines-1001275>

PHOTOGRAPHY

Composition of an Atlas of the Images of the Future (prologue to photomontage)

<https://drive.google.com/drive/u/0/folders/1qP0KyoZxPd-5ePfvuzuSx8tu5RQdtFZJ>

Instagram: atlasforanotherfuture

It will be a question of practicing photography, from manual shooting to post-production (image retouching, colorimetry, special effects). We will address elements of framing, light, color temperature.

- Handling of the digital camera in manual mode
- On-site shooting (workshop, 3-day trip to be planned)
- Retouching, colorimetry, special effects
- Edition
- Archiving

ICONOGRAPHY

This CTID is dedicated for the theoretical part to the study of the iconography of industrial heritage and more broadly to the impact of images on the visions of users.

Art and architecture are at the centre of an important reflection on the transformation of the industrial landscape in Europe, which was brutally invested in the nineteenth century, and is now made up of sites that are still in use and places that have been abandoned and that have been chosen either to destroy or to rehabilitate. Once abandoned wastelands, these traces are now at the heart of the challenges of redevelopment of the contemporary city, which must face the challenges of density, improved transport, the return of nature to the city, and high social quality. In fact, this heritage is becoming crucial and constitutes the major support for the changes necessary to bring cities into the era of planetary responsibility.

In the 1970s, a group of artists and architects locked themselves in a disused factory in the Ruhr to protest against its destruction. Among them were the

photographers Bernd and Hilla Becher, who photographed blast furnaces, headframes and other water towers in series and showed them in museums all over Europe. This photographic work had the effect of changing the perception that the inhabitants and elected officials had of their region and a very ambitious requalification program was launched in the 80s with an international exhibition of architecture.

<https://www.ruhr-tourismus.de/en/index.html>

Through the study of a few notable cases (Ruhr, Detroit, Lens), students will analyze the place of collective representations and imaginaries in industrial heritage rehabilitation projects.

By way of introduction:

In his book published in 2020 'What if... We were unleashing our imagination to create the future we want?' (Ed. Actes Sud, June 2020) activist Rob Hopkins quotes Dominique Christina (Black American artist, poet and activist):

'The problem is now at the centre. What doesn't work, what is dysfunctional, takes up all the space. The breakdown becomes the only thing that exists.

There are so many fantastic, extraordinary, impossible, supernatural people on this Earth who love the planet and act out of kindness, integrity and responsibility. But we are so depressed by the abyss in which our gaze is lost that we have lost sight of paradise. Our way of responding to all of this is to think about what we want rather than constantly reacting to what we don't want. The way we imagine this world should be at the center, constantly, in place of everything that's broken.'

TRIP TO THE NORD PAS DE CALAIS MINING AREA from November 9 to 11, 2024

Details of the trip:

- Departure Saturday morning, return Monday evening
- 2 nights at the Nœux-les-Mines accommodation center
- 20 students maximum
- budget for accommodation + travel by TER and BUS + visits = between 50 and 60 euros to be paid by each student by October 8 for reservations (via LYDIA)

SATURDAY NOVEMBER 9

- Visit to Louvre-Lens
<https://www.louvrelens.fr>
- visit to base 11/19
<https://tourisme-lens.fr/fiche/la-base-11-19/>
- Walk on the slag heaps of Loos en Gohelle
<https://www.pas-de-calais-tourisme.com/archives/les-terrils-jumeaux/>

SUNDAY NOVEMBER 10

- Visit to Nœux-les-Mines and Loisinord
<https://www.bethunebruay.fr/fr/loisinord>
- Visit to the Cité des électriciens in Bruay La Buissière
<https://citedeselectriciens.fr/fr/patrimoine-en-mouvement-construire-un-avenir-durable>
- Visit to LaBanque, contemporary art center (according to schedule)
- Visit to the center of Béthune
<https://www.bethune.fr/bethune-brille/patrimoine-historique/la-grand-place-558.html>

MONDAY NOVEMBER 11TH

- Visit to Mining Museum of Nœux-les-Mines
<https://www.tourisme-bethune-bruay.fr/a-voir-a-faire/culture-patrimoine/le-musee-de-la-mine-de-noeux-les-mines-1001275>

PHOTOGRAPHY

Composition of an Atlas of images of the future (prologue to photomontage)

<https://drive.google.com/drive/u/0/folders/1qP0KyZxPd-5ePfvuzuSx8tu5RQdtFZJ>

Instagram: atlasforanotherfuture

The aim is to practice photography, from manual shooting to post-production (image retouching, colorimetry, tricks). We'll look at framing, lighting and color temperature.

- Getting to grips with the digital camera in manual mode
- On-site shooting (workshop, 3-day trip to be arranged)
- Retouching, colorimetry, effects
- Editing
- Archiving

ICONOGRAPHY

The theoretical part of this CTID is dedicated to the study of the iconography of industrial heritage, and more broadly to the impact of images on the visions of users.

Art and architecture are at the heart of a major reflection on the transformation of Europe's industrial landscape, which was brutally taken over in the 19th century, and is now made up of sites still in use and derelict sites that have been either destroyed or rehabilitated. Once neglected wastelands, these traces are now at the heart of the redevelopment of contemporary cities, which must face up to the challenges of density, improved transport links, the return of nature to the city and high social quality. In fact, this heritage is becoming a key factor in the changes needed to bring cities into the era of global responsibility.

In the 1970s, a group of artists and architects locked themselves inside a disused factory in the Ruhr to protest against its destruction. Among them

were the photographers Bernd and Hilla Becher, who photographed a series of blast furnaces, headframes and water towers and displayed them in museums across Europe. This photographic work had the effect of changing the way inhabitants and elected representatives perceived their region, and a highly ambitious requalification program was launched in the 1980s with an international architecture exhibition.

<https://www.ruhr-tourismus.de/en/index.html>

By studying a few notable cases (Ruhr, Detroit, Lens), students will analyze the place of collective representations and imaginations in industrial heritage rehabilitation projects.

By way of introduction:

In his book published in 2020 'From What Is to What If Unleashing the Power of Imagination to Create the Future We Want' (Chelsea Green Publishing.) activist Rob Hopkins quotes Dominique Christina (black American artist, poet and activist):

'The problem is now at the center. What doesn't work, what is dysfunctional, takes up all the space. The breakdown becomes the only thing that exists.

There are so many fantastic, extraordinary, impossible, supernatural people on this Earth who love the planet and act out of kindness, integrity and responsibility. But we're so depressed by the abyss into which our gaze is lost that we've lost sight of paradise. Our response to all this is to think about what we want, rather than constantly reacting to what we don't want. Our way of imagining this world should be at the center, constantly, in place of everything that's broken.'

Content:

SEE YOU ON October 1, 2024 at 9 a.m. for the first class - room to come

14 classes (1h30/week) which are spread over the whole of semester 1 (Every Tuesday morning from 9am to 10.30am)

+ 1 trip of 3 days.

Theoretical courses will be offered to support the reflection necessary for the students for their work in creating images.

Technical and creative courses will be offered to students: getting to grips with the semi-professional camera and initiation and improvement on Photoshop® or equivalent.

INDICATIVE TIMETABLE

Tuesday 1 October = presentation, organisation, questionnaire

Tuesday 8 October = firm reservation = between 50 and 60 euros to be paid by LYDIA or in cash - Introduction to photography - (handling of the digital camera in manual mode, exposure, adjustments, framing, shooting, archiving)

Tuesday 15 October = Presentation of the Mining Basin and the Fosse 1 Wasteland/Leroy Merlin Slab

Tuesday, October 22 = Representations of the mining basin (past, future)
 Tuesday, October 29 = Autonomous photography exercises
 Tuesday 5 November = presentation of photomontages and the 'Atlas for another future' project
 Saturday 9 November - Monday 11 November = Visits and photography in the Mining Basin
 Tuesday, November 12 = introduction to color retouching on Photoshop® or equivalent
 Tuesday, November 19 = introduction to clipping on Photoshop® or equivalent
 Tuesday, November 26 = nomenclature of photographs for the Atlas
 Tuesday 3 December = general presentation of the work
 Tuesday, December 10 = preparation of the photomontage
 Tuesday, December 17 = followed by the photomontage
 Tuesday, January 7 = homework
 Tuesday, January 14 = general correction

FIRST course Tuesday October 1 at 9 am

14 classes (1h30/week) spread over the whole of semester 1 (every Tuesday morning from 9am to 10.30am)
 + 1 3-day trip.

Theoretical courses will be offered to help students reflect on their work in creating images.

Technical and creative courses will be offered to students: getting to grips with the semi-professional camera and initiation and improvement in Photoshop® or equivalent.

indicative timetable

Tuesday October 1 = presentation, organization, questionnaire
 Tuesday, October 8 = firm booking = between 50 and 60 euros to be paid by LYDIA or in cash - Introduction to photography(manual use of digital camera, exposure, settings, framing, shooting, archiving)
 Tuesday, October 15 =Presentation of the Bassin Minier et Friche de la Fosse 1/Dalle Leroy Merlin
 Tuesday, October 22 = Representations of the Bassin Minier (past, future)
 Tuesday, October 29 = Photography exercises
 Tuesday, November 5 = Presentation of photomontages and the 'Atlas for another future' project
 Saturday November 9 - Monday November 11 = Visits and photography in the coalfield
 Tuesday November 12 = Introduction to color retouching on Photoshop® or equivalent
 Tuesday November 19 = Introduction to clipping on Photoshop® or equivalent
 Tuesday, November 26 = nomenclature of photographs for the Atlas
 Tuesday, December 3 = general presentation of work

Tuesday, December 10 = photomontage preparation

Tuesday, December 17 = photomontage follow-up

Tuesday, January 7 = table-top assignment

Tuesday, January 14 = general correction

Work required:

The student will have the choice between the following renderings:

1/ A documentary file

2/ A photographic series

3/ a creative video

4/ An edition

©Photoshop and ©Indesign are installed on your laptop

Course materials:

Teaching unit:

M71CTID – 42-hour intra-domain transversal course

Teachers:

NJOO James



ECTS credits: 3

Nbr of weeks : 14

Nbr of hours / semester : 42

Own work: 35

INTRA-DOMAIN TRANSVERSAL COURSE

MTP-CTID 735 Learning from Asian Cities

Objectives:

This course is in line with urban studies of the "Learning from..." and proposes to explore how this genre of urban theory could be enriched by the reading of Asian cases. More generally, the course aims to raise students' awareness of the circulation of urban models between the West and the Far East, and to develop a critical look at the effects of globalization in contexts where the phenomena of rapid expansion, metropolization and deterritorialization are exacerbated.

Content:

This year, we propose to focus our gaze on the phenomenon of Kampung or working-class informal settlements in Indonesia and more specifically in the city of Bandung, capital of the western province of Java. Its former village fabrics, increasingly overtaken by the sprawling expansion of the large cities of the Indonesian archipelago, are now at the heart of metropolises such as Bandung. They are therefore a highly coveted land reserve, at the cost of the eviction of their inhabitants, which raises many questions about their future. Through a work of documentation, observation and analysis in the continuity of our previous investigations on "living heritage" (Chengdu 2013-2014, see course materials), but also through a more architectural work of typomorphological investigation, we propose to explore these urban villages as a possible model of another relationship between urban and rural at a time when the separation between city and countryside no longer makes sense in the West.

The course is organized in two parts and in two formats: the time of a monthly seminar which aims to build a theoretical knowledge of the subject through the preparation of a webinar that will take place in the first week of February 2025 and the time of a summer workshop in Bandung where it will be a question of developing an in situ work of investigation and inhabited surveys on a Kampung fabric to be determined, and in collaboration with local and

international students and teachers (first 2 weeks of August 2025, the travel costs are covered by the school). Through these two types of work, we will seek to articulate empirical and theoretical approaches. This work is part of an international research cooperation supported by the Institut Français in Indonesia.

Scales: territorial, urban, architectural.

Language of communication and instruction: French and English

Work required: Pre-selection on the basis of an application (limit of 12 places): 1-page cover letter and mini-portfolio demonstrating achievements in representation (hand-inhabited survey, computer modelling, photography, writing, etc.), urban analysis, fieldwork, interdisciplinarity and project. To be submitted via Taiga by Oct. 11, 2024.

Course materials: Mapping Chengdu: Stories // Territories // Traces, booklet of CTID work 7/935 'Learning from Asian cities'
http://www.paris-lavillette.archi.fr/uploads/ACTUALITES/2022/Mapping%20Chengdu_livret.pdf

Teaching unit:

M71CTID – 42-hour intra-domain transversal course

Teachers:

NAVINER Brigitte



ECTS credits: 3

Nbr of weeks : 14

Nbr of hours / semester : 42

Own work: 35

INTRA-DOMAIN TRANSVERSAL COURSE

MTP-CTID716 Trees in the City, Trees for the City

Students can complete their work in French, English or Spanish.

Object LANGUAGE OF INSTRUCTION: French

ives: LANGUAGES OF COMMUNICATION: French, English and Spanish

Trees are an important component of cities: in gardens, in the heart of blocks, in squares, along planted paths or on the banks of rivers, they structure space and transform the landscape with the seasons.

Companions of everyday life, they remain little known, however, and the problems they encounter or cause in cities are very directly linked to this ignorance.

Trees are one of the answers to the environmental and climatic problems (among others) of large cities. With the aim of better taking into account their needs and characteristics, this course will give students the tools to make a reasoned choice and implement them sensitively in their projects.

Summary presentation of the course under this link: https://parislavillettearchifr-my.sharepoint.com/personal/brigitte_naviner_paris-lavillette_archi_fr/_layouts/15/guestaccess.aspx?docid=071cb60a81d104ef0b4aa3f6b27fa7e08&authkey=AZhC4r2RPqOZGUSmXN_Bgos&e=103GD8

Conte This teaching combines several complementary forms of teaching: theoretical courses, visits and tutorials, to encourage direct observation of the trees, to work together, to give an important place to dialogue and drawing.

The courses, tutorials and visits are devoted to the discovery of the tree around three themes:

- 1- Discovery of plant characteristics: observing / describing / recognising
 - living beings with a particular way of life and the needs / functioning and roles of the tree
 - An extraordinary diversity: how to recognize them?
 - Name and describe the tree classification vocabulary

2- Why plant in the city: understanding the issues related to their presence in the city (climatic, aesthetic, sanitary, ecological, environmental, social, cultural, economic, etc.)

- The Tree in the City: A History of the City's Green Places and Plant Forms
- Trees for the city: an ecological and technical look to understand the roles of trees and what they bring to the city
- Public policies and trees, in the city and outside the city
- Tree-lined cities

3- Of Trees and People: Exploring the Ancient and Cultural Relationships That Unite Us to Trees

- Discovering trees through other eyes: what we learn from the eyes of poets, writers, painters, photographers, filmmakers
- Mythological trees, symbolic trees and remarkable trees
- Plant Travels: Where do the trees in our cities come from?

The teaching favours outdoor sessions (if the weather is favourable) in the first half of the semester: visits will be made in Paris or in the inner suburbs for an observation of trees, urban plantations and the problems they encounter or cause: Buttes Chaumont park, Châtenay-Malabry arboretum, Parc Floral de Paris, arboretum of the Breuil school, Jardin des Plantes de Paris, arboretum de Chèvreloup, etc.

Tree specialists will come to share their knowledge and expertise: nurseryman, phytosanitary expert.

Number of students for this course: the course is open to S7 and S9 students, with a maximum of 21 enrolled.

Work required: The proposed exercises, partly carried out during the visits and tutorials, are to be finalised personally or as a team. They lead students to better understand the trees present in the city in a sensitive and plastic way (observation and recognition of trees), as individuals, and as constituent and transformative elements of the space (analysis of the relationship with a plant or built environment), in their evolution over the seasons (observation of the transformations of a site). One exercise proposes to reflect on the requalification of a place by studying the plants present and a replanting project (preferably on the site of the project group).

Course language: French

Languages of communication: French, English and Spanish

Erasmus students are welcome, and work can be submitted in French, English or Spanish. However, a good understanding of the French language is essential.

Course materials: Information about this teaching is available on the website: <https://brigitteviner.fr/bn-ens/bn-ens-arbre/bn-ens-arbre-accueil-IP930.html>
Course materials (projected documents) and complementary documents are made available to students via a OneDrive folder.

Teaching unit:

M71CTID – 42-hour intra-domain transversal course

Teachers:

DEBOMBOURG Baptiste

ECTS credits: 3

Nbr of weeks : 14

Nbr of hours / semester : 42

Own work: 35

Cours intensifs entre février et avril 2025 : cours accessible uniquement aux étudiants présents l'année complète

Intensive courses between February and April 2025: only available to students present for the full year

INTRA-DOMAIN TRANSVERSAL COURSE

MTP-CTID734 New Art Practices in Public Space, Augmented Architecture?

Objectives:

This course addresses the question of art in the public space around the existing system, in particular with the artistic 1%, and presents, through innovative examples, a new way of thinking about a relationship between art, architecture and landscape.

But it happens that the 1% projects are sometimes very much criticized by the public, because they appear to be imposed with authority on the population or, on the contrary, are completely ignored. Misunderstood, they are also sometimes poorly maintained. The artist's work is complex because very often his space of expression is limited to a space allocated by the architect and confirmed by the political power, and he must deal with a very established framework while managing the desires, tastes, susceptibilities, and sometimes the cultural misunderstandings of the principals.

However, this possibility of bringing the artist and the architect together on a project can be a productive and innovative step forward for the future. It is an opportunity to extend again and again a vision of space that is more adapted to humans. In this sense, the Nouveaux Commanditaires, created by François Hers in 1988, under the aegis of the Fondation de France, have been working for 25 years as mediators between all parties, whether political, social actors and technicians, by calling on artists to imagine new forms of relationship with contemporary space.

Content:

For the Minister of Culture, the issue of art and culture in the public space is "an essential democratic issue", touching in particular on "learning about citizenship" and "the encounter with social diversity". This is why it has made it one of the major axes of its policy to promote new modes of access

to culture. But to what extent can an intelligent dialogue between a work and architecture have a positive impact on the environment, the landscape, the city and the development of a territory?

In the age of the Anthropocene and the coming overpopulation challenging the environment, to what extent can art be a laboratory of ideas for the architecture of tomorrow? To what extent can its presence in the landscape be a source of inspiration and future for architecture? What interactions are essential?

Public space is and remains an issue for the architect and urban planner as much as for the artist. At a time of new environmental challenges, approaches based on re-use, recycling and technology, to what extent can design and contemporary art be vectors of ideas for the development of the territory? The course presents new types of artworks in public space by artists, designers and architects.

This course is designed as a research and reference workshop. It offers sources of reflection and documentation through slideshows of monumental works, examples of integration into the landscape and architecture. The objective is to offer the School's students a platform for exchanges and reflections on this research, the different ways of working, the contextual approach, the experiences. It is an opportunity to address the questions and the essential relationships between a work and its context, in the same way as what questions architecture in the landscape. Through the example of the creation of the Fondation de France's new sponsors, land-art, works by artists and designers...

Work required:

The course is structured around examples, research work and applied exercises around materials in a contextual approach. Site visits are to be expected. Research work with analysis and realization of plastic work.

Course materials:

Teaching unit:
M71PA - Project

Teachers:
HENRY Didier
BLANDIN Philippe

ECTS credits: 11
Nbr of weeks : 16
Nbr of hours / semester : 112
Own work: 128

PROJECT

A - IEHM-P701 Heritage rehabilitation of the building and the territory

Objectives:

Objective:

To contribute to the renewal of the deposit of architectural and urban wastelands in Paris and its periphery, particularly in Seine St Denis where industrial wasteland abounds such as the large mills of Pantin, the Babcock factories of La Courneuve, the general stores of Pantin, the EDF power plant of St Denis, the cathedrals of the railway to the plain and others.

This is in order to preserve their history and allow them to evolve, to protect a heritage and to requalify abandoned territories.

On the territory of Saint Denis, several sites to be rehabilitated may be proposed in addition to the 'Rail Cathedrals' programme, which will be the main site of intervention.

The analysis territory:

- Plaine Commune: an agglomeration community in Seine-Saint-Denis that brings together 9 towns on the northern border of Paris, including La Courneuve and Saint-Denis.
- Plaine Commune is identified as a territory of "Culture and Creation" among the development poles defined in the 'Grand Paris' project.

Proposal:

How can architectural and urban production and its history be sustainably anchored in territories that must now be rehabilitated and reconstituted in order to give them meaning, quality of life and sustainability.

It is an opportunity to rehabilitate, transform uses, reconvert, re-innovate a heritage, a territory and buildings that are palimpsests of our scientific, economic, social and environmental history.

Content:

The project group will address the question of the plurality of scales of reflection necessary for the development of Urban Planning and Heritage Architecture projects.

These will involve:

- Diagnose a territory and a building.
- Take into account the contextual factors of a changing territory.
- Engage in a systemic analysis of its development.
- Understand the mechanisms, methods and tools for enhancing architectural and territorial heritage.
- Define a programme that promotes adaptability to long-term changes, by meeting the requirements of a sustainable development of high heritage, environmental, economic and social quality of the built environment.

We will take into account:

- The transversality of analytical, technical and sensitive approaches.
- The relevance of the projects in their environment.
- The viability of the life cycle of projects in the face of environmental, governance and temporality issues.
- The technical and functional coherence of Architecture projects with regard to the territorial program.

Based on the inventory of the study sites and the territorial development guidelines, the group will develop analysis tools that will allow them to collectively develop a diagnosis and establish a forward-looking and phased "plan - programme" explaining their development proposals and architecture projects.

At each stage of the project, the principles of precaution with regard to uses and resources, risk prevention, and the protection and preservation of natural or anthropogenic heritage will be highlighted.

The challenge of the projects will be to try to bring coherence to proposals that ensure balanced links of diversity and temporality in a plurality of activities: training, employment, housing, leisure, savings, uses and mobility.

Particular attention will be paid to the analysis and diagnosis of pathologies, the territory of the site and the buildings.

Work required:**Course materials:**

Teaching unit:
M71PA - Project

Teachers:
JAQUET Paul
BOTINEAU Marc

ECTS credits: 11
Nbr of weeks : 16
Nbr of hours / semester : 112
Own work: 128

PROJECT

A - IEHM-P702 Rural Resources

Objectives:

RURAL RESOURCES
An off-site workshop in Charente-Maritime

This workshop experiments with transversal teaching by bringing together two studios (S7 and S9) from the same field of study. This approach makes it possible to pool the means and resources around an Off-the-Walls workshop and the contribution of a plurality of points of view.

Context.

Faced with current ecological, economic and societal changes, rural territories crystallise the challenges of tomorrow. While the artificialisation of agricultural and natural land has been going on at a steady pace for several decades, we are paradoxically witnessing a desertification of town centres, a deterioration in the quality of life, and the decline of public services. This double movement "urban extension versus desertification" is accompanied by the brutal development of bypass infrastructures and business parks, in contrast to the patient and reasoned evolution of a human settlement in connection with its natural resources. At the same time, the rise in property prices in urban centres and the awareness of the preciousness of rural areas prefigure a renewed interest in rural municipalities.

These paradigm shifts in rural areas demonstrate the need to pay in-depth attention to them, in order to anticipate short-, medium- and long-term challenges.

Example.

Through the establishment of a partnership between ENSAPLV and the DDTM of Charente Maritime, a 4-day Off-Site Workshop during the semester allows students to be put in a direct situation and to meet directly

with the actors (inhabitants, elected officials, architect and landscape consultant, DDTM, CAUE, ABF).

This year, it is proposed to study the village of MATHA. It is expected to freely question pre-existing situations, through a phase of diagnosis and detailed understanding of the existing situation as well as the formulation of a problem that will serve as a backing up to concrete explorations of projects, developed down to the architectural detail.

Restitution and dissemination.

At the end of the semester, a restitution of the work carried out is planned in the form of a publication and a travelling exhibition. This phase of dissemination extends the dialogue that has been initiated, the questions raised, and which we hope will be able to find continuities, bridges with other fields or subsequent developments.

