

Programme of courses 1st semester 2023/2024

Master 1 – Semester 7 (4th Year)

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Teaching unit:
M71PA - Project

Teachers:
DEHOUX Dominica
BLANDIN Philippe

Ects credits: 1 1
Number of weeks: 16
Number of hours / semester:
112
Personal work: 128

PROJECT

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

Objectives:

Objective:

Contribute to activate the renewal of the deposit of architectural and urban wastelands of Paris and its periphery, particularly in Seine St Denis where industrial wastelands abound such as the great mills of puppet, Babcock factories of La Courneuve, general stores of puppet, from there central EDF of St Denis, cathedrals of the rail 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 program of 'Cathedrals of the rail' which will be the main site of intervention.

The territory of analysis:

- Plaine Commune: an agglomeration community of Seine-Saint-Denis which brings together 9 cities 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 poles of development defined in the "Grand Paris" project.

Proposal:

How to anchor architectural and urban production and its history durably on territories that today need to be rehabilitated, reconstituted in order to give them meaning, quality of life and sustainability.

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

Content:

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

This 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 valuing the architectural and territorial heritage.
- Define a program promoting adaptability to long-term changes, by meeting the requirements of a sustainable development of high quality heritage, environmental, economic and social of the built living environment.

We will take into account:

- The transversality of analytical, technical and sensitive approaches.
- The relevance of putting 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 the Architecture projects with regard to the territorial program.

Based on the inventory of the study sites and the territorial development orientations, the group will develop analytical tools to collectively develop a diagnosis and establish a prospective and phased "program plan" explaining their development proposals and architectural projects.

At each stage of the project, it will be necessary to highlight the precautionary principles vis-à-vis uses and resources, risk prevention, protection and preservation of natural or anthropogenic heritage.

The challenge of the projects will be to try to bring coherence to proposals ensuring 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: 1 1
Number of weeks: 16
Number of hours / semester:
112
Personal work: 128

PROJECT

A - IEHM-P702 Rural Resources

Objectives:

RURAL RESOURCES

An Hors-les-Murs 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 resources and resources around an Hors-les-Murs workshop and the contribution of a plurality of points of view.

Context.

Faced with current ecological, economic and societal changes, rural territories crystallize the challenges of tomorrow. While the artificialization of agricultural and natural land has continued at a steady pace for several decades, we are paradoxically witnessing a desertification of town centers, a degradation of the quality of housing, the decline of public services. This double movement "urban extensions versus desertification" is accompanied by the brutal development of bypass infrastructures, business parks, contrary to a patient and reasoned evolution of a human settlement in connection with its natural resources. At the same time, the rise in real estate prices in urban centres, the awareness of the preciousness of rural territories foreshadow a movement of renewed interest in rural municipalities.

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

Scenario.

Through the establishment of a partnership between ENSAPLV and the DDTM of Charente Maritime, a 4-day Outside the Walls Workshop during the semester allows the direct situation of students and the direct meeting 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 as well as the formulation of a problem that will serve as a back-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 engaged, the questions asked, and which we hope will find continuities, bridges with other fields or subsequent developments.

Content:

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

Sparing: the inclusion of interventions in the future approach of "Zero Net Artificialization - 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 manufacture of a territory, from its built dimension to its landscape dimension.

Transform: it is a question here of questioning the possible modes of construction (rehabilitation, reconversion, extension). It is requested to conduct an open, prospective and critical reflection on local resources, materials, know-how available and adapted to the territories and its challenges.

Living: It is expected to question the potential of places by formulating a problem, to summon modes of living in the broad sense, 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 the workshop outside the walls. Each pair is asked to address a problem associated with potential intervention sites. Each group focuses its research on concrete and precise existing situations, summoning documentary resources available and developed by themselves (drawings, models of the existing, structural analysis of the building). The first targeted project hypotheses will make it possible to question and directly test the potential for transformations of the place. In parallel, the whole group

prepares a global model of the site, and the documents (atlas) to feed the discussions and questions to the various actors present during the trip - Presentation and Display of an Atlas.

- Invest 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 speakers on site. The aim here is to compare the first project hypotheses with the sites and the problems explained, to deepen the surveys, to exchange with all the actors present on the site. Following the stay, a global restitution of all the groups orders and installs the right coherence of the proposed scenarios - Restitution and display.

- Intervene. This third sequence deepens a project hypothesis with regard to project conditions. Depending on the nature of the interventions, it is requested a reflection on the conditions of intervention in relation to the existing, as well as the development of precise architectural and technical devices (fragment at 1/20) - Intermediate Jury.

- Develop. In-depth of the projects and preparation of the final jury and the exhibition.

Work required:

- The workshop is designed to accommodate up to 30 students. It requires a strong motivation, a diligent 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 statement: knowing and representing the existing, Mr. Chastanier, Ms. Pernin

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

MS713, M813, S913: History and practices of built environment transformations, Ms. Bassieres, Ms. Maumi

ENGLISH FRIENDLY
communication language

SPANISH FRIENDLY
communication language

Teaching unit:
M71PA - Project

Teachers:
MOURIER Emmanuel
SAIMPERT Maud
EBODE Sylvain

Ects credits: 1 1
Number of weeks: 16
Number of hours / semester:
112
Personal work: 128

PROJECT

C - CCA-P704 Already here: Resources, Processing, Construction

Objectives: ALREADY THERE: RESOURCE, TRANSFORMATION, CONSTRUCTION
Emmanuel Mourier, Maud Saimpert, Sylvain Ebodé
This project workshop proposes to work on the relationships that spatial parameters and environmental parameters must maintain in the design of an architecture project.
P 704 belongs to the Field of Study 'Design and Build Architecture' and pursues two pedagogical objectives and their simultaneous conduct in the project approach:

- 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 deeply humanistic conception of architecture, his personality intimately linked to his territory and able to anticipate at the same time a certain number of architectural and environmental themes that define our professional future.

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

This year, our field of study is located in a seaside resort rebuilt after the 2nd World War. The programme focuses on the transformation of a swimming pool – a remarkable element of the city's modern heritage – into a media library. You will meet elected officials and various personalities

involved in this program and in the development of the city, all very interested in the approach you can have.

Content:

Your work will consist in conducting a global reflection on the site, namely 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 of facades, development of implementation processes.

Our requests are in particular at three levels:

- adoption of a general economy approach of 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 buildings (materials, insulation, solar energy capture, inertia, protection, ventilation), extensive work on interior/exterior relations.

Relying on climatic and physical sensations in the project development process is highly recommended. For the record, Alvar Aalto, in his housing projects, worked with the idea of recreating the impression of outdoor life inside the habitat.

We will ask you to rely on constructive materiality, preferably use geo or biosourced materials for their physical presence (thickness, color, texture ...) their environmental qualities of course, but also their evocative, poetic, sensitive, tactile capacities ... in order to summon very early in the project atmospheres, images, thicknesses to live, and to work on the question of implementation as a driving force of the project. The specificity of this building of the 1960s is to be built mainly of reinforced concrete, material of modernity of the time, promise of freedom and new plastic possibilities. You will wonder about its integration into contemporary issues of recognition of modern heritage, resource depletion and climate crisis.

The project approach aims, both in new 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, allowing us to rethink the issues of insulation and comfort, as well as the relationship between indoor and outdoor activities.

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

You will lead, in teams of three or four, a survey and analysis campaign of the site and existing ones, based on jointly established themes, based on the basic documents that we will provide you, on your research, observations and sketches of analysis 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 accurately apprehending the uses of the places, the relationships between the existing buildings, the limits and the surrounding buildings, between the full and the voids, the plant and the built ...
- sections and plans of buildings, sketches of spatial organization, records of uses, details ...

This corpus of data, made available to the entire group, will accompany your project research.

You will also conduct a systematic experimentation of project figures, crossed 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 analyze - 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 whole group. They will then be regularly convened by theme throughout the semester in order to shed light on ongoing projects.

In architecture, too much remains at the level of analysis, while 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 interactively. We want 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 make you 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 hope that the group of students that you will form becomes a real workshop, where your knowledge, your intuitions, your desires, are shared, in order to explore all the possibilities of this project situation.

The reference to reality and the distance established by the work of each 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 projectual culture of the group.

Language of communication: French.

Maximum number of students: 20. 9am every Friday

A two-day trip (Friday and Saturday) at the beginning of the semester will allow you to get to know the site, the city and meet some local actors.

A two-day trip (Friday and Saturday) at the end of the semester will allow you to present your work to elected officials and local actors.

Work required:

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

- understanding of the interactions between program, site and position on the project between urban scale and scale of the building between 'heritage' intervention and new intervention
- understanding and manipulation of the volumetric-typologies-facades interaction
- 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 Bachelor's degree (design, representation, reflection) and to articulate them in the conduct of a project
- Projectual autonomy in construction
- Ability to integrate into the group, to share, to participate in its general advancement and cohesion.

Course materials:

Recommended achievements:

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

Knowledge by the project of urban housing issues.

Minimum knowledge of traditional and current construction and implementation principles.

Teaching unit:
M71PA - Project

Teachers:
NEUMAN Frédéric
BARREAU Christophe

Ects credits: 1 1
Number of weeks: 16
Number of hours / semester:
112
Personal work: 128

PROJECT

C - CCA-P705 Naval Architecture

Objectives: 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 final coherence.

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

The Archimedean equilibrium, for example, is 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 form, a structural principle, materials...

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

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

The components of this balance proceed from an architectural, technological and physical approach.

The student will be confronted on the one hand with the modeling of the 'shape' (very 'typical') of the float and its geometric analysis (hydrostatic), and on the other hand with the functional organization of 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 (scenario) as well as the 'constructive' aspect of the whole, so that their main architectural implications are taken into account.

Specificities and areas of work:

Method known as the "ship loop": Iterative methodology for apprehension of 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: Nesting of volumes, search for lightness, functional intelligence.

Putting into practice the classic notions of construction.

Specific scientific concepts related to hydrostatics, hydrodynamics. Archimedes' principle, 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 in imagining a floating extension of our school, a school outside the walls, mobile, classroom and exhibition to present the work of the students, pretext for study trips along the networks of inland waterways allowing to travel through Europe to the gates of Asia.

This project could also be part of the call for projects launched with 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 places of information and demonstration.

Our proposal would, of course, be floating and autonomous.

Work required:

Students will learn the architecture of the ship in a global approach, during 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:

ENGLISH FRIENDLY
communication language

JAPANESE FRIENDLY
communication language

Teaching unit:
M71PA - Project

Teachers:
LOCICERO Eric
SILVESTRE Joaquim
BERTRAND Frédérique

Ects credits: 1 1
Number of weeks: 16
Number of hours / semester:
112
Personal work: 128

PROJECT

C - CCA-P710 Urban project and European cities

Objectives:

GENERAL THEME: CCA Domain – Design and Build Architecture
P 710 - Urban projects and European cities: Towards a digital and ecological architecture

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

1. The digital transition
2. The energy transition

From the know-how already acquired previously, paper model, volumetry, plans, drawings of facades – Students will be led to evolve their practice of the project by 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.
- The construction of the BIM model for project management
- The production of virtual environment for the presentation of the project. Technical knowledge of the architecture concerning the thermal of the Building and building energy production

This project group P710 can be linked with the CTID 924 for the digital fabrication of the model and the - Po7- Bridges can 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 project on a reduced scale and one project on an urban scale:

Small-scale project:

It will be a question of designing and apprehending a small architecture so 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.

Urban scale project: This will involve projecting an urban-scale facility on the site of the new Grand Paris station in La Courneuve. As such, the modelling, modeling and evaluation design methods will be taken from the 1st exercise and developed on an urban scale.

Throughout these 2 exercises, design methods will be at the center reflection. Simulation and evaluation tools will be guides for project design 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 architecture project that will be at the heart of our concerns, its design and construction: Invention, mechanisms and strategies of efficient designs, critical scrutiny 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 tool training, 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

ENGLISH FRIENDLY
communication language

POLISH FRIENDLY
communication language

Teaching unit:
M71PA - Project

Teachers:
LIPSKI Justine
BOYADJIAN Anne

Ects credits: 1 1
Number of weeks: 16
Number of hours / semester:
112
Personal work: 128

PROJECT

D - MTP-P706 Emerging Territories

Objectives:

LANGUAGE OF INSTRUCTION: French
LANGUAGE OF COMMUNICATION: French

- Cartographic and sensitive representation of a territorial project on the scale of a small rural municipality
- Experimentation of a project design process linking the scale of the municipal territory and that of the building
- Development of a prospective approach to housing projects in a small town in a rural area (rehabilitation and new construction)
- Exploration of the materiality of the building: stone and wood

Content:

PREAMBLE:

For several years, the TERRITOIRES EN DEVENIR project workshop has been developing studies focused on the local development of small rural or peri-urban municipalities. The approach of the workshop consists in meeting territories, municipalities and inhabitants, in order to develop studies based on the real issues and specificities of the places studied.

The local development of small municipalities in rural or peri-urban areas is now considered a strategic subject within reflections on the future of our territories. This is evidenced by the latest study programs launched by the state such as Cœur de ville, POPSU territoire, Petites villes de demain.

Indeed, because of their distribution on French territory and because of their scale, towns and small towns constitute an essential network of places of centrality, where each of them plays a primordial role of social cohesion, and where all the questions relating to the social and territorial policy that unite local residents immediately arise. The question of the future of these territories involves very concrete projects/interventions, located in an area of proximity that is that of the daily practice of the place by its inhabitants.

Also, because of the scale of the human group, the context is favorable to direct exchanges and consultation of the population.

SITE:

This year, the study will focus on the territory of the commune of Saint Hippolyte du fort. Located at the foot of the foothills of the Cévennes, at the confluence of the Vidourle and its tributary the Argentesse, it is part of the Community of communes of the Cevennes Piedmont.

The town has about 3900 inhabitants (cigalois-es), its development is based on its economic activities, crafts, vineyards and local products and a historical and landscape heritage conducive to tourism.

CHALLENGES AND PROBLEMS:

Today, ecological upheavals are confronting small towns with the urgency of new societal and territorial issues that profoundly re-examine the meaning of their future projects. The urgency of recurring issues such as the fight against urban sprawl, the management of agricultural and natural areas, local travel and short circuits, the densification and revitalization of town centers, open up new horizons, lead to think of new ways of living and promote rehabilitation actions as well as the exploration of forms of land use and innovative architecture.

The general issues identified by local experts on the territory of the municipality are as follows:

- Preservation of the landscape, the environment and consideration of risks
- Improvement of the living environment and travel
- Revitalization of the town center
- Evolution of ways of living

Our study will first address all these questions and then focus on that of housing: potential for rehabilitation of existing buildings, creation of new housing in densification of the town center, which will support hypotheses and projects on the question of the evolution of forms of living on this territory.

CONTENT AND ORGANIZATION OF THE STUDY:

The study will consist of 4 phases of work:

1/ At the level of the commune:

(collective work – 5 weeks, including an in situ study tour)

A first time will be devoted to the study of the town center and its environment in order to identify the essential issues of the territory and to develop a hypothesis of a master plan of development, in particular focused on the question of public space.

The thematic analyses will focus on the themes previously identified:

- Landscape and environment
- Networks, mobilities, poles of centrality
- Built heritage and local resources

Production of a master plan at scales ranging from 1/2500th to 500th:
Intention diagrams, cartography, sensitive drawings (sections/sketches), overall model.

2/ At the scale of the habitat grouping:
(work in small groups – 4 weeks)

Then, within this master development plan, a more precise study of the evolution of living patterns will be carried out in small groups, leading to the development of projects on:

- the restructuring of the old buildings in the town centre,
- the creation of new housing within the urbanized area,

Surveys, diagnostics, production of an architectural project at scales ranging from 1/500th to 1/100th:
Intention diagrams, plans, sections, perspective sketches, study models.

3/ At the scale of the building:
(personal work – 4 weeks)

We will explore the realm of materiality by promoting the use of local resources, including dimension stone and wood. A fragment of the housing project will be developed at different scales: from structure to detail.

Production of an architectural project at scales of 1/50th and 1/20th:
Intention diagrams, plans, sections, perspective sketches, model.

4/ Synthesis:

(collective and small group work – 2 weeks)

Time will be set aside for the coherence of these different study scales and the publication of a booklet of the works.

CALENDAR:

- Phase 1 – 5 weeks: from 5 October to 9 November, including a 4-day study tour on site.
- Phase 2 – 4 weeks: from 9 November to 7 December.
- Phase 3 – 4 weeks: from December 7 to January 18.
- Phase 4 – 2 weeks: delivered on Saturday 3 February in the Town Hall of Saint Hippolyte du Fort, exhibition and public presentation in the presence of the partners (subject to the financing agreement of the DDTM of Gard).

PARTNERSHIP & STUDY TRIP:

A partnership agreement has been signed between ENSAPLV and the Town Hall of Saint Hippolyte du Fort.

The costs related to this pedagogical work will be charged to the funding obtained under this agreement (travel for Workshop in situ, accommodation, students and teachers during the in situ workshop, equipment necessary for the production of an overall model, communication).

Currently under study, an agreement with the DDTM of Gard would allow a possible second trip to the site at the end of the semester, lasting 2 days, including the installation of an exhibition of the work of the workshop in the Town Hall as well as a public presentation of the study.

Work required:

WORK ORGANIZATION:

Urban study in large group, architectural project in small group, project of a personal building.

MADE:

Presentation of the work to local actors, either at the school or in the Town Hall of Saint Hippolyte du Fort in the form of a public presentation.

Printing of a booklet describing the process and the work of the workshop.

Possibility of an exhibition of the works in the Town Hall of Saint Hippolyte du Fort.

Course materials:

ENGLISH FRIENDLY
communication language

ITALIAN FRIENDLY
communication language

Teaching unit:
M71PA - Project

Teachers:
ROUSSEL Severine

Ects credits: 1 1
Number of weeks: 16
Number of hours / semester:
112
Personal 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 flooding.