Content:

This workshop thus tries to raise students' awareness of the contemporary issues of evolution of the rural world, in particular through their "existing resources" in the broad sense: current conditions of the transformation of a territory, attention to the built heritage, and the mobilization of local know-how and resources. Three axes thus guide the workshop's research:

To spare: the inclusion of interventions in the future approach of "Zero Net Artificialisation - ZAN" broadens the scope of reflection of an intervention on the existing (which elements to build, which elements to preserve, which elements to deconstruct?) naturally inducing a complete concern for the making of a territory, from its built dimension to its landscape dimension.

Transforming: the aim here is to question the possible construction methods (rehabilitation, reconversion, extension). It is requested to carry out an open, prospective and critical reflection on the local resources, materials and know-how available and adapted to the territories and their challenges.

Living: It is expected to question the potential of places by formulating a problem, to summon the modes of living in the broad sense, the fruit of a constructed and committed reflection.

The semester is organized around four sequences, each giving rise to a time of restitution/jury as a milestone.

- Explore. This first sequence at the workshop aims to actively prepare for the off-site workshop. Each pair is asked to take up a problem associated with potential intervention sites. Each group focuses its research on concrete and precise existing situations, summoning available documentary resources developed by them (drawings, models of the existing, structural analysis of the building). Initial targeted project

hypotheses will make it possible to question and directly test the potential for transformation of the place. At the same time, the whole group prepares a global model of the site, and the documents (atlases) to feed the discussions and questions to the various actors present during the trip - Presentation and Display of an Atlas.

- Investing in a territory (Atelier Hors les Murs in Matha). These 4 days are entirely dedicated to site visits, round tables, conferences, intensive workshops and restitution with on-site speakers. The aim here is to confront the first project hypotheses with the sites and the issues explained, to deepen the surveys, and to exchange with all the actors present on the site. Following the stay, a global restitution of all the groups orders and establishes the right coherence of the proposed scenarios - Restitution and display.
- Intervene. This third sequence deepens a project hypothesis with regard to the project conditions. Depending on the nature of the interventions, it is requested to reflect on the conditions of intervention in relation to the existing one, as well as the development of precise architectural and technical devices (fragment at 1/20) - Intermediate Jury.
- Develop. Deepening of the projects and preparation of the final jury and the exhibition.

Work required:

- The workshop is designed to accommodate a maximum of 30 students. It requires strong motivation, assiduous investment as well as a predisposition to teamwork, (collective coordination and development of projects in pairs). An appetite for the problems related to the intervention in the existing as well as an ease in the production of models is imperative.
- Language: French

Course materials:

Possible relationships with other teachings:

S7-S9: CTID926 Heritage(s) and Mutations, Philippe Dehan

S8: CTID829 The survey: knowing and representing what already exists, Mr. Chastanier, Mrs. Pernin

S8: CTID 830 (number to be checked) - Typologies of intervention in the existing building, Mrs Jacquin

MS713, M813, S913: History and Practices of Transformations of the Built Environment, Mrs. Bassieres, Mrs. Maumi

Teaching unit:
M71PA - Project

Teachers:
EBODE Sylvain
SAIMPET Maud
BOUILHOL Pierre

ECTS credits: 11
Nbr of weeks : 16
Nbr of hours / semester : 112
Own work: 128

PROJECT

C - CCA-P704 Already Here: Resources, Transformation, Construction

Objectives:

ALREADY THERE: RESOURCE, TRANSFORMATION, CONSTRUCTION
Emmanuel Mourier, Maud Saimpert, Sylvain Ebodé

This project workshop aims to work on the relationship between spatial and environmental parameters in the design of an architectural project.

P 704 belongs to the Field of Study 'Designing and Building Architecture' and pursues two pedagogical objectives and their simultaneous conduct in the project process:

- materiality as a means of entering the design process and as a support for architectural expression: structure, materials, thicknesses, implementation and envelope
- the study of the transformation capacities of a built complex and the articulation between the new and the existing (rehabilitation, extension, elevation, partial demolition, construction of new independent buildings).

Our approach is interdisciplinary, with regular interventions by Sylvain Ebodé, architect and engineer, teacher in STA.

For this semester, we offer you the benevolent support of Alvar Aalto, for his profoundly humanistic conception of architecture, his personality intimately linked to his territory and capable of anticipating at the same time a certain number of architectural and environmental themes that define our professional future.

Architecture cannot save the world, but it can set a good example, he said.

This year, our field of study is located in the suburbs of Paris. The programme involves the renovation of a media library. You will meet elected officials and various personalities involved in this program and in

the enhancement of the city, all of whom are very interested in the approach you can have to it.

Content:

Your work will consist of conducting a global reflection on the site, i.e. questioning the presence of the already there associated with a transformation program, which takes into account the three major concerns of the city, use and built architecture: articulation with the urban environment and weaving with the city, improvement of the use of places - both exterior and interior, Conversation between new and existing, development of the land, architecture of buildings including work on facades, development of implementation processes.

Our demands are particularly at three levels:

- Adoption of a general economy approach to the project and limitation of demolitions
- interaction between the different scales of the project, from the city to the window and vice versa
- research on typologies, combining work on the uses and environmental qualities of the building (materials, insulation, solar energy capture, inertia, protection, ventilation), in-depth work on interior/exterior relations.

The use of climatic and physical sensations in the project development process is strongly recommended. For the record, Alvar Aalto, in his housing projects, worked with the idea of recreating the impression of outdoor life inside the home.

We will ask you to rely on the constructive materiality, to preferably use geo or bio-sourced materials for their physical presence (thickness, color, texture, etc.), their environmental qualities of course, but also their evocative, poetic, sensitive, tactile capacities, etc. in order to summon very early in the project atmospheres, images, thicknesses to be experienced, and to work on the question of implementation as the driving force of the project. The specificity of this building from the 1970s is that it is mainly built in reinforced concrete, a material of the modernity of the time, a promise of freedom and new plastic possibilities. You will question its integration into the contemporary challenges of recognition of modern heritage, the depletion of resources and the climate crisis.

The project approach aims, both in new construction and in rehabilitation, the creation of new forms of interior/exterior relations, typological research in connection with the principles of bioclimatic architecture, the search for new gradations from public to private, new uses, such as the differentiated or seasonal use of certain places, making it possible to rethink the questions of insulation and comfort, as well as the relationship between indoor and outdoor activities.

Courses will be given in the morning on environmental issues, bioclimatic architecture, the architecture of media libraries, rehabilitation, geo and bio-sourced materials, a reminder of the main principles of construction and implementation...

You will carry out, in teams of three or four, a survey and analysis campaign of the site and the existing ones, based on themes established together, based on the basic documents that we will provide you, on your research, observations and analysis sketches made on site:

- History of the transformation of the site, cross-referenced data of all types
- Geography, Soil, Urban Landscape, Near and Far Environment, Silhouettes
- sections and plans of the land precisely apprehending the uses of the site, the relationships between the existing buildings, the boundaries and the surrounding buildings, between the solids and the voids, the vegetation and the buildings...
- Sections and plans of buildings, sketches of spatial organization, surveys of uses, details...

This corpus of data, made available to the entire group, will support your project searches.

You will also conduct systematic experimentation with project figures, cross-referenced with program hypotheses, using drawings, diagrams, collages and models, as well as typological research related to the principles of bioclimatic architecture.

In parallel with this work, each team will analyse - according to a protocol and common themes - a similar project reference, an analysis that will allow it to enter into the architects' project approach. These analyses will be presented and made available to the entire group. They will then be regularly convened by theme throughout the semester in order to shed light on current projects.

In architecture, too much remains at the level of analysis, whereas it is synthesis that we need. Nothing is more dangerous than separating analysis from synthesis: they are inevitably linked. A. Aalto.

The rest of the project will be done individually or in teams, sequenced by thematic approaches, and work at different scales simultaneously and in an interactive way. We would like you to work very early in the project process on full-height sections of the building studied, as well as on implementation devices (I prefer this expression to the word detail, which could lead one to think that these are things of little importance) at 1/10, 1/5, 1/2 and up to scale 1, as tools for designing and defining architectural writing.

We want the group of students that you are going to form to become a real workshop, where your knowledge, your intuitions, your desires, are pooled, in order to explore all the possibilities of this project situation.

The reference to reality and the distance established by the work of each and every one of you, of appropriation of the site and the program, will make it possible to define a typology of characterized projects, thus building the common project culture of the group.

Language of communication: French.

Maximum number of students: 20. 9 a.m. every Friday

You will meet representatives of the city, the Territorial Public Establishment of which it is a part and the media library, at the beginning of the semester and during the final jury.

Work required:

Here are the main expectations at the end of the semester:

- understanding of the interactions between programme, site and position on the project between the urban scale and the scale of the building between 'heritage' intervention and new intervention
- understanding and manipulation of the interaction between volumes, typologies and facades
- Ability to master a complex project as a field of study, reflection and experimentation, articulating several scales and types of built intervention
- ability to mobilize the knowledge and know-how acquired in the Bachelor's degree (design, representation, reflection) and to articulate them in the conduct of a project
- Project autonomy in construction
- Ability to integrate into the group, to share, to participate in its general advancement and cohesion.

Course materials:

Recommended achievements:

Knowing how to analyze a site, a program and reformulate them as a project.

Knowledge of urban housing issues through the project.

Minimum knowledge of construction and implementation principles, both traditional and current.

Teaching unit:
M71PA - Project

Teachers:
NEUMAN Frédéric
LEFRANC Clovis



ECTS credits: 11
Nbr of weeks : 16
Nbr of hours / semester : 112
Own work: 128

PROJECT

C - CCA-P705 Naval Architecture

Objectives: To deepen the methodology of the project based on a complex technical and architectural program: that of a ship.

Content: Because of its complexity and the interweaving of the various elements of the program, the ship project highlights the importance of the overall vision and the position that will make it possible to prioritize the choices that will lead to a final coherence.

Students will design an architecture where formal, technical, functional and environmental constraints are inextricably linked.

The Archimedean equilibrium is, for example, an easily identifiable constraint. This unavoidable constraint, influenced by each decision-making, thus contributes to the awareness of the importance of the overall vision essential to the relevance of an architectural response. A ship project requires a very strong coherence between spatial quality, a shape, a structural principle, materials...

It is an architecture subject to essential technical criteria in small, moving spaces and confronted with very varied problems, situations and environments.

Far from being confined to the design of small units, naval architecture covers a field that ranges from aircraft to submersibles, from the smallest craft to the largest ship (a large tonnage ship is also called a "building").

The components of this balance are based on an architectural, technological and physical approach.

The student will be confronted on the one hand with the modeling of the (very 'typical') 'shape' of the float and its geometric (hydrostatic) analysis, and on the other hand with the functional organization of the space, interior and exterior, always cramped, limited by this object.

He will have to know the environment (the marine environment) and learn to master its scale ('restricted spaces').

We will also deal with the 'mobile' character (situational setting) as well as the 'constructive' aspect of the ensemble, so that their main architectural implications are taken into account.

Specificities and areas of work:

Method known as the "ship loop": Iterative methodology for understanding a ship project allowing the integration of all the criteria participating in the choices.

Study of complex shapes: Learning the curvature, representation and implementation of the curved envelope. Introduction to developable surfaces.

Optimization: Interweaving of volumes, search for lightness, functional intelligence.

Putting into practice the classical notions of construction.

Specific scientific notions related to hydrostatics and hydrodynamics.

Archimedes' principle, the principle of the load-bearing wing...

The project

Our school is located near the crossing of the canals on the edge of the Parc de la Villette.

The project would consist of imagining a floating extension of our school, an off-site school, mobile, a classroom and exhibition room to present the students' work, a pretext for study trips along the networks of inland waterways that allow us to travel from Europe to the gates of Asia.

This project could also be part of the call for projects launched with the ENSA to create 20 ephemeral and innovative pavilions in connection with Bernard Tschumi's 20 "Folies" in the Parc de La Villette. During the summer of the 2024 Olympic Games, these pavilions will be used by sports federations as information and demonstration venues.

Our proposal would of course be floating and autonomous.

Work required:

Students will learn about the architecture of the ship in a global approach, on the occasion of a project that they will have to develop from the program that will be proposed to them: for example, that of a floating and mobile extension project of our school based on the Canal de l'Ourcq or a habitable sailboat.

A navigation is planned at the beginning of the semester.

Course materials:

Teaching unit:
M71PA - Project

Teachers:
LOCICERO Eric
DUCLOS PREVET Claire



ECTS credits: 11
Nbr of weeks : 16
Nbr of hours / semester : 112
Own work: 128

PROJECT

C - CCA-P710 Urban Project and European Cities

Objectives:

GENERAL THEME: CCA Domain – Designing and Building Architecture
P 710 - Urban Projects and European Cities: Towards a Digital and Ecological Architecture

Following the bachelor's degree course and the learning of the basics of architectural project design, this Master 1 course – P 710 – introduces students to the contemporary issues of the design and construction of today's architectural project according to 2 recurring themes:

1. The digital transition 2. The energy transition

Based on the know-how already acquired previously, paper model, volumetry, plans, façade drawings – Students will be led to evolve their practice of the project through the use of new manufacturing and evaluation tools: From the classic model to the digital model. From classical architectural drawing to numerical modeling and model evaluation.

The teaching will also aim to direct students towards new design techniques

- Parametric modeling to explore project variations.
- Construction of the BIM model for project management
- The production of virtual environments for the presentation of the project.

Technical knowledge of architecture concerning the thermal of the building and building energy production

This P710 project group could be linked with the CTID 924 for the digital production of the model and the - Po7- Bridges could be established with the SAPI seminar in order to initiate a research questioning on a concrete situation and more generally with the MAAC laboratory and its teachers.

Content: The workshop will be organized from 2 exercises, 1 small-scale project and a project on an urban scale:

Small-scale project:

It will be a question of designing and understanding a small-scale architecture in such a way as to allow the student to develop a set of technical skills through the application of design and modeling methods. In particular, the project envelope will be studied and its thermal identity evaluated.

Project on an urban scale: It will be a question of projecting a facility on an urban scale on the site of the new Grand Paris station in La Courneuve. As such, the methods of design, modelling and evaluation will be taken from the 1st exercise and developed on an urban scale.

Throughout these 2 exercises, design methods will be at the center of reflection. The simulation and evaluation tools will be guides for the design of the projects

To achieve this, the presentation of digital tools will be made throughout the semester by occasional speakers.

Beyond the learning of these tools, it is the architectural project that will be at the heart of our concerns, its design and construction: Invention, mechanisms and strategies of efficient design, critical eye and evaluation. In addition, we will work on the techniques of representation of the project and its argumentation.

Work required: From the classic model to the digital model.
From classical architectural drawing to numerical modeling and model evaluation.

From this principle and on a weekly basis, students will learn new Design and Representation Techniques and will have to report on them in the different stages of the project.

The evolution of their project will be published on a WEB platform provided by the teaching team.

The student will be supervised in his training in the tools, but it is expected that he organizes himself to practice the tools on a regular basis from the beginning of the workshop

Use of digital design, evaluation and presentation tools:

Drawing, production of study models and models by digital fabrication, model scanning, parametric modeling, BIM modeling, collaboration via digital platforms.

Course materials: Occasional teachers of the MAAC laboratory

Teaching unit:
M71PA - Project

Teachers:
PETITRENAUD Antoine
MAHIEU Yves

ECTS credits: 11
Nbr of weeks : 16
Nbr of hours / semester : 112
Own work: 128



PROJECT

D - AS-P708 Persona grata, Urban Mobile Interference Structures Design/Manufacture

Objective P708
s: PERSONA GRATA
LANGUAGE OF TEACHING & COMMUNICATION: FRENCH

Urban Mobile Interference Structures
Design / Manufacture

A- Confront a strong and topical social problem.

By using the title PERSONA GRATA from the exhibitions taking place from October 16, 2018 to January 20, 2019 at the MAC VAL (Musée d'art contemporain du Val-de-Marne) and the Musée national de l'histoire de l'immigration, it is proposed to question the notion of hospitality. However, this question may be considered in cases other than that of refugees.

B- Confront the design of an urban mobile structure of interference generating exchange.

Because the reception is not limited to meeting the needs of the body (food, sleep, etc.)

C- Develop a truly ecological approach by putting into practice, as part of the design of a structure:

- The concern for an optimized relationship between structure and form.=> economy of material
 - The use of renewable natural materials (bamboo, straws, etc.).
 - The use of recycled, reused materials, etc. if possible as a local resource (cardboard, plastics, metals, earth, tires, bamboo from the Parc de La Villette, etc.).
- Other specific materials will be used sparingly.

D- Confronting manufacturing

E- Use digital manufacturing tools (not mandatory)

F- To bring these structures into play in the urban space and to achieve a representation of these "actions".

Content: LANGUAGE OF TEACHING & COMMUNICATION: FRENCH

PROGRAM:

The aim is to design and build on a scale of 1 urban mobile interference structures

These Structures make it possible to create or promote interactions with a strong social aim

The emergence of the program will come from a critical point of view related to:

- Experiments based on structures carried out the previous year ...
- New experiments carried out by students
- Exchanges with associations and actors in the field
- Direct exchanges between students and the "public" concerned
- Analysis of proposals already carried out (Camps de la Chapelle, Ivry ...)
- Analysis of sites and their operations (including standards, regulations, etc.)

CHOICE OF SITES:

We ask students to draw their attention to the choice of sites for tours and investigations, allowing them to converse with populations.

The student creates his program and chooses his site with the members of his team.

Video presentation of teaching in 2020-21

<https://youtu.be/i7yQD2OMM5I>

Update 2022-23 of the presentation in PDF:

https://www.dropbox.com/s/vmhw2z0ix6qp1ad/1_presentation_P708_2022-223%20le%2026%20sept%202022.pdf?dl=0

Examples

<https://www.dropbox.com/scl/fo/19pqkcxytt048xi6ef13/h?rlkey=ji8va8unj215rvhj9xgcng66g&dl=0>

Example of achievements in previous years on other topics of the MIP 926 manufacturing intensive:

Interactive membranes in L'Isle-d'Abeau

<https://www.youtube.com/watch?v=5xQ10TRI-lw>

**Work
required:**

REQUIRED WORK

Teamwork (of 2 to 4 people) with the usual study tools (conventional drawing, volume models, computer simulations), to which will be added physical models of the structure and the creation of a prototype.

**Course
materials
:**

Teaching unit:
M71PA - Project

Teachers:
ROUSSEL Séverine
LERAY Solène

ENGLISH FRIENDLY
communication language

ITALIAN FRIENDLY
communication language

ECTS credits: 11
Nbr of weeks : 16
Nbr of hours / semester : 112
Own work: 128

PROJECT

D - MTP-P707 Landscape/S architecture and natural hazards: coastal territories

Objectives:

According to the 6th IPCC report, published in February 2022, sea level rise could reach 60 cm to 1.10 meters by 2100. This rise in sea levels increases the frequency and impact of storms and marine submersions.

Today, 60% of the world's population lives less than 60km from the shore. In metropolitan France, which has 5,500 km of coastline, 1 in 8 French people live in a coastal municipality, i.e. almost 8 million inhabitants. This figure is expected to increase, according to INSEE, by 50% by 2040. This growing urbanisation reinforces the artificialisation of the shores, which are increasingly losing their role as a buffer between land and sea.

This contradiction between the attraction of the coastline and the increase in risks is found all over the world, which leads many architects to think about adaptation measures by rethinking the habitability or the way of living in coastal territories.

We know that adaptation is most effective when the project process includes the communities concerned and takes into account their socio-cultural values. Thus, the question of adaptation to sea level rise is not limited to technical measures such as coastal protection (dikes, etc.), the relocation of issues, or the construction of houses on stilts. But it invites us to THINK ABOUT THE COASTLINES WE WANT FOR TOMORROW.

During this semester, we will work on a given territory, in exchange with local actors. The objective will be to develop project proposals that should allow this territory to evolve in a position of adaptation to natural hazards and towards sustainable lifestyles.

We are doing forward-looking work, but we are doing it with local partners with whom we are in dialogue throughout the semester. We are therefore in the context of a 'commission', which will allow you to understand how the architect must take into consideration short-term requests and problems but also to extract himself from them in order to see further, to shift the gaze to go beyond the case-by-case response and arrive at project proposals that have a generic dimension.

This work is therefore of course articulated at the crossroads of multiple approaches such as: the question of the identity of a territory and people, policies for the preservation of the environment and the fight against global warming, heritage and conservation issues but also the technical, geographical, economic and legal approach. Cross-referencing with your seminar topics is more than welcome to feed this reflection.

Content:

Our project group has established a partnership with the French Association for the Prevention of Natural and Technological Disasters (AFPCNT) and with the Lorient Agglomeration community of municipalities, located in the Brittany region in the department of Morbihan.

Our work site will be the city centres of Lorient and Lanester, two towns located on either side of the mouth of the Scorff river in the harbour of Lorient.

The town of Lanester, largely built on former marshland areas, and the coastline of Lorient, made up of vast areas taken from the sea, now present several very urban sites located in areas at high to very high risk of marine submersion. This risky situation concerns housing and commercial areas but also a major industrial problem.

These municipalities and Lorient Agglomeration in general are in a strongly ageing population dynamic. In 2037, 30% of the population will be over 65 years old. This will have an obvious impact on the evolution of this territory and the ways of inhabiting it. In addition, many port or industrial areas are in transition phases that must be seized.

Our subject will therefore be to imagine the possible mutations of these districts and the future configurations that some of these port areas could take to live with the hazard instead of suffering it. The challenge will be to place these proposals in the context of the Zero Net Land Artificialisation law, which leads to a new reflection on design approaches. The projects we will develop will be intrinsically linked to a broader vision of the future of these territories in terms of ecology, biodiversity and subsistence. What new link between nature and urbanity for these coastal municipalities?

Our approach will be: Where and how to intervene in these municipalities to start this path towards a resilient territory? What flexible, light and scalable approaches, compatible with climate issues and economic constraints, could we outline? What processes should be implemented to learn by walking and to make this territory evolve other than through major urban planning decisions?

Work required:

The teaching team is multidisciplinary, architects / landscape architects.

The team is made up of the following teachers:

Séverine Roussel, architect MFC TPCAUI

Sara Escudero, architect, PhD student LAA-LAVUE - ENSAPLV

Solène Leray, landscape architect specialising in the issue of water, PhD student LAVUE - ENSAPLV

The sessions are weekly (on Fridays) and the workshop is organized in the form of exchange/debate sessions between the students themselves and the teachers based on your project progress. We are very keen that the weekly sessions are a moment of emulation, exchanges and debates rather than a time of 'correction'. Specific Course-type times are planned throughout the semester to allow for the deepening of certain subjects.

The workshop is also designed as an introduction to architectural competition renderings. This is why the emphasis is placed on the coherence between the thinking of the project and its expression to result in a project that demonstrates a real capacity for reasoned proposals. The idea is to arrive at a convincing expression of the project for an external audience.

Course materials:

Teaching unit:
M71PA - Project

Teachers:
MIRACI Gjergj
SECCI Claudio
DESSARDO Marco

ECTS credits: 11
Nbr of weeks : 16
Nbr of hours / semester : 112
Own work: 128

PROJECT

D - MTP-P713 Learning from the city of small things. Repair as a mode of action

Objectives: This new project course proposes an approach to the city, called here the "city of small things", aimed at building project situations based on what is often invisible in urban plans.

It is an invitation to learn how to:

- To found an architectural and urban project based on field observation
- build a project situation from the in situ drawing
- articulate the scales by using the micro-scale as a reference scale
- Exploring repair as a philosophy of action
- Develop projects such as urban tactics (micropolitics).

Content: Why such a course? Resource conservation and the fight against global warming are urgent.

Faced with these challenges, various approaches are being tested, such as those that seek to avoid demolition: preserving as much as possible what is already there while improving it (repurposing, renovation, restoration, densification, etc.). These are all forms of action that are and will constitute a main practice of the architect in the future.

Is it possible to go even further? Namely, could we accept an ethic of withdrawal, of restraint? Explore avenues where intervention is minimal? Working by subtraction in the existing system? even dare to question the need to act? To do nothing argued by a reasoned study on why do nothing? Fleeing forced production? In short, to tend towards a management of the existing rather than the development ...

The approach is therefore based on an economy of means and resources. It offers:

- to begin by engaging in observations of the existing, physical and social, giving particular importance to what is tangible on the "micro-scale"
- to use in situ drawings in various forms as a tool for a detailed description of the existing
- to question the observations made at the micro-scale by comparing them with official urban plans, in particular the SCoT (territorial coherence scheme)
- to develop an urban repair project through micro-actions.

The territory of this experiment is located in the Paris region. Among its characteristics, it is indirectly impacted by the dynamics of the "Greater Paris" projects.

Work required:

The expected production can be described as follows:

- produce numerous drawings in the field, in different forms and formats, which will be the primary materials of the project approach
- meet local actors and organise various exchanges with them (commented tours, interviews, etc.) to verify the knowledge drawn
- Dare to project it: propose processes of 'urban repair' and test them in situ, by a kind of urban scene that can go from installation to performance
- Organize a public restitution to share the production with actors concerned by urban situations explored.

The course is taught in French. However, Spanish, English and Italian can be used.

Course materials:

Teaching unit:
M71PA - Project

Teachers:
PUMAIN Philippe
PENISSON Lionel



ECTS credits: 11
Nbr of weeks : 16
Nbr of hours / semester : 112
Own work: 128

PROJECT

E - HMU-P709 Urban and architectural projects: from the neighbourhood to the building

Objectives:

The city is now being built more and more by seeking to preserve and reuse existing buildings, both for cultural reasons of preserving the memory of the place, on the one hand, and for environmental reasons, in a search for frugality and sustainable development, on the other.

This does not mean that the use of existing buildings should not be renewed more or less fundamentally and we are therefore led to modify/supplement the buildings with contemporary interventions.

As part of the major urban project of Bercy-Charenton, which aims to profoundly requalify the heart of an area stretching from the Gare de Lyon to the city centre of Charenton, the former Bercy - La Rapée refrigerated station, both underground and aboveground, and the former power plant that served it constitute both a major architectural potential and a central issue in the requalification of the site.

Other urban elements located in the immediate vicinity, the former Petite Ceinture de Paris and the remains of the Thiers fortification, but also the Seine and its quays, reinforce the exceptional character of this architectural ensemble.

We therefore propose to work on the rehabilitation/reuse of the old refrigerated station and the adjoining buildings, on the basis of a programme whose mixed functions will be one of the major objectives: culture, education, work, housing, etc. Not to mention the requalification of neighbouring public and private spaces by integrating 'renaturation' issues to promote biodiversity, reduce heat islands and improve the management of water resources.

A preliminary historical, geographical, urban and extended social analysis of the site will allow a better understanding of the existing context in order to lay the foundations of a programme consistent with the urban and environmental objectives of the project.

Content:

The work is divided into three stages:

- Research, surveys and diagnostics (4 sessions)

In teams of two or three, on the basis of an initial corpus of documents that we send them and after a first collective visit to the site, the students carry out research according to different themes, in order to achieve the most exhaustive shared knowledge possible of the site and the buildings:

- History of the site and the district
- History of the buildings
- Environmental elements of the site (geography, geology, hydrology, biodiversity, etc.)
- Inventory of the 'functioning of the district' (uses, traffic, facilities, etc.)
- Inventory of any projects underway on the site and buildings
- Search for additional graphic documents on buildings and/or on-site surveys
- Sanitary and structural inventory of buildings

At the same time, the students collectively create a 1:500 scale model of the site, which can be partially dismantled, to support the development and presentation of future projects.

- Definition of the program and architectural sketches (4 sessions)

In the light of all the knowledge acquired, the different groups propose a programme based on the search for a mix of functions and a principle of intervention on the site and buildings on a scale of 1:500, supported by plans, sections, elevations as well as a model to be inserted into the collective model previously produced. The teams will also produce references to projects that have inspired their approach.

- Development of the architectural project (7 or 8 sessions)

Individually, each student develops an architectural project based on the sketch made by his or her team. In this case, the architectural project may relate to all or part of the former underground station, to the warehouses of the former surface station, to the former power station, or to a coherent 'section' of two or three of the buildings on the site. The project will be developed at 1/200th and then at 1/100th, with construction details at least 1/50th. Without having to demonstrate the technical constructability of their projects, students will have to look for a certain structural feasibility of their proposals by relying on examples of comparable projects.

Teaching unit:
M71PA - Project

Teachers:
LAFON David
CHAVANES Philippe



ECTS credits: 11
Nbr of weeks : 16
Nbr of hours / semester : 112
Own work: 128

PROJECT

E - HMU-P711 Housing Architecture, Residential Perspectives

Objectives:

The architecture of collective housing, residential perspectives

This project group proposes to question the new paradigms that are emerging around the current challenges of housing design and construction in France on the basis of project experiments which, without ignoring the conditions of a globally impoverished and stereotyped production, propose a critique capable of exploring new paths and formulating hypotheses in line with the aspirations of society and part of the professional world and in touch with the contemporary urban, environmental and social challenges. Based on an awareness of the anthropological dimension of inhabited space (relationship between functions, uses and practices), and structured by a knowledge of the major modern paradigms of Housing confronted with the logics of the urban fabric, this critical and exploratory approach will place the architectural project on housing and the building in the residential issues and development issues of the contemporary city within 3 major expectations:

- The relationship between type, uses and program
- The relationship between constructive typology and distributive typology
- the relationship between the "logic of the building" and the logic of the urban fabric.

Content:

Based on the achievements of the Bachelor's degree that have laid the foundations for an understanding of the relationships between space and use and a knowledge of the typology of the building understood as an element of an urban fabric, it will be a question of carrying out an approach at the scale of housing, the building and the urban fabric.

at the building and apartment level,

We propose to deepen these achievements based on a prospective project and analysis work crossing 3 types of approaches articulating use, space and construction:

1- A programmatic approach aimed at critically questioning housing and building programs and their current modes of production, and based on the identification of society's aspirations that prefigure the expectations and possibilities of tomorrow's housing around the issues of use related to collective and private spaces (diversity, scalability, pooling of spaces, etc.). services and energy, car and storage space, surfaces and spaces in the home, etc.)

2- A typological approach aimed at characterizing relevant types of projects based on a critical interpretation of traditional and modern types and based on the exploration of the values and aspirations of contemporary residential space (aspirations for individual housing and private space, collective space and the services it provides, nature, landscape, leisure, etc.)

3- A constructive approach to the design of structures and envelopes articulating tectonic and environmental issues:

- Definition of structural typologies in relation to the types of plans and their distribution
- Definition of envelopes combining use and environmental issues

on an urban scale,

We will situate ourselves in the perspective of an urban development characteristic of the contemporary city, of a city that has become territorialized, open to geography and landscape and in which natural spaces and the "great landscape" occupy a central role.

The aim is to question the residential forms of today's "city-territory" by seeking a typological expression that is appropriate to the new relationship that is emerging between residences, public spaces, natural spaces, and landscapes. In this perspective, the contradictory aspirations of a new urban ecology seeking to combine the need for a dense city and the aspiration for a "natural city" will be questioned.

Work required:

The subject concerns the collective building.

It is structured around the study of a corpus of modern housing history and its underlying themes on the one hand, and the exploration of new questions that arise in housing architecture in terms of program, uses and construction on the other hand.

It gives rise to a cumulative approach of several sequences combining analytical work, short theoretical exercises and long project exercises.

The students' work will be finalized at the conventional scales of an architectural preliminary project (1/500 for the scale of the urban fabric and 1/200 and 1/100, details at 1/50 and 1/20 3D representations and models, etc.).

The constructive approach will be reinforced with the intervention of a teacher from the STA field (8 p.m.).
The work is individual
Language of instruction: French

Course materials:

Teaching unit:
M71PA - Project

Teachers:
MAURIZIO Gian Mauro
FERNANDEZ ATELA Andres



ECTS credits: 11
Nbr of weeks : 16
Nbr of hours / semester : 112
Own work: 128

PROJECT

E - HMU-P712 Design/Space/Architecture

Objectives:

LANGUAGE OF INSTRUCTION: French
LANGUAGE(S) OF COMMUNICATION: French, English and Spanish.

Place of investigation:

The town of MARGENCY is a commune in the Val-d'Oise department in Île-de-France in north-central France, the town has become since the 1960s a place with an essentially residential vocation with the push of urbanization in the greater Paris suburbs. It is located in the valley of Montmorency and currently it has 72 hectares with a population of 2,900 inhabitants.

The City Council invites us to reflect on the future of their city, with the prospect of developing a tourist and cultural offer in their municipality. We will have to take into account the fundamentals of Margency, two economic engines: The children's hospital and on the Bury estate, the Notre Dame de Bury school and the school of chartered accountants.

To do this, we suggest that you study the installation of a mixed facility in the City Hall Park, in the city center. The facilities should include an art centre and accommodation with overnight rooms.

Intentions:

Our studio offers you a deeper understanding of the relationship between architecture/space and design. To do this, you must first design a facility in relation to its landscape, then we will look at the structure, the interior space, the interior-exterior relationship and the program, finally we will enter into the definition of details and materiality of the building. The work on the model is essential, we ask for renderings with models at different scales.

The equipment must meet eco-responsible requirements.

Questions related to architectural typology, the relationship with the city and the student imagination should be answered sometimes.

This course will:

- to develop critical methodological tools in line with contemporary urban issues,
- build a coherent and personalized project approach based on a critical reading of contextual and programmatic data,
- to articulate analysis and design in a permanent iterative dialogue,
- articulate different scales of intervention: architectural, spatial and furniture.

Content:

The course will examine and rethink the curriculum of an art centre facility of tomorrow and explore its architectural and urban potentials as a public space.

The program addresses many interesting contemporary challenges and issues. How to reconcile public facilities as a cultural symbol in Margency with a response to tomorrow's tourist needs and to think about a new strategy to make its public facilities economically manageable.

As a public space, the art center has the potential to become or remain a vital public and civic space. Modern equipment includes more and more different and previously unincorporated programs. In addition to its main function, it could also include bookstore/sales areas/cafeteria/classrooms, group classes. It must also include important technical installations.

As such, the workshop will ask each student to explore the architectural potential of the art center by interfacing with the park and the city, creating an urban institution.

The studio will begin with in-depth research into the history of the art center typology as well as outstanding examples of architecture from modernism to the contemporary period. Each student is expected to formulate their own specific hypothesis and conceptual approach to the equipment problem (whether it is based on the virtual media problem, the symbolism of knowledge, the urban and public context, programmatic complexity, or the relationship between public space and privatization), and then develop the co-ed curriculum and a design project accordingly.

Program to think about for the Art Centre:

Reception area 30 m2

Shop 50 m2

Administrative Offices 50 m2

Library/documentation centre

Screening room
 Exhibition hall, temporary and permanent 500 m2
 Storage room 200 m2
 Cafeteria 100 m2
 Public toilets
 Technical rooms 20 m2

Overnight stay/hood/artists' residency program:

Plan between 10 and 20 rooms with a surface area
 of 18 m2,
 Each room will have an en-suite bathroom and a
 kitchenette

Representatives or associates of the student project:

La Marie de Margency: M. Mayor Thierry BRUN
 AMO of the city of Margency: Mr. François DEGUSSEAU
 Poppers Foundation: Mr Franz SPATH and Georges SILVA

Schedule:

Course Overview
 02/10/24 Introduction Presentation
 09/10/24 Reception at the Town Hall of Margency.
 9:30 am City tour.
 2:00 p.m. Presentation of the Mayor of Margency.
 16/10/24 Presentation Fondation Franz Poppers
 12/18/24 Intermediate Correction
 29/01/25 Final Jury
 02/25 Exhibition in the council room of the Town Hall and
 presentation of the work to the city.

Work required:

Course materials:

Teaching unit:
M72HA - History

Teachers:
BASSIERES Laurence

ECTS credits: 2
Nbr of weeks : 14
Nbr of hours / semester : 21
Own work: 23

HISTORY

HA701 A History of Heritage 19th-21st Century

Objectives: The preservation of heritage has entered the heart of contemporary policies and the architects trained today will all be confronted, in one way or another, with the question of heritage, whether in the form of restoration, rehabilitation or reconversion.
The aim here is to approach the notion of heritage from a historical and speculative angle, apart from operational issues (intervention techniques, heritage expertise, etc.), by highlighting the construction of our relationship with the existing and its evolution over the last two centuries.

Content: It is the institutional, legislative and cultural history of the establishment and evolution of heritage protection that will be developed here, at different scales - architectural, urban, territorial. The focus will be on France, from the first heritage protection measures to the present day, but it will also focus on other geographical areas, in order to be able to show the specific issues such as the exchanges and influences that may have developed, as well as the dynamics participating in the process of universalization of the notion since the middle of the twentieth century.

PROPOSED PROGRAM:

Course 1 - Introduction. Monument, historical monument and heritage.
Course 2 - The birth of the historical monument in France and Europe, eighteenth - nineteenth centuries.
Course 3 - Restoration: the invention of a discipline.
Course 4 - The extension of the historic monument.
Course 5 - Heritage Policies Outside Europe – Japan
Course 6 - World Wars, Destruction, Reconstruction.
Course 7 - The turning point of the Glorious Thirty
Course 8 - The city as heritage
Course 9 - Heritage extension: the invention of industrial heritage

Course 10 - The Universalization of Heritage

Course 11 - The new challenges of heritage: tourism, sustainable development and housing.

Course 12 - Restoration in the face of contemporary issues. Theories and practices.

Course 13 - The case of Paris

Work required:

The aim will be to carry out a study on the existing protections of the chosen place and to highlight the projects, debates and struggles that over time have determined the establishment, removal or evolution of these protections. In this perspective, the student will be led to locate and mobilize existing sources, digital, cartographic, archival, etc. to analyze and cross-reference them.

Course materials:

Teaching unit:
M72HA - History

Teachers:
CHABARD Pierre

ECTS credits: 2
Nbr of weeks : 14
Nbr of hours / semester : 21
Own work: 23

HISTORY

HA702 Immediate History of a Fin de Siècle

Objectives:

'Immediate History of a Fin de Siècle: Contemporary Architecture on Exhibition (1965-2005)'

Combining the history of ideas and the history of objects, this course offers a critical history of contemporary architecture seen through a particular prism: the main exhibitions that marked the last third of the twentieth century, from the mid-1960s to the turn of the twenty-first century. Particularly numerous during this period, these exhibitions constitute a privileged field of observation of the debates and discourses, trends and turning points, of the ephemeral fashions as well as the more structural transformations that have animated this field and of which today's architecture is, in fact, the heir. The course deals in particular with the question of "postmodernity", both as a passing architectural fashion and as a more chronic historical condition. Through a critical history, which is therefore highly themed, this course attempts to explore certain recurring features of architects' relationship to this "postmodern condition". The transversal themes of this course are: the relationship to modernity (or at least to its rhetoric) the relationship to time (the present, history, memory, fashion, etc.) The autonomy or heteronomy of architecture Architecture as a product and architecture as a profession

Content:

1. Architecture and guilt: project crises
Exhibition: B. Rudovsky, "Architecture Without Architects," New York, 1964.
2. De the Disappearance of Architecture: Radical Architectures
Exhibition: E. Ambasz, "The new domestic landscape", New York, 1972.
3. The Ambiguities of Reason: Neo-Rational Architecture
Exhibition: A. Rossi, E. Bonfanti, et al., Architettura Razionale, Milan, 1973.
4. In search of the genius loci
Exhibition: "Roma Interrotta", Rome, 1978.
5. Presences of History: The Uses of the Past of Architecture

Exhibition: P. Portoghesi, "La Presenza del Passato", Venice, 1980.

6. Neo-modern reactions

Exhibitions: P. Chemetov, "Modernité: un projet inachevé", Paris, 1982.

7. Overexposed architectural drawing

Exhibition: J. Dethier, "Images et Imaginaires d'architecture", Paris, 1984.

8. The invention of new avant-garde

Exhibition: Ph. Johnson, M. Wigley, "Deconstructivist Architecture", New York, 1988.

9. Towards a new classicism?

Exhibition: G. Tagliavanti, L. O'Connor, "A Vision of Europe", Bologna, 1992.

10. Phenomenal Architecture

Exhibition: T. Riley, "Light Construction," New York, 1994.

11. Non-standard architects

Exhibition: F. Migayrou, "Non-standard Architecture", Paris, 2004.

12. Postmodernism News

Exhibition: I. Flagge, "Postmodern Revisited", Frankfurt, 2004.

Work required:

Course materials:

Teaching unit:
M72HA - History

Teachers:
SCOTTO Manon

ECTS credits: 2
Nbr of weeks : 14
Nbr of hours / semester : 21
Own work: 23

HISTORY

HA703 Where will we stay tomorrow? For a retro-prospective history of housing

Objectives:

This course aims to question housing from a variety of perspectives (forms, implementation, principles, density, materiality, urbanity), inviting étudiant.es to deploy their capacity for analysis of an inhabited space, their referential baggage and their critical eye.

Why housing? Because it is a public interest issue, which concerns us all – as architects and users – in our spatial practices, both professional and personal. Because as the architects of tomorrow, étudiant.es will be amené.es to design, build and bequeath them.

Taking the form of a "retro-prospective" – combining the history of architecture, a critical analysis of pre-existences and projection – this lecture sheds light on the following issues:

- Assessing the existing: being able to take an informed look at the architectural pre-existences, whether it is a question of studying them, renovating them, transforming them or taking a place "next to them"
- Nothing is invented, everything is re-examined: to observe the components of past experiences and achievements – as diverse as they may be: spatial, constructive, aesthetic – in that they can nourish our current architectural proposals
- To be part of a form of cyclicity: to understand that architecture, even when it claims to be innovative, realizes (in part) the aspirations of previous generations

Content:

The lecture proposes to explore the principles that have governed the design and construction of housing over the past centuries, in order to understand the extent to which they continue to inform our ways of thinking about housing today and tomorrow. An exploration that is carried out through typological (collective, intermediate, individual housing), technical

(modes of implementation) or professional (architects' postures, utopian dimension) entries. In short, to adopt a form of "retro-prospective" approach to question the links between the components of yesterday's housing and the lessons we draw from them (or not) to project its future architecture. Echoing the question posed by the critic Michel Ragon in the early 1960s – Where will we live tomorrow? - it is a question of revisiting these architectures as "previous futures" in order to understand how to look at them, extract their principles and, in turn, think about a desirable future for housing. Already in the past, architects thought about flexibility, comfort, hygiene and the technologies that could support it. At a time when the term innovation is flooding the discourse on architectural production, it is a question of building a critical look – because it is referenced and analytical – at what makes the quality of housing, by re-inscribing each element of housing - implementation, distributive principles, density, materiality, etc. – in a broader history: that of past experiences and their mutations.

The course is based on a rich iconographic corpus (drawings, photographs, diagrams, etc.), aimed at consolidating the analytical skills of étudiant.es.

1. Introductory session: preamble
2. The Haussmannian building: a model of reversibility
3. From working-class housing to social housing: experimenting (via) working-class housing
4. Housing and gender: housewives
5. Collective housing: urban "monsters" to be rehabilitated
6. Intermediate housing: an art of combinatorics
7. Individual housing: from desire to stigmatization
8. Living in the temporary: leisure, emergency, poor housing
9. Utopias: when architects fantasize about housing
10. Housing today: legacies and anticipations
11. Concluding session: "to be continued"

Work required:

Course materials:

Teaching unit:
M72HA - History

Teachers:
LABIED ROUIZEM Nadya

ECTS credits: 2
Nbr of weeks : 14
Nbr of hours / semester : 21
Own work: 23

HISTORY

HA704 Twentieth-Century Architecture in North Africa: Vernacular Inspirations

Objectives:

This course offers a different reading of the history of architecture in North Africa, exploring how the traditional architectural culture of these countries influenced architects during the twentieth century. It is part of a process of questioning the history of architecture as a single narrative, centred on Europe and North America, in order to open up to little-studied contexts and geographical areas, contributing to the renewal of this teaching.

Course language: French
Language of communication: French and English

Content:

Mostly Western-trained, architects in North Africa sought to interpret modernity to adapt it to the local context, throughout the twentieth century.

This course studies experiments conducted during the twentieth century, inspired by vernacular constructions, thus showing the transfer of techniques, ideas, and models. Indeed, vernacular architecture and traditional know-how have become a source of inspiration, especially with the questioning of the modern movement, the colonial independence movements, and the social and environmental crises.

Two tours are organized around buildings updating construction techniques inspired by old buildings, or traditional practices.

Program

Course 1 - Introduction. Lessons from the vernacular
Course 2 – The Journey to the Orient: A Lesson in Architecture

Course 3 – Plural Modernities in the Maghreb
Course 4 – Raw Earth Experiments in Morocco
Course 5 - Building with the People: Hassan Fathy
Course 6 – Restoring Traditional Practices: From Self-Construction to Participation
Course 7 – André Ravéreau: the lessons of the M'zab
Course 8 – Building in Raw Earth: Alternative Modernities
Course 9 – Building in Raw Earth: Vernacular Heritage
Course 10 – The CRAterre: from the association to the research centre
Course 11 – Visit of a raw earth building in Ile de France
Course 12 - Visit of the Archives of the Cité de l'Architecture
Course 13 – Oral presentation 1/2
Course 14 – Oral presentation 2/2

Work required: Readings from the bibliography and comparison in an analysis file with one of the themes seen in class.

Course materials:

Teaching unit:
M72HA - History

Teachers:
NAVINER Brigitte

ECTS credits: 2
Nbr of weeks : 14
Nbr of hours / semester : 21
Own work: 23

HISTORY

HA705 History of Urban Gardens and Plantations

Objectives:

LANGUAGE OF INSTRUCTION: French

LANGUAGES OF COMMUNICATION: French, English and Spanish

The period we are going through (with its more intense, longer, more numerous heat waves), and the recent lockdowns resulting from the pandemic) remarkably underline the importance of gardens for the inhabitants of the urban world. While they contribute to the cooling of cities, they play a certain social role and often represent for many city dwellers the only contact with a form of nature.

In order to help preserve them, or to create new ones, it is essential to know their history and characteristics. The garden accompanies the architecture, extends the city, transforms it, and the architect can draw valuable lessons in terms of spatial planning and staging from the study of gardens.

This course proposes to broaden the historical field to urban gardens and plantations with two objectives:

- develop a spirit of curiosity through the approach of a field of study inviting the (re)discovery of the relationships between the garden and society, between the garden and the city, and the multiple forms of plant presence in the city
- Combine several modes of exploration: direct and field observation during visits, reading literary or historical texts, analysis of graphic or pictorial representations.

Content:

The framework of this course (fourteen sessions of 1h30) limits our object of study to the Western garden, through an approach that does not claim to be exhaustive but offers landmarks and keys to understanding the place and current forms of gardens.

After a quick evocation of the gardens of the most ancient periods (Antiquity, Middle Ages) and the gardens of Islam, we will study the gardens

of the Italian Renaissance and the spread of garden art throughout Europe: the gardens of absolutism and their extensions in the city, then the major turning point represented by the Age of Enlightenment with the emergence of the landscape garden, of the picturesque garden and a new look at nature the nineteenth century for which the garden was open to all and introduced the landscape of nature into the city, while becoming a showcase for technical and scientific progress and discoveries, the time of Modernity and its gardens marked by very diverse innovations and currents, the contemporary era rich in new forms and approaches (particularly social and ecological) implemented in the creation of gardens, parks, promenades, in the contemporary city.

For each of the periods considered, we will discuss the historical context and the actors in the creation of the gardens, the composition, the decoration and the plants of the garden, some exemplary gardens and their uses.

In addition to the classes, three tours are organized on Saturdays (in October or November): the gardens of Versailles and the King's Vegetable Garden, the gardens of Trianon and the Queen's Hamlet, the Parc de Bagatelle or the Parc des Buttes Chaumont. Each student must participate in one of the visits.