Today, 60% of the world's population lives within 60km of the shore. In metropolitan France, which has 5,500 km of coastline, 1 in 8 French people live in a coastal town or almost 8 million inhabitants. This figure is expected to increase, according to INSEE, by 50% by 2040.

This increasing urbanization reinforces the artificialization of shorelines, which are increasingly losing their role as a buffer between land and sea.

This contradiction between the attraction of the coastline and increased 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 rising sea levels is not limited to technical measures such as coastal protection (...), 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 will allow this territory to evolve in a posture of adaptation to natural hazards and towards sustainable lifestyles.

It is a forward-looking work that we carry out but we do it with local partners with whom we 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 issues but also to get out of them in order to see further, to shift the gaze to go beyond the response on a case-by-case basis and arrive at project proposals that have a generic dimension.

This work is therefore articulated of course at the crossroads of multiple approaches that are: the question of the identity of a territory and people, the policies of preservation of the environment and the fight against global warming, the issues of heritage and conservation but also the technical, geographical, economic and legal approach. Crossovers with your seminar topics are 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 community of communes Lorient Agglomération, located in Brittany in the department of Morbihan.

Our work site will be the city centers of Lorient and Lanester, two cities located on either side of the mouth of the river Le Scorff in the harbor of Lorient.

The city of Lanester largely built on former marsh areas and the coastline of Lorient consisting of vast spaces 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 residential and commercial districts but also a strong industrial problem.

These municipalities and Lorient Agglomération in general are in a strongly aging population dynamic. By 2037, 30% of the population will be over 65 years of age. 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 need to be addressed.

Our subject will therefore be to imagine the possible mutations of these neighborhoods 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 Artificialization of Soil Law, which induces a new reflection of design approaches. The projects we will develop will be intrinsically linked to a broader vision on 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 be outlined? What processes should be implemented to learn by walking and to make this territory evolve other than by major urban planning decisions?

Work required:

The teaching team is multidisciplinary, architects / landscaper.

The team consists of the following teachers:

Séverine Roussel, architect MFC TPCAUI

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

Solène Leray, landscaper specialized in the issue of water, PhD student LAVUE - ENSAPLV

The sessions are weekly (Friday) 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 time of emulation, exchange and debate rather than a time of 'correction'. Specific times such as Courses are planned during the semester to allow the deepening of certain subjects.

The workshop is also designed as an introduction to the rendering of architectural competitions. This is why the emphasis is placed on the coherence between the thought of the project and its expression to achieve a project that demonstrates a real capacity for reasoned proposals. The idea is to arrive at a convincing expression of the project for an outside audience.

Course materials:

ENGLISH FRIENDLY
communication language

SPANISH FRIENDLY
communication language

Teaching unit:
M71PA - Project

Teachers:
LOPEZ Luis
SECCI Claudio
BODART Celine

Ects credits: 1 1
Number of weeks: 16
Number of hours / semester:
112
Personal work: 128

PROJECT

D-MTP-P713 "Learning from Indian cities. Becoming the city of little things »

Objectives: This project course proposes to:

- confront the international, learning to make cultural differences an asset for the project approach, namely learning to articulate urban culture and project culture
- develop a project that links architecture and the city by developing approaches such as urban projects, i.e. aiming more at projects-processes than project-products
- give a central place to fieldwork or, in other words, privilege the observation of the micro-scale to build project approaches offering bottom-up processes
- use hand drawing in all its forms, and in particular the inhabited survey in situ, essential in an approach that is built from the field.

Content: Entitled 'LEARNING FROM INDIAN CITIES', this project teaching continues the work of the two workshops carried out in 2020 and 2022 in Calcutta in West Bengal, by exploring another city in Bengal, Dhaka, in present-day Bangladesh.

The semester is organized in two stages: the first in Paris offering a preparation on the project approach as well as an introduction to the architecture and cities of Indian civilization: the second time, the intensive international workshop (or workshop) in Dhaka between semesters, in February 2024.

This workshop is co-organized by a Franco-Indian cooperation composed of ENSAPLV and the BVCOA Colleges of Architecture of Navi Mumbai and CAT of Trivandrum in India, as well as a university of Dhaka: the Bangladesh University of Engineering and Technology (BUET) and a photography school, Pathshala Institute.

AN APPROACH: FROM THE OBSERVATION OF SMALL THINGS TO THE EMERGENCE OF PROJECTS LOCATED

The proposed project approach favours field observation. It starts from a scale often invisible on urban levels: the micro-scale, named here "The city of little nothings". Then, this starting point expands to various territories depending on the links and networks that these little things weave at different territorial scales.

The observation of 'little things' thus becomes the place of emergence of projects. It therefore aims to 'build a project situation' from the ground.

In this perspective, the teaching team, composed of architects, urban planners and sociologists, offers ethno-architectural support.

A THEME, A CITY: THE URBANITY OF TRADES IN OLD DHAKA

The workshop in Paris as the workshop in Dhaka propose to work on the theme of the urbanity of trades in Old Dhaka (Puran Dhaka). Located on an arm of the Ganges, Old Dhaka is animated by thousands of workshops and markets creating an urbanity around manufacturing.

Today, it is undergoing major changes at the same time as intense activity in workshops and markets continues. This changing ancient centre will be the focus of attention for this project group under the title: "From the river to the city: the urbanity of occupations along the Burigaga".

Work required:

The semester is spread over two stages and offers an opening.

BEFORE DEPARTURE: prepare for a workshop in Dhaka, Bangladesh through a double preparation work aimed at (1) familiarizing oneself with a field approach (architectural & ethnological) based on observation and (2) learning to read and understand the space of Indian cities, especially that of Dhaka, from drawing

DURING: WORKSHOP IN DHAKA IN FEBRUARY 2024: an intensive workshop consists essentially of patient fieldwork, crossing observations of physical space (surveys) and social space (interviews, life portraits, commented tours, ...). Test or emerging projects will be evaluated at each stage. This work will be done in cooperation with students and teachers from India and Bangladesh.

ON RETURN, AN OPENING: for students interested in valuing the field experience of this project teaching, it will be possible to open it to a dissertation, or even to a Pfe in 2025.

This teaching is given in French and English during the workshop in Bangladesh. Two other languages are also used for communication: Spanish and Italian.

Course materials:

Teaching unit:
M71PA - Project

Teachers:
PUMAIN Philippe
PENISSON Lionel

Ects credits: 1 1
Number of weeks: 16
Number of hours / semester:
112
Personal work: 128

PROJECT

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

Objectives:

On changing sites in Paris and its immediate periphery, we invite students to explore both the problematic of the form of the contemporary city and that of current modes of housing, work and leisure. With the aim of 'sustainable' urban planning, we favour the reconstruction of the city over the city, and in particular the requalification of wastelands and the reuse of existing buildings.

This learning of the making of the project at different scales, from the territory to the architecture, is based on the notion of 'urban project', emphasizing the importance of public spaces in the constitution of the city. The sites selected are still territories in the process of being requalified where questions arise in particular of the centrality/periphery relationship, programmatic and social diversity, density, routes and urban continuities, in the broader context of the ongoing reflection on 'Greater Paris'. The subjects of sustainable development and 'renaturation' of urban space are also major axes of reflection, in connection with the notions of green and blue grids, and the search for a deartificialization of soils.

In previous years, students have worked on:

- The Porte de Montreuil and the Paris-Montreuil link beyond the ring road,
- The fringes of the Canal Saint-Denis in Paris, Aubervilliers and Saint-Denis,
- The English Port district in Vitry-sur-Seine, located between the two major urban projects of Confluences in Ivry-sur-Seine and Ardoines in Vitry,
- The area of the future Grand Paris Express station 'Villejuif - Institut Gustave Roussy' in Villejuif, in the heart of the Val-de-Bièvre agglomeration community,
- The Plaine Saint-Denis sector from the Pleyel crossroads to the banks of the Seine, site of the future Olympic village.

- The 'strip' of territory bordering the Canal de l'Ourcq from Paris to Bobigny, via Pantin and Aubervilliers, between the Parc de la Villette and the Parc des Bergères.

As a continuation of the work begun last year last year, we propose to work this year on the 'Bercy-Charenton' site, between the Bercy station and the Charenton-le-Pont footbridge, a territory marked, among other things, by major railway rights-of-way and the presence of the ring road, and whose guiding principles of the urban project developed by the City of Paris for several years have just been fundamentally called into question under pressure from the Citizens.

Content:

The work is punctuated in three stages: the diagnosis and then the urban project, for which the students are divided into groups of three or four, which allows them to experiment with a collective mode of production of the urban project, close to that which they will be able to find in their future professional practice, and finally the architectural project, carried out individually.

- **Diagnosis: A look at the City**

Each team presents its own reading and diagnosis of the territory and current projects, based on collectively defined themes. The results of the analysis are shared between the different teams.

- **Urban project**

Each team develops its strategy on all or part of the territory studied in order to meet the objectives it identified during the diagnosis. This work leads to the definition of a 'piece of the city', by reweaving a structure of streets, squares, squares and gardens, blocks - open or closed - and by specifying the programs, scales and typologies of the new buildings that contribute to recompose the district. Each team produces in particular a large urban model at 1/1000th.

- **Architectural sketch**

Each student develops an architectural project at a sketch stage - preferably concerning a public building located in a key location of the urban project - in order to also 'test' the validity of his team's urban proposals. The individual project offers students the opportunity to address the subject of the reuse of existing buildings, especially of industrial origin.

Work required:

Course materials:

ENGLISH FRIENDLY
communication language

Teaching unit:
M71PA - Project

Teachers:
LAFON David
CHAVANES Philippe

Ects credits: 1 1
Number of weeks: 16
Number of hours / semester:
112
Personal 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 the design and construction of housing in France based on 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 contemporary urban, environmental and social challenges.

Based on an awareness of the anthropological dimension of the 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 buildings in 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 "logic of the building" and logic of the urban fabric.

Content: Based on the achievements of the Bachelor's degree having laid the foundations for an understanding of the relationship between space and use and a knowledge of the typology of the building understood as part of an urban fabric, it will be a question of conducting an approach at the scale of housing, building and urban fabric.

at the building and residential level,

We propose to deepen these achievements from a prospective project work and analysis 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, services and energy, car and storage space, surfaces and spaces of housing, etc.)

2-A typological approach aimed at characterizing relevant types of project based on a critical interpretation of traditional and modern types and from the exploration of the values and aspirations of contemporary residential space (aspirations to individual housing and private space, collective space and the services it provides, nature, landscape, recreation, 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 crossing usage and environmental issues

at the urban scale,

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

It will question the residential forms of this "territorial city" of today by seeking a typological expression appropriate to the new relationship that emerges between residences, public spaces, natural spaces, 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 have to be questioned.

Work required:

The subject concerns the multi-family building.

It is structured around the study of a corpus relating to the history of modern housing and its underlying themes on the one hand, and the exploration of new questions facing 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 a preliminary architectural 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 (20h).

Work is individual

Language of instruction: French

Course materials:

Teaching unit:
M71PA - Project

Teachers:
MAURIZIO Gian Mauro
FERNANDEZ ATELA Andres

Ects credits: 1 1
Number of weeks: 16
Number of hours / semester:
112
Personal work: 128

PROJECT

E-HMU-P712 Design/Space/Architecture

Objectives: The objective of this course is to propose new answers to the library of the XXI century.
The student will make proposals arising from the analysis of three existing projects.
Questions related to architectural typology, the relationship with the city and the student imagination should be answered at some point.

This court will:

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

Content: The course will examine and rethink the agenda of the Library of Tomorrow and explore its architectural and urban potentials as a public and civic space. The Library's program addresses many interesting contemporary challenges and issues. How can the Library's traditional role as a repository and sometimes symbol of information and knowledge – in the form of books and written materials – be reconciled in an age of increasingly new forms of information and virtual media, in an era where information is decentralized and accessible from anywhere, after a century of cinema and video? How do we reconcile the Library as the physical embodiment of an ideal of knowledge and history when new forms of media can be stored electronically and no longer require a single location for storage and access?

As a public program, the Library also seems to run counter to the increasingly predominant phenomenon of late privatization of capitalists.

Public spaces are mostly semi-private "collective" spaces, and the private sector is increasingly responding to needs formerly provided by the public. Located in shopping malls and urban commercial developments, book and media "Superstores", with their free navigation, cafes and event spaces, increasingly present the false impression of a collective and public library-like space.

As a public space, the library has the potential to become or remain a vital public and civic place. The modern library includes more and more different and previously unincorporated programs. In addition to its main function of storing and preserving books and enabling access and reading, the library could also include audio/visual media and electronic/virtual data, as shown by the "Media Library" programme it can also encompass research facilities, performance spaces, gallery spaces and even commercial/retail spaces (library libraries are becoming more and more common). As such, the workshop will ask each student to explore the architectural potential of the Library by interfacing with the city, creating an urban institution.

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

PROGRAM:

Core Program Requirements:

Storage of books / articles:	1,000 m ²
Reading room:	1,600 m ²
Support services:	3,700 m ²

This default basic program must be specifically modified by each student according to the strategy and direction of their project. Students must add other sub-programs and/or change the size of the core program. Students cannot keep the core curriculum as it is unless they are motivated and defended.

Work required:
Course materials:

Teaching unit:

M71CTID – Transversal intra-domain course 21H

Teachers:

TICKETS Guillaume

Ects credits: 1.5

Number of weeks: 14

Number of hours / semester: 21

Personal work: 22

INTRA-DOMAIN TRANSVERSAL COURSE

AS-CTID711 Urban Sound Workshop

Objectives:

Putting electroacoustic techniques at the service of the means of representation

Content:

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

Work required:

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

Course materials:

Teaching unit:

M71CTID – Transversal intra-domain course 21H

Teachers:

SOUCARRAT CHAUDHURI Françoise

Ects credits: 1.5

Number of weeks: 14

Number of hours / semester: 21

Personal work: 22

INTRA-DOMAIN TRANSVERSAL COURSE

CCA - CTID 702 - Energy transition and eco-construction

Objectives:

Content:

Work required:

Course materials:

Teaching unit:

M71CTID – Transversal intra-domain course 21H

Teachers:
TUSCHER DOKIC Anne**Ects credits:** 1.5**Number of weeks:** 14**Number of hours / semester:** 21**Personal work:** 22**INTRA-DOMAIN TRANSVERSAL COURSE****CCA-CTID719 Elements of Cognitive Science for Architectural Design: Psychology and Applied Neuroscience****Objectives:**

Over the past decade, knowledge about the impact of the built environment on users' psychosomatic health has grown steadily 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 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, research results are often not directly transferable into design strategies, the crucial point being that there is a tendency to try to translate these research results into a project too literally and prematurely. 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 now, the question addressed in this teaching is whether, and how, it is currently possible to apply these research findings in the design practice of architects. The fundamental assumption 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, students are introduced to the links between architecture and cognitive science through a series of presentations. The second step of this teaching consists in asking students (in groups of two) to start "testing" the possibility of practical application, not directly in the project but in the search for documentation upstream of the design. It is a question of listing the difficulties of such an approach and evaluating its feasibility, to possibly imagine additional tools to facilitate it.

ENGLISH FRIENDLY
communication language

Teaching unit:

M71CTID – Transversal intra-domain course 21H

Teachers:

NEUMAN Frédéric

Ects credits: 1.5

Number of weeks: 14

Number of hours / semester: 21

Personal 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 at scale 1.

Content:

Notion of finesse

Archimedes' principle

Mass Quote - Stability

Ship theory: the great balances

Geometry and design of developable surfaces

Structural principles of a plywood ship.

Work required:

This option 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 – Transversal intra-domain course 21H

Teachers:
VACHON Pauline

Ects credits: 1.5
Number of weeks: 14
Number of hours / semester: 21
Personal work: 22

INTRA-DOMAIN TRANSVERSAL COURSE

CCA-CTID721 Nothing will take place but the place

Objectives: Realize a thought of the project in a printed booklet.

Content: We speak of "artist's book" to designate this form of experimental publishing that appeared in the twentieth century which sees artists seize an object – the book – to make it no longer the mediating 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 where a certain form of the architectural project can be embodied?

In what way can the book, or more generally the printed object (fanzine, fascicle, pamphlet...) be considered, by its morphology, its nature, as a relevant tool to constitute a thought in architecture and not only on architecture?

This is what we will try to explore in this option, by making a booklet around the project developed during the semester. This small book will be considered as a place to deploy a thought, a thought from below but also from beyond the current project: in a way compile around it to better understand the heart. In this place will come to dialogue references, intuitions and ideas, images (photographs, drawings, diagrams ...) and texts (whether theoretical, fictional, poetic, technical ...), any form that, put in relation, contributes to build an architectural form.

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

The challenge will therefore be to make an autonomous object, thought in its entirety (content, format, typography, layout, materiality), so that it embodies in the most accurate way possible the idea of the project carried

out during the semester. Because, although developed in parallel with the latter, this object will of course be anything but a communication medium, but a place of realization of the critical, reflexive and poetic apparatus that constitutes it. An equivalent.

Work required: Realization of a booklet (format and number of pages to be determined according to the student's project).

Knowledge of a layout software (InDesign) recommended
Course language: French

Course materials:

ENGLISH FRIENDLY
communication language

Teaching unit:

M71CTID – Transversal intra-domain course 21H

Teachers:

GABBARDO Denis

Ects credits: 1.5

Number of weeks: 14

Number of hours / semester: 21

Personal work: 22

INTRA-DOMAIN TRANSVERSAL COURSE

CCA-CTID725 History(s), theory and doctrines: fabrication workshop'

Objectives:

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

It prepares to:

- the explanation of an intellectual and professional positioning specific to the student
- writing memoirs
- research in architecture

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 various 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 concepts identified from a historical or operative 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 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 quotes and concept mapping.

Personal theoretical construction from one or more notions.

Course language: French
Language of communication: English

Course materials: Selected and collections of quotations.

Teaching unit:

M71CTID – Transversal intra-domain course 21H

Teachers:

TICKETS Guillaume

Ects credits: 1.5

Number of weeks: 14

Number of hours / semester: 21

Personal work: 22

INTRA-DOMAIN TRANSVERSAL COURSE

HMU-CTID701 Aesthetic Acoustics

Objectives:

To leave 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, through group exercises during the course that will have to be practiced individually afterwards. The study of sound, component and resultant of architectural and urban space, will be based on theoretical work (physical acoustics, writings by Murray Schafer and P. Mariétan) and on the acoustico-aesthetic analysis of remarkable urban sites.

Work required:

lectures and practical exercises in the field.

Course materials:

Teaching unit:

M71CTID – Transversal intra-domain course 21H

Teachers:

SOUCARRAT CHAUDHURI Françoise

Ects credits: 1.5

Number of weeks: 14

Number of hours / semester: 21

Personal work: 22

INTRA-DOMAIN TRANSVERSAL COURSE

HMU-CTID702 Energy transition and Eco-construction

Objectives:

ENSAPLV— 2ND CYCLE MASTER — 2021/2022

Transversal course Intra Domain —

CTID 702/902 Energy transition and Eco-construction

Teacher: F. Soucarrat Chaudhuri

Wednesday - 11:30 a.m. to 1 p.m. - room 210

The Energy Transition for Green Growth Act and the accompanying action plans will enable the France to contribute more effectively to the fight against climate change and strengthen its energy independence.

In this context, we will focus more particularly on Hemp and its use in construction, the France being the leading European producer of hemp with about 11,000 Ha cultivated. This observation and the climate and environmental challenges will lead us to reflect on the development of this sector in construction in order to move towards a positive ecology that lifts 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 buildings.

Beyond being thermally efficient, the constructions of tomorrow will take into account four other dimensions:

1/ Man as a user of the building

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 the 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 hemp

concrete and lime plaster, interior and exterior, can provide solutions: 1 m² of wall 36 cm thick gives a thermal resistance $R > 4\text{m}^2 \cdot \text{K}/\text{W}$ (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 both the characteristics of an insulator and a wall, which gives it a certain inertia allowing it to store heat to ensure comfort in summer and winter.

Hemp concrete prepared on site can be poured between benches or sprayed using a machine. Hemp projecting machines appeared on the market. There are different sizes, with different principles. The advantage of the machines is that you can project continuously, farther, higher and with less water, which reduces execution and drying times.

We will be interested in the challenges of the use of hemp in construction / renovation particularly in Ile de France, from the manufacture of hemp to the architectural realization but also to

STRAW CONSTRUCTION (straw sector)

WOOD CONSTRUCTION (The wood 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 material in construction and decoration products, as a fixed furniture and as a building material in a building (cf. 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 husks, miscanthus, cork, linen, thatch, prairie grass, etc. Their applications are just as important 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 building materials that meet the requirements of the building and housing code through evaluations and technical documents to guarantee a level of quality to the works and to secure the entire chain of actors involved in the act of building. A large part of them are subject to professional rules, Atec or Atex classifying them in the category of materials recognized by the Construction Quality Agency (AQC).

Thanks to their thermal phase shift and breathable properties, bio-based and geo-based materials have recognized performances 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 develop, with the active support of the State, characterization tests in the fields of thermal, 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 materials from recycling, 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 (A4/30 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: Language of the course and communication: French

Teaching unit:

M71CTID – Transversal intra-domain course 21H

Teachers:
FENKER Michael

Ects credits: 1.5

Number of weeks: 14

Number of hours / semester: 21

Personal work: 22

INTRA-DOMAIN TRANSVERSAL COURSE

HMU-CTID709 Architectural Design and Ergonomic Approach

Objectives:

This course has three objectives:

- Initiate the links between architecture and ergonomics in the workplace design process.
- 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 S7 and S9 students.

Content:

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

This experience will allow them 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 client and a project manager.

The course will take place during the intersemester, from 06/02/2023 to 10/02/2023 at ENSAPLV. A 1.5-hour preparation session will take place in January 2023.

Work required:

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

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

Course materials:



Teaching unit:

M71CTID – Transversal intra-domain course 21H

Teachers:
DEHAN Philippe

Ects credits: 1.5
Number of weeks: 14
Number of hours / semester: 21
Personal work: 22

INTRA-DOMAIN TRANSVERSAL COURSE

IEHM-CTID726 Heritage(ies) and transfers

- 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 issues related to the transformation and management of built heritage, whether cultural, functional, urban or ecological. Constitution of a cultural, conceptual and technical corpus as a support for the project. Apprehension of trades and markets related to heritage issues.
This course prepares students for heritage projects, 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 upgrading ecological changes adaptation of buildings.
Issues: Ecological urban cultural and tourism memorials
- 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, landscapes...).
- Legal tools of patrimonialization
- Premises: Safeguarded sectors, AVAP (ex ZPPAUP), heritage lists of PLU..
- National: Inventory of Historical Monuments and supplementary inventory, Mountain and Coastal Laws, Natural Parks...
- International: Unesco classifications, ...
- Actors Intervention method and tools
Historical studies, technical diagnostics, upstream studies, feasibility and change scenarios, master plans, optimization of real estate assets...

Concepts of interventions: conservation, restoration, conversion, rehabilitation, maintenance, Urban, urban approaches.

Building in the built: Restoration techniques, Rehabilitation techniques, Sustainable rehabilitations, Management of major heritages.

Examples of practices:

- Valorization of historical monuments
- Conversion of industrial heritage
- Rehabilitation of modern heritage
- Mutation of the banal heritage
- Adaptation of ordinary heritage
- Real estate asset management
- Policy of major managers

Language of the French course

Communication languages: English, Spanish, Italian

Work required:

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

Course materials:

Teaching unit:

M71CTID – Transversal intra-domain course 21H

Teachers:
COUILLARD Denis

Ects credits: 1.5

Number of weeks: 14

Number of hours / semester: 21

Personal work: 22

INTRA-DOMAIN TRANSVERSAL COURSE

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

Objectives: 'Past/present/future' of a territory: architecture, urbanism, 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 municipal team:

1/ Ile d'Yeu, island territory and place of study of the years 2014, 2013 and 2015 (educational 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, strongly touristic site,

5/ Joinville and its AVAP (area of architectural and heritage valorization), place of study 2016 and 2017,

6/ Island of 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, Vosges, on the site of the city of Plombière les Bains, or Lorraine on the site of the historic city of Fenetrance.

8/ Other territories? In Island of France ...

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

PEDAGOGICAL OBJECTIVES:

For example, in the case of the territory of Ile d'Yeu, our favorite territory:
- understand the functioning of a territory, endowed with a strong cultural identity in architecture, urban planning, heritage, landscape, geography, economy and sustainable development.

- Read, learn, develop:
- reports, geology, climatology, geography, natural resources and architecture urbanism, agriculture, crafts, economy, demography,
- historical scenarios of territorial, human and natural occupations,
- identify the periods of construction from an architectural and urban reading of stylistic periods,
- understand and measure the importance of territorial resources, the importance of local materials, in the technical and constructive result of buildings and island town planning,
- understand the importance of social/political issues in architectural and urban choices and the relationship of architecture and urban planning to 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/current/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). Having 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 landscaped 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 program, 2014, 2015 and 2016 of the stay île d'Yeu: Sunday, pedestrian route in the landscapes of the island, marshes, moors and hundred-year-old trees and along the coastal border, by the path 'of the customs officers', megalithic monuments, Gallic oppidum then Gallo-Roman, 12th century castle, chapel of sailors, 2 tiny ports, cliff beaches, geology, climatology and others ...

Monday and Tuesday, visit of the territory, analyses and prospective 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 predilections and skills, with site visits, TD and other educational experiences ...

Friday evening, elaborations and formatting of the presentation of scenarios and proposals, and presentation to the local jury composed of local elected officials and associative representatives, a school director and inhabitants of this territory... OBJECTIVE: production of scenarios/proposals and recommendations/proposals, in groups of 2 students.

Saturday MAT, public, verbal and computer presentation of the scenarios / projects, to a local jury composed of local elected officials and associative, political and commercial representatives, a school director, inhabitants of this territory ...

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

Course materials: Studies work on site and at ENSAPLV.
Travel to work site, with local technical means, and for ENSAPLV La Villette, classroom course 103, internet support, images, videos, writings and other documents, tutorials in room 102.,

Teaching unit:

M71CTID – Transversal intra-domain course 42h

Teachers:

PETITRENAUD Antoine

Ects credits: 3

Number of weeks: 14

Number of hours / semester: 42

Personal work: 35

INTRA-DOMAIN TRANSVERSAL COURSE

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

Objectives:

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

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

Content:

Before a requalification project is decided, this former port site offers the opportunity to experiment on the ground 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 propose to architecture students to intervene physically on the premises by confronting the elements and materialities still present. It is a question of inventing and manufacturing at scale 1 space devices to reveal possible imaginaries of this port place. It is a question of experimenting with new ways of reinvesting this territory, of stimulating new rhythms of vision, of working on the urban future of this river port wasteland.

Mode of plastic intervention in urban environments questioning changing spaces. Attempt to revive spatial mechanisms from these neglected territories and heritages. Dare to act. The strength of the elements involved requires obvious responses in return, the project thus being developed on

practice. Plastic and architectural primers determine test areas, construction 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 of material reaction that promotes the emergence of concepts and a potential for action. In this respect, students are led to develop their own critical tools of representation and their own elaboration processes resulting from this experimental dimension of places at scale 1.

This intensive teaching will take place during the second week of spring break

from Monday, April 26 2021 to Saturday, May 1 2021

NB/ This teaching module is linked to the Master's seminar Plastic approaches and urban territories and the project group Persona grata. Urban Mobile Interference Structures, Design / Manufacturing

For more information, visit the website of our research team "Architecture Milieu Paysage" (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 – Transversal intra-domain course 42h

Teachers:

PIGOT Bernard

Ects credits: 3

Number of weeks: 14

Number of hours / semester: 42

Personal work: 35

INTRA-DOMAIN TRANSVERSAL COURSE

AS-CTID714 Scenography: workshop-projects

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 the sign and the symbol handling metaphor as the effect of reality. In relation to play, the movement of bodies and time, dramatic action, text, history and memory, she seeks an emotion of space.

Content:

This workshop aims to give students the theoretical and practical tools of analysis and scenographic design in the field of theatrical representation: discover the space of writing, transform it into a scenographic device, reflect on the stage-room relationship, understand the constraints of the stage and 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 profession of 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 theater (national scene). An exhibition of model works in this theater can be envisaged.
2-Sensitive approach: a body expression workshop to apprehend the space through actors' exercises.

Course materials:

Teaching unit:

M71CTID – Transversal intra-domain course 42h

Teachers:

ROUBY Yves
DESSARDO Marco

Ects credits: 3

Number of weeks: 14

Number of hours / semester: 42

Personal work: 35

INTRA-DOMAIN TRANSVERSAL COURSE

AS-CTID715 Devions

Objectives:

Analysis and modification of human circulation inside ENSAPLV by building constraining structures on a 1:1 scale 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: a time of analysis and design, and a time of production in the form of a workshop. The final evaluation will be quantitative.

Collaborations with other teachers and institutions will be considered.

Content:

The exercise will focus on the diversion of human flows.

It will change the daily circulation of students, teachers and administrative staff.

- 1 Analysis course and proposals through drawing
- A stage of prototypes, models and 1:1 scale tests of the different proposals in 2 or 3 intensive days
- Construction in 2 or 3 intensive days
- 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: achieved 1:1 scale in confinement

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

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

Work required:

Exercise taking place during 1 full week during the inter-semester (early February), 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 – Transversal intra-domain course 42h

Teachers:

RESTREPO RESTREPO Esteban

PINATEL Flavie

Ects credits: 3

Number of weeks: 14

Number of hours / semester: 42

Personal work: 35

INTRA-DOMAIN TRANSVERSAL COURSE

AS-CTID717 Building (for) a narrative.

Objectives:

This intra-domain transversal 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 identify 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 the novel of the same name by Franz Kafka – uses architecture both as a backdrop and host box to welcome the narrative but also as a protagonist charged with an active and critical dimension in the dramaturgy of the story itself.

Content:

The exercise will consist in creating, as a first step, 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 design 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 parade dramaturgically throughout the story itself, finally, the conception of an artistically treated lexicon and syntax (beyond the communicative constraints of language).

In a second step, it will be a question of making a cinematographic adaptation of this text. We will reflect on the "traumatic" transition of the text to the 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 design of the image: points of view, framing, light, color, grain.
- the conception of time: duration of the plans, 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 architecture.

Work required:

The course will initially consist of a two-hour introductory session in the first semester, followed by a 5-day intensive practical session in the inter-semester (week of February 6th).

Achievements: a story of 5 pages (max.), a short film of 3 minutes (max), and a critical text on the work done of 3 pages.

Course materials:

Teaching unit:

M71CTID – Transversal intra-domain course 42h

Teachers:

ROUBY Yves
DESSARDO Marco

Ects credits: 3

Number of weeks: 14

Number of hours / semester: 42

Personal work: 35

INTRA-DOMAIN TRANSVERSAL COURSE

CCA-CTID718 The Longest Bridge

Objectives: 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 not very resistant 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 allow students to explore on a real scale the basic construction techniques, especially those related 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 traversed at the end of the exercise. This bridge will be built from a single material module, the sheet of cardboard, the assemblies between modules to be made without glue, tape or staples.

The choice of cardboard as the only material meets several constraints:

- mono-material design is one of the eco-design strategies
- the constraint of the single material makes it possible to address the different joining strategies
- the modest cost of cardboard and fast shaping using simple and affordable tools
- In the absence of glue, cardboard is perfectly biodegradable and recyclable.

The idea of the teaching is to confront students with a concrete constructive reality that goes beyond the only structural dimension, including 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 fact 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 crossed (measured excluding piles) by a person in the group, before (possible) collapse of the bridge
- but will also be taken into account, especially in case of tie:
- its lightness, its constructive economy
 - its total range (between batteries if 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 (early February), in room 101B, 100 and under the glass roof of the atrium.
Course language: French (English, Italian, Spanish on request)

Course materials:

Teaching unit:

M71CTID – Transversal intra-domain course 42h

Teachers:
FEICHTINGER Dietmar

Ects credits: 3
Number of weeks: 14
Number of hours / semester: 42
Personal work: 35

INTRA-DOMAIN TRANSVERSAL COURSE

CCA-CTID723 The act of building-from design to realization with a specific look at the construction phase"

Objectives: "The path upside down".
We start from a project under construction or completed to trace its genesis.
We study the relationship of the constructive system, materiality, details with design.
We analyze the impact of the project situation and consequently of the site – its constraints, its organization – on the design of the project.
The actors of the construction site, the craftsmen and their know-how – what influence on the way of thinking about the project.
Involvement of the designer in the process of realization.

Content: Architectural practice in Austria differs from practice in France. The architect is more involved in the process of realization. As concrete examples we will discover and analyze the differences, measure the impact on the practice and the result built.
Also craftsmanship is still very present in Austria. Hence a certain quality of execution and a requirement of detail. Analysis and understanding of the subject.
On the background of the projects visited under construction or completed we retrace the path of their conception.
The relationship between project objectives and achievement will be established.
We take into account the ambitions of a sustainable approach and link it with craftsmanship.
The focus is on projects as a whole – starting from an understanding of the urban situation, programme and content. It ends up in the design of details and their realization.

Work required:

We will visit buildings representative of a "constructive" approach in Austria – Vienna and Graz – in various phases of realization in order to look "behind the scenes".

Contact with the design architects and the actors of the site – project managers, craftsmen – will be established.

For a week the subject will be elaborated – sketches on site, photos, research of documents.

Course language: French

Communication languages: German, English

Course materials:

ENGLISH FRIENDLY
communication language

Teaching unit:

M71CTID – Transversal intra-domain course 42h

Teachers:

SATTLER Lea

BERTRAND Frédérique

Ects credits: 3

Number of weeks: 14

Number of hours / semester: 42

Personal work: 35

INTRA-DOMAIN TRANSVERSAL COURSE

CCA-CTID724 Digital continuum: design, modeling and manufacturing.

Objectives:

The main goal is to put into practice a digital continuum from design to manufacturing.

The objectives for the digital continuum are to:

- Design a digital model to be manufactured: use parametric modeling and scripting, adapt the design to the chosen materials, experiment with assemblies.

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

A 'generative design' approach or generative design will be the guiding principle of the teaching.

Content:

Presentation of the concept of digital continuum.

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

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 model workshop of the school.

Work requested:

-Writing of a state-of-the-art article analyzing a manufacturing design achievement.

- Realization of one or more projects:

- Design a digital model project and physical model.

Rendering of modeling files and physical model.

Production of a report on the project and on the design, modeling and manufacturing approach carried out.

Course materials: A website is set up to share theoretical contributions and productions between teachers and students. <http://194.199.196.229/So921/>

ENGLISH FRIENDLY
communication language

Teaching unit:

M71CTID – Transversal intra-domain course 42h

Teachers:

EYRAUD Jean Baptiste

MERON Nava

BOUCHERON Olivier

Ects credits: 3

Number of weeks: 14

Number of hours / semester: 42

Personal work: 35

INTRA-DOMAIN TRANSVERSAL COURSE

HMU- CTID 710 The Infraordinary of Modernity

Objectives:

Content:

Work required:

Course materials:

Teaching unit:

M71CTID – Transversal intra-domain course 42h

Teachers:

VALLECILLO Christophe
SECCI Claudio

Ects credits: 3

Number of weeks: 14

Number of hours / semester: 42

Personal work: 35

INTRA-DOMAIN TRANSVERSAL COURSE

HMU-CTID703 Transmitting architecture

Objectives:

In a school of architecture as in a university, a student needs to confront the realities of civil society as well as the adapted and detailed professional practices they require.