Other visits are left to the student's initiative: Vaux-le-Vicomte, Domaine de Chantilly, Parc Monceau, Square des Batignolles and Parc Martin Luther King, Clichy, Batignolles, Parc André Citroën, Garden of the Musée du Quai Branly, Parc Montsouris, Parc Floral, Jardin des Plantes, etc.

in parks and gardens in Paris and Ile-de-France:

Course language: French

Languages of communication: French, English, Spanish

Erasmus students are welcome in this course, and assignments can be submitted in French, English or Spanish. However, it is essential to have a good understanding of the French language.

Work required:

The 'Carnet de visites', the main exercise, is directly linked to the garden visits organised on Saturdays. It is based on the observations, surveys, surveys, sketches and drawings, photos, and notes made on this occasion, and is completed by an analysis that must illustrate the relationship between the courtyards and the field observations, reflect a good understanding of the main characteristics of the chosen garden and the period or style to which it belongs.

It is advisable to make a second visit to the chosen garden, in order to observe its metamorphosis from summer to autumn, or winter.

Course materials:

Information about this teaching is available on the website:

<https://brigitteviner.fr/bn-ens/bn-ens-jardins/bn-ens-jardins-accueil.html>

Course materials (projected documents and transcripts) and complementary documents are made available to students via a OneDrive folder.

Teaching unit:

[S7-M72] UEM72Seminar/Introduction to Research/History/Philosophy or Sociology

Teachers:

JEUDY Olivier

ECTS credits: 2**Nbr of weeks :** 14**Nbr of hours / semester :** 21**Own work:** 23**INTRODUCTION TO RESEARCH****A - AS - MIR1 Plastic approaches and urban territories****Objectives:**

This course offers students an introduction to research through a bodily and perceptual approach to territories, leading to a plastic approach as well as theoretical work. This option also aims to introduce students to the aesthetic, cultural and political issues of the relations between the arts, media and territories.

Content:

Students who follow this optional course are led to develop a work of spatial perception and representation of a territory. This work will be followed by an artistic intervention in situ, in situation. The various experiments and experiments in situ will give rise to phenomenological reflections on the perception, action and production of spaces. Phenomenological and artistic approaches will also be studied to show how they reveal architectural and landscape imaginaries, generate a potential for interpretations as to the future vocation of a territory.

Work required:

- Courses, methodological workshops
- Research file on a practiced territory

Bibliography:

Teaching unit:

[S7-M72] UEM72Seminar/Introduction to Research/History/Philosophy or Sociology

Teachers:

PIGOT Bernard

FALZON Laurence

ECTS credits: 2

Nbr of weeks : 14

Nbr of hours / semester : 21

Own work: 23

INTRODUCTION TO RESEARCH

A - AS - MIR2 Scenography and architecture: scenography, an art of place

Objectives:

Scenography is considered an art of place in that its vocation is to shape the place of representation relating to a given work. The scenography thus regulates the relationship between the spectator and the work in a certain symbolic context. Today, the scenographer is in demand for fields other than theatre, such as museums, exhibitions, fashion shows, gardens, architecture and public spaces. Is scenography a tool, in its ability to give shape and above all space to an imaginary world? not through a given and definitively fixed place, but through the shifts that representation operates from a real place to an imaginary place, and from an imaginary place to a real place.

Content:

Provide the necessary tools to approach research and writing a dissertation
Methodology
Bibliographic and documentation research
Scenographic analyses
investigation and fieldwork.

Work required:

Courses and application during memory workshops

Bibliography:

Teaching unit:

[S7-M72] UEM72Seminar/Introduction to Research/History/Philosophy or Sociology

Teachers:

RESTREPO RESTREPO Esteban

SAIDI SHAROUZ Mina

PINATEL Flavie

ECTS credits: 2

Nbr of weeks : 14

Nbr of hours / semester : 21

Own work: 23

INTRODUCTION TO RESEARCH

A - AS - MIR3 Art, Cinema, Architecture

Objectives:

The aim is to give students the methodological principles necessary for reflection on a project and its problematized expression in a dissertation-film.

Content:

This course complements the seminar Art, Cinema, Architecture, to provide the methodological foundations necessary for the development of research in architecture. More specifically, it will support the emergence of the research problem and the reflection project of students wishing to develop a hybrid dissertation including a film and a written part.

How can a research problem be identified, and how can it be explored via heterogeneous approaches: textual, plastic, filmic? How to organize your sources, optimize and prioritize your documentary material and references? How can we mobilize them to build our work? Based on examples and analyses, we will explore how a film or a work of art deploys in its form a thought and constructed reflections that can feed a problematic in architecture, and this in complementarity to the necessary work on reference texts.

In a less academic way, it is also a question of considering the possibility of formulating research via a form that is not only textual. The making of a dissertation-film underlies the construction of a thought and its writing in a cinematographic form in relation to the production of a text. It is to the correspondence and complementarity of these two forms of enunciation of thought that the course will focus.

Enrolment limited to 24 students

Work required:

The sessions will be held following and in complementarity with the Art, Cinema, Architecture Seminar.

This option is open only to students pursuing a dissertation in the same seminar.

Teaching unit:

[S7-M72] UEM72Seminar/Introduction to Research/History/Philosophy or Sociology

Teachers:

POMMIER Juliette

ECTS credits: 2

Nbr of weeks : 14

Nbr of hours / semester : 21

Own work: 23

INTRODUCTION TO RESEARCH

B - HMU - MIR14 Architectures of inhabiting, process, urbanity, spatiality

Objectives:

This course aims to gradually transmit to students the methodological skills necessary for the writing of the different stages of the dissertation (S7, S8, S9).

Content:

Several thematic sessions to

- Building your scientific approach: problems and hypothesis(s)
- build its documentation: written, audio and visual sources (archives, libraries, databases and online platforms)
- learn how to produce reading sheets and an annotated bibliography
- learn to use Word software and organize your writing
- choose your field of research
- Identify and choose quantitative (questionnaires) and qualitative (interviews, observations) research methods

Work required:

Bibliography:

Teaching unit:

[S7-M72] UEM72Seminar/Introduction to Research/History/Philosophy or Sociology

Teachers:

PATTERSON Michael Brent

ECTS credits: 2

Nbr of weeks : 14

Nbr of hours / semester : 21

Own work: 23

INTRODUCTION TO RESEARCH

B - HMU - MIR15 Territories of Political Ecology

Objectives:

Content:

Work required:

Bibliography:

Teaching unit:

[S7-M72] UEM72Seminar/Introduction to Research/History/Philosophy or Sociology

Teachers:

ECTS credits: 2

Nbr of weeks : 14

Nbr of hours / semester : 21

Own work: 23

INTRODUCTION TO RESEARCH

B - HMU - MIR4 Architecture, urban project and societies

Objectives:

The aim is to learn about the different types of research possible in the field of architecture as well as their methods and techniques.

This teaching is a privileged place to question these methods and techniques.

Content:

This optional is directed and led by a teacher-researcher from the APUS seminar and a teacher-researcher from the AIC seminar. The other teachers of these two seminars will be required to intervene on an ad hoc basis.

The content of this optional is developed over 14 two-hour sessions that will address the mechanisms of research construction as follows:

- 1) Presentation of the different types of research possible in architecture
- 2) Research techniques
- 3) Build a problem (problem note)
- 4) Build your practical research approach (compose and organize your work, choose and build your methods and techniques)
- 5) Write a research report (i.e. Master's thesis)
- 6) Build a state of the art from reflective readings (reading sheets, summaries, summaries, etc.)
- 7) Work around the production of articles
- 8) Presentation of examples of current research

Each section will be supported by concrete examples in order to facilitate the students' understanding

Work required:

The sessions will take the form of lectures that will be experienced in the work required in the seminar.

The work requested is directly related to the preparation of the dissertation and more specifically to the pre-dissertation.

Bibliography:

Teaching unit:

[S7-M72] UEM72Seminar/Introduction to Research/History/Philosophy or Sociology

Teachers:

MACAIRE Elise

LAMOUREUX Margotte

ECTS credits: 2

Nbr of weeks : 14

Nbr of hours / semester : 21

Own work: 23

INTRODUCTION TO RESEARCH

B - HMU - MIR5 Habitat and sustainable city, for an approach to the urban fabric

Objectives:

The work of preparation for the dissertation is associated with the corresponding seminar. In this context, students are invited to develop an original and personal research approach, leading to the construction of a problem and hypotheses, to the analysis of a field, supported by the constitution of a corpus of references on the knowledge already constituted (theoretical and methodological works) and from data from surveys, observations, archives, etc.

Content:

The methodological workshop proposed in this optional aims to nourish the work of the dissertation by an introduction to research and its study methods, the learning of the use of tools related to the objectification of a questioning will be addressed as well as the questions of choice and construction of the dissertation subject, the problematic and the hypotheses, working methods, research of sources, exploitation of data, bibliographic work. This workshop will be led by teachers with an active practice of research in the laboratories of the school and the UMR-CNRS LAVUE, or in other institutions.

It will introduce students to the analysis and scientific production of content.

For more details see the <http://enseignementshmu.paris-lavillette.archi.fr/hvd/> page

Work required:

The main objective of this course is to prepare students for the work and writing of the Master's thesis. It can also serve as a foundation for students wishing to engage in a research course in semester 9.

Teaching unit:

[S7-M72] UEM72Seminar/Introduction to Research/History/Philosophy or Sociology

Teachers:

SZANTO Catherine

ECTS credits: 2

Nbr of weeks : 14

Nbr of hours / semester : 21

Own work: 23

INTRODUCTION TO RESEARCH

C - MTP - MIR7 Architecture/S & Landscape/S

Objectives:

The objective of this optional is to help students acquire the know-how required for all quality research work: mastered concepts, chosen and argued corpora, selected references, constructed bibliography, precise writing. In addition, attention will be paid to modes and tools of investigation specific to the field of space and design practices.

Content:

This optional will introduce students to the principles, methods and constructions specific to the field of research.

Research is not invented out of thin air. And all serious work begins by becoming aware of what has already been thought, written, and thought out before oneself. But how can you not be overwhelmed by the mass of publications and documents spotted on your subject of study? How do you recognize the relevance of a book? How to select the authors? And first, where do you start? Where to get the information? How to organize one's work, carry out research in databases, archives, build a bibliography? etc.

This introduction to research will answer the questions of "how" in the practice of research, and will aim to build, with the students, the specificity of architectural research, in the broad sense of the term. Particular attention will be paid to the writing, in its various forms (analysis, commentary, summary, etc.) and to the precision of its enunciation. Learning how to present a work orally will also be offered, based on the work done by the students.

This optional is organized by teachers with a particular interest in questions related to Landscape, in particular those addressed within the framework of the "Architecture, Environment, Landscape" team of the research department of ENSAPLV, CNRS- UMR 7218-LAVUE (but not only).

Work required:

Two hours per week, divided partly into classes and partly into tutorials.

Students will practice certain practices directly connected to the realization of their dissertation: bibliographic research in a variety of databases, analysis of a

text, an image, a place, a project and a film sequence, in situ writing work, oral presentation of a work of their choice.

Bibliography: A reference bibliographer will be provided in class

Teaching unit:

[S7-M72] UEM72Seminar/Introduction to Research/History/Philosophy or Sociology

Teachers:

ECTS credits: 2

Nbr of weeks : 14

Nbr of hours / semester : 21

Own work: 23

INTRODUCTION TO RESEARCH

**C - MTP - MIR8 Architecture of Inhabited Environments:
Philosophy, Architecture, Urban**

Objectives:

In accompaniment to the seminar, this optional course offers students tools and methods allowing them to engage in research work that is demanding in its form and precise in its writing. Based on the support of the GERPHAU laboratory, it offers a philosophical deepening of the notions addressed in the seminar, in order to restore to the themes a power of meaning, to function by questioning, to question horizons. The notion of the operational concept will be particularly questioned in order to analyze the modalities of articulation of the architecture-city-philosophy relationship. The aim is to problematize a question of architecture and to make a philosophical concept operative (design by research/research by design).

Content:

This module aims to deepen research "through research", proposing to carry out at the same time: the construction of the problem, the broadening of references, methodological deepening, conceptual precision, rigor in the statement and in the writing.

Two pedagogical periods define this teaching:

1 - A time of contributions related to philosophical work: -Reading: how, why, -Problematizing: in relation to, in dialogue with, -Conceptualizing: in reference to -Illustrating, by means of, -Writing, from,

2 - A more individualized supervision time supported by regular opportunities for presentation to the group and personalized evaluations. The sessions provide a space for critical presentation, discussion, and evaluation.

Work required:

A personal investment and regular attendance at the sessions are necessary, accompanied by a regular dissemination of the work and an oral presentation of the progress

Working from references (the reading activity) is an important part of the research work. It will be approached by placing the proposed sources in a disciplinary and historical perspective (map of the knowledge that can be identified on a question).

Bibliography:

The bibliography will be built within the optional, according to the specificities of the themes, and will be capitalized on in a common database for the use of the seminars (S7, S8 and S9).

Teaching unit:

[S7-M72] UEM72Seminar/Introduction to Research/History/Philosophy or Sociology

Teachers:

LAGUIA Virginia

JAUPITRE Julie

ECTS credits: 2

Nbr of weeks : 14

Nbr of hours / semester : 21

Own work: 23

INTRODUCTION TO RESEARCH

C - MTP - MIR9 Architecture, a sustainable factory for the whole world

Objectives: This training in research through research is a place of development in two ways:

- Collective, that of the construction of an analytical and critical thought of international human spatial productions and their mutations over the long term.
- Individual, that of the workshop, patient and cumulative, of the production of the master's thesis, on the basis of the reasoned construction of a specific subject and problem, a referenced corpus, as well as a posture specific to each student.

Content: This optional is part of a dual theoretical and practical perspective:

- That of the inseparability of the scales of the making of anthropized spaces, from the most domestic knowledge and uses to the practices of the concrete and diversified production of the urban and the large international metropolitan territories.

- Those of the sharp apprehension of the spatial and social complexity of human, sedimentary and hybrid fabrications, both material and immaterial: archetypes, models, cultures, logics and dynamics of transformation. All this in a systemic way on the scale of the prolonged bilateral exchanges between identities and cultures of the world's major civilizational areas: the Mediterranean, Asia, Latin America, the Middle East, Africa.

METHODS

The approaches, presented and illustrated, are those developed by urban and architectural scientific research in its multidisciplinary and intercultural procedures. They are articulated in the form of specific analyses that are upwards, retrospective and comparative.

They thus constitute tools for in-depth knowledge of both the diversity and the universality of spatial fabrications and cultures - both scholarly and popular - on the

scale of an intercontinental metropolisation recognized as a major human and civilizational fact.

https://parislavillettearchifr-my.sharepoint.com/personal/virginia_laguia_paris-lavillette_archi_fr/_layouts/15/guestaccess.aspx?share=EThCEQNZbUtlN3EhCwtuFXkBAFdQ7rGflwqC-hR28qAqEA&e=rzQXsC

christian.pedelahore@paris-lavillette.archi.fr
julie.jaupitre@paris-lavillette.archi.fr
virginia.laguia@paris-lavillette.archi.fr

Work required: Lectures in French on the topics developed by the students.
Languages accepted (individual corrections): Spanish, English, Portuguese, Italian, Vietnamese.
Work requested:
- Course notes and readings as identification and construction of a research object and a personal problem.
- A Thematic Dossier and the preparation of a corpus specific to the development of an original research project.

Bibliography:

Teaching unit:

[S7-M72] UEM72Seminar/Introduction to Research/History/Philosophy or Sociology

Teachers:

FAAS Guillaume

ECTS credits: 2**Nbr of weeks :** 14**Nbr of hours / semester :** 21**Own work:** 23**INTRODUCTION TO RESEARCH****D - CCA - MIR10 Edification and uses****Objectives:**

First approach to scientific research, its methods and tools, through the field of architectural and urban atmospheres: It will be a question of distinguishing the different types of scientific research (fundamental/applied) and their differences with development activities, understanding the foundations of the experimental method, its strengths and limitations, and finally being able to orient oneself in the products of the research (reports, monographs, communications, etc.)

Content:

This introduction to research includes an overview of architectural, urban and landscape research, in the more general framework of scientific research. The fundamentals of the latter will then be addressed through examples drawn from research in the field of architectural and urban atmospheres: methods, documentary research and reading notes. The essential dialogue between the so-called "imprecise" sciences and the "hard" sciences will also be developed in this context.

Work required:

Reading sheets and conferences, Commented bibliography + continuous assessment (= attendance at classes)

Bibliography:

Teaching unit:

[S7-M72] UEM72Seminar/Introduction to Research/History/Philosophy or Sociology

Teachers:

DESCAT Sophie

ECTS credits: 2

Nbr of weeks : 14

Nbr of hours / semester : 21

Own work: 23

INTRODUCTION TO RESEARCH

D - CCA - MIR11 Critique and history of architecture and the city

Objectives:

The aim of this course is to introduce the students of the seminar 'Critique and Histories of Architecture' to the handling of research instruments. The knowledge transmitted responds to a common rule: how to best construct and treat a subject. How can we develop a bibliography and a critical apparatus in order to appropriate a subject and define the state of the question? How do I collect useful documentation? Where to look? How to select? What are the advantages and pitfalls of an internet search? Finally, what should be the role of interpretation in the different ways in which sources — including 'images' — are made to speak, which are so many "traces" serving as a basis for the creation of a corpus?

Content:

The course is divided into several sequences including classroom exercises and off-site sessions (libraries, archives, etc.).

Work required:

Different exercises as the course progresses.

Bibliography:

Teaching unit:

[S7-M72] UEM72Seminar/Introduction to Research/History/Philosophy or Sociology

Teachers:

SILVESTRE Joaquim

ECTS credits: 2

Nbr of weeks : 14

Nbr of hours / semester : 21

Own work: 23

INTRODUCTION TO RESEARCH

D - CCA - MIR12 Design Activities and Instrumentation

Objectives:

The aim is to learn about the different types of research possible in the field of architecture as well as their methods and techniques.

This teaching is a privileged place to question these methods and techniques.

Content:

This optional is directed and led by a teacher-researcher from the APUS seminar and a teacher-researcher from the AIC seminar. The other teachers of these two seminars will be required to intervene on an ad hoc basis.

The content of this optional is developed over 14 two-hour sessions that will address the mechanisms of research construction as follows:

- 1) Presentation of the different types of research possible in architecture
- 2) Research techniques
- 3) Build a problem (problem note)
- 4) Build your practical research approach (compose and organize your work, choose and build your methods and techniques)
- 5) Write a research report (i.e. Master's thesis)
- 6) Build a state of the art from reflective readings (reading sheets, summaries, summaries, etc.)
- 7) Work around the production of articles
- 8) Presentation of examples of current research

Each section will be supported by concrete examples in order to facilitate the students' understanding

Work required:

The sessions will take the form of lectures that will be experienced in the work required in the seminar.

The work requested is directly related to the preparation of the dissertation and more specifically to the pre-dissertation.

Bibliography:

Teaching unit:

[S7-M72] UEM72Seminar/Introduction to Research/History/Philosophy or Sociology

Teachers:

IOSA Ioana
MINOST Martin
HELAND Laure

ECTS credits: 2

Nbr of weeks : 14

Nbr of hours / semester : 21

Own work: 23

INTRODUCTION TO RESEARCH

E - IEHM - MIR 16 Built cultural heritage

Objectives:

This course offers a theoretical and methodological introduction to architectural research, its approaches, methods and tools. The objective is to equip students to define a research topic and to deepen it during S8 and S9 in order to produce a Master's thesis.

Content:

Several aspects will be addressed:

- The definition of a research subject: constructing a problem (questions and hypotheses), defining a field
- Establishing a state of the art: reading and analysing texts, discussing them, making a reading report, etc.
- The construction of a research strategy: identifying the most relevant investigation techniques according to its subject and field
- The survey methods of the SHS applied to architectural research
- The presentation of data and research results in various ways: storytelling, the writing process, diagramming as an analysis tool, the scientific poster, etc.
- The formatting of the dissertation: methods of presenting a bibliography, hierarchy of the dissertation, standards of scientific writing, support tools.

Work required:

Creation of the three reading sheets and a state of the art.

Bibliography:

ARBORIO Anne-Marie, FOURNIER Pierre. Direct observation. Paris, Armand Colin, 2015 (5th edition).
BEAUD Stéphane, WEBER Florence. Guide de l'enquête de terrain, Paris, La Découverte, 1998.
BECKER Howard. How to write the Social Sciences. Starts

Teaching unit:

[S7-M72] UEM72Seminar/Introduction to Research/History/Philosophy or Sociology

Teachers:

TILLY Linnea

BASSIERES Laurence

ECTS credits: 2

Nbr of weeks : 14

Nbr of hours / semester : 21

Own work: 23

INTRODUCTION TO RESEARCH

E - IEHM - MIR13 History and Practices of Transformations in the Built Environment

Objectives:

With a view to the realization of their dissertation, within the seminar 'History and practices of transformations of the built environment', the purpose of this teaching is to introduce students to the canonical methods of intellectual and scientific work, to the practical modalities of knowledge production.

This "initiation" to research has several components: an epistemological component (the methods of scientific research, the criteria for the validity and scientificity of a research work) a practical component (the work and daily life of the researcher) an institutional component (raising students' awareness of the way in which the architectural and urban research environment is structured in France and abroad)

Content:

Work required:

Bibliography:

Teaching unit:

[S7-M72] UEM72Seminar/Introduction to Research/History/Philosophy or Sociology

Teachers:

ECTS credits: 2

Nbr of weeks : 14

Nbr of hours / semester : 21

Own work: 23

INTRODUCTION TO RESEARCH

**E - IEHM - MIR17 How to live together? Theories and Forms of
Collective Architectures**

Objectives:

Content:

Work required:

Bibliography:

Teaching unit:

M72PH/SH – Philosophy/Sociology

Teachers:

TUSCHER DOKIC Anne

ECTS credits: 2

Nbr of weeks : 14

Nbr of hours / semester : 21

Own work: 23

PHILOSOPHY OR SOCIOLOGY

**PH701 Philosophy - Philosophical Issues of Cognitive Science for
Art and Architecture: From Psychology to Neuroscience**

Objectives:

The aim of this course is to develop the ability to analyse, evaluate and formulate philosophical arguments, with a particular focus on the relationship between recent developments in cognitive science and architecture. In particular, we will examine the role that psychology and neuroscience can play in explaining the arts and, therefore, the architectural experience.

Content:

First, the interdisciplinary objectives and methods of cognitive science via their application in the explanation of art and aesthetic experience will be introduced. Then, the ways in which aesthetic experience is distinguished from ordinary perceptual experience in traditional and contemporary philosophical literature will be exposed. Then, we will focus more particularly on the relationships that recent developments in neuroscience may have with architecture. For the past twenty years, the notion of "neuroarchitecture" has been proposed by some architectural theorists, and even some practitioners, interested in the possibility of a "scientifically established" architecture, based on better knowledge of the impact of built environments on human behaviour and mental functions. Among these, embodied cognition benefits from new approaches, which emphasize the role of the body, as well as the structure of the space we inhabit, in cognition and experience. This notion of embodiment partially overlaps with the concept of empathy ("Einfühlung") which, since the end of the nineteenth century, has been a major category of philosophical aesthetics. The aim is to study the real scope of this concept, as well as its derivatives (embodiment, mental simulation, imagination, affordances, etc.), for architecture.

Synopsis: (1) General Introduction to Philosophy of Mind and Cognitive Science, (2) Art and Cognition: What is an Aesthetic Experience?, (3) Architecture and Cognition: A Specific Introduction to "Neuroarchitecture", (4) The Varieties of Empathy in Architecture: From the Design Process to the User Experience.

Work required:

Course materials:

Teaching unit:

M72PH/SH – Philosophy/Sociology

Teachers:

ANTONIOLI Manola

ECTS credits: 2**Nbr of weeks :** 14**Nbr of hours / semester :** 21**Own work:** 23**PHILOSOPHY OR SOCIOLOGY****PH702 Philosophy - The Political Issue****Objectives:**

The aim of this course is to expose the main axes of the new thinking about nature that developed between the second half of the twentieth century and the twenty-first century, based on the analysis of the work of philosophers (Félix Guattari, Edgar Morin, Bernard Stiegler, Peter Sloterdijk), economists (Serge Latouche), sociologists (Bruno Latour), landscape architects (Gilles Clément) who have long invited us to build a meaningful relationship with all the components (natural, social, technical, urban) of our environment, in a clearly affirmed perspective of political ecology.