In society, populations (disadvantaged social groups and or organized in associations, cooperatives, collectives) sometimes need services or benefits, among others relating to the field of architecture, to which they do not have access.

This course proposes to learn 'with' civil society through its projects, both by elaborating a possible common action and by developing a reflective approach to this action.

In this sense, the objectives are to:

- build cooperation processes
- develop a common language to act 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:

The device of this course proposes to build the conditions of the encounter between university and society, the meeting of their respective needs. It aims to develop a specific, concrete and achievable action, through what could be called "a learning collective".

Devices exist in South America under the name 'extensão' in Brazil, 'extensión' in Argentina, etc. In Venezuela, it has been clarified by the formula 'Servicio (Social) Comunitario'.

In this perspective, the course proposes to reflect on this meeting between university and society in a double activity:

- by a personal work aimed at the joint elaboration of a "micro-project", in other words to build an action with civil society in which an architecture student proposes to engage
- by a critical collective reflection on this practice of architecture with civil society, consisting of time for discussion on a collectively chosen theme and a program of guest interventions on the themes affected by micro-projects.

A territory, composed of one of the densest associative networks in France, is proposed to this course: the Goutte d'Or in the 18th arrondissement of Paris and in particular the Salle St-Bruno, the house of associations in the district.

This reflection and the actions imagined with civil society are in the field of the social and solidarity economy.

Work required:

The course of the semester will follow this structure:

- 1) immersion in the associative fabric: meeting at the Salle St-Bruno, place of inter-associations of the Goutte d'Or, director Mrs. Pauline Goudot
- 2) a collective reflection around a question or issue arising from the first contact with associations
- 3) the construction of a project with an association
- 4) the organization of sessions with external guests to feed the critical collective reflection in connection with the theme chosen for the semester and the personal work.

If the framework of this course offers the opportunity to build a process of cooperation with an association, it opens the possibility for interested students to continue the project towards its realization. Indeed, this course can be in synergy with a master's internship lasting 2 months (or 280 hours) to implement the project set out with an association.

In addition, a memory of the school and the course will be constituted by recording (video or podcast) testimonials of guest teachers from the school and elsewhere who have built projects with civil society.

This instruction is given in French. Other languages are also used for communication: English, Spanish and Italian.

Course materials:

Teaching unit:

M71CTID – Transversal intra-domain course 42h

Teachers:

EYRAUD Jean Baptiste

Ects credits: 3

Number of weeks: 14

Number of hours / semester: 42

Personal work: 35

INTRA-DOMAIN TRANSVERSAL COURSE

HMU-CTID704 Fighting Unworthy Habitat-Tools and Practices

Objectives:

This optional course focuses on undignified housing, its different forms, and housing and urban planning policies in this field.

Content:

The importance of urban renewal, and more recently the "Plan de Rénovation des Quartiers Anciens Dégradés" (PRQAD) adopted by the last legislative component on housing and urban planning, put intervention in old housing back on the agenda.

The legislation on undignified housing, which brings together procedures for insalubrity, danger and insecurity, as well as standards and rules related to lead poisoning and overcrowding, have been strengthened.

It is therefore a question of training students in the legislation of poor housing, through a series of theoretical courses and practical work.

They will each have to conduct a site visit to a dwelling, list the malfunctions, survey the surface, make a diagnosis, and evaluate the means to be implemented to reduce the disorders. They will be able to measure the consequences of these poor housing conditions on the inhabitants, adults and children. This exercise puts into practice the learning of legislation and standards relating to poor housing.

Work required:

The work to be done includes: a precise statement of the plan of the housing, the surface, statement of malfunctions, writing and photos, examples of reasoned letters that can be used by the occupants of the dwelling to request rehousing, and a table summarizing the dysfunctions in terms of standards.

Course materials:



Teaching unit:

M71CTID – Transversal intra-domain course 42h

Teachers:

ZANINI Piero
DE BIASE Alessia

Ects credits: 3

Number of weeks: 14

Number of hours / semester: 42

Personal work: 35

INTRA-DOMAIN TRANSVERSAL COURSE

HMU-CTID706 Greater Paris Observatory

Objectives: Transmission of tools to analyze ongoing projects that take place within the transformations of the Greater Paris metropolis and that claim, through the discourses and practices that carry it, "urban innovation".

Content: This intensive intra-domain transversal course is part of the work carried out by the Greater Paris Observatory since 2008, when the Laboratoire Architecture Anthropologie (LAA) decided to follow as a research object the transformation process of the Parisian metropolis. During this intensive we interviewed projects that are taking place within the transformations of the Greater Paris metropolis and that claim, through the discourses and practices that carry it, "urban innovation".

We have chosen to work on projects that emanate from a series of public procurement mechanisms currently at work in the context of the Paris metropolitan area (Parisculteurs, Arc de l'innovation, Inventons la Métropole, Réinventer Paris, Réinventer la Seine), and that assume the idea of innovation as a tool for urban, territorial and social transformation. In Paris, elected "European Capital of Innovation" in 2017, these "calls to innovate" have gradually spread and institutionalized since the consultation of Greater Paris in 2007. The "attractiveness" and strong potential of land in the Paris region have sometimes allowed these devices to produce a leverage effect (economic, discursive, etc.) in different areas, from energy transition to greening, from public space to smart cities, etc. Based on a selection of projects related to these "calls to innovate", it will be a question of analyzing and understanding the role attributed to innovation by both the "sponsor" and the "project leaders". What ideas and forms of innovation emerge from these devices? How do they inform us about this evolution of the project process, its temporalities and the interplay of actors, as well as the type of spaces and cities - real or imagined - that we produce?

During a work in groups of two people, it will be a question of knowing, questioning and understanding these projects through the experimentation of different tools (documentary research, in situ observation, interviews, mapping, construction of constellations of actors and words). A collective analysis of this work will aim to bring out both the particularities and the common features of the projects, in addition to their relationship with the institutional order to which they respond, as well as to the urban transformation in which they participate.

Work required: Analysis work in small groups on projects

Course materials:

ENGLISH FRIENDLY
communication language

Teaching unit:

M71CTID – Transversal intra-domain course 42h

Teachers:

MAGNAC Daniel

Ects credits: 3

Number of weeks: 14

Number of hours / semester: 42

Personal work: 35

INTRA-DOMAIN TRANSVERSAL COURSE

HMU-CTID707 Design and production of cast concrete objects

Objectives: UHP concrete cast objects

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

Through the exercise of molding, from the design to the realization of an object in UHP concrete and wood, based on a targeted study of the LPO on the interaction between architecture and nesting of a species of gregarious Parisian 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 focus is on the design of objects that will have to be realized 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 assume all the roles from design to execution.

He will design based on specifications and will realize his proposal.

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

The work is done individually or in groups.

Work required: Realization of the final object and presentation file

Course materials:

Course in workshop volume and workshop models.

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

Conference, LPO intervention

Teaching unit:

M71CTID – Transversal intra-domain course 42h

Teachers:

SOUCARRAT CHAUDHURI Françoise

Ects credits: 3**Number of weeks:** 14**Number of hours / semester:** 42**Personal 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

Transversal course Intra Domain —

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

Teacher: F. Soucarrat Chaudhuri

13:15 to 16:15 - Room 112A

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

India is experiencing a significant rural-urban migration, linked to its population growth and difficult living conditions in rural areas. This rural exodus leads to the overpopulation of cities, around which gigantic slums have developed. Faced with their proliferation, the authorities have chosen to provide slums with basic infrastructure — sewerage, 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 20 most polluted cities in the world are Indian and a third of the urban population does not have access to tap water. In Delhi, only 17% of households are connected to the sewerage network. A note from the Treasury Department, published in June 2015, estimates India's urban infrastructure investment needs at €680 billion over the next twenty years. All sectors are concerned: from urban mobility to the construction of sewerage networks, including public lighting or treatment.

waste. Enough to whet the appetites of companies... provided 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, an organization 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 as 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 or Bhubaneswar, several slums have been razed 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 who 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 have to build the equivalent of two Singapores every year. However, several megacities such as Bangalore or Chennai (Madras) are already threatened by a depletion of groundwater. Many of their inhabitants are supplied by tanker trucks that fetch water from nearby rural areas.

Technology companies are positioning themselves in this market in the hope of selling an "intelligence" of data that would allow optimal use of these resources (sensors to alert the authorities on leaks of water pipes, or turn on public lights only in case of pedestrian or vehicle crossing).

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 small 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 successively:

- The 7 traditional high places and towns (Kedarnath/Badrinath/Somnath/Puri/Dwarka/Rameshwaram/Varanasi)
- Protection of cultural heritage in India (pilgrimage sites and heritage tourist)
- Traditional and classical Indian architecture (the science of Vastu Shastra)
- The 100 "smart cities" declared Smart City since 2015
- Metropolitan 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 issue 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 Panchayat!
- *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:

ENGLISH FRIENDLY
communication language

GERMAN FRIENDLY
Communication language

ITALIAN FRIENDLY
communication language

SPANISH FRIENDLY
communication language

Teaching unit:

M71CTID – Transversal intra-domain course 42h

Teachers:

PATTERSON Michael Brent

Ects credits: 3

Number of weeks: 14

Number of hours / semester: 42

Personal work: 35

INTRA-DOMAIN TRANSVERSAL COURSE

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

Objectives:

From theoretical, philosophical, architectural and other disciplines, lead students to develop a culture and knowledge of architectural theory. Build conceptual tools that allow them to develop a critical look at the discipline and its discourses.

Develop their research, representation, oral and written expression skills. This teaching also aims to get the student to communicate in a foreign language. ENSAPLV offers this teaching in English to allow students to participate in international educational activities (international workshops and symposia 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 terms of its evolving historical contexts and current economic and political systems, highlighting not only the need to know about 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 diagnostic work 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 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 little 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 another look at history and heritage, on the way they are represented? What happens to these sites of destruction? What reading of the ruins? How to understand them historically and also their current impact, how to document them and explore other critical approaches? How to address the challenges of reconstruction and restoration? How to deal with commemoration, 'places of memory', but also oblivion? What is the role of architects?

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

Course materials:

Teaching unit:

M71CTID – Transversal intra-domain course 42h

Teachers:

TABOADA Varinia

Ects credits: 3

Number of weeks: 14

Number of hours / semester: 42

Personal work: 35

INTRA-DOMAIN TRANSVERSAL COURSE

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

Objectives:

SEMESTER 7 (728) and SEMESTER 9 (928) 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 in semesters 7 and 9. It ensures consistency with the Master 1 project group P808 Latin American Cities as well as the CTID 828 Latin American Cities.

This teaching 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 illustrating social, heritage and urban development.

- Promote a permanent dialogue between heritage architectural production in Latin America and France
- Contribute to the necessary renewal of the approach of the architectural and urban project confronted with the disused heritage in quest for architectural quality and the challenge of sustainable development.
- Reflect on architectural practice and good quality facilities, but also on the quality of use, the quality of social life
Product areas
- Discover and learn constructive techniques of Aymara and Quechua (Inca) cultures elsewhere and appropriate them to enrich oneself
- Reconnect with the ancestral Aymara-Inca culture in the Andean region (Bolivia, Peru, Ecuador) of South America.
- Raise students' awareness of the 'tangible and intangible' heritage of deprived territories, supported by a committed architecture

- Share and found critical thinking based on openness to new and ancestral knowledge

This CTID will provide you with the methodological tools and the body of knowledge that will allow you to train yourself in different architectural cultures of Latin America

Content:

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

In Bolivia, Peru, Ecuador, the architecture and territories of the Aymaras and Incas are currently unknown in France. However, it offers a world in motion, complex abundant. The inhabitants keep a remarkable know-how linked to the intangible heritage including music, dance, fabrics, the traces of the city. In Tiawanacu, 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 resorption of favelas.

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

- History of heritage practices and policies in the Andean region (Peru, Bolivia, Ecuador)
- Historic centres of the Andean city, models, ancient city, contemporary city, examples of restructuring, criticisms of planning instruments
- Urban typology, micro-urban, 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 district (historical, social, technical, landscape, sensitive) emphasizing 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 its renewal. Urban rehabilitation and architecture projects will be continuously analyzed with historical backgrounds, in osmosis with the actors of the urban space and the cultural landscape.

A critical analysis of a project at the territorial and urban scale will open 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 of the life and architectural production of recognized architects 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), Javier Escalante (Bolivia), Luis Longhi (Peru), Sandra Barclay and Jean-Pierre Crousse (Peru), Rodo Tisnado (Peru/France)

Work required: Heritage diagnostic studies, contextual sketches, programming.
Critical feedback, individual end-of-year summary file (3 A3 plates)
A TD will be requested in trinomial with a Peruvian student and a Bolivian.
3 TDs in total will be requested throughout the semester

Course materials: Courses in French and Spanish throughout the semester

ENGLISH FRIENDLY
communication language

Teaching unit:

M71CTID – Transversal intra-domain course 42h

Teachers:

DENNEULIN Chimene

Ects credits: 3

Number of weeks: 14

Number of hours / semester: 42

Personal work: 35

INTRA-DOMAIN TRANSVERSAL COURSE

IEHM-CTID729 Industrial heritage: Art/Architecture

Objectives:

INDUSTRIAL HERITAGE: ART/ARCHITECTURE

1st PART: ICONOGRAPHY and PHOTOGRAPHY

This CTID is dedicated equally to the iconography and practice of photography.

This first semester (CTID 700, 42h) is the prologue of the second (CTID 800, 21h), devoted to photomontage (digital or manual) in its critical and/or prospective aspects. For the sake of continuity, it is recommended to follow both semesters.

Study of 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.

A reading sheet will be requested.

Art and architecture are at the center of an important reflection on the transformation of the industrial landscape in Europe, invested in the nineteenth century in a brutal way, made up today of sites still in use and places in dormancy, which have been chosen either to destroy or to rehabilitate. Once neglected, 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, high social quality. In fact, this heritage becomes crucial and constitutes the major support for the changes necessary to bring cities into the era of planetary responsibility.

In the 70s, a group of artists and architects locked themselves in a disused factory in the Ruhr to protest against its destruction. Among them, the photographers Bernt 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 by an international exhibition of architecture.

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

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

PHOTOGRAPHY

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

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

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

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 (artist, poet and black American 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. Our way of imagining this world should be at the center, constantly, instead of everything that is broken."

Content:

SEE YOU ON XXX AT 9am for the first class

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

+ 1 trip of 3 days to organize on a weekend (previous years: Mining Basin of Nord Pas de Calais).

Theoretical courses will be offered to support the reflection necessary for students for their work of image creation.

Technical and creative courses will be offered to students: handling the semi-professional camera and initiation and improvement on Photoshop© or equivalent.

INDICATIVE TIMETABLE - possible groupings to be organized

1 - 1h30 history of representations of Industrial Heritage by the study of 3 cases: the Ruhr, Detroit, Lens

2 - 4h30 photography: handling the digital body in manual mode, exposure, adjustments, framing, shooting, archiving

3 - 6h Photoshop©: adjustments, transformation, retouching, hiding...

4 - 1h30: the architects creating images: Yona Friedman, Archizoom and Superstudio, Rem Koolhaas

5 - Intensive workshop over 4 days

6 - 1h30 Final 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 to be installed on your laptop

Course materials:

ENGLISH FRIENDLY
communication language

SPANISH FRIENDLY
communication language

Teaching unit:

M71CTID – Transversal intra-domain course 42h

Teachers:

LAGUIA Virginia

ADRIAN ARANEDA Luis

Ects credits: 3

Number of weeks: 14

Number of hours / semester: 42

Personal work: 35

INTRA-DOMAIN TRANSVERSAL COURSE

IEHM-CTID730 Regards d'ici et d'ailleurs

Objectives:

Architecture photography!!

The technical choices and their 'effects' on the aesthetics of the photographic image:

These digital photography courses try to maintain a permanent link between practice and theory.

We have even favored the practice which, in a spontaneous use allows discoveries and in systematic exercises

More rigorous, allows to better understand the theoretical and technical phenomena of architectural photography.

Here in this course it is often the practice that helps to better understand the theory.

A photographer consciously or unconsciously chooses:

The subject - the size of the shot - the axis of the shooting - the focal length - the light - the composition - the presentation - The shutter speed - the diaphragm - the sensitivity to light (iso).

Each of these parameters modifies the totality of the photographic image in its plastic expression, thus its meaning, largely emotional.

Content:

INTENSIVE from Monday 19 to Friday 23 February 2024

Work required:

Course materials:

Teaching unit:

M71CTID – Transversal intra-domain course 42h

Teachers:

DEBOMBOURG Baptiste

Ects credits: 3**Number of weeks:** 14**Number of hours / semester:** 42**Personal work:** 35**INTRA-DOMAIN TRANSVERSAL COURSE****MTP CTID 734 New art practices in public space, augmented architecture?****Objectives:**

This teaching addresses the question of art in the public space around the existing device 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 much criticized by the public, because they appear to be imposed with authority on the population or on the contrary are totally 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 taking care of the desires, tastes, sensitivities, and sometimes cultural misunderstandings of the principals.

Yet this possibility of bringing together the artist and the architect 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 more adapted to humans. In this sense, the New Patrons, 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 to contemporary space.

Content:

For the Minister of Culture, the question of art and culture in the public space is "an essential democratic issue", touching in particular on "the learning of 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?

At a time 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 well as for the artist. At a time of new environmental challenges, approaches focused on re-use, recycling and technology, to what extent can design and contemporary art be vectors of ideas for territorial development? The course presents new types of works of art in public space made by artists, designers and architects.

This course is designed as a research and reference workshop. It offers sources of reflection and documentation through slides of monumental works, examples of integrations into 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 essential relationships between a work and its context, such as what questions architecture in the landscape. Through the example of the realization of the new sponsors of the Fondation de France, land-art, works of artists and designers...

Work required:

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

Course materials:

ENGLISH FRIENDLY
communication language

SPANISH FRIENDLY
communication language

Teaching unit:

M71CTID – Transversal intra-domain course 42h

Teachers:

NAVINER Brigitte

Ects credits: 3

Number of weeks: 14

Number of hours / semester: 42

Personal work: 35

INTRA-DOMAIN TRANSVERSAL COURSE

MTP-CTID716 Trees in the city, trees for the city

Object LANGUAGE OF INSTRUCTION: French

ives: COMMUNICATION LANGUAGES: French, English and Spanish

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

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

However, trees represent one of the answers to the environmental and climatic problems (among others) of large cities. In order to better take into account their needs and characteristics, this course will give students the tools allowing them a reasoned choice and a sensitive implementation in their projects.

Summary presentation of the course under this link: https://parisla villettearchifr-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 pedagogical forms: theoretical courses, **nt:** visits and tutorials, to promote direct observation of trees, work together, offer an important place to dialogue and drawing.

The courses, TDs and visits are dedicated to the discovery of the tree around three themes:

1- Discovery of plant characteristics: observe / describe / recognize

- 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 vocabulary classification tree

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 vegetated places of the city and plant forms

-The tree for the city : an ecological and technical look to understand the roles of the tree and what it brings to the city

- public policies and the tree, in the city and outside the city
- wooded cities

3- Trees and people: exploring the ancient and cultural relationships that unite us to trees

- discover trees through other eyes: what we learn from the eyes of poets, writers, painters, photographers, filmmakers
- mythological trees, symbolic trees and remarkable trees
- Plant journeys: where do the trees of our cities come from?

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

Tree specialists will 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 enrolment of 21 enrolled.

Work required: The proposed exercises, partly carried out during the visits and the tutorials, are to be finalized personally or as a team.

ed: 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 transforming elements of space (analysis of the relationship with a plant or built environment), in their evolution over the seasons (observation of the transformations of a site). An exercise proposes to reflect on the requalification of a place by a study of the plants present and a replanting project (preferably on the site of the project group).

Course language: French

Communication languages: French, English and Spanish

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

Course materials: Information on this course is available on the website:

<https://brigitteviner.fr/bn-ens/bn-ens-arbre/bn-ens-arbre-accueil-IP930.html>

als : Course materials (projected documents) and additional documents are made available

Teachers: PETITRENAUD Antoine JEUDY Olivier	Teaching unit: M72S – Seminar	Ects credits: 4 Number of weeks: 14 Number of hours / semester: 49 Personal work: 47
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SEMINAR

A - AS-MS701 Plastic approaches and urban territories

Objectives: This seminar aims to develop research on artistic and architectural practices in situ, upstream of the project. It is a question of studying how these practices of spaces can act on the ways of making territories, to show how they can stimulate new spatio-temporal dynamics, 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 making of new landscapes. They offer other views 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 thesis is mainly carried out from this plastic and architectural approach carried out on one or more territories - practice of material intervention at scale 1 and / or filmic practice of urban places. The thesis is composed as follows: an observational work on the different contextual aspects of the territory studied a critical reflection on the own creative processes and representation tools (graphic, filmic, etc.) developed by the student a narrative on the imaginaries aroused by the territory (s) practiced.

NB / we accept students in 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 producing space consist in 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 ...), to experiment with it to reveal the potentialities 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 areas in the process of requalification. Different artistic approaches upstream of the project are studied to show how they reveal architectural imaginaries, 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 bodily the multi-sensory qualities of space, to immerse oneself in the concrete reality of a site to build a critical look at the situations lived, the successive atmospheres crossed. With regard to the notions developed by the landscape artist Bernard Lassus, such as "inventive analysis", "minimum intervention", "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, potential imaginations. Other spatial and narrative hypotheses then complement, nourish, intermingle with these first moments of immersion. Through different sound and visual writings experienced, 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 in presence. The in situ practices we develop question urban interstices, brownfield sites, spaces in transition, 'constructed situations' (J.-L. Voileau, 1998) and their possible transformation while respecting the environment.

Research is also conducted on graphic representations, audio-visual writings and the narrative fabric 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 thesis thus begins with the keeping of a research notebook bringing together all the ideas of in situ intervention and artistic, architectural and landscape works that resonate with them, and continues with the development of a phenomenological narrative on the plastic approach carried out on the invested territory. The graphic representations (sketch, drawing, photography, cartography...) and/or audio-visual montages are then re-worked and re-questioned according to a back and

forth between concrete territory practiced and project territory represented.

Conduct of the S7 seminar (1st semester) / Immersion:

Approach based on observation and experimentation in the field, of "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, manager of the site, is an artistic production office specializing 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 in La Station will accompany us in our experimental research efforts.

- The third place led by the Association Ateliers Experience Redynamisation Insertion (AERI) in Montreuil (Metro Croix de Chavaux). Place conducive to architectural experimentation and artistic emergences. We will be assisted by Le Plug In Circus, an architectural and musical research workshop working at scale 1.

NB / This seminar is linked in Master 1 with the project group "Persona grata, Urban mobile structures of interference, Design / manufacturing" and the intensive workshops (CTID) "Plastic experiments at the North Port of Chalon-sur-Saône" and "B.U.L XL (Large Ultralight Widgets)"

Work required:

- Courses, methodological workshops and research follow-up
- realization of a plastic work and writing of a pre-thesis. Produce an observation and intervention follow-up logbook. Through a continuous practice of space, manufacture a problem, hypotheses, a research protocol.

Course materials:

ENGLISH FRIENDLY
communication language

PORTUGUÉS FRIENDLY
communication language

SPANISH FRIENDLY
communication language

Teaching unit:
M72S – Seminar

Teachers:

SA Alexandra
PIGOT Bernard
FALZON Laurence
MAZLOUMAN Mahtab
DESSARDO Marco

Ects credits: 4

Number of weeks: 14

Number of hours / semester: 49

Personal work: 47

SEMINAR

A - AS-MS702 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 spectator's relationship to the work in a certain symbolic context. Today the scenographer is solicited for other fields than theater such as museums, exhibitions, fashion shows, gardens, architecture and public spaces. Is scenography a tool, in its ability to give shape and especially space to an imaginary? 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 the imaginary place to the real place.

Content:

Scenography, a culture of space, a design tool for the architectural project
Theatrical aesthetics, scenic venues, scenography of exhibitions and worn-outs, crossing of artistic practices, scenography as a design tool for the architectural project.

In an approach to the history of theatre from the history of theatre and its great theories through the study of the spatial, aesthetic and symbolic evolution of the theatrical place.

We will analyze the scenographic field and its mutations in its relationship with the evolution of the different fields of shaping space and other areas 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, place of representation ...) and scenography beyond the theater (plastic arts, installations, performances, public art, exhibition spaces, demonstration, dance, video, hybridization shows ...). Mandatory outings and visits will be offered to students.

Work required:

- courses and conferences on:
? Theatrical scenography

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

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
- ? places of representation, space represented, space representative
- ? looking at it and watching it / spectator, actor work
- ? The problems of the scenography of places related to 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
Number of weeks: 14
Number of hours / semester: 49
Personal work: 47

SEMINAR

A - AS-MS703 Art, cinema, architecture

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

Considered as a gesture that is both aesthetic and political, cinema makes it possible to narrate spaces, cities, territories and acts as a seismograph of man's relations with the places he lives in or 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 development of a thesis in two parts, including the realization of a short film (10-15 mins) and the writing of a text (about 60 pages). By avoiding dissociating form from substance, we will consider film and writing as two elements of the same project. Thought together, they will constitute the material of this hybrid research, artistic and academic, whose filmed part and the written part 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 on architecture, and the problems that emerge from it. This will require the elaboration of a synopsis, a film structure and its development to address the problematic formulated in the dissertation, to set up the conditions favorable to the shooting, to anticipate

the development of the project and to realize the adequacy between what we do and what we want to say. The project will develop in stages, from the note of intent, to the spotting, then to the filming and finally to the editing. All this accompanied by a permanent work of reflection, research and writing, also involving structural, formal and discursive biases.

Throughout the 3 semesters, lectures will make it possible to apprehend theoretically the design times of a sequence or a film in order to analyze the development of an intention of shooting, editing, storytelling. By promoting a critical look, 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 thought, and to encourage him to establish his own links and connections, to carry out his own research from the lines of reflection raised in the courses.

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

It is essential to have already made some films in license to integrate this seminar.

Enrolment limited to 32 students (including 10 Erasmus Leavers, and 4 Erasmus Incomers)

Work required: Formulation of a subject and a research problem, development of a plan and a biblio-filmography, filmic locations

Course materials:

ENGLISH FRIENDLY
communication language

ITALIAN FRIENDLY
communication language

Teachers:

MACAIRE Elise
GOURVENNEC Estelle
CARLINI Sara
By ORAZIO Anne
BARON Guillaume

Teaching unit:
M72S – Seminar

Ects credits: 4

Number of weeks: 14

Number of hours / semester: 49

Personal work: 47

SEMINAR

B - HMU-MS705 Habitat and sustainable city, for a critical approach to the urban fabric

Objectives:

While the climate emergency challenges the social world and becomes an unavoidable issue for our territories, all indicators remind us how much the continuous process of urbanization weighs on social and environmental balances and contributes to the diffusion of carbon emissions. In this context, the objective of this seminar is to present a first overview of the challenges of the ecological transition with regard to urban manufacturing processes through an approach focused on the production of housing and sustainable cities both from the theoretical and conceptual angle and from the point of view of the practices of actors (professionals, citizens, decision-makers, etc.).

Beyond the thematic approach, it will be, throughout this semester, to allow the definition of a research topic 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 cycle.

Content:

This course is intended to be a place of collective reflection on the strategic choices and methods that contribute to urban and architectural design: how to think about spatial planning, 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 "habitat and sustainable 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 deepening on the sustainable architectural and urban challenges facing territories and stakeholders, with regard to new imperatives (climate and energy constraints, exit from fossil fuels, urban resilience, etc.). The frameworks and production methods (manufacture of eco-districts, production of

ecological architecture, dissemination of participation model of different actors in the design and development processes, ...) will be questioned according to a resolutely critical and comprehensive approach.

Work required:

- Active participation in theoretical and lectures.
- Realization of reading sheets.
- Elaboration of a pre-thesis (definition of a subject and a problem, presentation of a working method, bibliography).
- In connection with the teaching Initiation to research [IR 705], co-construction of an ABC of Sustainable Development and Ecological Transition.

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

Course materials:

ENGLISH FRIENDLY
communication language

SPANISH FRIENDLY
communication language

ITALIAN FRIENDLY
communication language

Teaching unit:
M72S – Seminar

Teachers:

RADOUAN Sebastien
APPLE TREE Juliette
POLYCHRONIADI Aikaterini
FARRET Pierre
DEHAN Philippe
CHAVANES Philippe

Ects credits: 4

Number of weeks: 14

Number of hours / semester: 49

Personal work: 47

SEMINAR

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

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

Content:

Housing architectures proceed from many factors. By adopting the designer's point of view, the design process is rooted first in a relationship with the client, and beyond that a knowledge, or even a vision of the inhabitants and lifestyles in a given culture. This vision is based on the culture of the architect, his methods and his posture. It is built over time, and crosses both the architect's career and the history of architecture in a given era and society. Indeed, the design work is also part of a multiplicity of crossed histories: that of the designer, that of the client, that of architecture, that of society. It also corresponds to a set of rules and methods that the architect gives himself, drawn from the theories of architecture or from his personal culture, experienced and transformed over the long term.

By adopting the point of view of the inhabitant, the question arises of inhabiting it. To understand living in it is to explore 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, occupying one's home and neighborhood, appropriating spaces, furnishing them or transforming them over 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 living patterns and raising questions of scalability and flexibility.

More broadly, the design of housing is part of an economy and a housing policy, it integrates the laws of the market as well as the structures of production of the building. It evolves over the course of the conjunctures and it must always be contextualized in the era. 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 advance of techniques. These issues determine how we look at buildings past and present, and how we produce contemporary-oriented knowledge of design.

The social dimension of housing, considered as production and reflection of a society, is finally superimposed by 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, implanted? 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 the habitat 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 can be associated, for example, with a historical study of the designer's career and theories, an analysis of the production practices of the client, or the examination of the organization of work at the architectural firm. The tools and theories specific to habitat architectures will constitute both the objects of research and the instruments of analysis. Notions such as distribution, threshold, comfort, or type may be questioned at different times, both in their definitions and interpretations and in their concrete translations. Similarly, the situations studied may concern a variety 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, using a transdisciplinary exploration of the research object. The issues may intersect with the design work, the

theorization that underlies it, the tools of representation that nourish it, as well as 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" for analyzing architecture, archives as a support for analyzing the design process, writings, whether books, articles or interviews (journals 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, methods of analysis)

2nd semester: investigation 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 pre-memory steps

Course materials:

ENGLISH FRIENDLY
communication language

SPANISH FRIENDLY
communication language

ITALIAN FRIENDLY
communication language

GERMAN FRIENDLY
Communication language

Teaching unit:
M72S – Seminar

Teachers:
PATTERSON Michael Brent
ANTONIOLI Manola

Ects credits: 4
Number of weeks: 14
Number of hours / semester: 49
Personal work: 47

SEMINAR

B- HMU - MS715 Territories of political ecology

Objectives: As part of the field of study "Living in 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 areas). The approach adopted will be clearly transdisciplinary and will focus on creating links with project teachings.

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 in the late 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 the quality of individual and collective life). It 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 neighborhood, education, culture, transport, links between generations.

Work required:
Course materials:

ENGLISH FRIENDLY
communication language

ITALIAN FRIENDLY
communication language

HUNGARIAN FRIENDLY
communication language

SPANISH FRIENDLY
communication language

GERMAN FRIENDLY
communication language

Teaching unit:
M72S – Seminar

Teachers:

SZANTO Catherine

FANG Xiaoling

PATTERSON Michael Brent

DE MARCO Rosa

Ects credits: 4

Number of weeks: 14

Number of hours / semester: 49

Personal work: 47

SEMINAR

C - MTP-MS707 Architecture/S and Landscape/S: the fundamentals

Objectives:

Acquire the bases of a culture of landscape through the diversity of approaches to which it is subject, and their architectural relevance. Explore the contributions of landscape thoughts in the design and implementation of site transformation projects: architectural projects, urban projects, artistic projects, territorial projects, landscape projects, etc. Questioning the cultural models supporting contemporary policies of spatial planning, "landscaping", ecological transition.

Content:

A word invented to designate all or part of a painted image, landscape today continues to shape and inform the layout of contemporary spaces, whether extraordinary or ordinary, exceptional or everyday. Its importance, now acquired to project the future of places, requires adequate training for the complexity of its field, the renewal of architectural and urban practices that it induces, 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 sufficient bases 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 relationships with other notions (space, site, place, environment, environment, territory, nature, garden, ...), its fields of use, its potential for invention and creation, in order to understand its relevance and its contributions in the very act of architectural and urban design.

In a second step, it will be a question of analyzing concrete realities, both political and spatial, territorial and environmental within which this notion is mobilized. The presentation of case studies, relating to key periods of landscape, from the Renaissance to the present day, will provide a better understanding of the sources of the current emergence of landscape and better situate it in the evolution of man's relationship to his environments.

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

In the continuity of the seminar and the optional 'Introduction to research', students will be supervised and accompanied in the development of their final thesis subject.

Work required:

The seminar (28h) 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 arts, sciences and letters. It gives rise to exchanges oriented around the fundamentals of the landscape. The memory follow-up (21h) is carried out in a collective session in complementarity with the optional 'Architecture/S and Landscape/S: Introduction to Research'.

Course materials:

ENGLISH FRIENDLY
communication language

PORTUGUÊS FRIENDLY
communication language

Teachers:

GOURVIL Yannick
BODART Celine
BONNAUD Xavier
BEGEL Antony

Teaching unit:
M72S – Seminar

Ects credits: 4

Number of weeks: 14

Number of hours / semester: 49

Personal work: 47

SEMINAR

**C - MTP-MS708 Architecture of inhabited environments:
philosophy, architecture, urban**

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 living worlds appears as an unstable construction in which we are engaged, especially as architects, while human edification 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 installation on the planet.

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

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.

It is a question of discovering the research activity (from progressive exercises and supervised personal work), and also to bring over the sessions, specific knowledge and opportunities for exchanges

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

- Anthropocene and these stories
- Tools to rethink the idea of nature,
- Which metabolism for which cities?
- Relationship between ecological sensitivity and new aesthetics,
- How to look at the fragility, the vulnerability of the forms of life
- Addressing disaster risks, collapses'

Each time details on the notions, projects, attitudes of architect, will rub shoulders 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 with intensity the prospective game at work in each research activity.

Work required:

Course materials:

ENGLISH FRIENDLY
communication language

SPANISH FRIENDLY
communication language

ITALIAN FRIENDLY
communication language

PORTUGUÉS FRIENDLY
communication language

Teaching unit:
M72S – Seminar

Teachers:

PEDELAHORE Christian
LAGUIA Virginia
MORALES Juan Luis
JAUPITRE Julie

Ects credits: 4

Number of weeks: 14

Number of hours / semester: 49

Personal work: 47

SEMINAR

C - MTP-MS709 Architecture, sustainable factory of the whole world

Objectives:

This seminar is a twofold place of development:

-Collective, that of the construction of an analytical and critical thinking of international human space productions and their mutations over the long term.

-Individual, that of the workshop, patient and cumulative, of the manufacture of the master thesis, on the basis of the reasoned construction of a subject and a specific problem, a referenced corpus, as well as a posture specific to each student.

Content:

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

-That of the inseparability of the scales of the manufacture of anthropized spaces, from the most domestic knowledge and uses to the practices of the factory -concrete and diversified- 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 prolonged bilateral exchanges between identities and cultures of the great world civilizational areas: Mediterranean, Asia, Latin America, 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 remounted, retrospective and comparative.

They thus constitute tools for in-depth knowledge, both of the diversity and 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.