Content:**POLITICAL ECOLOGY AND PHILOSOPHY**

All the ideals of modernity (progress, growth, technology, man's mastery over Nature) have contributed to imposing for several centuries a non-ecological humanism and a techno-economic-scientific development that is not concerned with the preservation of the planet's natural resources. The environmental emergency and the debates around "sustainable development" have recently put ecology at the heart of the news. But the ecological question cannot be confined to the restricted sphere of experts and scholars, nor can it be expressed exclusively in a technocratic vocabulary, it implies a new philosophy of the relationship between man, technology and Nature, but also new orientations in all fields of human activity (politics, economy and culture). The course proposes to explode this philosophical turn, in close connection with the theory of architecture and the city.

Work required:**Course materials:**

Teaching unit:

M72PH/SH – Philosophy/Sociology

Teachers:

DESCHAMPS Catherine

ECTS credits: 2

Nbr of weeks : 14

Nbr of hours / semester : 21

Own work: 23

PHILOSOPHY OR SOCIOLOGY

**SH701 Sociology - Metropolisation, Globalization and
Cosmopolitanism**

Objectives:

The introduction to field research in the humanities and social sciences.
Introduction to sociological and anthropological literature
The extent of the notion of risk applied to architecture and to territories: from what it means to make a decision when one 'makes a project', from constraints to ecological issues, risk runs through the questions that futur.es architects face. In this course, it is a question of understanding it in its positive and negative values, in relation to a set of political, social and societal issues.

Content:

The question of risk will be declined in relation to different 'fields' of sociology and anthropology and with issues specific to architecture:

- Risk and the urban, but also risk and new territorial exoduses
- Risk and public and common spaces
- From controversy to crisis: the risk of different forms of dispute
- Risk, inequalities and exclusions, including through architectural and urban forms (from gentrification to open, inclusive or exclusive spaces, etc.)
- The risk and expectations of the architectural project
- The risk and the question of the standard, whether technical, health, social or societal...
- Risk as dynamic and in relation to situations...

In this teaching, empirical elements, practices, uses, and situations intersect with theoretical questions and sociological and anthropological traditions. The previous experiences of the étudiant.es architecture project will be used to embody reflection and generalization.

Work required:

Commentary on texts and presentation of situations.
Field survey in Paris or the Ile-de-France region

Course materials: In addition to the 3 books, which are a must-read, articles and sociological or anthropological surveys will be mobilized, according to the proposals for reflection resulting from student concerns.

Teachers:

LOPEZ Luis
PETITRENAUD Antoine
JEUDY Olivier

Teaching unit:

M72S – Seminar

ECTS credits: 4

Nbr of weeks : 14

Nbr of hours / semester : 49

Own work: 47

SEMINAR

A - AS-MS701 Art, Architecture, Experimentation

Obligation to take the associated Initiation to Research course:

[S7-M72] UEM72 - A - AS - MIR1 Plastic Approaches and Urban Territories

ECTS credits: 2

Nbr of weeks : 14

Nbr of hours / semester : 21

Own work: 23

Objectives:

This seminar aims to develop research on artistic and architectural practices in situ, upstream of the project. The aim is to study how these spatial practices can act on the ways of making territories, to show how they can give impetus to new spatio-temporal dynamics, and participate in the transformation of places and territorial imaginaries. By generating spatial implementations, in situ interventions question the territories of the Third Landscape (G. Clément) and participate in the creation of new landscapes. They offer other perspectives on the phenomenology of places, their materiality, their imagination, their physical or fictitious transformation.

The students of this seminar are themselves led to develop a plastic approach on the territory(ies) they choose to study, and to theorize it in the form of a dissertation-action-creation.

The work of writing the dissertation is mainly carried out on the basis of this plastic and architectural approach carried out in one or more territories - the practice of material intervention on a scale of 1 and/or the filmic practice of urban places. The dissertation is composed as follows: of an observational work on the different contextual aspects of the territory studied of a critical reflection on the student's own creative processes and tools of representation (graphic, filmic, etc.) of a narrative on the imaginaries aroused by the territory(ies) practiced.

NB / we accept students on mobility

Examples of memory-action-creation at this address:

<http://amp.scribnet.org/formations/master/seminaires-de-recherche/article/seminaire-demarches-plastiques-et-territoires-urbains>

Content:

At the level of architectural design, the plastic approaches that produce space consist of setting up experimental devices, proposing readings of spatial reality, at the scales of the environment. It is a question of confronting a place and its real context (geographical, social, historical, economic, political, etc.), of experimenting with it in order to reveal the potential of space, and to implement new narratives of architecture, landscape, territory.

This research seminar deals more particularly with plastic actions and experiments carried out in urban, industrial or rural wastelands, in urban or peri-urban territories in the process of requalification. Different artistic approaches upstream of the project are studied to show how they reveal architectural imaginaries and generate a potential for interpretations as to the future vocation of a territory.

The sensitive, plastic and conceptual approach that we develop aims more particularly to apprehend the multi-sensory qualities of the space in a physical way, to immerse oneself in the concrete reality of a site in order to build a critical look at the situations experienced, the successive atmospheres experienced. With regard to the notions developed by the landscape artist Bernard Lassus, such as "inventive analysis", "minimal intervention", "the inflexus or inflection of a process", it is a question of maintaining a sensitive relationship with the site and its elements, with each detail that can make sense, to immerse oneself in the existing while proposing readings and potential imaginaries. Other spatial and narrative hypotheses then complete, nourish, and intertwine these first periods of immersion. Through different experimented sound and visual writings, a narrative of the site takes shape, new landscape visions emerge.

This work of inventive re-presentation continues with in situ plastic interventions which, by materializing different trans-formations of the site and its scales, make it possible to arouse other ideas and imaginaries as to the possible reactivation of the things present. The in situ practices that we develop question urban interstices, industrial wastelands, spaces in transition, 'built situations' (J.-L. Voileau, 1998) and their possible transformation in an environmentally friendly way.

Research is also carried out on graphic representations, audio-visual writings and the narrative making of territories. By exploring different

practices of images and representation to express their project intentions or show their in situ interventions already carried out, students are led to develop a critical analysis approach on the perceptual transformations they produce in terms of spatiality, temporality and territorial imaginary.

The work of writing the dissertation thus begins with the keeping of a research notebook bringing together all the ideas for in situ intervention and the artistic, architectural and landscape works that resonate with them, and continues with the elaboration of a phenomenological narrative on the plastic approach carried out in the territory invested. The graphic representations (sketch, drawing, photography, cartography, etc.) and/or audio-visual montages are then re-worked and re-examined according to a back-and-forth between the concrete territory practiced and the territory of the project represented.

Seminar S7 (1st semester) / Immersion:

Approach based on observation and experimentation in the field, in a "doing" situation

In situ plastic and architectural intervention projects, carried out collectively, are planned on two sites:

- La Station - Gare des Mines located at the Porte d'Aubervilliers, at the crossroads of Saint-Denis, Aubervilliers and Paris. The MU collective, which manages the site, is an artistic production office specialising in the fields of sound art, music and new media. A collaboration agreement between our school and the MU Collective was signed in 2020. The Craft (construction) workshop based at La Station will accompany us in our experimental research efforts.

- The third place led by the Association Ateliers Experience Redynamisation Insertion (AERI) in Montreuil (Croix de Chavaux metro station). A place conducive to architectural experimentation and artistic emergence. We will be assisted by Le Plug In Circus, an architectural and musical research workshop working on a scale of 1.

NB / This seminar is linked in Master 1 with the project group "Persona grata, Urban Mobile Interference Structures, Design / Fabrication" and the intensive workshops (CTID) "Plastic experiments at the North Port of Chalon-sur-Saône" and "B.U.L XL (Ultra-light Large Gadgets)"

Work required:

- Courses, methodological workshops and research follow-up
- Realization of a plastic work and writing of a pre-dissertation. Produce an observation and intervention monitoring logbook. Through a continuous practice of space, to create a problem, hypotheses, a research protocol.

Teachers:

SZUTER Dimitri
SA Alexandra
PIGOT Bernard
MAZLOUMAN Mahtab
FALZON Laurence
DESSARDO Marco

Teaching unit:

M72S – Seminar

ECTS credits: 4

Nbr of weeks : 14

Nbr of hours / semester : 49

Own work: 47

SEMINAR

A - AS-MS702 Scenography and architecture: scenography, an art of the place

Obligation to take the associated Initiation to Research course:

[S7-M72] UEM72 - A - AS - MIR2 Scenography and architecture: scenography, an art of place

ECTS credits: 2

Nbr of weeks : 14

Nbr of hours / semester : 21

Own work: 23

Objectives:

Scenography is considered an art of place in that its vocation is to shape the place of representation relating to a given work. The scenography thus regulates the relationship between the spectator and the work in a certain symbolic context. Today, the scenographer is in demand for fields other than theatre, such as museums, exhibitions, fashion shows, gardens, architecture and public spaces. Is scenography a tool, in its ability to give shape and above all space to an imaginary world? not through a given and definitively fixed place, but through the shifts that representation operates from a real place to an imaginary place, and from an imaginary place to a real place.

Content:

Scenography, a culture of space, a design tool for the architectural project
Theatrical aesthetics, scenic locations, scenography of exhibitions and exhibitions, cross-fertilization of artistic practices, scenography as a design tool for the architectural project.

In an approach to the history of theatre, the history of theatre and its major theories through the study of the spatial, aesthetic and symbolic evolution of the theatre venue.

We will analyze the scenographic field and its mutations in its relationship with the evolution of the different fields of spatial shaping and other fields of creation (visual arts, dance, music,...), architecture and public spaces.

The courses are composed of two parts: theatrical scenography (study of the genesis of a work, text, staging, scenography, performance venue, etc.) and scenography beyond the theater (visual arts, installations, performances, public art, exhibition spaces, exhibitions, dance, video, hybridization shows, etc.). Outings to shows and compulsory visits will be offered to students.

Work required:

- Courses and lectures on:

- ? theatrical scenography
- ? the scenic venues, the new venues, the theatrical architecture
- ? Cultural policy
- ? Scenography and the visual arts
- ? dance: Tanztheater, hybridization shows, use of video
- ? Public art / public commissions
- ? Public spaces
- ? the museography and scenography of the exhibitions

2- Methodological workshop and research follow-up

Several lines of research will be proposed to students, this list is not exhaustive and will evolve according to the problems encountered:

- ? scenographic design
- ? performance venues, represented space, representative space
- ? the looking and the watched / spectator, actor work
- ? the problems of the scenography of places related to the places of exhibition, museum, exhibition
- ? Public art in the city
- ? Contemporary creation in its scenographic dimension

Course materials:

Teaching unit:

M72S – Seminar

Teachers:

SAIDI SHAROUZ Mina
RESTREPO RESTREPO Esteban
REINERT Marie
REIP Hughes
PINATEL Flavie

ECTS credits: 4

Nbr of weeks : 14

Nbr of hours / semester : 49

Own work: 47

SEMINAR

A - AS-MS703 Art, Film, Architecture

Obligation to take the associated Initiation to Research course:

[S7-M72] UEM72 - A - AS - MIR3 Art, Cinema, Architecture

ECTS credits: 2

Nbr of weeks : 14

Nbr of hours / semester : 21

Own work: 23

Objectives:

How do art and cinema enrich the thought of architecture, while constituting themselves as fundamental critical tools for the practice of architecture?

Considered as a gesture that is both aesthetic and political, cinema makes it possible to tell the story of spaces, cities, territories, it acts as a seismograph of man's relationships with the places he inhabits or that he crosses.

This seminar is aimed at students who wish to engage in research in architecture, city and/or landscape through cinematographic reflection and practice. Reflection and practice that will be enriched by questions emanating from the field of visual and narrative arts, as well as anthropology and philosophy, in relation to architecture.

Content:

The seminar will be the framework for the elaboration of a thesis in two parts, including the production of a short film (10-15 mins) and the writing of a text (of about 60 pages). By avoiding dissociating form from content, we will consider the film and the written word as two elements of the same project. Thought out together, they will constitute the material of this hybrid research, artistic and academic, the filmed part and the written part

of which will be built in a work of correspondence and complementarity. All cinematographic forms are accepted: experimental cinema, fiction, documentary, essays. We also encourage forms of research and writing that hybridize demonstrative and scientific components, with experimental, artistic, and literary components.

It will be a question of working on his cinematographic gaze to give visual and written form to his own questions about architecture, and the issues that emerge from it. This will require the elaboration of a synopsis, a film structure and its development to address the problem formulated in the dissertation, to set up the conditions favourable to filming, to anticipate the development of the project and to achieve the adequacy between what we do and what we want to say. The project will develop in stages, from the note of intent, to location scouting, then filming and finally editing. All this is accompanied by a permanent work of reflection, research and writing, which also involves structural, formal and discursive biases.

Throughout the 3 semesters, lectures will allow students to theoretically understand the time taken to design a sequence or a film in order to analyze the development of an intention for filming, editing, and storytelling. By encouraging a critical eye, by situating the works studied and by confronting them with other works and other discourses, it will be a question of giving the student the means to exercise his thoughts, and to encourage him to establish his own links and rapprochements, to carry out his own research from the avenues of reflection raised in the courses.

4 CTIDs are associated with this seminar, namely: Building (for) a narrative (S7/S9), Road Movie (S8), City and Public Space in Images (S8) and Film Editing - Written Editing (S9). These CTIDs seek to deepen the reflections, methods and practices provided in the seminar courses

It is essential to have already made a few films in the bachelor's degree to join this seminar.

Enrolment limited to 32 students (including 10 Outgoing Erasmus students, and 4 incoming Erasmus students)

Work required: Formulation of a subject and a research problem, development of a plan and a biblio-filmography, film location scouting

Course materials:

Teachers:

MACAIRE Elise

GOURVENNEC Estelle

LAMOUREUX Margotte

CARLINI Sara

Teaching unit:

M72S – Seminar

ECTS credits: 4

Nbr of weeks : 14

Nbr of hours / semester : 49

Own work: 47

SEMINAR

B - HMU-MS705 Habitat and Sustainable Cities, for a Critical Approach to the Urban Fabric

Obligation to take the associated Initiation to Research course:

[S7-M72] UEM72 - B - HMU - MIR5 Habitat and sustainable city, for an approach to the urban fabric

ECTS credits: 2

Nbr of weeks : 14

Nbr of hours / semester : 21

Own work: 23

Objectives:

At a time when the climate emergency is challenging the social world and becoming an unavoidable issue in our territories, all the indicators remind us of the extent to which the continuous process of urbanisation weighs on social and environmental balances and contributes to the spread of carbon emissions. In this context, the objective of this seminar is to present an initial overview of the challenges of the ecological transition with regard to the processes of urban making through an approach focused on the production of housing and the sustainable city both from a theoretical and conceptual angle as well as from the point of view of the practices of actors (professionals, citizens, decision-makers, etc.).

Beyond the thematic approach, it will be a question, throughout this semester, of allowing the definition of a research subject that students will have to deepen during the S8 and S9 semesters in order to achieve the production of their dissertation. This work is built in the progressiveness and duration of the master's cycle.

Content:

This course is intended to be a place for collective reflection on the strategic choices and methods that contribute to urban and architectural design: how to think about the development of space, with regard to environmental and

climate issues? What professional, civic and political skills are being built or transformed?

Based on the analysis of both French and foreign architectural and urban practices, around the "sustainable housing and city" dimension, students will question the evolution of professions in their technical, economic and social dimensions. We will shed light on avenues for reflection and in-depth study on the sustainable architectural and urban challenges that territories and actors will have to face, with regard to new imperatives (climate and energy constraints, exit from fossil fuels, urban resilience, etc.). The frameworks and methods of production (manufacture of eco-districts, production of ecological architecture, dissemination of models of participation of different actors in the design and development processes, etc.) will be questioned according to a resolutely critical and comprehensive approach.

Work required:

- Active participation in theoretical and lecture courses.
- Creation of reading sheets.
- Development of a pre-dissertation (definition of a subject and a problem, presentation of a working method, bibliography).
- In connection with the Initiation à la recherche [IR 705] course, co-construction of an ABC of Sustainable Development and Ecological Transition.

Hourly load: 2h CM+ 1h30 methodological workshop and collective follow-up

Course materials:

<http://enseignementshmu.paris-lavillette.archi.fr/hvd/>

Teachers:

POMMIER Juliette

POLYCHRONIADI Aikaterini

Teaching unit:

M72S – Seminar

ECTS credits: 4

Nbr of weeks : 14

Nbr of hours / semester : 49

Own work: 47

SEMINAR

B - HMU-MS714 Architectures of inhabiting, process, urbanity, spatiality

Obligation to take the associated Initiation to Research course:

[S7-M72] UEM72 - **B - HMU - MIR14 Architectures of inhabiting, process, urbanity, spatiality**

ECTS credits: 2

Nbr of weeks : 14

Nbr of hours / semester : 21

Own work: 23

Objectives:

The objective of the seminar is to introduce students to architectural research. On the one hand, it is a question of grasping architecture as a field of knowledge under construction, on the other hand of experimenting with the tools and methods of research, and finally of acquiring a critical eye. This objective will apply in a privileged way to housing architectures, by opening up the investigation to several scales and disciplinary approaches. Starting from the point of view of design, the research will weave approaches in order to construct specific problems and hypotheses of this transdisciplinary object of study, between history, process, spatiality, reception and transformation. The research will thus cross the methods of investigation and analysis of architecture, history and the human sciences to question the architectures of the habitat in a retrospective and prospective way, questioning both contemporary issues and knowledge and theories built in the long term. A kind of "archaeology of the project", the research will make it possible to deconstruct the design process and the multiplicity of parameters that determine it.

Content:

The architecture of housing is the result of many factors. Adopting the designer's point of view, the design process is rooted first and foremost in a relationship with the client, and beyond that in a knowledge, or even a

vision, of the inhabitants and lifestyles in a given culture. This vision is based on the architect's culture, methods and posture. It is built over time, and intersects with the architect's career as well as the history of architecture in a given era and society. Indeed, the work of design is also part of a multiplicity of intersecting histories: that of the designer, that of the project owner, that of architecture, that of society. It also corresponds to a set of rules and methods that the architect adopts for himself, drawn from architectural theories or from his personal culture, experimented and transformed over the long term.

By adopting the point of view of the inhabitant, the question of inhabiting it arises. Understanding living means exploring the relationships that inhabitants establish with their habitat, from the scale of the dwelling to that of the building or even the neighbourhood. These relationships are built within a society and a culture, they evolve according to the times and the paths of each inhabitant. They are concretized in the ways of living, of occupying one's home and one's neighborhood, of appropriating spaces, of furnishing them or transforming them in the long term as the domestic group changes. Societal changes such as the diversification of lifestyles, the extension of life expectancy, or the transformation of housing/work relationships contribute to renewing ways of living and raising the questions of scalability and flexibility.

More broadly, the design of housing is part of a housing economy and policy, it integrates the laws of the market as well as the structures of production of the building. It evolves with the circumstances and must always be contextualized in the times. But the analysis of an object located in history is done from the contemporary, it necessarily questions our current problems: the evolution of lifestyles, the integration of the ecological question, the growing place of rehabilitation operations, the progress of techniques. These issues determine how we look at buildings past and present, and how we produce a knowledge of contemporary design.

The social dimension of housing, considered as a production and reflection of a society, is finally superimposed on the spatial and constructive dimensions that are at the heart of the architect's profession. What types of housing and spaces accommodate the different ways of living? How are they organized, sized, lit, equipped, and installed? What are their spatial qualities and their qualities of use? The design process, its tools of representation and negotiation, the theoretical notions that underlie it, and the culture of the architect participate in the production of housing architectures.

To address this set of questions, we propose to consider the architectures of housing at the crossroads of several approaches, emphasizing one or the other according to the problems of each student: if the analysis of the building remains essential, it could be associated, for example, with a historical study of the designer's career and theories, an analysis of the client's production practices, etc. or the examination of the organization of work at the architectural agency. The tools and theories specific to housing architectures will constitute both the objects of research and the instruments of analysis. Notions such as distribution, threshold, comfort, or

type can be questioned at different times, both in their definitions and interpretations and in their concrete translations. Similarly, the situations studied may concern a diversity of environments and types, from collective housing to individual houses.

By combining architectural analysis, theory, history, and even sociology, the seminar aims to shed light on the factors that contribute to the development of architecture, with the help of a transdisciplinary exploration of the research object. The issues may intersect with the work of design, the theorization that underlies it, the tools of representation that nourish it, and the perception of the built space resulting from the process. To carry out this research, different types of sources can be mobilized: buildings, considered as the first "documents" allowing the analysis of architecture, archives as a support for analyzing the design process, writings, whether books, articles or interviews (magazines are a fruitful resource), interviews with designers, and more broadly with the actors of built production. The methods of analysis, crossing history, architecture and sociology, will aim to mobilize the architect's tools to nourish and question the architect's knowledge.

Organization

1st semester: construction of the subject (theme, initial question, corpus, state of the art) and discovery of research methods (surveys, visits, archives, interviews, analysis methods)

2nd semester: survey and analysis of the corpus, problematic reformulation.

Writing exercise on a chapter, in the form of a small article

3rd semester: writing and defense.

Work required: Presentations Validation of the stages of the pre-thesis

Course materials:

Teaching unit:

M72S – Seminar

Teachers:

PATTERSON Michael Brent

PAILLARD Joffrey

ESSID Nada

LAURENS Christophe

ANTONIOLI Manola

ECTS credits: 4

Nbr of weeks : 14

Nbr of hours / semester : 49

Own work: 47

COURSE IN ENGLISH

SEMINAR

B - HMU-MS715 Territories of Political Ecology

Obligation to take the associated Initiation to Research course:

[S7-M72] UEM72 - B-HMU-MIR15 Territories of Political Ecology

ECTS credits: 2

Nbr of weeks : 14

Nbr of hours / semester : 21

Own work: 23

Objectives:

Within the framework of the field of study "Inhabiting Urban Worlds", the seminar proposes to study from a socio-political and aesthetic perspective emerging practices (in the fields of architecture, urban planning, but also arts and design in public space) that combine concern for the preservation and restoration of ecosystems with concern for a new ecology of social relations (especially in urban environments). The approach adopted will be clearly transdisciplinary and will focus on creating links with project teaching.

Content:

In the field of political ecology, opened in the 1970s and today in constant mutation, the seminar (while remaining attentive to other perspectives and theoretical orientations) will be part of the continuity of the philosophical and political project inaugurated by the psychoanalyst, philosopher and activist Félix Guattari at the end of the 1980s under the title of ecosophy (cf. Félix Guattari, *Les Trois écologies*, Paris, Galilée, 1989). Ecosophy proposes an ethical, political and aesthetic articulation between the three registers of environmental ecology (preservation of natural environments), social ecology (reinvention of social relations) and mental ecology (concern for the invention of new styles and forms of existence in order to preserve and restore individual and collective quality of life). She pays particular attention

to the future of the city and territories (where all these relationships are reinvented on a global scale) and to architecture as a place of design and evolution of the built environment, intended to give shape to new practices of neighbourhood, education, culture, transport, and links between generations.

Work required:

Course materials:

Teaching unit:

M72S – Seminar

Teachers:

SZANTO Catherine

KATZ Suzanne

FANG Xiaoling

IMPERA Sara

DE MARCO Rosa

ECTS credits: 4

Nbr of weeks : 14

Nbr of hours / semester : 49

Own work: 47

ENGLISH FRIENDLY
communication language

ITALIAN FRIENDLY
communication language

SEMINAR

C - MTP-MS707 Architecture/S and Landscape/S: The Fundamentals

Obligation to take the associated Initiation to Research course:

[S7-M72] UEM72 - C - MTP - MIR7 Architecture/S & Landscape/S

ECTS credits: 2

Nbr of weeks : 14

Nbr of hours / semester : 21

Own work: 23

Objectives:

To acquire the basics of a culture of landscape through the diversity of approaches to which it is subject, and their architectural relevance.