Work required:

Lectures in French.

Languages accepted (individual corrections): Spanish, English, Portuguese, Italian, Vietnamese.

Work requested:

- Notes of Lectures and readings as identification and construction of a research object and a personal problem.

- A thematic file as preparation of the corpus of individual memory.

Course materials:

ENGLISH FRIENDLY
communication language

Teaching unit:
M72S – Seminar

Teachers:
ROUGELOT Benoit
HAMANI Dalil
FAGUET Gaelle
FAAS Guillaume
BELKADI Nazila Kahina
BALEZ Suzel

Ects credits: 4
Number of weeks: 14
Number of hours / semester: 49
Personal work: 47

SEMINAR

D - CCA-MS710 Architectural Project Construction Practices

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 bring students during the semester to:

- determine the field of study and the nature of the thesis they will develop
- 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 topic to their EFP topic in order to make their personal work coherent between reflection and project proposal. The thesis then becomes the theoretical contribution feeding the PFE. Consequently, 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 that 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 the realization and returns of exploitation, necessarily iterative process to manage its complexity and its 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 better understand the other actors, their legitimacy and their profession (different project owners, design office, specialized consulting engineer, company, industrialist), to question the specific contribution of the project

management (and the architect within it) and its role vis-à-vis the other actors,

- to understand the question of project management (' project control and management '),

- 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: title, pre-problematic, annotated bibliography accompanied by reading sheets, first iconographic base, possibly first results of the work (for example interview report) and work plan for the next two semesters.

Course materials:

ENGLISH FRIENDLY
communication language

SPANISH FRIENDLY
communication language

Teachers:

KOURNIATI Marilena
DESCAT Sophie
DESTOMBES Louis
CHABARD Pierre

Teaching unit:
M72S – Seminar

Ects credits: 4

Number of weeks: 14

Number of hours / semester: 49

Personal work: 47

SEMINAR

D - CCA-MS711 Criticism and History of Architecture and the City

Objectives:

Teaching Team 2023-2024:

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, sociocultural, geopolitical, technoscientific) that definitively throw confusion 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 to extend reflection, deepen issues and renew knowledge, mobilizing the tools of history discipline that Manfredo Tafuri already saw, in his time, as "a perpetual contestation of the present, (...) a threat also, if you will, to the tranquilizing myths that assuage the anxieties and doubts of architects 1".

(1) Manfredo Tafuri, *Théories et Histoire de l'Architecture*, Paris: éditions S.A.D.G., 1976 (1968), p.307.

Content:

The axes of reflection and claim opened 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 issues is of course the rise of the ecological imperative that engages 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 construction 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 dismantling. Faced with this constant, some authors call for a drastic reduction, or even a "moratorium (1)" pure and simple, of new construction.

Rather than the death of architecture, Pierre Caye sees on the contrary, its rebirth. The maintenance, repair and perpetual transformation of buildings already built – the "heritage", in the broader sense – can, according to him, constitute an alternative productive model to neoliberal capitalism a productive model more intensive than extensive, where the theoretical and practical skills of the architect become central again: "It is up to architecture to disarm this global and machinic mobilization at the origin of the wear and tear of the world, by substituting its own mobility, soothed and serene. (2)"

Project crisis

These crucial issues call into question, one after the other, certain foundations of the discipline. It is first of all 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 removed 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. It is still the primacy of the notion of "project" whose anthropologist Tim Ingold has clearly shown the problematic rooting in Western modernity, domineering, vertical and extractive. Against this, he invites us to think differently about the articulation between the "thinking", the "saying" and the "doing" of architecture: "To do then consists of a process of correspondence: not to impose a preconceived form on a raw material substance, but to draw or deliver the immanent potentialities of a world in the making. (4) »

Critical history of the present

To fully grasp the potential of these new challenges, 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 that, in the field of architecture, prefigured and prepared their current emergence. Precisely, for at least its first two decades, the School of Architecture of Paris-la Villette (ex-UP6), founded in January 1969, was the effervescent, militant and experimental home 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. alterglobalist utopias (Gustave Massiah), the participation of inhabitants (Jean-Pierre Lefèvre), the rights of homosexual minorities (Roland Castro), the search for constructive alternatives (David-Georges Emmerich) or energy alternatives (Georges and Jeanne-Marie Alexandroff). At a time when these questions, once marginal, are becoming central, it is urgent to study these episodes carefully 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, "Le plus moderne des anciens, le plus anciens des modernes", in Arnaldo Rivkin, *Avec Alberti. Considérations intempestives sur l'architecture*, Paris, Éditions de la Villette, 2023.

(3) Translation of 'agency', agency (or agenciality) is an Anglo-Saxon notion introduced in 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)), maker architects (Juliette Montfrond (2022), Camille Sauze (2022)), architects-publishers (Filiz Keysan (2022), Maud Yvon (2022)), 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 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 briefs have been awarded since 2017:

Thesis 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: Radiation 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, La Nature de la machine. The automotive space among French organic architects, 1962-1990, 2022

Rémi Butler Award:

DAVID, Romain, OMA born again, 2018

Sixteen dissertations received the mention research:

BESSON, Elsa, The Written Prison: Making Prison Space in Legal and Architectural Discourses from the Mid-Eighteenth to Mid-Nineteenth Centuries, 2013
EL KADDIOUI, Hakima, Will the return of ornament take place?, 2013
GIORDANO, Élise, La cabane, a mediatized refuge from the crisis. In the discourse of the Exyzt and Cabanon Vertical collectives, 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, Linking 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 Ricardo Bofill's Abraxas Spaces, 2018
BERNARD-GUELLE, Gabriel, The Teaching of David-Georges Emerich in Schools of Architecture: Radiation and Isolation, 2017
DUCROCQ, Marie-Anne, The strategy of silence: reception of the reconstruction of the Saint-Elie church in Lebanon, 2018
BETTING, Hugo, L'avoir lieu d'une utopie. Critical History of the Mobile 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, Parisian industrial hotels. 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 dissemination of prison architecture in France (1770-1950), defended in December 2021 at the University of Rennes 2, under the direction of Hélène Jannière.

EL KADDIOUI, Hakima, Orner le quotidien: processus d'ornementation du logement collectif privé en Ile-de-France (2009-2016), defended in December 2022 at the University of Paris 1, under the direction of Valérie Nègre and Pierre Chabard.

BOUROUBA, Lyna, Le Degré zéro de l'écriture architecturale, 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, ongoing at Harvard University since 2019, under the direction of Reinhold Martin.

FELDMAN, Deborah, Stay home! Intimacy and its architecture in the digital age, underway since 2020 at Paris 10 University, under the direction of Alessia de Biase and Pierre Chabard.

BETTING, Hugo, Illusion of immersion: the annular theater 1910-1970, in progress at Harvard University since 2020, under the direction of Antoine Picon.

Work required:

The life of the seminar alternates several types of sessions: first lectures that feed the three themes of the seminar from the research work of the teachers conferences of external speakers on particular points and in situ visits according to the occasions and themes treated regular sessions of follow-up of the dissertations

Nourished by an optional introductory teaching in research methods, this first semester of seminar must 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 land.

Course materials:

ENGLISH FRIENDLY
communication language

JAPANESE FRIENDLY
communication language

Teaching unit:
M72S – Seminar

Teachers:
TUSCHER DOKIC Anne
SATTLER Lea
SILVESTRE Joaquim
GUENA François

Ects credits: 4
Number of weeks: 14
Number of hours / semester: 49
Personal work: 47

SEMINAR

D - CCA-MS712 Knowledge of Instrumented Project Activities

Objectives: The mode of production and the evaluation of the architectural project were little questioned. Nowadays, this questioning cannot do without examining the first instrument of design: the brain. But it does not work 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 of project thinking: the oldest such as sketch, geometric, descriptive, vocabulary or physical model but also the most modern such as digital model, algorithmic processes, multi-agent systems, form grammars, or artificial intelligence.

It is this embodied and instrumented conception of the project that the seminar 'Knowledge of Instrumented Project Activities' (formerly Activities and Design 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, materials, perception, emotions, empathy...

Content: The seminar takes place in several stages:

- A time of theoretical teaching: the sciences of architectural design are approached through different models of explanation of design and project activities.
- A time of presentation of contemporary anchors of architectural design: biomimicry, neuroarchitecture, algorithmic architecture, smart cities, BIM, project pedagogy, serious gaming.
- A time to present instruments for research 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 wants to be a place where speech is free and attentive listening. It is led by members of the CNRS MAP-MAACC research laboratory. This supervision provides solid training in scientific research methodologies. It also offers the chance to discover the research work of the laboratory as well as to participate in its experiments. Students are encouraged to propose presentations of new themes and tools in order to broaden the field of reflection.

Work required: Popular science readings followed by readings of scientific articles. If necessary, constitution of a corpus. Writing of a problem note as well as a schedule of the research work.

Course materials: A website provides students with the contents of the courses as well as the documents and methodological tools necessary for the realization of the dissertation. A presentation of the course is available on this website <http://maacc.paris-lavillette.archi.fr/S>

ENGLISH FRIENDLY
communication language

Teaching unit:
M72S – Seminar

Teachers:
PORTNOI Anne
DESCHAMPS Catherine
JOLY Julien
CHASTANIER Frédéric

Ects credits: 4
Number of weeks: 14
Number of hours / semester: 49
Personal work: 47

SEMINAR

E - IEHM - MS 717 How to live together? Theories and forms of collective architectures

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, built or unbuilt projects, it is a question of making visible uses, spatial devices, types or transformations, with regard to issues of sharing, neighborhood or coexistence that intrinsically link society and environment. Tools for territorial, typological, morphological and structural analysis as well as a set of theoretical texts and documentary resources are mobilized 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 in front 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 we are required to solve. The seminar starts from this starting point: we must renew our understanding of what constitutes community in order to be able to reconnect with politics. And this is not activism but investigation. Investigations to update this world of tomorrow that begins in a thousand scattered places where various forms of coexistences 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 we're going to have to "land." This means, among other things, that the scope 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 probably correspond to forms of commissions for architects different from those currently known. What will be the extent of these transformations? We do not know. Some architects want to be actors of 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 commonality with a gaze that sees what others do not see. In the tension between the future and the past, it is also a question of making this sentence of the historian Patrick Boucheron our own: "If the past has authority over our lives, it is not because it would burden them with the weight of tradition. This 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 concerned. 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 a difference. How has project design been designed to facilitate or represent community life? And what does this tell us about the designs 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 game of consensus and controversy 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 analyzed as landscaped, inhabited, located, 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 conduct the investigation leaving a chance for the duration to move the line of a priori, without impeding being able to take a position. Shared spaces also respond to timesharing. Roland Barthes, in *Comment vivre ensemble*, praises "idiorhythmic" communities, where individual and collective cadences 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, the office of times are meanwhile attempts to answer the metropolitan desynchronization.

The study of the forms of coexistence is rich in many potential themes, all of which feed the reflection on the future of our modes 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. Some examples, among others, of themes hung on places:

- Invent in the existing

Whether it is a question of "revitalizing" town centres, reconversion projects for industrial rights-of-way, renovation of degraded condominiums, the challenge is invariably to resurrect locally a lost or weakened community life. To enrich project approaches, objectifying the most common community representations makes sense. Both those that permeate places and projects and those that motivate actors. But in no way is it a question of opposing the concrete of the built environment and its potentials to the ethers of representations. The challenge is operationality, in a context where the architect finds himself more and more often confronted with decision-making collectives.

- Community utopias

From Fourierist housing to gated communities of garden cities to post-68 utopian communities from the Kommunalka 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 itself in relation to the surrounding world, accepting the limits of a local utopia or having to continue after their foundation. In the context of the climate and environmental crisis, the community utopia is undergoing major renewals. The local and community level needs to be reinvested.

- Real villages and mythical villages

From historic villages focused on agricultural production, forming a community in the shadow of the lords, to contemporary satellite villages of metropolises, the gap is great. 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 revitalizing town centres raise the question of the forms of the community in two ways. Both because they confront designers with local infrapolitical interactions and because community is often the very object of commissioning. 'Revitalization' or 'revitalization' is always ultimately about the very being of the local community.

- Degraded condominium and energy renovation

One of the hard points to drive the energy transition in the coming years 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 a place where the social and ecological imperative collide, it is that of degraded co-ownership.

- Human and non-human communities

The conversion of brownfield sites 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 reinvested. Various experiments attempt to include "non-humans" in human communities and their deliberative bodies: Notre-Dame des Landes, Parlement de la Loire, etc.

Half-yearly organization

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 the 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 issues, punctuated by student presentations, grouped by thematic or methodological proximities, with presentation of a detailed plan of the thesis in the form of a poster

- S09: individualized supervision of the writing of the dissertation. Semester sometimes shared with the S07.

Students in mobility (erasmus)

For students in mobility, a specific follow-up will be organized, with adapted schedules. In addition, CM or conference content will be made available for replay.

Work required:

Course materials:



Teaching unit:
M72S – Seminar

Teachers:

RADOUAN Sebastien
ROLLENHAGEN TILLY Linnea
MAUMI Catherine
KOERING Elise
GALLO Emmanuelle
BRUCCULERI Antonio
BASSIERES Laurence

Ects credits: 4

Number of weeks: 14

Number of hours / semester: 49

Personal work: 47

SEMINAR

E - IEHM-MS713 History and practices of transformations of the built environment

Objectives:

The teaching provided in the seminar 'History and practices of transformations of the built environment' aims, through the production of a dissertation, the development of a reflection based on the specific tools of research in history, in the fields of architecture, the city, the territory, techniques or heritage. The ambition is to shed light on decision-making methods, actors involved, terms and conditions of debates, values convened, modes of application and implementation of adopted policies, concrete practices for transforming buildings.

The thesis should show mastery of research methods: definition of an original subject, clearly defined in terms of problematic and chronological and geographical demarcation production of a state of the art presentation of mobilized sources creation and implementation of instruments of Research specific to the subject studied (databases, maps) development of a problematized plan, writing of a scientific text.

While the subjects may concern all geographical areas and all periods, including the most contemporary, the sources to be mobilized, whether written (archives, journals, publications) or oral (interviews), must be clearly defined, located, and accessible during these three years.

Semesters.

Content:

The program is designed to alternate:

- Conferences of teacher-researchers,
- Stage work to be done throughout the year
- Individual corrections during method and writing workshops.

If the conferences are intended to enrich the reflections of the students on various subjects, the progress work and workshops are designed to allow to gradually master, while questioning them, the tools and methods of research in the fields of heritage and history of architecture, the city and the territory.

Visits:

- Visit of documentation sites (Musée d'Orsay, Archives de Paris, Archives nationales...)
- Site visit: (Suresnes open-air school, garden city of Draveil...)

Study tour:

A study trip is organized in the spring, with students from other seminars, the post-master Immersion AHTTEP, PhD students from the AHTTEP laboratory and students from other schools or universities.

Work required:

Course materials: Slideshow, bibliography and online documents

ENGLISH FRIENDLY
communication language

ROMANIAN FRIENDLY
communication language

GERMAN FRIENDLY
communication language

Teaching unit:
M72S – Seminar

Teachers:

MINOST Martin

MERON Nava

IOSA - LEMUR FURNACE Ioana Liana

LEITNER Patrick

HELAND Laure

Ects credits: 4

Number of weeks: 14

Number of hours / semester: 49

Personal work: 47

SEMINAR

E- IEHM - MS716 Built cultural heritage: expertise and reuse in France and abroad

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 architectural, social, environmental, political and normative issues of the heritage factory. In this perspective, it raises the question of temporal reconfigurations, social productions and appropriations of built heritages, focusing more particularly on 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 analyzing the spatial effects of financing mechanisms complementary to ministerial policies (such as the Heritage Lottery or participatory financing) with a particular interest in rural territories or in decline. These rural territories, captured in often competitive logics of tourism and revitalization, such 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 Espace Travail Laboratory of the UMR CNRS Lavue - as well as its guests, will present case studies in France and abroad: Italy, Romania, China, Japan, Israel, Nepal, United States ...

Content:

Organization: The seminar thus consists of three types of sessions:

1. Methodology courses in S7: Qualitative methods of survey (observations, interviews, mapping, documentary corpora, etc.), the techniques of scientific writing (referencing, bibliography, etc.) and those of representation of the data collected are presented.

2. Lectures and lectures in S7 and S8: opportunity to discover remarkable research or practices in the field of heritage preservation or transformation.

3. Individual follow-up (or in small groups) of the dissertation, for students in Paris.

The individual follow-up of Erasmus students is weekly. It is provided by a supervisor-referent. Remote supervision is carried out through various software, applications and digital platforms and adapts to the student's schedule in his host country.

A workshop in Bégard will take place from October 28, 2023 to November 1, 2023.

Finally, thematic and methodological links can be made between this seminar and the groups P701, P702, P703, CTID 732, CTID 733, CTID 737, P810, P912, ...

Work required: Exercises for reading and critical analysis of texts proposed by teachers.

Course materials:

Teaching unit:
M72HA - History

Teachers:
BASSIERES Laurence

Ects credits: 2
Number of weeks: 14
Number of hours / semester: 21
Personal work: 23

HISTORY

HA701 A History of Heritage 19th-21st Century

Objectives: Heritage preservation has entered the heart of contemporary policies and the architects trained today will all be confronted, in one way or another, with the heritage issue, whether in the form of restoration, rehabilitation or reconversion.
The aim here will be to approach the notion of heritage from a historical and speculative angle, apart from operational issues (intervention techniques, heritage expertise, etc.), highlighting the construction of our relationship to 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 protections 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 specific issues such as exchanges and influences that have developed, as well as the dynamics participating in the process of universalization of the notion since the mid-twentieth century.