To explore the contributions of landscape thinking in the design and implementation of projects for the transformation of places: architectural projects, urban projects, artistic projects, territorial projects, landscape projects, etc.

To question the cultural models supporting contemporary policies of land use planning, "landscaping", and ecological transition.

Content:

A word invented to designate all or part of a painted image, the landscape today continues to shape and inform the development of contemporary spaces, whether extraordinary or ordinary, exceptional or everyday. Its importance, which has now been acquired in projecting the future of places, requires adequate training in the complexity of its field, in the renewal of architectural and urban practices that it induces, and in the displacement of territorial and environmental issues that it raises.

The seminar "Architecture/s and Landscape/S" therefore offers a three-semester training course at the end of which students will have the sufficient foundations to think and project architecture, city and landscape together.

The first semester of the seminar offers a first encounter with this field of knowledge. The first step will be to address the notion of landscape, its relations with other notions (space, site, place, environment, environment, territory, nature, garden, etc.), its fields of use, its potential for invention and creation, in order to fully understand its relevance and its contributions in the very act of architectural and urban design.

Secondly, it will be a question of analysing concrete realities, both political and spatial, territorial and environmental within which this notion is mobilised. The presentation of case studies, relating to the key periods of landscape, from the Renaissance to the present day, will allow us to better understand the sources of the current emergence of the landscape and to better situate it in the evolution of man's relationship with his environments.

Field trips are planned to experiment 'in landscape' with living spaces at different scales.

As a continuation of the seminar and the optional 'Introduction to Research', students will be supervised and supported in the development of their final thesis subject.

Extramural activities will complete the seminar's educational program. Among these, the 4th session of the Workshop Paris-Rome_#4 will take place, organized in partnership with the Department of Landscape Architecture of the University of Rome La Sapienza (third week of February 2024).

The A&P seminar is part of the research work carried out within the "Architecture, Environment, Landscape" research unit, which concerns, among other things, the study of notions and practices, past and present, in the field of landscape, their articulation with architecture and the environment. The confrontation of this triad with the ecological and territorial transition offers the opportunity to explore fields of study with a multiscalar and multidisciplinary approach also proposed within the seminar.

Work required:

The seminar (28 hours) is organized around papers presented by members of the "Landscape" team and by external guests acting in the intersecting fields of landscape, architecture, the city, but also the arts, sciences and letters. It gives rise to exchanges oriented around the fundamentals of landscape.

The dissertation follow-up (21 hours) is carried out in a group session in complementarity with the optional 'Architecture/S and Landscape/S: Introduction to Research'.

Teaching unit:

M72S – Seminar

Teachers:

ROBERTIES Emmanuelle

TASK Florence

FRICK CLOUPET Carla

BONNAUD Xavier

BODART Celine

BEUERLE Marine

BEGEL Antoine

ECTS credits: 4

Nbr of weeks : 14

Nbr of hours / semester : 49

Own work: 47

SEMINAR

**C - MTP-MS708 Architecture of Inhabited Environments:
Philosophy, Architecture, Urban**

Obligation to take the associated Initiation to Research course:

[S7-M72] UEM72 - C - MTP - MIR8 Architecture of Inhabited
Environments: Philosophy, Architecture, Urban

ECTS credits: 2

Nbr of weeks : 14

Nbr of hours / semester : 21

Own work: 23

Objectives:

All the major systems of planet Earth (the cycles of water, CO₂, biomass, sediments, ecosystems and climates) are changing and shaping a planet without antecedent, identified by this new geological era called the Anthropocene.

The history of the planet and of the living worlds appears as an unstable construction in which we are engaged, especially as architects, while human construction and the Earth system now form an interdependent and fragile whole.

More and more numerous and diversified architectural productions echo this context, engaging a new art of human settlement on the planet.

In the seminar, we therefore posit the hypothesis that architecture is one of the emblematic practices of this anthropocene context: in charge of human installations, it offers many palettes of intervention, with regard to new ecological, social, political, and aesthetic issues.

It is around these new urban and landscape architectural cultures, sensitive as much to objects as to environments, that the seminar deploys its program and accompanies students in their personal research work.

As much through theoretical investigation as from the study of the current diversity of alternatives, innovations and professional cultures, it is a question of working on the future of the architecture of the city and the development of territories from a thought of inhabited environments.

Content:

The first year of the seminar has a twofold objective.

The aim is to introduce the research activity (based on progressive exercises and supervised personal work), and also to provide specific knowledge and opportunities for exchange over the course of the sessions

Semester 7 is organized as a sequence of presentation of the vocabulary of inhabited environments based on the following notions

- The Anthropocene and these narratives
- Tools to rethink the idea of nature,
- Which metabolism for which cities?
- Relations between ecological sensibilities and new aesthetics,
- How to look at the fragility, the vulnerability of life forms
- Addressing the risks of disasters, collapses

Each time, details on the notions, projects, attitudes of an architect, will be found side by side during the sessions

Backed by the GERPHAU laboratory (Groupe d'études et de recherches Philosophie, Architecture Urbain), philosophy intervenes as an aid to problematization, as a power of questioning, as precision in the definition and evolution of the concepts used, it questions horizons, and opens up with intensity the prospective game at work in each research activity.

Work required:

Course materials:

Teaching unit:

M72S – Seminar

Teachers:

SAMIH Kawtar

PEDELAHORE Christian

KASSAB Dalal

LAGUIA Virginia

JAUPITRE Julie



ECTS credits: 4

Nbr of weeks : 14

Nbr of hours / semester : 49

Own work: 47

SEMINAR

C - MTP-MS709 Architecture, a sustainable factory for the whole world

Obligation to take the associated Initiation to Research course:

[S7-M72] UEM72 - C - MTP - MIR9 Architecture, a sustainable factory for the whole world

ECTS credits: 2

Nbr of weeks : 14

Nbr of hours / semester : 21

Own work: 23

Objectives:

This seminar is a place of elaboration twofold:

- Collective, that of the construction of an analytical and critical thought of international human spatial productions and their mutations over the long term.
- Individual, that of the workshop, patient and cumulative, of the production of the master's thesis, on the basis of the reasoned construction of a specific subject and problem, a referenced corpus, as well as a posture specific to each student.

CPL / JJ / VL

Content: This seminar is part of a dual theoretical and practical perspective:

- That of the inseparability of the scales of the making of anthropized spaces, from the most domestic knowledge and uses to the practices of the concrete and diversified production of the urban and the large international metropolitan territories.

- Those of the sharp apprehension of the spatial and social complexity of human, sedimentary and hybrid fabrications, both material and immaterial: archetypes, models, cultures, logics and dynamics of transformation. All this in a systemic way on

the scale of the prolonged bilateral exchanges between identities and cultures of the world's major civilizational areas: the Mediterranean, Asia, Latin America, the Middle East, Africa.

METHODS

The approaches, presented and illustrated, are those developed by urban and architectural scientific research in its multidisciplinary and intercultural procedures. They are articulated in the form of specific analyses that are upwards, retrospective and comparative. They thus constitute tools for in-depth knowledge of both the diversity and the universality of spatial fabrications and cultures - both scholarly and popular - on the scale of an intercontinental metropolisation recognized as a major human and civilizational fact.

https://parislavillettearchifr-my.sharepoint.com/personal/virginia_laguia_paris-lavillette_archi_fr/_layouts/15/guestaccess.aspx?share=EThtCEQNZbUtIn3EhCwtuFXkB AFdQ7rGflwqC-hR28qAqEA&e=rzQXsC

christian.pedelahore@paris-lavillette.archi.fr
 julie.jaupitre@paris-lavillette.archi.fr
 virginia.laguia@paris-lavillette.archi.fr

Work required: Lecture in French.
 Languages accepted (individual corrections): Spanish, English, Portuguese, Italian, Vietnamese.
 Work requested:
 - Course notes and readings as identification and construction of a research object and a personal problem.
 - A Thematic Dossier as a preparation of the individual dissertation corpus.

Course materials
 :

Teachers:

ROUGELOT, Benoît

FAAS Guillaume

HAMANI Dalil

EBODE Sylvain



Teaching unit:

M72S – Seminar

ECTS credits: 4

Nbr of weeks : 14

Nbr of hours / semester : 49

Own work: 47

SEMINAR

D - CCA-MS710 Construction Practices of the Architectural Project

Obligation to take the associated Initiation to Research course:

[S7-M72] EMU72 - D - CCA - MIR10 Construction and uses

ECTS credits: 2

Nbr of weeks : 14

Nbr of hours / semester : 21

Own work: 23

Objectives:

This seminar initiates the work that should lead to the production of a dissertation at the end of the master's cycle. The objective is therefore to lead students during the semester to:

- determine the field of study and the nature of the dissertation they will develop
- to gather useful ' materials ' around the constitution of a bibliography
- Identify the questions and pose a problem through the production of a first model of the dissertation.

Content:

From the beginning of their research, students are encouraged to link their thesis subject to their PFE subject in order to make their personal work coherent between reflection and project proposal. The dissertation then becomes the theoretical contribution nourishing the PFE. As a result, the issues that can be addressed in this seminar are diverse and touch on fairly broad thematic areas. Nevertheless, they will share a general framework linked to the project approach which is based on the dual point of view that considers the architectural project:

- as a long process, marked by highlights, from programming (and even upstream from an architectural and urban diagnosis) to implementation and operating returns, a necessarily iterative process to manage its complexity and evolution over time,

- as a collaborative work involving many actors, work necessary to respond to its heterogeneous and multidisciplinary nature.

The seminar proposes to deepen these two points of view by providing a critical and forward-looking look at current practices. The pedagogical objective is to bring students:

- to get to know the other actors better, their legitimacy and their profession (various project owners, design offices, specialized consulting engineers, companies, industrialists), to question the specific contribution of the project management (and the architect within it) and his role vis-à-vis the other actors,

- to understand the question of project management ('mastery and management of the project'),

- to discover where and how the decisive and founding decisions for the project are made.

Work required:

At the end of the semester, a document containing the work developed during the period is submitted: title, pre-problem, annotated bibliography accompanied by reading sheets, first iconographic database, possibly first results of the work (for example interview report) and work plan for the following two semesters.

Course materials:

Teachers:

DESCAT Sophie
KOURNIATI Marilena
CHABARD Pierre



Teaching unit:

M72S – Seminar

ECTS credits: 4

Nbr of weeks : 14

Nbr of hours / semester : 49

Own work: 47

SEMINAR

D - CCA-MS711 Critique and History of Architecture and the City

Obligation to take the associated Initiation to Research course:

[S7-M72] UEM72 - D - CCA - MIR11 Critique and history of architecture and the city

ECTS credits: 2

Nbr of weeks : 14

Nbr of hours / semester : 21

Own work: 23

Objectives:

2023-2024 teaching team:

Pierre Chabard / Sophie Descat / Louis Destombes / Carlo Grispello / Marilena Kourniati

The intense debates that accompanied the massive mobilization of architecture schools from February 2023 onwards highlighted the urgency for architects of a set of intertwined issues (environmental, socio-cultural, geopolitical, technoscientific) that definitively cast doubt on our theoretical, pedagogical, disciplinary and professional certainties. Starting from the principle that no return is possible or desirable, we propose to make the seminar "Criticism and Histories of Architecture" the collective and inclusive framework for prolonging reflection, deepening issues and renewing knowledge, by mobilizing the tools of history, a discipline that Manfredo Tafuri already saw, in his time, as "a perpetual contestation of the present, (...) a threat also, if you will, to the reassuring myths that allay the anxieties and doubts of architects 1".

(1) Manfredo Tafuri, Theories and History of Architecture, Paris: S.A.D.G. editions, 1976 (1968), p.307.

Content:

The lines of reflection and demand opened up during the mobilization will be welcomed and explored as potential fields of research, to contribute to a critical history of the contemporary. The first of these challenges is of course the rise of the ecological imperative that commits the world of architecture to transform itself and architects to rethink their role, their professional practices and the modes of production of the built environment. The building sector accounts for almost half of the world's annual CO2 emissions, if we consider the entire production chain, from the extraction of raw materials to the long-term maintenance of buildings, or even their deconstruction. Faced with this constant, some authors call for a drastic reduction, or even a pure and simple "moratorium" (1), on new construction. Rather than the death of architecture, Pierre Caye sees it as its rebirth. The maintenance, repair and perpetual transformation of buildings already built – "heritage", in the broader sense – can, according to him, constitute an alternative productive model to neoliberal capitalism, a productive model that is more intensive than extensive, where the theoretical and practical skills of the architect once again become central: "It is up to architecture to disarm this global and mechanical mobilization at the origin of the wear and tear of the world, by replacing it with its own mobility, peaceful and serene. (2) »

Project crisis

These crucial issues call into question, one after the other, some of the foundations of the discipline. It is first and foremost the figure of the liberal architect that must be redefined in the light of the renewal of practices and knowledge, but also of the demands emanating from social, cultural and sexual minorities. It is also the aesthetics of architecture that must be departed from the tyranny of fashion and novelty in order to make it more inclusive, hybrid, composite, turned towards "agency" (3) rather than form, maintenance rather than performance, duration rather than space. This is also the primacy of the notion of "project" whose problematic roots in dominating, vertical and extractive Western modernity have been clearly shown by anthropologist Tim Ingold. Against this, he invites us to think differently about the articulation between the "thinking", the "saying" and the "doing" of architecture: "Doing then consists in a process of correspondence: not imposing a preconceived form on a raw material substance, but drawing or delivering the immanent potentialities of a world in the making. (4) »

Critical History of the Present

To fully grasp the potential of these new issues, it is crucial to trace their genealogies, to follow the way in which postmodern thought of the second twentieth century worked on them upstream and, above all, to document,

with the tools of history, the often minority episodes which, in the field of architecture, prefigured and prepared their current emergence. Precisely, for at least its first two decades, the Paris-la Villette School of Architecture (ex-UP6), founded in January 1969, was the effervescent, militant and experimental focus of a pedagogy whose mission was to train "reflective practitioners, critical intellectuals and citizen architects", taking into account in turn non-Western (Jean-Paul Flamand) and non-metropolitan (Norbert Chautard) territories. anti-globalization utopias (Gustave Massiah), the participation of inhabitants (Jean-Pierre Lefèvre), the rights of homosexual minorities (Roland Castro), the search for constructive (David-Georges Emmerich) or energetic (Georges and Jeanne-Marie Alexandroff) alternatives. At a time when these questions, once marginal, are becoming central, it is urgent to study these episodes in detail in order to be able to write the next ones.

We are convinced that schools are the privileged places to initiate and experiment with new approaches to architectural practice and the mode of production of inhabited environments, in order to refound architecture and redesign its social, political and environmental role.

(1) Charlotte Malterre-Barthes (texts), Zosia Dzierzawska (drawings), "A Global Moratorium on New Construction", *The Architectural Review*, 2021, p. 36-40.

(2) Pierre Caye, "The Most Modern of the Ancients, the Most Ancient of the Moderns", in Arnaldo Rivkin, with Alberti. *Considerations intempestives sur l'architecture*, Paris, Éditions de la Villette, 2023.

(3) Translation of 'agency', agency (or agenciality) is an Anglo-Saxon notion introduced into architecture by Jeremy Till to designate what architecture "does" (cf. Jeremy Till, Nishat Awan and Tatjana Schneider, in: *Spatial Agency: Other Ways of Doing Architecture*, London, Routledge, 2011).

(4) Tim Ingold, *Faire, Anthropologie, Archéologie, Art et Architecture*, Paris, Dehors, 2017, p.79.

Themes developed in recent years:

Alternative forms of architectural action: multidisciplinary collectives (Isaac Naffer (2023), Violette Syrot (2022)), architect makers (Juliette Montfrond (2022), Camille Sauze (2022)), architect-publishers (Filiz Keysan (2022), Maud Yvon (2022)), the agency as a company (Romain David (2018)).

The history of architecture education: Clara Garcia (2021), Juliette Pihan (2019), Auriane Bernard-Guelle (2017), Simon Baudry (2018), Sophie Galarneau (2017).

Cultures and Constructive Experiments: Émile Drillaud (2023), Raphael Merlet (2023).

Architectural space through the prism of gender studies (Lois Paulin (2021), Martina Silvi (2016)).

Architecture and the Postmodern Condition: Tom Bardout (2023), Zoé Frommer (2023), Laura Nguyen (2022), Jade Baudouin (2018), Ivana Mardesic (2016).

Architecture and politics: Mustafa Kridly (2022), Lucie Doligez (2022), Vsevolod Zarichnyi (2020), Jules Armbruster (2020), Aurélie Reuther (2017). The logics of consecration and the architectural starsystem: Siyang Guo (2018), Julia Piasco (2017).

The work of reference, interarchitectuality in architectural design (Lancelot De Roucy (2022), Léo Figuet (2021), Elisa Nicolazik (2020), Nina Balliot (2018), Vincent Fourel (2018)).

Six dissertations have been awarded since 2017:

Dissertation Prize of the Maison de l'architecture d'Île de France:

REUTHER, Aurélie, Architecture and Vergangenheitsbewältigung: The Silent Architecture of a Conflictual Memory, 2017

BERNARD-GUELLE, Gabriel, The Teaching of David-Georges Emerich in Schools of Architecture: Influence and Isolation, 2017

BALLIOT, Nina, From Avant-Garde to Neo-Avant-Garde. The Updating of Russian Constructivism by the Architects of the AA, 2018

FIGUET, Léo, Radical Revival: Plural References to Radical Architecture since 1996, 2021.

GALOPIN, Hugo, The Nature of the Machine. The space of the automobile among French organic architects, 1962-1990, 2022

Rémi Butler Prize:

DAVID, Romain, OMA born again, 2018

Sixteen dissertations were awarded the following mention:

BESSON, Elsa, The Written Prison: The Making of Prison Space in Legal and Architectural Discourses from the Mid-Eighteenth to the Mid-Nineteenth Century, 2013

EL KADDIOUI, Hakima, Will the Return of Ornament Take Place?, 2013

GIORDANO, Élise, The Cabin, Mediatized Refuge of the Crisis. In the discourse of the collectives Exyzt and Cabanon Vertical, 2013

MARDESIC, Ivana, Emergence and Reception of Postmodern Architecture. The Case of Ricardo Bofill, 2016

SILVI, Martina, History and Geography of the Gender Question: In the Italian Architectural Debate since the 1990s, 2016

REUTHER, Aurélie, Architecture and Vergangenheitsbewältigung: The Silent Architecture of a Conflictual Memory, 2017

BALLIOT, Nina, From Avant-Garde to Neo-Avant-Garde. The Updating of Russian Constructivism by the Architects of the AA, 2018

Baudry, Simon, Attaching the teaching of architecture to the university. Failure and metamorphoses of a claim (1962-1977), 2018

BEAUDOUIN, Jade, Overview 1978-2018. 40 years of debate around the Abraxas Spaces by Ricardo Bofill, 2018
 BERNARD-GUELLE, Gabriel, The Teaching of David-Georges Emerich in Schools of Architecture: Influence and Isolation, 2017
 DUCROCQ, Marie-Anne, The Strategy of Silence: Reception of the Reconstruction of the Church of Saint-Elie in Lebanon, 2018
 BETTING, Hugo, L'avoir lieu d'une utopie. Critical History of the Moving Ring, 2018
 DAVID, Romain, OMA born again, 2018
 RICHARD, Perrine, Glass is in the apple: the use of structural glass at Apple, 2001-2017, 2019
 BURQ, Benjamin, Hôtels industriels parisiens. The Multiple Lives of a Manifesto Program, 2021
 FIGUET, Léo, Radical Revival: Plural References to Radical Architecture since 1996, 2021.

Eight students continued their doctoral research:

BESSON, Elsa, Spatial Logics and Penal Logics: Actors, International Models and the Diffusion of Prison Architecture in France (1770-1950), defended in December 2021 at the University of Rennes 2, under the supervision of Hélène Jannière.

EL KADDIOUI, Hakima, Orning the Daily: Process of Ornamentation of Private Collective Housing in Ile-de-France (2009-2016), defended in December 2022 at the University of Paris 1, under the supervision of Valérie Nègre and Pierre Chabard.

BOUROUIBA, Lyna, The Zero Degree of Architectural Writing, in progress since 2019 at the Université Libre de Bruxelles, under the direction of Wouter Van Acker.

BERNARD-GUELLE, Gabriel, L'Enseignement de la construction dans les écoles d'architecture entre les années 1940 et 1990, en cours à l'Ensa Normandie depuis 2019, sous la direction de Caroline Maniaque.

DAVID, Romain, Ethnohistory of Architectural Production: OMA, 1987, 1995, 2002, in progress at Harvard University since 2019, under the supervision of Reinhold Martin.

FELDMAN, Deborah, Stay Home! Intimacy and its architecture in the digital age, in class since 2020 at the University of Paris 10, under the direction of Alessia de Biase and Pierre Chabard.

BETTING, Hugo, Illusion of immersion: the annular theatre 1910-1970, in progress at Harvard University since 2020, under the direction of Antoine Picon.

Work required:

The life of the seminar alternates between several types of sessions: firstly, lectures that feed into the three themes of the seminar based on the research work of the teachers, conferences by external speakers on particular points and in situ visits according to the occasions and the themes dealt with, regular sessions for the follow-up of the dissertations

Nourished by an optional course of introduction to research methods, this first semester of the seminar should lead to the writing of a detailed research project and a bibliography. To this end, the work will focus on exploratory research, the construction of the problem, the development of a state of knowledge and the choice of a field.

Course materials:

Teaching unit:

M72S – Seminar

Teachers:

VITALIS Louis

TUSCHER DOKIC Anne

SATTLER Lea

SILVESTRE Joaquim

DUCLOS PREVET Claire

ECTS credits: 4

Nbr of weeks : 14

Nbr of hours / semester : 49

Own work: 47

ENGLISH FRIENDLY
communication language

ITALIAN FRIENDLY
communication language

SEMINAR

D - CCA-MS712 Knowledge of Instrumented Project Activities

Obligation to take the associated Initiation to Research course:

[S7-M72] UEM72 - D - CCA - MIR12 Design Activities and Instrumentation

ECTS credits: 2

Nbr of weeks : 14

Nbr of hours / semester : 21

Own work: 23

Objectives:

The mode of production and the evaluation of the architectural project have been little questioned. Nowadays, this questioning cannot do without examining the first instrument of design: the brain. But it does not function by floating in isolation in an ether of ideas. It is embodied in a body and integrated into an environment. It extends to the outside world through mediation instruments. Traditional tools (paper, pencil, tee, square, compass, etc.) and digital tools (computer, screen, keyboard, mouse, etc.) support many supports and catalysts for project thinking: the oldest such as the sketch, the geometric, the descriptive, the vocabulary or the physical model, but also the most modern such as the digital model, algorithmic processes, multi-agent systems, etc. grammars of shapes, or artificial intelligence.

It is this embodied and instrumented conception of the project that the seminar 'Knowledge of Instrumented Project Activities' (formerly Design Activities and Instrumentation) proposes to explore with students for three semesters. The research axis of the seminar, which could be described as metacognitive, is transversal to many themes: constructive thinking, tectonics, ecology, digital technology, materials, perception, emotions, empathy...

Content:

The seminar takes place in several stages:

- A time for theoretical teaching: the sciences of architectural design are approached through different models of explanation of design and project activities.
- A time to present contemporary anchor points of architectural design: biomimicry, neuroarchitecture, algorithmic architecture, smart cities, BIM, project pedagogy, serious gaming.
- A time to present research instruments and tools for the project: virtual reality, BIM, deep learning, parametric modeling, optimization algorithm, eye tracking, electroencephalogram (EEG), 3D scanning (photogrammetry, Sfm), 3D printing.

The SAPI seminar is intended to be a place where people can speak freely and listen attentively. It is led by members of the CNRS MAP-MAACC research laboratory. This supervision ensures a solid training in scientific research methodologies. It also offers the chance to discover the laboratory's research work as well as to participate in its experiments. Students are encouraged to propose presentations of new themes and tools in order to expand the field of reflection.