PROGRAM OFFERS:

- Course 1 - Introduction. Monument, historical monument and heritage.
- Course 2 - The birth of the historic monument in France and Europe.
- Course 3 - Restoration: the invention of a discipline.
- Course 4 - The extension of the historical monument.
- Course 5 - Heritage policies outside Europe – Japan
- Course 6 - Theme 1: Heritage Representations
- Course 7 - Theme 2: Conflict and Heritage
- Course 8 - The turn of the Glorious Thirty
- Course 9 - Heritage Extension 1: The Invention of Industrial Heritage
- Course 10 - Heritage extension 2: "from the cathedral to the spoon"
- Course 11 - Theme 3: Restoration: Theories and Practices
- Course 12 - Universalization of Heritage

Course 13 - What uses for heritage?

Work required:

It will be a question of conducting a study on the existing protections of the chosen place and highlighting 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 ... to analyze and cross-reference them.

Course materials:

Teaching unit:
M72HA - History

Teachers:
CHABARD Pierre

Ects credits: 2
Number of weeks: 14
Number of hours / semester: 21
Personal work: 23

HISTORY

HA702 Immediate history of a fin de siècle

Objectives: 'Immediate history of a fin de siècle: contemporary architecture on display (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 debates and discourses, trends and turns, ephemeral fashions as well as more structural transformations that have animated this field and of which today's architecture is, in fact, the heir. In particular, the course deals with the question of "postmodernity", both as a transient architectural mode and as a more chronic historical condition. Through a critical history, therefore strongly themed, this course attempts to explore some recurring features of the relationship of architects 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: the 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 architecture's past
Exhibition: P. Portoghesi, "La Presenza del Passato", Venice, 1980.
6. Neo-modern reactions
Exhibitions: P. Chemetov, « Modernité : un projet inachevée », Paris, 1982.

7.Overexposed architectural drawing

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

8.The invention of new avant-gardes

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, « Architecture non-standard », Paris, 2004.

12.Postmodernism News

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

Work required:

Course materials:

Teaching unit:
M72HA - History

Teachers:
DESTOMBES Louis

Ects credits: 2
Number of weeks: 14
Number of hours / semester: 21
Personal work: 23

HISTORY

HA703 Constructive thinking. History, theories, analysis

Objectives: CONSTRUCTIVE THINKING, HISTORY, THEORIES AND ANALYSIS

This history course is at the crossroads of three themes: constructive techniques, architectural culture in its historical dimension and the recent evolution of architectural practices through the prism of the digital turn and ecological transition.

Articulating the history of constructive practices and the history of construction theories in architecture since the eighteenth century, it aims to equip students with a theoretical background and methods of critical analysis to study the transactions between architectural design and constructive techniques.

Content: This teaching articulates lectures, reading key texts and exercises of analysis of architectural achievements, the latter allowing students to apply the theoretical principles acquired and to appropriate a methodology of analysis specific to the constructive project developed by an architect. Applied to contemporary projects, these analyses will make it possible to place the constructive project that underlies them in a historical perspective, by highlighting continuities or breaks with the major themes of modern constructive thought (constructive fiction, detail, tectonics, construction as representation, etc.).

Work required: Reading sheet (1 to 2 pages)
Analysis file of a project based on the concepts of the course (4 pages A3)
Oral presentation of the project analysis (10mn)

Course materials:

Teaching unit:
M72HA - History

Teachers:
RADOUAN Sebastien

Ects credits: 2
Number of weeks: 14
Number of hours / semester: 21
Personal work: 23

HISTORY

HA704 History of ruins: from the return to Antiquity to urbex (fifteenth-twenty-first century)

Objectives: The challenge of the course is to establish a critical distance from current speeches delivered in the name of sustainable development by returning to the thoughts developed since the nineteenth century in order to establish a more respectful relationship between human beings and their living environment. To do this, is proposed the analysis of founding texts but also projects formulating another way of inhabiting our common home that is the Earth, most often claiming a consideration of ecosystems and potentials held by a territory, the way in which they can be the support of economic and human activities respectful of the resources they represent, This while promoting the organization of a coherent and harmonious community.

Content: Course language: French
Language of communication: French and English.

The course could also have been titled 'The House We Live In' – the house in question being the Earth – in reference to the television show conceived by landscape designer Ian McHarg as an "extension" of the 'Man and Environment' teaching he had been teaching since 1957 at the University of Pennsylvania, with a view to training environmental planners.

In fact, if the impact of the human footprint on the Earth's environment is imposed on us today with force and indisputability, history teaches us that many invitations to such awareness have long been neglected by the majority. Thus, George Perkins Marsh stressed as early as 1864, in *Man and Nature*, the role of "man as an active geological agent" worrying about the future of humanity as it modifies its environment, on which its well-being and health depend. The major lesson of his approach, crossing geography and history, is that it demonstrates the need to be part of the long term: long duration of the history of territories and modes of habitation, but also of the impact of human acts on the Earth.

Since then, environmental history, as defined by William Cronon, has convinced us of the need to break down disciplinary boundaries and mobilize contributions from different fields (anthropology, ecology, economics, geography, etc.) in order to decode the relationship between human beings and their environment over time.

The interest of such an approach for spatial designers – architects, urban planners, landscapers – lies in the fact that it invites us to reflect on the questions of soil (its nature, status, property regimes), resources, energy, climate, all points that are also economic and political and have guided the way in which the human being has moved, has established, built and artificialized its environment and made society. It also requires us to dwell on the evolution of man-nature (or nature-culture) relationships, particularly in our Western societies.

To do this, the course resonates fundamental texts dating from the nineteenth century (or even earlier) with the issues that are ours in the twenty-first.

It also explores thoughts and approaches to the project that have nourished reflections during the twentieth century (ranging for example from Kropotkin to Geddes, from MacKaye to McHarg, even Magnaghi or Hopkins today with cities in transition).

The objective of the course is to develop a critical thinking of fact, many observations have been known for a long time and some solutions are also known. The environmental question is above all a political and ethical issue, which the architect must seize.

A majority of the references mobilized are Anglo-Saxon.

Work required:

Regular updates are made during the semester to check the progress of the work of writing the article. It is expected that the texts given throughout the semester will be read and analyzed.

Course materials:

Teaching unit:
M72HA - History

Teachers:
NAVINER Brigitte

Ects credits: 2
Number of weeks: 14
Number of hours / semester: 21
Personal work: 23

HISTORY

HA705 History of Urban Gardens and Plantations

Objectives:

LANGUAGE OF INSTRUCTION: French

COMMUNICATION LANGUAGES: 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 highlight the importance of gardens for the inhabitants of the urban world. If 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 architecture, extends the city, transforms it, and the architect can draw valuable lessons from the study of gardens in terms of spatial planning and staging.

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

- develop a spirit of curiosity through the approach of a field of study inviting the (re)discovery of the relations 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 benchmarks and keys to understand the place and current forms of gardens.

After a quick evocation of the gardens of the oldest 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 that represents the Age of Enlightenment with the emergence

of the landscape garden, the picturesque garden and a new look at nature the nineteenth century for which the garden is open to all and introduces the landscape of nature in the city, while showcasing technical and scientific progress and discoveries the time of modernity and its gardens marked by innovations and very diverse currents the contemporary era rich in new forms and approaches (especially social and ecological) implemented in the creations of gardens, parks, walks, in the contemporary city.

For each of the periods considered, we will evoke the historical context and the actors of 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 courses, three visits are organized on Saturdays (in October or November): gardens of Versailles and Potager du Roi, gardens of Trianon and Hameau de la Reine, Parc de Bagatelle or Parc des Buttes Chaumont. Each student must participate in one of the tours.

Other visits are left to the initiative of the student: Vaux-le-Vicomte Domaine de Chantilly Parc Monceau, Square des Batignolles and Parc Martin Luther King Clichy Batignolles Parc André Citroën Garden of the Quai Branly Museum Montsouris Park Floral Park 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 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 courses and field observations, reflect a good understanding of the main characteristics of the chosen garden and the era or style to which it is attached.

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 on this course is available on the website:

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

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

Teaching unit:

M72PH/SH – Philosophy/Sociology

Teachers:

TUSCHER DOKIC Anne

Ects credits: 2

Number of weeks: 14

Number of hours / semester: 21

Personal work: 23

PHILOSOPHY OR SOCIOLOGY

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

Objectives:

Develop the ability to analyze, evaluate and formulate philosophical arguments, with particular attention to the relationship that aesthetics can have with recent developments in cognitive science. In particular, we will examine the role that psychology and neuroscience can play in explaining the arts and, hence, architectural aesthetic experience.

Content:

The first step will be to offer a general introduction to the interdisciplinary objectives and methods of cognitive science through their application in the explanation of art and aesthetic experience. Next, the ways in which aesthetic experience is distinguished from ordinary perceptual experience in traditional and contemporary philosophical literature will be exposed. In a third step, the question of the naturalization of aesthetics - as a project aimed at studying, explaining and, if possible, solving traditional philosophical problems in terms of natural psychological processes - will be evaluated by means of philosophical conceptual analysis. In particular, we will discuss the hypothesis of some psychologists and neuroscientists that artists are intuitive neurophysiologists whose works reveal an implicit understanding of how the human brain works. Finally, the question of emotions will be addressed. Indeed, a debate opposes philosophers on the question of the existence of irreducible aesthetic emotions to other emotions not specifically aesthetic. A question more rarely asked in the context of this debate concerns the possible existence of emotions (aesthetic or not) intrinsically linked to the architectural experience. We will look at the ins and outs.

Courses taught in French (other language of communication: English)

Work required:

This teaching is provided in French in the form of seminar-courses. Active participation of the student is required. Presentation at the end of the

semester of a personal written work (in French or English) related to the concepts discussed in class.

Course materials:

Teaching unit:

M72PH/SH – Philosophy/Sociology

Teachers:

ANTONIOLI Manola

Ects credits: 2

Number of weeks: 14

Number of hours / semester: 21

Personal work: 23

PHILOSOPHY OR SOCIOLOGY

PH702 Philosophy - The Political Issue

Objectives:

This teaching aims to expose the main axes of the new thought of nature that develops between the second half of the twentieth century and the twenty-first, based on the analysis of the work of philosophers (Félix Guattari, Edgar Morin, Bernard Stiegler, Peter Sloterdijk), economists (Serge Latouche), sociologists (Bruno Latour), landscapers (Gilles Clément) who have long invited us to build a meaningful relationship with all 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 little 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 scientists or stated 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

Number of weeks: 14

Number of hours / semester: 21

Personal work: 23

PHILOSOPHY OR SOCIOLOGY

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

Objectives:

Introduction to field research in SHS.

Introduction to sociological and anthropological literature

The extent of the notion of risk applied to architecture and territories: from what it means to make a decision when 'making a project', from constraints to ecological issues, risk runs through the questions that arise for futur.es architects. In this teaching, it is a question of apprehending 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 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...)
- The risk and expectations of the architectural project
- The risk and the question of the standard, whether technical, health, social or societal...
- Risk as a dynamic and in relation to situations...

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

Work required:

Commentary on texts and presentation of situations.

Field survey on the Paris or Ile-de-France territory

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

Teaching unit:

M73CTA – Construction – Environments

Teachers:
RIGAUD Jean Pierre

Ects credits: 3
Number of weeks: 14
Number of hours / semester: 42
Personal work: 35

CONSTRUCTION - ATMOSPHERES

MCTA701 Architectural light and acoustics

Objectives:

- This course is based on the observation of light and sound atmospheres during visits are scheduled on Thursdays from 10:30 am.
- Enrich the learning of the project by approaching light (natural and artificial) and acoustics in the apprehension and design of volume, -object in volume and volume in its urban or landscape environment.
- Familiarize students to use the constituent elements of the project (materials, colors, surfaces, volumes, solid/empty, openings, masks) in interface with light and acoustics.

Content:

- Understanding of light and acoustics by lectures (ambient parameters, definition of needs, colors and materials, regulations).
- Guided tours of significant sites and real case studies in situation through experimentation and critical observation, essential complements to the theoretical approach.
- Interventions of lighting and acoustic professionals for a pragmatic approach to the themes and familiarize themselves with the expectations of a project owner.

Work required:

Alternately:

- in the walls: courses, meetings with professionals, presentation and follow-up / correction of student files.
- outside the walls: mandatory site visits, meetings with professionals.
- files of personal observations and analysis (significant case studies, daytime and nocturnal light situations, sound photos, etc.) to be developed by each student following visits and meetings carried out outside the walls.

Course materials:

Teaching unit:

M73CTA – Construction – Environments

Teachers:
POIRIER Vincent

Ects credits: 3
Number of weeks: 14
Number of hours / semester: 42
Personal work: 35

CONSTRUCTION - ATMOSPHERES

MCTA702 Rehabilitation/interventions on old buildings

Objectives: This course aims to raise students' awareness of rehabilitation work on ordinary built heritage.
It should enable them to acquire knowledge on the current construction processes of buildings built between 1850 and 1930 and on the adapted construction devices to be implemented for their rehabilitation.

Content: The course is structured around the following themes:

- Analysis and identification of buildings (before 1850, between 1850 and 1900, between 1900 and 1930, after 1930), highlighting of different typologies (wood and stone constructions, timber frames, iron sides, concrete structures)
- The constraints of rehabilitation
- Architectural diagnosis
- The constructive principles by period (adaptation to the ground, main structures, envelope, partition).
- Technical diagnosis
- Interventions and rehabilitation works, according to the typologies:
 - . Adaptation to the ground (underpinning, infrastructure work, moisture treatment).
 - . Main structures: load-bearing walls and floors (disorders and reinforcement of structures and frameworks)
 - . Envelope: (Disorders and treatments of walls and covers)
 - . 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 (building of the eighteenth century in protected sector, Faubourien of the late nineteenth century in Paris, etc ...)

Work required:

- TD 1: Dating exercise on current typologies of Parisian buildings from 1850 to 1930
- TD 2: Oral and written restitution of one of the themes specified at the beginning of the semester in relation to the buildings analyzed by period (sanitary quality of housing, accessibility, fire safety, thermal, acoustics ...), accompanied by a graphic production of details on a large scale.
- TD3: Themed exercises on old buildings (proposed by the teacher)

Course materials: Transmitted to the student at the beginning of the session (3 to 4 supports).



Teaching unit:

M73CTA – Construction – Environments

Teachers:
COMITO Viviana

Ects credits: 3
Number of weeks: 14
Number of hours / semester: 42
Personal 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 landscape.

Content: The ongoing climate change confirms the urgency not only of reducing CO2 emissions in the construction and operation of buildings, but the need for adapted architecture.
Three interdependent axes will be developed, favouring a multiscale approach.

1. Thermal strategies of passive cooling (protect - avoid - dissipate - refresh - minimize) and active (technical devices with low environmental impact, especially in low-tech). With a focus on ventilation and the combination, in temperate climate, of hot and cold strategies.
2. Water management: preserving, reusing, reusing this resource, from wastewater to stormwater, from landscape to buildings.
3. Integration of biodiversity: vegetation is our best ally for climate control. Identify and question the reflexes of an anthropocentric approach in order to leave room for the living as a whole as one of the solutions to the current crisis.

Work required: In pairs or small groups, deepening, visits and presentations of projects applying specific strategies in the three axes of the course.
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 reflected according to their orientation and in such a way as to promote

natural ventilation a water retention device to the plot is displayed as a 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.

Teaching unit:

M73CTA – Construction – Environments

Teachers:

AUGROSCHEVA KIROV Cveta

Ects credits: 3

Number of weeks: 14

Number of hours / semester: 42

Personal work: 35

CONSTRUCTION - ATMOSPHERES

MCTA704 Rehabilitation and sustainable development

Objectives:

OBJECTIVES

1. INTRODUCTION

France: 32 million existing homes to be rehabilitated according to current comfort needs and awareness of environmental, social and economic issues
370,000 housing starts for all of 2011,

The rehabilitation and regular maintenance of buildings instead of deconstruction (when feasible) can 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 malfunctions and pathologies, it must first highlight the qualities of the buildings to be preserved as well as their possibilities of evolution by being part of a sustainable approach

Rehabilitation is an important market for our future architects that is much more complex than that of new

2. OBJECTIVES

- integrate the concept of sustainable development into the rehabilitation process

- be able to establish a broad 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 (condominiums, owner-occupiers? tenants?), economic possibilities, cultural value, heritage, current regulations taking into account their possible evolutions. It is about 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 an analytical methodology and at the same time have a clear awareness of the limits of their interventions, in terms of what type of expertise to use on a case-by-case basis.

Content:

3. SUMMARY CONTENT OF LECTURES:

- Introduction to the problem of rehabilitation: the major challenges of rehabilitation, social, environmental, economic
- the different stages of a rehabilitation process. Place of diagnosis in each of them.
- objectives of the contracting authority: limits of the diagnosis
- typological identification
- Diagnosis: pathologies due to a bad original design? inadequate rehabilitation? a lack of quality of materials? 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: merules, insects, humidity?
- diagnosis of consumption?
- architectural diagnosis: use of spaces, analysis of social and functional occupation
- final report with recommendations for hierarchical interventions and inputs for the reformulation of the programme. Integrating regulations

Work required:

-50% lectures and 50% TD. TDs are done on a 'real' building to be rehabilitated. Students analyze the building step by step according to the different stages of the diagnosis.
Tutorials: development of different diagnoses.

Course materials:

PPT and documents

Teaching unit:

M73CTA – Construction – Environments

Teachers:
HAMANI Dalil

Ects credits: 3
Number of weeks: 14
Number of hours / semester: 42
Personal work: 35

CONSTRUCTION - ATMOSPHERES

MCTA705 Simulation and evaluation of thermal environments

Objectives:

This course aims to introduce students to digital 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 revolve around the architectural project in the design phase.

The objective of this course is to integrate and experiment with computer thermal simulation tools 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 it is not his role, but of placing oneself in the posture 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 basics of thermal.
 - 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 (STD)
 - Dynamic thermal simulation in the design or rehabilitation phase.
 - Optimization of energy needs according to the composition of the envelope.
 - Operating principle of STD 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 winter and cold summer.