Work required:

Popular science readings and then readings of scientific articles. If necessary, constitution of a corpus. Writing of a problem note and a schedule of the research work.

Course materials:

A website provides students with the content of the courses as well as the documents and methodological tools necessary for the completion of the dissertation. A presentation of the course is available on this website <http://maacc.paris-lavillette.archi.fr/S>

Teaching unit:

M72S – Seminar

Teachers:

TILLY Linnea

MAUMI Catherine

BRUCCULERI Antonio

GALLO Emmanuelle

BASSIERES Laurence

ECTS credits: 4

Nbr of weeks : 14

Nbr of hours / semester : 49

Own work: 47

SEMINAR

E - IEHM-MS713 History and Practices of Transformations in the Built Environment

Obligation to take the associated Initiation to Research course:

[S7-M72] UEM72 - E - IEHM - MIR13 History and practices of transformations of the built environment'

ECTS credits: 2

Nbr of weeks : 14

Nbr of hours / semester : 21

Own work: 23

Objectives:

The teaching provided in the seminar 'History and practices of the transformations of the built environment' aims, through the production of a dissertation, to develop a reflection based on the specific tools of historical research, in the fields of architecture, the city, the territory, techniques or heritage. The ambition is to shed light on the decision-making methods, the actors involved, the terms and conditions of the debates, the values invoked, the modes of application and implementation of the policies adopted, and concrete practices for the transformation of buildings.

The dissertation must show the mastery of research methods: definition of an original subject, clearly defined in terms of problem and chronological and geographical boundaries, production of a state of the art, presentation of the sources mobilized, creation and implementation of research instruments, research specific to the subject studied (databases, maps) development of a problematized plan, writing of a scientific text.

While the subjects can concern all geographical areas and all periods, including the most contemporary, the sources to be mobilized, whether

written (archival collections, journals, publications) or oral (interviews), must be clearly defined, localized, and accessible during these three periods.
Semesters.

Content:

The program is designed to alternate:

- Conferences by teacher-researchers,
- Milestone work to be done throughout the year
- Individual corrections during method and writing workshops.

While the lectures are intended to enrich students' reflections on various subjects, the stage papers and workshops are designed to allow students to gradually master, while questioning, the tools and methods of research in the fields of heritage and the history of architecture, the city and the territory.

Visits:

- Visit of documentation sites (Musée d'Orsay, Archives de Paris, National Archives, etc.)
- Site visits: (Suresnes open-air school, Dravil garden city, etc.)

Study trip:

A study trip is organized in the spring, with students from other seminars, the AHTTEP Immersion post-master's degree, PhD students from the AHTTEP laboratory and students from other schools or universities.

Work required:**Course materials:**

Slideshow, bibliography and online documents

Teaching unit:

M72S – Seminar

Teachers:

PORTNOI Anne

MERON Nava

DESCHAMPS Catherine

JOLY Julien

CHASTANIER Frédéric



ECTS credits: 4

Nbr of weeks : 14

Nbr of hours / semester : 49

Own work: 47

SEMINAR

E - IEHM-MS717 How to live together? Theories and Forms of Collective Architectures

Obligation to take the associated Initiation to Research course:

[S7-M72] UEM72 - E - IEHM - MIR17 How to live together? Theories and Forms of Collective Architectures

ECTS credits: 2

Nbr of weeks : 14

Nbr of hours / semester : 21

Own work: 23

Objectives:

This seminar focuses on the architectures of collective life: from built heritage to territory, from urban fragment to public space. Around historical or contemporary cases of various scales, of built or unbuilt projects, the aim is to make visible uses, spatial devices, types or transformations, with regard to issues of sharing, neighbourhood or coexistence that intrinsically link society and the environment.

Territorial, typological, morphological and structural analysis tools as well as a set of theoretical texts and documentary resources are mobilized in order to characterize these collective architectures as singular or serial objects. The production of original drawings is articulated with reasoned reflection and investigation in order to produce a properly architectural research.

- Registration: julien.joly@paris-lavillette.archi.fr // anne.portnoi@paris-lavillette.archi.fr // catherinedeschamps45@yahoo.fr

Content:

Introduction

It is difficult to know what tomorrow will bring. There is a big question mark ahead of us. A titanic project awaits us to change our lifestyles, our

organizations, our ways of inhabiting the planet. This project, imposed by circumstances, comes at a time when faith in the collective is worn out by all the political adventures of the twentieth century. Having to act collectively while no longer believing in collective action: this is the impossible equation that we are obliged to solve. The seminar starts from this starting point: we must renew our understanding of what makes up a community in order to be able to reconnect with politics. And it is not a question of activism but of investigation. Investigations to bring to light this world of tomorrow that is beginning in a thousand scattered places where various forms of coexistence are experienced and lived. The successes and disappointments of these communities are knowledge that must be sought. It is difficult to know what tomorrow will bring. But we can make assumptions. We know that we will have to "land". This means, among other things, that the perimeter of our actions, of our lives, will be restricted. Our hypothesis is that this return to the local promotes more collaborative forms of existence. These forms of coexistence are probably matched by forms of commissions for architects that are different from those currently known. What will be the extent of these transformations? We don't know. Some architects want to be actors in this transition. With this in mind, we want to work upstream: to produce knowledge of public interest to understand and equip ourselves before acting. With the support of the social sciences, architects have an understanding of places and projects, a habit of combining heterogeneous problems allowing them to approach the subject of coexistence, of common making with a gaze that sees what others do not. In the tension between the future and the past, it is also a question of making our own this sentence of the historian Patrick Boucheron: "If the past has authority over our lives, it is not because it encumbers them with the weight of tradition. It is because it expands our experience, or better, because it constantly revives the idea of experience and, in doing so, makes it possible again. »

Intentions and themes

The use of the term "community" refers to different meanings depending on the period and the country considered. Similarly, what is shared, in the strong or weak sense, and the tension between individual freedom and group cohesion vary from one project to another. The invariable of the seminar is the attention to form, space, design, and their power to make the difference. How was the design of projects thought out to facilitate or represent community life? And what does this tell us about the conceptions of architects, urban planners, decision-makers? In this context, each device is assessed by comparison with other pre-existing models, so as to grasp the interplay of consensus and controversies beyond a particular case and a singular era. The objects of study, historical or contemporary, are of various scales. These are built or unbuilt projects and they are analysed as landscaped, inhabited, situated, delimited and perceived spaces. Their descriptions are made through the study of their paradigms, their use values, their distributive forms, spatial equality or privatization, as well as

through their mutations or typologies of transformations. When possible, they are observed in situ, repeatedly, to carry out the investigation, giving time a chance to move the line of preconceptions, without obstructing the possibility of taking a position. Shared spaces are also matched by shared time. Roland Barthes, in *How to Live Together*, praises "idiorhythmic" communities, where individual and collective rhythms coexist harmoniously. One thing is certain, time can make or break the local life of communities: think of dormitory towns. The city of the quarter of an hour and the office of time are attempts to respond to metropolitan desynchronization.

The study of the forms of coexistence is rich in many potential themes, all of which nourish the reflection on the future of our ways of living: intimacy and surveillance, autarkic utopias, the relationship to the outside world, land use, the structure of land ownership and the sharing of local resources, the distribution of power and its representation, the relationship between architecture and the city, the relationship between collective space and space politics, etc. A few examples, among others, of themes attached to places:

- Inventing in the existing

Whether it is a question of "revitalisation" projects in town centres, projects to convert industrial rights-of-way, or to renovate run-down condominiums, the challenge is invariably to resurrect a lost or weakened community life locally. To enrich project approaches, it makes sense to objectify the most common community representations, both those that permeate places and projects and those that motivate the actors. But in no way is it a question of opposing the concreteness of the building and its potentials to the ether of representations. The challenge is operationality, in a context where the architect is increasingly faced with decision-making groups.

- Community utopias

From Fourierist housing to gated communities, from garden cities to post-68 utopian communities, from the Kommunalke to Swiss or Dutch participatory projects... Community housing has accompanied architectural modernity. Whether they are conceived as an enlightened avant-garde, as an alternative or as a refuge, these projects face the same challenges: renewing the spatial forms of the collective, defining themselves in relation to the surrounding world, accepting the limits of a local utopia or having to endure after their foundation. In the context of the climate and environmental crisis, the community utopia is undergoing major renewals. The local and community level must be reinvested.

- Real villages and mythical villages

From the historic villages centred on agricultural production, forming a community in the shadow of the lords, to the contemporary satellite villages of the metropolises, the gap is wide. However, the spectre of the village community is everywhere, even in the heart of cities where the "village

spirit" and its supposed conviviality are common arguments for territorial promotion. The new missions of revitalization of town centers raise the question of the forms of community in two ways. Both because they confront designers with local infrapolitical interactions and because the community is often the very object of the commission. 'Revitalisation' or 'revitalisation' is always ultimately about the very being of the local community.

- Degraded co-ownership and energy renovation

One of the difficult points for driving the energy transition in the years to come concerns condominiums. There are many difficulties, starting with the inadequacy of public aid. But alongside the problem of funding, a less identified difficulty is our poor understanding of the decision-making mechanisms within these collectives. Identifying the divergent or converging interests of the actors, understanding how a local opinion is formed is not easy. If there is one place where the social and ecological imperative collide, it is that of the degraded co-ownership.

- Human and non-human communities

The conversion of industrial wastelands into cultural venues is becoming a new commonplace of gentrification. If the subversive charge of the first occupations has largely eroded, the diversity of what is invented in these places must be looked at carefully. New arrangements are emerging between collectives of all kinds, places and stories that have been reinvested. Various experiments attempted to include "non-humans" in human communities and their deliberative bodies: Notre-Dame des Landes, Parliament of the Loire, etc.

Half-yearly organisation

The study program is organized by semester, associated with courses, external interventions, conferences and thematic exercises, dealing with different scales and issues. Each semester corresponds to specific restitutions, in order to accompany students in the figurative and editorial production of the dissertation.

- S07: exploratory semester, dedicated to the constitution of a common and shared culture and methods, through thematic interventions, applied exercises and accompanied visits

- S08: elaboration of individual problems, punctuated by student presentations, grouped by thematic or methodological proximities, with presentation of a detailed plan of the dissertation in the form of a poster

- S09: individualized supervision of the writing of the dissertation. Semester sometimes shared with S07.

Students on mobility (erasmus)

For students on mobility, a specific follow-up will be organised, with adapted schedules. In addition, content such as CM or conference will be made available in replay.

Work required:
Course materials:

Teachers:

IOSA - FOURNEL LEMUR Ioana Liana
LEITNER Patrick
HELAND Laure

Teaching unit:

M72S – Seminar

ECTS credits: 4

Nbr of weeks : 14

Nbr of hours / semester : 49

Own work: 47

SEMINAR

E- IEHM-MS716 Built cultural heritage: expertise and reuse in France and abroad

Obligation to take the associated Initiation to Research course:

[S7-M72] UEM72 - **E-IEHM-MIR 16 Built cultural heritage**

ECTS credits: 2

Nbr of weeks : 14

Nbr of hours / semester : 21

Own work: 23

Objectives:

With an international dimension and an open vision of the notion of heritage, this seminar questions policies, protection and conservation mechanisms, as well as the logics of consumption or reuse of cultural heritage, tangible, intangible and dematerialized, protected or unprotected. It is thus at the crossroads of the architectural, social, environmental, political and normative issues of heritage making. In this perspective, it raises the question of temporal reconfigurations, social productions and appropriations of built heritages, with a particular interest in the question of the expertise, competence and legitimacy of heritage "makers", with a particular interest in mediation, experimentation and awareness of heritage. This seminar thus aims to become a privileged framework for analysing the spatial effects of financing mechanisms complementary to ministerial policies (such as the Heritage Lottery or crowdfunding) with a particular interest in rural or depressed territories. These rural territories, captured in the often competitive logics of tourism development and revitalization, as well as cultural or natural landscapes, small and medium-sized cities, or urban renewal districts, will all be at the heart of our research. Finally, this seminar questions the growing place occupied by innovation in heritage sciences, namely participatory or inclusive devices, but also virtual reality, geolocation, social networks, etc.

The teaching team - mainly made up of teacher-researchers who are members of the Laboratoire Espace Travail of the UMR CNRS Lavue - as well as its guests, will present case studies in France and abroad: Italy, Romania, China, Japan, Nepal, the United States, etc.

Content:

Organization: The seminar includes three types of sessions:

1. Methodology courses in S7: Qualitative survey methods (observations, interviews, mapping, documentary corpora, etc.), scientific writing techniques (referencing, bibliography, etc.) and those of representing the data collected are presented.

2. Lectures and conferences in S7 and S8: an opportunity to discover remarkable research or practices in the field of heritage preservation or transformation.

3. Individual (or small group) follow-up of the dissertation, for students in Paris.

Individual follow-up of Erasmus students is weekly. It is provided by a referent supervisor. Remote supervision is carried out through various software, applications and digital platforms and adapts to the student's schedule in his or her host country.

Finally, thematic and methodological comparisons can be made between this seminar and groups P701, P702, P703, CTID 732, CTID 733, CTID 737, P810, P912, etc.

Work required:

Reading and critical analysis exercises of texts proposed by the teachers.

Course materials:

Teaching unit:

M73CTA – Construction – Ambiances

Teachers:

MAHIEU Yves



ECTS credits: 3

Nbr of weeks : 14

Nbr of hours / semester : 42

Own work: 35

CONSTRUCTION - ATMOSPHERES

MCTA Earth & Canvas

Objectives:

Content:

Work required:

Course materials:

Teaching unit:

M73CTA – Construction – Ambiances

Teachers:

RIGAUD Jean Pierre

ECTS credits: 3

Nbr of weeks : 14

Nbr of hours / semester : 42

Own work: 35

CONSTRUCTION - ATMOSPHERES

MCTA701 Architectural light and acoustics

Objectives:

- This course is based on the observation of light and sound atmospheres during visits scheduled on Thursdays from 10:30 a.m.
- Enrich the learning of the project through the approach of light (natural and artificial) and acoustics in the apprehension and design of volume, of the object in volume and of volume in its urban or landscaped environment.
- Familiarize students with the use of the project's constituent elements (materials, colours, surfaces, volumes, solid/voids, openings, masks) in interface with light and acoustics.

Content:

- Understanding of light and acoustics through lectures (ambient parameters, definition of needs, colours and materials, regulations).
- Guided tours of significant sites and real case studies in situations through experimentation and critical observation, essential complements to the theoretical approach.
- Interventions by lighting and acoustics professionals for a pragmatic approach to the themes and to familiarize themselves with the expectations of a project owner.

Teaching unit:

M73CTA – Construction – Ambiances

Teachers:

POIRIER Vincent

ECTS credits: 3

Nbr of weeks : 14

Nbr of hours / semester : 42

Own work: 35

CONSTRUCTION - ATMOSPHERES

MCTA702 Rehabilitation/interventions on old buildings

Objectives:

This course proposes to raise students' awareness of rehabilitation work on ordinary built heritage.

It should enable them to acquire knowledge of the current construction processes of buildings built between 1850 and 1930 and of the appropriate construction devices to be implemented for their rehabilitation.

Content:

The course is structured around the following themes:

- Analysis and identification of constructions (before 1850, between 1850 and 1900, between 1900 and 1930, after 1930), highlighting of the different typologies (wooden and stone constructions, half-timbering, half-iron, concrete structures)
- The constraints of rehabilitation
- Architectural diagnosis
- The construction principles by period (adaptation to the soil, main structures, envelope, partition).
- Technical diagnosis
- Interventions and rehabilitation works, according to typologies:
 - . Adaptation to the ground (underpinning, infrastructure work, moisture treatment).
 - . Main structures: load-bearing walls and floors (disorders and reinforcement work on structures and frameworks)
 - . Envelope: (Disorders and treatments of walls and roofs)
 - . Equipment.
 - . Comfort and thermal and acoustic performance

Two detailed case studies and site visits will illustrate as much as possible the content of the course (eighteenth-century building in a protected sector, late nineteenth-century suburbs in Paris, etc.).

- Work required:**
- Tutorial 1: Dating exercise on common typologies of Parisian buildings from 1850 to 1930
 - Tutorial 2: Oral and written restitution of one of the themes specified at the beginning of the semester in relation to the buildings analysed by period (sanitary quality of housing, accessibility, fire safety, thermal, acoustics, etc.), accompanied by a graphic production of large-scale details.
 - TD3: Thematic exercises on old buildings (proposed by the teacher)
- Course materials:** Sent to the student at the beginning of the session (3 to 4 supports).

Teaching unit:

M73CTA – Construction – Ambiances

Teachers:

COMITO Viviana

ENGLISH FRIENDLY
communication language

SPANISH FRIENDLY
communication language

ITALIAN FRIENDLY
communication language

ECTS credits: 3

Nbr of weeks : 14

Nbr of hours / semester : 42

Own work: 35

CONSTRUCTION - ATMOSPHERES

MCTA703 + 4 °C. SUMMER THERMAL, WATER MANAGEMENT AND BIODIVERSITY INTEGRATION

Objectives:

Understand the levers of action in construction to mitigate the impact of global warming, by articulating a global view and concrete measures at the scale of the building and the landscape.

Content:

The ongoing climate upheaval confirms the urgency not only of reducing CO2 emissions in the construction and operation of buildings, but of the need for adapted architecture.

Three interdependent axes will be developed, favouring a multiscale approach.

1. The thermal strategies of passive cooling (protect - avoid - dissipate - cool - minimize) and active cooling (technical devices with a low environmental impact, particularly in low-tech). With a focus on ventilation and the combination, in temperate climates, of hot and cold strategies. Types.

2. Water management: preserving, reusing, reusing this resource, from wastewater to rainwater, from landscape to buildings.

3. Integration of biodiversity: vegetation is our best ally for climate control. To identify and question the reflexes of an anthropocentric approach with a view to leaving room for the living as a whole as one of the solutions to the current crisis.

Work required:

In pairs or small groups, in-depth study, visits and presentations of projects applying specific strategies in the three axes of the course.

The students will then make proposals for the application of passive and active devices by integrating them into their projects (under study in their project groups) and starting from landscape and urban integration to the scale of detail. The path of water becomes a common thread of the project. It is often not a question of adding technical devices but of generating

architecture. Example: the layout and configuration of the openings will be thought out according to their orientation and in such a way as to promote natural ventilation, a water retention device on the plot is displayed as micro-architecture in a renovation project...

Manufacture of a low-tech device (e.g. summer fridge) and a large-scale model of a device related to the project (e.g. ventilation devices, windows, green roof, etc.).

Course materials: Pdf of the course (downloadable on <https://ensaim.jimdofree.com/>).

Teaching unit:

M73CTA – Construction – Ambiances

Teachers:

Surcheva KIROV Cveta

ECTS credits: 3

Nbr of weeks : 14

Nbr of hours / semester : 42

Own work: 35

CONSTRUCTION - ATMOSPHERES

MCTA704 Rehabilitation and sustainable development

Objectives:

OBJECTIVES

1.INTRODUCTION

France: 32 million existing housing units to be rehabilitated according to current needs for comfort and awareness of environmental, social and economic issues

370,000 housing starts for the whole of 2011,

The rehabilitation and regular maintenance of buildings instead of deconstruction (when feasible) makes it possible to significantly reduce the consumption of raw materials and particularly energy

A good diagnosis is the key to good rehabilitation

A diagnosis cannot be limited to dysfunctions and pathologies, it must first highlight the qualities of the buildings to be preserved as well as their possibilities for development by being part of a sustainable approach

Rehabilitation is an important market for our future architects which is much more complex than that of new construction

2. OBJECTIVES

- integrate the concept of sustainable development into the rehabilitation process

- be able to establish a broader diagnosis of dysfunctions and opportunities, a diagnosis that takes into account, among other things, the interaction with the site, the social form of occupation, the technical issues according to the type of administration (co-ownerships, owner-occupiers? tenants?), the economic possibilities, the cultural and heritage value, the current regulations, taking into account their possible evolutions. It is a question of being able to think in the short, medium and long term.

- be able to choose the intervention techniques according to each typology and management methods.

- Appropriate a diagnostic methodology, for a transversal action based on multi-criteria hierarchical choices
- future architects must acquire a methodology of analysis and at the same time have a clear awareness of the limits of their interventions, by knowing what type of expertise to use on a case-by-case basis.

Content:

3. SUMMARY CONTENT OF THE LECTURES:

- Introduction to the problem of rehabilitation: the major challenges of rehabilitation, social, environmental, economic
- the different stages of a rehabilitation process. The place of diagnosis in each of them.
- Objectives of the project owner: limits of the diagnosis
- typological identification
- Diagnosis: pathologies due to poor original design? inadequate rehabilitation? a defect in the quality of the materials? Of a poor implementation?
- Opportunity diagnostics: e.g. rainwater harvesting? passive solar gains...
- safety diagnostics: e.g. fire safety, electricity,
- Health diagnosis: e.g. radon and ventilation, acoustics, humidity, natural light, accessibility
- Technical diagnostics Example structural diagnosis, building health: dry rot, insects, humidity?
- Diagnosis of consumption?
- Architectural diagnosis: use of spaces, analysis of social and functional occupation
- final report with recommendations for prioritized interventions and contributions allowing the reformulation of the program. Integrating regulations

Work required:

·50% lectures and 50% tutorials. The tutorials are done on a 'real' building to be rehabilitated. The students analyze the building step by step according to the different stages of the diagnosis.
Tutorials: development of various diagnoses.

Course materials:

PPT and documents

Teaching unit:

M73CTA – Construction – Ambiances

Teachers:

HAMANI Dalil

ECTS credits: 3

Nbr of weeks : 14

Nbr of hours / semester : 42

Own work: 35

CONSTRUCTION - ATMOSPHERES

MCTA705 Simulation and evaluation of thermal environments

Objectives:

This course aims to introduce students to the numerical evaluation and simulation tools specific to the needs of architects in the fields of thermal environments. Our objective is to reinforce the notion of reasoned design and to make students understand that the use of thermal environment simulation tools must be based on the architectural project in the design phase.

The objective of this course is to integrate and experiment with computer tools for thermal simulation in the architectural design phase. This will allow the student to test the effectiveness of the architectural options chosen in relation to his project inscribed in his environment.

It is not a question here of making the student (future architect) a pseudo-engineer by wanting to calculate everything, because we think that this is not his role, but of placing himself in the position of the architect confronted with the early evaluation of the impact of these conceptual, morphological and technical choices.

Content:

The course is structured around the following themes:

1. Energy saving strategies in buildings
 - Reminder of the basic notions of thermal engineering.
 - Bioclimatic design principle: strategy of hot in winter and cold in summer.
 - Thermal performance of materials (inertia, insulation, etc.).
 - Presentation of BBC and Passive architectural projects.
2. Dynamic Thermal Simulation (DTS)
 - Dynamic thermal simulation in the design or rehabilitation phase.
 - Optimization of energy needs according to the composition of the envelope.
 - Operating principle of DTS tools (CodyBa, Pleiades Comfie, TRNSYS, etc.).
3. Case study in dynamic thermal simulation with "Pleiades Comfie"
 - Definition of the building model.

- Development of coherent construction strategies relating to thermal environments in relation to architectural choices (morphology, materials, glazed surfaces, etc.).
- Simulation of thermal environments thanks to computer experiments on digital models.
- Analysis and interpretation of results.
- Optimization of the following case study: the strategy of hot in winter and cold in summer.

4. Personal Mini Project:

This is a personal research on a case study of early thermal evaluation, involving possible modifications to the project depending on the results obtained.

Work required: Teaching is given in the form of lectures of 1h30 and tutorials of 2 hours per week in the computer room.

Course materials:

Teaching unit:

M73CTA – Construction – Ambiances

Teachers:

VEYRIN FORRER, Gilles

ECTS credits: 3

Nbr of weeks : 14

Nbr of hours / semester : 42

Own work: 35

CONSTRUCTION - ATMOSPHERES

MCTA706 The structure of curved shapes, shells and stretched canvases

Objectives:

This course takes up the basics of statics and resistance of materials acquired in the bachelor's degree and deepens them around concrete examples, particularly from naval architecture. Students will learn how to use parametric modeling and structural calculation tools.

Content:

A-Reminders of Mathematics and Geometry.

B-Statics and RDM

- 1) Fundamental Principle of Statics, Balance of Forces and Moments.
- 2) Strength of materials, generalities.
- 3) Deformation, Notion of inertia and stiffness.
- 4) Tension, Shear, Bending, Torsion and Buckling.
- 5) Load cases and regulations.

C-Parametric modeling (Using Rhino and Grasshopper + Karamba software)

- 1) General principles and elements of method
- 2) The Flowchart: integration of constraints of form, structure, manufacturing, etc.
- 3) Geometric optimization and material optimization
- 4) Other possibilities of parametric optimization...

Work required:

3.5 h Weekly, 1.5 hours of classes and 2 hours of tutorials in the form of individual and group follow-up, for 14 sessions, i.e. = 49 hours

Course materials:

The course material will be provided weekly as a pdf.

Teaching unit:

M73CTA – Construction – Ambiances

Teachers:

HERRY Anne Laure

ECTS credits: 3

Nbr of weeks : 14

Nbr of hours / semester : 42

Own work: 35

CONSTRUCTION - ATMOSPHERES

MCTA707 Source-to-Retail Carbon Design

Objectives:

Content:

Work required:

Course materials:

Teaching unit:

M73CTA – Construction – Ambiances

Teachers:

LEYRAL Marc

ECTS credits: 3

Nbr of weeks : 14

Nbr of hours / semester : 42

Own work: 35

ENGLISH FRIENDLY
communication language

SPANISH FRIENDLY
communication language

ITALIAN FRIENDLY
communication language

CONSTRUCTION - ATMOSPHERES

MCTA708 Explore at 1-1 scale

Objectives:

Around a theme of experimental architecture or structure (this year 2023-24, it will be a question of building a vault or dome project, Catalan vault type), the thematic courtyard offers in-depth research, both architectural and technical, on this new architecture and the realization of a pavilion project on a scale 1.

A certain transversality will be set up with the Small Builders TC (S. Ebode / M. Leyral).

The pavilions of previous years can be seen here:
<https://www.instagram.com/construirarchi/>

Content:

The project will be developed during the first half of the year:

- A pavilion of about 30 m², determined at the end of a mini competition between students
- On an experimental theme: this year 2023-24, it will be a question of building a vault or dome project (in bricks or other material to be defined).
- Intended to be built in the second half of the year in a park in Paris as part of the CTA Experimenting on a Scale 1
- Objective of participation/presentation at conferences of the work done (DMS, IASS, etc.)

A publication support will be produced by the students, with the help of the supervisors.

The work will be published on the website Construire l'Architecture (<https://www.construire-l-architecture.com/recherche-publications>).

Work required:

The semester is made up of 14 sessions of 3h00, itself broken down into 1h30 of lectures and 1h30 of supervised work.

The course will use the techniques of parametric architecture/structure. A good knowledge of Rhino and Grasshopper is an asset but an upgrade will be made at the beginning of the TC on this theme.

Course language: French

Languages of communication: English, Spanish, Italian

Course materials: All course materials and tools useful to the TC are published online:
<https://www.construire-l-architecture.com/echelle-1>

Teaching unit:

M73CTA – Construction – Ambiances

Teachers:

TOGO Giovanna

ECTS credits: 3

Nbr of weeks : 14

Nbr of hours / semester : 42

Own work: 35

CONSTRUCTION - ATMOSPHERES

MCTA709 Analysis and life cycle

Objectives:

Content:

Work required:

Course materials:

Teaching unit:

M73CTA – Construction – Ambiances

Teachers:

SAIMPERT Maud

ROUGELOT, Benoît

SPANISH FRIENDLY
communication language

ECTS credits: 3

Nbr of weeks : 14

Nbr of hours / semester : 42

Own work: 35

CONSTRUCTION - ATMOSPHERES

MCTA710 Straw Steering Wheel

Cours intensifs entre février et avril 2025 : cours accessible uniquement aux étudiants présents l'année complète

Intensive courses between February and April 2025: only available to students present for the full year

Objectives:

Content:

Work required:

Course materials:

Teaching unit:

M73CTA – Construction – Ambiances

Teachers:

BARA Stéphane

ECTS credits: 3

Nbr of weeks : 14

Nbr of hours / semester : 42

Own work: 35

CONSTRUCTION - ATMOSPHERES

MCTA711 Facades, basics

Objectives:

Since he became sedentary, Man has sought to protect himself from his environment. He thus progresses, from the search for some cavity, cave or heap of plants that he could adapt, for the duration of a more or less long stay, to a real construction responsible for sheltering him with his animals and his crops. The mass of rock that once enveloped becomes a simple wall now delimiting an interior and an exterior space.

So here we are in the presence of a space between two walls that must meet the requirements and needs of the occupants according to their activities. To achieve this, it is necessary to start by defining the constraints and conditions in order to respond as best as possible by choosing a construction system appropriate to the expected protective envelope. The façade is an inseparable element of the project. However, the Architect must know the technical conditions of the development of his façade. This is the purpose of this course.

Content:

Basic technical knowledge for the development of facades:

Requirements planning - Concept of performance - Typology - Representation

French language courses

Work required:

Personal research

As part of the tutorials, practical application on an analysis file or the creation of façade(s).

Visits (if possible): photographs, drawings, note-taking.

Course materials:

Note-taking and putting into practice during the development of a façade on a concrete case.

Discussions and corrections in small groups.

Teaching unit:

M73CTA – Construction – Ambiances

Teachers:

LEYRAL Marc

EBODE Sylvain

ECTS credits: 3

Nbr of weeks : 14

Nbr of hours / semester : 42

Own work: 35

ENGLISH FRIENDLY
communication language

ITALIAN FRIENDLY
communication language

SPANISH FRIENDLY
communication language

CONSTRUCTION - ATMOSPHERES

MCTA712 Small builders

Objectives:

Every year since 2022, ENSAPLV and the associations Construire l'Architecture and AAlIA have organized an educational day for children aged 7 to 10 around the themes of architecture and construction, with the participation of the CAUE of Paris.

The project is inspired by the Christmas lectures initiated in 1825 by Michael Faraday at the Royal Institute in London. From that time to the present day, an annual conference is organized every Christmas for the popularization of scientific knowledge for a wide audience, partly composed of children. The objective is to inform while entertaining, with the help of models, demonstrations and costumes.

The objectives are multiple:

- To allow children from all backgrounds to push the doors of a higher education institution. To create a context conducive to awakening, interest, and even vocation.
- To disseminate precise knowledge simply by popularizing it, by an entertaining approach, with quality media and supports.
- Put students back at the heart of the pedagogical question so that the transmission of popularized knowledge is composed with them and not only by teachers → Break the verticality of teaching, promote exchange and mutual and intergenerational learning.

For Master's students, the educational objective is the perfect understanding of a specific theme of construction and architecture: it is indeed necessary to have understood an object oneself in order to be able to transmit it to a child. In this respect, the act of giving back to the child is a pedagogical act for the Master's student. More info on: <https://www.construire-l-architecture.com/lespetitsconstructeurs>

Content:

The first edition of the 'Small Builders' took them to discover the balance between forces and structures in tensegrity.

A video reproduces it on this page: <https://www.construire-l-architecture.com/lespetitsconstructeurs>.

The second edition, this year 2023-24, will focus on the theme of arches, vaults and domes.

Students will be divided into 5 or 6 small groups and will have to design and implement:

- 4 experimental stands that will be set up in the emblematic places of the École nationale supérieure d'architecture de Paris-La Villette (model workshop, room 110, Atrium, Media Library, K'fet, etc.) Immersing the stands in these places allows them to show the children what a higher education institution is, whose doors they will probably push open for the first time, and to make them meet students, teachers and administrative staff who bring these places to life. The stands must allow, in the form of educational and fun experiences, to make the children understand how it works (the funicular of forces, the emptiness of the arches, the construction and decimation of the arch, etc.). The spectacular allows you to have a greater impact on the mind, so it will be sought in these experiences.

- 1 virtual reality stand. The aim will be to make children understand the difference between weight and mass. The stand should allow them to make the most realistic trip possible to the moon and to Jupiter or a Super-Earth.

In addition, they will participate in the organization of the other events of the day, in particular in interaction with our associative and institutional partners:

- Conference on the theme of arches, the personality approached is the artist Vincent Ganivet.

- An extraordinary guided tour in the afternoon: this year, the collection of scale 1 arches of the Cité de l'architecture et du patrimoine is being considered.

- And finally the distribution of a toy kit made by the students, in order to make the memory of the day a reality for the child.

Finally, they will actively participate in communication operations and the search for partners and sponsors.

Work required:

Notions of architecture, and constructions (general culture, statics and RdM) of Bachelor's degree.

Course materials: The materials are published on the page: <https://www.construire-l-architecture.com/>

Teaching unit:

M73TR – Digital Transition – BIM – Representation

Teachers:

LAIDET Pascale

ECTS credits: 3

Nbr of weeks : 14

Nbr of hours / semester : 49

Own work: 35

DIGITAL TRANSITION - BIM – REPRESENTATION

MTR701 Introduction to design (archi naval, object...)

Objectives:

Based on a problem chosen by the student (specific to a project group) or a theme proposed by the teacher (sailboat), the objective through the world of the object in relation to architecture, is to be able to criticize its approach (cross-fields, relationship of scales) upstream of the shaping and then to be able to use tools adapted to the project and to the mastery of curved forms (the form plan used in naval architecture by example).

Content:

It will be a question of strengthening the personal approach and providing formatting skills (mastery of literal, graphic and computer tools).
-Course on the history of design (periods, movements) and its relationship to architecture.
-Initiation and deepening of a 3D modeler (rhinoceros) as a relevant tool in the mastery of design: Work on typical objects (familiarize yourself with curved shapes) before approaching the project.

Work required:

Written
sketch
3D formatting

Course materials:

Teaching unit:

M73TR – Digital Transition – BIM – Representation

Teachers:

FAYOLLE DE MANS Marc

RAYNAUD Alain

BERGNA Jacques

ECTS credits: 3**Nbr of weeks :** 14**Nbr of hours / semester :** 49**Own work:** 35**DIGITAL TRANSITION - BIM – REPRESENTATION****MTR702 The Mock-Up for Design****Objectives:**

The aim of this course is to mark our desire to rehabilitate the work of the hand in the representation of the Architectural Project. It allows us to tame matter so that it expresses a spatial concept, that is our inclination.

Content:

Through the creation of models, we will approach different scales, techniques and materials.

These achievements will show their full pedagogical potential by forcing the student to make a synthesis between plan, section and elevation, by developing in him a sense of structure, by encouraging him to adopt a strategy in the choice of an operating mode, to master a whole specific tool, to develop a sensitivity to the evocative power of a material to simulate a material, in short, to become aware, through the overall staging of the project, of the coherence of the underlying architectural approach.

Work required:

Students will work in teams or individually according to the 3 or 4 topics chosen.

Course materials:

Teaching unit:

M73TR – Digital Transition – BIM – Representation

Teachers:

JÉZÉQUEL Hervé

ECTS credits: 3**Nbr of weeks :** 14**Nbr of hours / semester :** 49**Own work:** 35**DIGITAL TRANSITION - BIM – REPRESENTATION****MTR703 Photo Option****Objectives:**

This course offers to acquire the essential knowledge for the practice of photography. But technique is not an end in itself and must allow the student to make these choices from there in order to build his own gaze and produce his images. The pedagogy is based on practical exercises that allow the student to acquire autonomy and sufficient technical ease in the realization of these photographic projects and to develop his own criticism of the flows of images to which he is subjected.

Content:

The teaching of photography is based on three axes:

1- Acquisition of a photographic technique based on the analogue technique (in black and white) and image processing in digital photography.

Learning the technique and its uses must aim for a qualitative approach, whether it is a question of working with digital technology or film technology.

2- Discovery of the history of photography from the nineteenth century to contemporary practices through short presentations.

Photography, which is by nature at a crossroads, will allow the student to open up to interdisciplinarity in terms of mediums and ideas (history, politics, aesthetics) and sciences (sociology, geography, etc.).

3- Workshop, tutorials. During the course, the student is required to carry out exercises, carry out experiments or present a short presentation (image reading or monograph of photographers or artists using photography)

Work required:

Classes take place every week at the photo workshop or at extramural meeting places.

1- Continuous exercises during the course

2- The student develops a personal project using the technique that suits him best, and presents this work in the form of original prints (exhibition), book-object or projection.

It is recommended that the student bring, from the first class, his own film and/or digital photographic equipment.

Course materials:

Teaching unit:

M73TR – Digital Transition – BIM – Representation

Teachers:

COUSSON Francis



ECTS credits: 3

Nbr of weeks : 14

Nbr of hours / semester : 49

Own work: 35

DIGITAL TRANSITION - BIM – REPRESENTATION

MTR704 An urban digital model at the service of the architect

Objectives:

-Thematic

The presentation of a construction project inevitably mobilizes the computer tool to easily and quickly convince decision-makers.

Thus, Virtual Reality now makes it possible to simulate the visit of a building (even before its construction) or even to interact with certain elements that make it up.

However, this approach carries with it the whole problem of the field: to make realistic what does not yet exist in an environment that is.

- Virtual reality or real virtuality

Despite the studies published in recent years on the virtual, it seems that there are still semantic questions about the word, and epistemological difficulties about the concept.

These questions and its difficulties are linked to the complex relationships between the virtual thing, on the one hand, and the virtual on the other, with the actual and the non-actual. Virtual was an adjective.

In a few years, the epithet has swelled to the point of becoming a noun. At the end of the 80s, we started talking about virtual images, then virtual objects, then virtual agents.

These people, through their increasing number and complexity, have begun to populate virtual environments, even virtual worlds.

Subsequently, the ambiguous expression "virtual reality" became widespread and today, we talk about the virtual as we say the real.

The word virtual used to describe a form, today it designates a substance. The virtual was the modality of the thing in potential, it becomes that of the thing in act.

In a word, the virtual has been actualized, the virtual has become actual.

- Architecture presented or representation of an architecture

Whatever the scale of the architecture on which we work, the problem remains the same:

The representation of the virtual towards a representation of the real, the imaginary then becomes a concrete construction, a model, a prototype, an image, or the opposite, the representation of the existing towards a represented world, and there, the constructed then becomes potential, conditional, represented.

To increase the realism of the immersive experience, there are several factors that must be considered throughout the process of building a virtual environment.

In addition to the quality of the modeling, dressing and lighting phases of a scene, it is also necessary to identify the dynamic and reactive aspects of the virtual environment from the beginning.

It is through the urban study of a site and the realization of an architectural project in it, that this problem will be stated and treated.

Content:

- Data reconstruction. First of all, it is a question of rebuilding the city (cities, neighbourhoods, buildings?), through an urban analysis approach.

This is done with the whole group of students and with individual work.

The city is then read in plans, sections, facades on a CAD/CAD tool using digitized images (plan or photos, aerial photos?) and vector data (cadastre in DWG format, DXF, GIS data).

Historical data is treated in the same way. The pooled set constitutes a database on the city available to each student.

Each one makes a summary in a digital format compatible with everyone (PDF format).

Then comes the 3D reconstruction of the city: It all starts with the study of the principles of computer input with a view to reading the city on a screen in 3 dimensions and in real time.

The learning of adapted software, a computer mode of interpretation of reality, and the foundations of virtual reality then rubbed shoulders with the shaping of the city.

Work required:

Course materials:

Teaching unit:

M73TR – Digital Transition – BIM – Representation

Teachers:

HAMANI Dalil

BEAUTEMS Dominique

ECTS credits: 3

Nbr of weeks : 14

Nbr of hours / semester : 49

Own work: 35

DIGITAL TRANSITION - BIM – REPRESENTATION

MTR705 Architectural Survey Practices

Objectives:

We wish to teach students the different practices of surveying for the restitution of architectural heritage, which involves all the knowledge of different disciplinary fields. In practice, this consists of surveying historic buildings or monuments in their contexts using manual and digital techniques, and then producing different types of representations and renderings with different levels of detail.

The competence of architectural survey requires a broad knowledge of the built environment and site analysis.

This learning of the survey requires a complex methodology of analysis of the building in its site, including at the time of the survey. This methodological approach requires technical knowledge and experience of the building that is open to multiple issues:

- architectural, urban and landscape knowledge
- constructive and plastic knowledge of the building.

The course is divided into three parts:

- Introduction to survey and representation tools (manual and digital)
- experience surveying an old or contemporary building within a site
- practice of acquired representations.

The attention paid to the typomorphology of the building associated with the construction system is one of the main objectives of the survey and representation in this course. Thus, a reading of the building at different scales (urban and architectural) and the transcription of the constructive aspects.

In the process of restoring the existing, we are often confronted with problems that are related to the practices of survey and representation in

architecture. Through the learning and practice of the different survey techniques, the objective is to analyse, restore and represent an existing building and to highlight its heritage or singular interest. In concrete terms, it is a question of comparing the manual (drawing, sketching,...) and digital techniques used in architectural surveys (theodolite, photomodelling, 3D laser-scanner) but also of reflecting on their uses for the restitution of buildings or historical monuments.

By taking into consideration the direct links that exist between the survey and the restitution of the project, this course attempts to:

- Experiment with and master survey practices
- record and process information to manually and digitally restore the building under study
- Produce different types of representations of the building (plans, facades, sections, immersive views in 3D model).
- acquire a local spatial vocabulary through its reading and transcription (scenography, public/private space, etc.)

Content:

In this course, we address the different techniques of architectural surveying:

- manual
- photomodeling
- 3D scanner.

We also discuss the modelling methods appropriate to each of these practices.

The acquisition of mastery of the survey through these different approaches allows the student to evaluate the advantages and limitations, as well as to choose the tool best suited to his or her needs.

Based on case studies presented by professionals, we will use these processes to survey buildings (old or new) in their true dimensions and then restore them in plans, sections, elevations and 3D models.

This work will be used to develop a study, a restitution of damaged or destroyed parts or possibly a constructive diagnosis. This teaching is punctuated by two main stages:

1. On-site building survey campaign.
2. Data analysis and analysis.

Work required:

- Theoretical course of 1h30 and tutorials of 2 hours per week in the computer room.
- Interventions by professionals in the field to present a pragmatic approach to the themes studied.
- Divide students into several groups.

Teaching methods (hours): CM: 9 p.m. Tutorial: 28 hours Practical work:
Personal work: 9 p.m.

Course materials:

Teaching unit:

M73TR – Digital Transition – BIM – Representation

Teachers:

DUCLOS PREVET Claire

ECTS credits: 3**Nbr of weeks :** 14**Nbr of hours / semester :** 49**Own work:** 35**DIGITAL TRANSITION - BIM – REPRESENTATION****MTR707 Introduction to Parametric Modeling****Objectives:**

The pedagogical objective is to provide students with the knowledge to create parametric models for computer design assistance.

Content:

Both ecological and energy transitions, generated by environmental issues, are transforming architectural design practices and leading more and more architects to use digital design assistance tools based on parametric modeling. A parametric model defines a morphological space that can be explored from parameters. A combination of parameter values produces a shape instance that can be evaluated from a technical perspective. Parameter value combinations can also be determined by optimization based on target evaluation functions. These mechanisms can effectively help the architect in his eco-design activities. This course is intended to train students in parametric modeling based on Grasshopper's visual programming tool (Parametric modeling plugin for the 3D geometric modeling software Rhinoceros).

Work required:

Each session provides theoretical input and practical exercises to be carried out in session and in personal work between classes.

Course materials:

A website, updated as the sessions progress, presents the concepts covered and the exercises to be carried out. <http://maacc.paris-lavillette.archi.fr/TR707>

Teaching unit:

M73TR – Digital Transition – BIM – Representation

Teachers:

SEGERS Bertrand

ECTS credits: 3**Nbr of weeks :** 14**Nbr of hours / semester :** 49**Own work:** 35**DIGITAL TRANSITION - BIM – REPRESENTATION****MTR708 Drawing in the city****Objectives:**

The objective of this optional is to reactivate drawing as a technique of representation, drawing practiced "on the spot", in the city.

This technique can address current issues in the city. The objective is to build a critical, in-depth and material look with the simple means of drawing.

We will experiment with the limits of this language.

Content:

The subjects chosen each year are broad enough that the whole semester is not enough to exhaust it: court and justice, shopping centres, nature in the city...

On these questions, which can correspond to places of daily practice, everyone will be led to construct an argument, a choice, a view. This gaze can be declared at the end of a nourished and open experience of drawings.

This technique must be understood in the widest spectrum of the freedoms it allows both in terms of the points of view (close up or in context, aerial view, plans, sections, etc.), the tools used (dry techniques, watery techniques, collages, etc.) and the chosen subjects (spaces, users, colours, décor, etc.). We will also bear in mind the freedom that drawing allows in relation to other techniques with regard to the ownership of the image, especially in places where photography and video are prohibited.

Students must regularly publish their work on a dedicated online collaborative platform, a wiki. This tool allows you to:

- Create an open workspace
- Introduce to code
- manipulate and publish files
- capitalize on and bring together the students' work from one year to the next

Address www.ouarpo.net

User Ouarpo

password ouarpo-edit

Work required:

The sessions are devoted to drawing on the site. The support guides the progressiveness of the course in relation to the subject, a time at the beginning of each session allows you to take stock of the progress and clarify the objectives.

Three interim evaluations make it possible to cross-reference, to bring together all the work produced and to put it into perspective with the references that lend themselves to the exercise and the level of progress.

Students need time outside of class to process the drawings (scanning, putting online, editing).

Language of the course and communication: French

Course materials:

Teaching unit:

M73TR – Digital Transition – BIM – Representation

Teachers:

BEAUTEMS Dominique



ECTS credits: 3

Nbr of weeks : 14

Nbr of hours / semester : 49

Own work: 35

Cours intensifs entre février et avril 2025 : cours accessible uniquement aux étudiants présents l'année complète

Intensive courses between February and April 2025: only available to students present for the full year
DIGITAL TRANSITION - BIM – REPRESENTATION

MTR709 Archicad and Rhinoceros Learning

Objectives:

The objective of this teaching is to allow students to be autonomous on two complementary 3D design software in architecture. At the end of the training, they will be able to design an architectural project (more or less complex) and to communicate it, through plans, sections, line views or realistic renderings.

Content:

At a time when the digital model is becoming a must in the architectural project, knowledge of one or more architectural project modeling software is a necessity.

Through learning exercises, this teaching will allow you to understand the philosophy of the Archicad and Rhinoceros software in a few sessions.
40 students maximum (2 groups)

Work required:

Course language: French

Language of communication: French

Course materials:

Teaching unit:

M73TR – Digital Transition – BIM – Representation

Teachers:

VACHON Pauline

ECTS credits: 3

Nbr of weeks : 14

Nbr of hours / semester : 49

Own work: 35



DIGITAL TRANSITION - BIM – REPRESENTATION

MTR710 Pages to think about and not get lost

Objectives:

To think of the printed page and, more precisely, the book, as a place to build a thought in architecture.

Content:

A book, yes, but what to put in it?

Each student is invited to develop a theoretical and personal critical reflection on several architectural objects of his or her choice. Architectural works to be compared, in a critical way, with texts, external references or any element useful for the development of a thought on architecture. This work may mark the beginnings of a more advanced reflection by the student in the context of a dissertation, as well as install elements of personal reflection mobilized elsewhere (for example in the practice of the project...). The relationship of thought that the student wishes to establish between texts and images implies a reflection on the spatial organization within the page, but not in relations of subjection such as "image-caption" or "text-illustration". The material used will be thought of as equal parts of a reflective whole.

Creation of a book (format and number of pages to be determined according to the student's project).

In parallel, a series of exercises will be proposed:

- creation of a poster that connects a text and two images
- Creation of a pamphlet showing two buildings that have formal similarities.
- Production of a one-page double-sided document that combines architectures and typographies.

Work required:

3h30 of weekly classes over the semester, then 21h in intensive training in the inter-semester (beginning of February).
Knowledge of layout software recommended.