4. Mini personal project:

This is a personal research on a case study of early thermal evaluation, involving possible modifications of the project depending on the results obtained.

Work required: Teaching is provided in the form of lectures of 1h30 and tutorials of 2h weekly in the computer room.

Course materials:

Teaching unit:

M73CTA – Construction – Environments

Teachers:

Ects credits: 3

Number of weeks: 14

Number of hours / semester: 42

Personal work: 35

CONSTRUCTION - ATMOSPHERES

MCTA706 The structure of curved shapes, shells and stretched canvases

Objectives:

This teaching takes up the basics of statics and resistance of the materials acquired in license and deepens them around concrete examples taken in particular from naval architecture. Students will be introduced to the use of parametric modeling and structural calculation tools.

Content:

A-Reminders of Mathematics and Geometry.

B-Static and RDM

- 1) Fundamental Principle of Statics, Balance of forces and moments.
- 2) Strength of materials, general.
- 3) Deformation, Notion of inertia and stiffness.
- 4) Tension, Shear, Flexion, Torsion and Buckling.
- 5) Load cases and regulations.

C-Parametric modeling (Use of Rhino and Grasshopper + Karamba software)

- 1) General principles and methodological elements
- 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, 1.5h of classes and 2 hours of TD in the form of individual and collective follow-up, during 14 sessions, or = 49 h

Course materials:

The course material will be provided weekly in pdf format.



Teaching unit:

M73CTA – Construction – Environments

Teachers:
LEYRAL Marc

Ects credits: 3
Number of weeks: 14
Number of hours / semester: 42
Personal work: 35

CONSTRUCTION - ATMOSPHERES

MCTA708 Architectural sculpture: project and scale 1/2

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 court proposes an in-depth research, both architectural and technical on this new architecture and the realization of a pavilion project at scale 1.
A certain transversality will be set up with the Small Builders TC (S. Ebode / M. Leyral).

The pavilions of previous years are visible here:
<https://www.instagram.com/construirarchi/>

Content: The project will be developed during the first semester:
- 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 Paris park as part of the CTA Experimenting at scale 1
- Objective of participation/presentation at conferences of the work done (DMS, IASS, etc.)
A publication support will be made by the students, with the help of the supervisors.

The work will be published on the Building Architecture (<https://www.construire-l-architecture.com/recherche-publications>) website.

Work required: The semester consists of 14 sessions of 3h00, itself broken down into 1h30 of classes 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 CT on this theme.

Course language: French

Communication languages: 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 – Environments

Teachers:

Ects credits: 3

Number of weeks: 14

Number of hours / semester: 42

Personal work: 35

CONSTRUCTION - ATMOSPHERES

MCTA709 Building the everyday: details of structural, constructive and architectural archetypes

Objectives:

The objective of the course is to acquire a professional ability that can be directly exploited by developing creativity in terms of common details based on a good understanding of archetypes and their own logics.

Content:

Teaching focuses on archetypal constructive details relating to the appearance of common buildings.

The constructive, architectural and structural detail is seen as a major tool for the overall coherence of the project. The development of this capacity for creative synthesis is based on a few fundamentals that the course proposes to explore:

- Know how to identify an archetype among the diversity of aspects it can take
- Know how to decline the current forms of a structural, constructive and architectural archetype
- Know the details and typical implementations of said archetypes
- Understand the reasons for details and typical implementations
- Develop an informed and therefore operational personal vision of constructive detail

The tool for acquiring knowledge and personal expression is large-scale drawing and modelling, most often on a full-scale scale, a condition for better understanding and therefore greater freedom.

Thus, each current programmatic typology (individual house, collective housing, industrial or commercial shed, offices,...), will be associated with the most used construction and structural modes (posts/beams, porticos, load-bearing sails, lattice, ...), as well as significant details having an impact on the appearance of the building (acrotère, bay support, sheds, structural articulation, glass roofs, cladding, ...)

Work required: Indirect professionalization by realization of constructive details in drawing and modeling, on a large scale between 1/5 and 1/1:

- Restitution by the drawing or model at 1:1 scale of an existing representative standard detail
- Development of a detail from a personal project by the same means

Course materials: Powerpoint or pdf released at the end of the sessions on Drive

Teaching unit:

M73CTA – Construction – Environments

Teachers:**Ects credits:** 3**Number of weeks:** 14**Number of hours / semester:** 42**Personal work:** 35**CONSTRUCTION - ATMOSPHERES****MCTA710 Architecture of bio-based materials****Objectives:**

In its beginnings, for lack of being able to shape materials, architecture was only an "art of finding". Techniques for transforming raw materials have gradually developed so that the materials used in the construction act are increasingly distant from their "natural" state of existence. This process accelerated during the era of industrialization, then following the world wars, eras that also bequeathed us a wide range of new chemical compositions, giving rise to new families of materials, often blindly assimilated in the culture of the building, bringing a bill of which we have not yet taken the measure.

In the name of the principle of economy or with the concern for a 'nobler' image, a questionable need for transformation and continuous renewal is valued, which can lead to damaging waste.

However, this process of planned obsolescence is not inevitable and architecture occupies a key position to reflect on it, or even to question it. Short of eliminating craftsmanship, diminishing social ties and losing the infinitely rich aesthetics of a natural material, architecture must acknowledge the harmful consequences of these practices.

Even if choosing to use the most widely available local materials, such as soil or local wood, set up by local know-how, appears the most expensive in terms of initial investment, ecological, energy and social constraints recommend this new opening towards the least processed materials, Energy-efficient, naturally recyclable and reusable.

While reviving a thousand-year-old tradition, architecture will respond through these materials to the primary needs of its users: to resonate their sensory register with them while providing proof of a possible and sustainable way of our survival while respecting life on earth and its future.

Content:

Work required:

He will have to produce a detail of the project, representative of the use of a bio-sourced material, which will be developed and represented in drawing (ranging from scale 1/1 to scale 1/20). Optionally a model can complete this study. A summary document arguing the relevance of material and structural choices and their contribution to space and ultimately to architecture is expected.

The hand drawing will be the only tool allowed, the work sessions will be moments of exchange, orientation and optimization, pencil in hand.

Course materials:

Teaching unit:

M73CTA – Construction – Environments

Teachers:

BARA Stephane

Ects credits: 3

Number of weeks: 14

Number of hours / semester: 42

Personal work: 35

CONSTRUCTION - ATMOSPHERES

MCTA711 Facades, basics

Objectives:

Since becoming sedentary, man has sought to protect himself from his environment. He thus progresses, from the quest for any cavity, cave or pile of plants that he could adapt, the time 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 space and an outdoor 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 best respond by choosing a constructive 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. That is the purpose of this course.

Content:

Fundamental technical knowledge for the development of facades:
Requirements planning - Concept of performance - Typology - Representation

Courses in French

Work required:

Personal research
In the context of TDs, implementation on an analysis file or creation of facade(s).
Visits (if possible): photographs, drawings, note-taking.

Course materials:

Note-taking and practice during the development of a façade on a concrete case.
Discussions and corrections in small groups.

Teaching unit:

M73CTA – Construction – Environments

Teachers:

LEYRAL Marc
EBODE Sylvain

Ects credits: 3

Number of weeks: 14

Number of hours / semester: 42

Personal work: 35

CONSTRUCTION - ATMOSPHERES

MCTA712 Small builders

Objectives:

Every year since 2022, ENSAPLV and the associations Construire l'Architecture and AIIA organize an educational day for children from 7 to 10 years old around the themes of architecture and construction, with the participation of the CAUE de 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:

- Allow children from all backgrounds to push the doors of a higher education institution. Create a context conducive to awakening, interest, and even vocation.
- Simply disseminate precise knowledge through its popularization, through an entertaining approach, with quality media and media.
- 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 students, the pedagogical objective is the perfect understanding of a specific theme of construction and architecture: it is indeed necessary to have understood an object yourself to be able to transmit it to a child. In this, the act of returning to the child is a pedagogical act for the Master student. More info: <https://www.construire-l-architecture.com/lespetitsconstructeurs>

Content:

The first edition of the 'Petits Constructeurs' took them to discover the balances between forces and tensegrity structures.

A video renders 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 installed 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 children what a higher education institution is, from which they will probably push the doors for the first time, and to make them meet students, teachers and administrative staff who bring these places to life. The stands will allow, in the form of educational and fun experiences, to make children understand how it works (the funicular of the forces, the thrust into the void of the arches, the construction and decintrement of the arch, etc.). The spectacular makes it possible to have a greater impact on the minds, so it will be sought after in these experiences.

- 1 virtual reality stand. The purpose will be to make children understand the difference between weight and mass. The stand will allow them to make the most realistic journey possible on the moon and on 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 approached.

- And finally the distribution of a toy kit made by the students, in order to concretize the memory of the day to the child.

Finally, they will actively participate in communication operations and search for partners and sponsors.

Work required:

Notions of architectures, and constructions (general culture, static and RdM) of License.

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

Number of weeks: 14

Number of hours / semester: 49

Personal work: 35

DIGITAL TRANSITION - BIM – REPRESENTATION

MTR701 Introduction to design (naval architecture, object...)

Objectives:

Starting from a problem chosen by the student (specific to a project group) or a theme proposed by the teacher (sailboat), the objective throughout the world of the object in relation to architecture, is to be able to criticize its approach (cross-fields, scale ratio) upstream of the shaping and to then be able to use tools adapted to the project and the mastery of curved shapes (the shape 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 (become familiar 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

Number of weeks: 14

Number of hours / semester: 49

Personal work: 35

DIGITAL TRANSITION - BIM – REPRESENTATION

MTR702 The mock-up to design

Objectives:

This teaching aims to mark our desire to rehabilitate the work of the hand in the representation of the Architecture Project. It allows us to tame matter so that it expresses a spatial concept, that's our inclination.

Content:

Through the realization of models, we will approach different scales, techniques and materials.

These achievements will show their full pedagogical potential by obliging the student to operate a synthesis between plan, cut and elevation, by developing a sense of structure, by encouraging him to adopt a strategy in the choice of a mode of operation, to master a whole specific tooling, 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 party.

Work required:

Students will work in teams or individually according to the 3 or 4 chosen topics.

Course materials:

Teaching unit:

M73TR – Digital transition – BIM – Representation

Teachers:

Ects credits: 3

Number of weeks: 14

Number of hours / semester: 49

Personal work: 35

DIGITAL TRANSITION - BIM – REPRESENTATION

MTR703 Photo Option

Objectives:

This course offers to acquire the essential knowledge for the practice of photography. But the technique is not an end in itself and must allow the student to make these choices from there, in order to build his own look and produce his images. The pedagogy is focused 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 critique in the face 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 on the basis of the silver technique (in black and white) and image processing in digital photography. Learning the technique and its uses must aim at a qualitative approach, whether it is working with digital or film technology.

2- Discovery of the history of photography from the nineteenth century to contemporary practices through short presentations.

Photography is, by nature, at a crossroads will allow the student to open up to interdisciplinarity both at the level of mediums and ideas (history, politics, aesthetics) and sciences (sociology, geography, etc.).

3- Workshop, directed work. During the course, the student is required to carry out exercises, experiment or present a short presentation (image reading or monograph of photographers or artists using photography)

Work required:

Classes take place weekly 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 course, his own film and / or digital photographic equipment.

Teaching unit:

M73TR – Digital transition – BIM – Representation

Teachers:
COUSSON Francis

Ects credits: 3

Number of weeks: 14

Number of hours / semester: 49

Personal 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 convince decision-makers easily and quickly.

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 compose it.

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 about the concept, epistemological difficulties.

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 current and the non-current. Virtual was an adjective.

Within a few years, the epithet swelled to the point of becoming a noun. In the late 80s, we started talking about virtual images, then virtual objects, then virtual agents.

These, by their increasing number and complexity, began to populate virtual environments, even virtual worlds.

Subsequently, the ambiguous expression of virtual reality spread and today, we talk about the virtual as we say the real.

The word virtual qualified a form, it now designates a substance. The virtual was the modality of the thing in power, it becomes that of the thing in action.

In a word, the virtual has been updated, the virtual has become current.

- 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, several factors must be taken into account 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, districts, buildings?), through an urban analysis approach.

This is done with the whole group of students and with individual work.

The reading of the city is then done in plans, sections, facades on a CAD tool using digitized images (plan or photos, aerial photo?) 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 summarizes it in a digital format compatible with all (PDF format).

Then comes the 3D reconstruction of the city: It all starts with the study of the principles of computer input for a reading of the city on screen in 3 dimensions and in real time.

Learning adapted software, computer interpretation of reality, the foundations of virtual reality then rubs shoulders with the shaping of the city.

Work required:

Course materials:

ENGLISH FRIENDLY
communication language

Teaching unit:

M73TR – Digital transition – BIM – Representation

Teachers:

HAMANI Dalil
BEAUTEEMS Dominica

Ects credits: 3

Number of weeks: 14

Number of hours / semester: 49

Personal work: 35

DIGITAL TRANSITION - BIM – REPRESENTATION

MTR705 Architectural Survey Practices

Objectives:

We wish to teach students the different practices of the survey for the restitution of the architectural heritage which involves all the knowledge of different disciplinary fields. In practice, this involves surveying historic buildings or monuments within 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 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)
- Survey experience on an old or contemporary building within a site
- practice of acquired representations.

The attention paid to the typomorphology of the frame associated with the constructive device is one of the main objectives of survey and representation in this course. Thus, a reading at different scales of the building (urban and architectural) and 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 exercise of different survey techniques, the objective is to analyze, restore and represent an existing

building and to highlight its heritage or singular interest. In concrete terms, it is a question of confronting the manual techniques (drawing, sketches,...) and digital techniques used in architectural survey (theodolite, photomodeling, laser-3D scanner) but also to reflect on their uses for the restitution of buildings or historical monuments.

Taking into consideration the direct links that exist between the survey and the restitution of the project, this teaching attempts to:

- experiment and master survey practices
- record and process information to manually and digitally reproduce the building studied
- 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, ...)

Content:

In this teaching, we discuss 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 transcript by these different approaches allows the student to evaluate its advantages and limitations, as well as to choose with relevance the tool best suited to his needs.

Based on case studies presented by professionals, we will use these processes to identify buildings (old or new) in their true dimensions and then restore them in plans, sections, elevations and 3D model.

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 TD of 2h weekly in computer room.
- Interventions of professionals in the field to present a pragmatic approach to the themes studied.
- Distribution of students into several groups.

Pedagogical modalities (hours): CM: 9 p.m. TD: 8 p.m. TP: Personal work: 9 p.m.

Course materials:

Teaching unit:

M73TR – Digital transition – BIM – Representation

Teachers:

GUENA François

Ects credits: 3

Number of weeks: 14

Number of hours / semester: 49

Personal 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 IT 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 technically evaluated. Combinations of parameter values can also be determined by optimization on the basis of target evaluation functions. These mechanisms can effectively assist 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

Number of weeks: 14

Number of hours / semester: 49

Personal 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, the drawing practiced "on the motif", in the city.

This technique can address current topics of the city. The objective is to build a critical, in-depth and material look with the simple means that are those of drawing.

We will experience the limits of this language.

Content:

The topics chosen each year are broad enough that the whole semester is not enough to exhaust it: court and justice, shopping centers, nature in the city...

On these questions, which may correspond to places of daily practice, everyone will have to build an argument, a choice, a look. This look can be declared at the end of a nourished and open experience of drawings.

This technique will have to be captured in the widest spectrum of freedoms that it allows both with regard to points of view (close or in context, aerial view, plans, sections ...), the tools used (dry techniques, aqueous techniques, collages ...) and the subjects chosen (spaces, users, colors, decor ...). We will also bear in mind the freedom that drawing allows compared 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
- initiate to code
- manipulate and publish files
- capitalize and gather students' work from one year to the next

Address www.ouarpo.net

User Ouarpo

Ouarpo-Edit password

Work required:

The sessions are devoted to drawing on the site. The accompaniment guides the progressiveness of the course in relation to the subject, a time at the beginning of each session makes it possible to take stock of the progress and to clarify the objectives.

Three intermediate evaluations make it possible to cross-reference, to bring together all the work produced and to put them in perspective with the references that lend themselves to the exercise and the level of progress.

Time is necessary for students, outside of classes for the processing of drawings (scanning, uploading, editing).

Language of the course and communication: French

Course materials:

Teaching unit:

M73TR – Digital transition – BIM – Representation

Teachers:

LEMRINI Narjis
BEAUTEMS Dominica

Ects credits: 3

Number of weeks: 14

Number of hours / semester: 49

Personal work: 35

DIGITAL TRANSITION - BIM – REPRESENTATION

MTR709 Learning Archicad and Rhinoceros

Objectives:

The objective of this teaching is to allow students to be autonomous on two 3D design software, complementary, in architecture. At the end of the training, they will be able to design an architectural project (more or less complex) and communicate it, through plans, sections, line views or realistic rendering.

Content:

At a time when the digital model is becoming a must for the architecture project, the knowledge of one or more modeling software of the architecture project is a necessity.

Through learning exercises, this teaching will allow in a few sessions to understand the philosophy of Archicad and Rhinoceros software.

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

Number of weeks: 14

Number of hours / semester: 49

Personal work: 35

DIGITAL TRANSITION - BIM – REPRESENTATION

MTR710 Pages to think and not get lost

Objectives:

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?

Proposal is made to each student to develop a theoretical and critical personal reflection around several architectural objects of his choice. Architectural works to be related, critically, with texts, external references or any element useful for the development of a thought of architecture. This work may mark the beginnings of a more advanced reflection of 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 of the type "image-caption" or "text-illustration". The material used will be thought of as equal parts of a reflection whole.

Realization 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:

- realization of a poster that connects a text and two images
- creation of a leaflet featuring two buildings with formal similarities.
- Production of a two-sided one-page document that combines architectures and typographies.

Work required:

3h30 of weekly classes on the semester, then 21h in intensive in the inter-semester (early February).

Knowledge of recommended layout software.