
PROGRAMME OF COURSES

2ND SEMESTER 2023/2024

Master 1 (4th year) – semester 8

Informations :

All courses are taught in French.

Teachers may communicate in other languages for practical courses: these languages of communication are mentioned in the catalogue.

Lectures are given in French only.

Table of contents

M84 Project	4
M84 P801	4
M84 P802	6
M84 P803	9
M84 P804	12
M84 P805	15
M84 P807	18
M84 P809	22
M84 P810	27
M84 P811	29
M84 P813	33
M84 P815	37
M84 42h - Intra-domain transversal course	39
M84 CTID 801	39
M84 CTID 817	40
M84 CTID 819	42
M84 CTID 829	44
M84 CTID 830	45
M84 CTID 831	47
M84 21h - Intra-Domain transversal cours	49
M84 CTID 803	49
M84 CTID 804	52
M84 CTID 805	54
M84 CTID 806	57
M84 CTID 808	59
M84 CTID 811	61
M84 CTID 814	63
M84 CTID 818	65
M84 CTID 820	66
M84 CTID 822	67
M84 CTID 824	69
M84 CTID 825	72

M84 CTID 833	
M84 CTID 834	75
M85 History	77
M84 HA 801	77
M84 HA 802	79
M84 HA 803	80
M84 HA 804	82
M84 HA 805	85
M85 Philosophy / Sociology	87
M85 PH801	87
M85 PH802	88
M85 SH801	90
M86 Construction - Atmospheres	91
M86 CTA801	91
M86 CTA802	93
M86 CTA803	95
M86 CTA804	98
M86 CTA805	100
M86 CTA806	102
M86 CTA807	104
M86 CTA808	105
M86 CTA809	107
M86 CTA810	109
M86 CTA811	112
M86 CTA812	113
M86 Digital transition - BIM - Representation	115
M86 TR801	115
M86 Ecological transition	116
M86 TECO801	116
M86 Construction law	118
M86 DR801	118

Teaching unit:
M84 P - PROJECT

Teachers:
MAZLOUMAN Mahtab
JOULIN David



ECTS Credits: 11
Number of weeks: 16
No. of hours / semester: 112
Personal work: 128

PROJECT

A - AS-P801 Scenography and Architecture of Performance Venues

Objectives: Due to its functional and technical complexity, the programme of a performance venue (performing arts venue, theatre) is a rich ground for reflection on the architectural project. It requires work on the hierarchy and articulation of interior and exterior, the understanding of the scenographic tool and its architectural and urban implications.

Content: We will study the material and technical framework of the performance and its articulation with the fictional framework through exercises on the architecture of performance spaces and the application of scenography to architecture in its broadest sense: theatre, choreography, visual arts. We will analyze the history of theatrical architecture, which requires a questioning that goes far beyond the simple historical evocation. From the birth of perspective and the birth of the Italian stage to the present day, theatrical architecture in its relationship between room and stage has undergone significant variations. The study of the typologies of the auditorium and the stage sheds light on the mutations of scenographic spaces and provides important tools for the design of scenic spaces.

To provide the student with methods to cope with the scale and complexity of the programme of performance venues, through a project for a venue for dissemination and creation including the construction of a theatre hall with a capacity of 500 to 700 seats, a convertible hall with 200 to 400 seats, a rehearsal room, public spaces, technical spaces, etc. art spaces, etc. It will address the relationship between stage block and hall block, visibility curve, visual angles, stage machinery, volume of the hall, volume of the stage and its environmental and urban inscription, facades, exterior and interior materials.

Work required: Projects:
The architecture and scenography of a distribution and creation room with a room of 500 to 700 seats, a room of 200 to 400 seats, rehearsal room,...

Courses and conferences, visits, meetings:

- Typological analysis of the room and the stage
- Evolution of theatrical architecture in the twentieth century
- Technical: machinery, lighting, acoustics,
- Visits to different performance venues,
- Meetings, theatrical outings, compulsory exhibitions

Course Materials:

Teaching unit:
M84 P - PROJECT

Teachers:
MEADOWS Fiona
LAGURGUE Xavier

ECTS Credits: 11
Number of weeks: 16
No. of hours / semester: 112
Personal work: 128



PROJECT

A - CCA-P802- Applied Architectural Ecologies

Objectives:

Title of the course: "Applied architectural ecologies: straw project"
"Straw Project": architectural research, from the material, from the design to the construction and up to the deconstruction.

A 1-scale construction experimentation studio at the Cité du Développement Durable in the tropical agronomy garden of the city of Paris.

Project teachers: Xavier Lagurgue, Fiona Meadows
IEDES Teacher: Charlotte Guénard

The Applied Architectural Ecologies studio is dedicated to architectural and constructive experimentation on a scale of 1. This year it is the "straw project" whose teachings and experiments will be located at ENSAPLV and the Cité du Développement Durable, at the Jardin d'agronome tropicale de la Ville de Paris.

This listed site was developed for the 1907 Colonial Exhibition, of which part of the installations remain. He then spent many years training tropical agronomy engineers who were leaving for overseas territories. Rich in a past that questions North-South relations more than ever, the JIT is now home to laboratories, associations and companies that have come together to form the City of Sustainable Development. Today, the Cité du SD is an international research centre in agronomy, the economics of climate change and, more broadly, the ecological transition in its multiple dimensions.

Pedagogical objective

This is an experiential teaching that aims to understand the impact of architectural design in the cycle of the material through scale 1 experimentation.

Based on visits and conferences allowing them to understand the notion of a sector in space and time, the students put themselves in a research

situation to define a material based on straw, then they design a small-scale project in groups.

Semester 8 is a privileged moment in the initial formation to engage in personal research before the final year and its culmination at the FWP. This research, which has in common a material concretization, will possibly be carried out in connection with a theoretical work of memory. They may concern the development of a new material, the search for a construction process adapted to a specific situation, a formal device on the scale of design or architecture.

After validation by the teaching team, the research will follow the methodological expectations of a scientific approach that the students will develop individually or in groups of two or three people. Starting from a clearly stated problem, one or more hypotheses will be put forward that the constructive and architectural experimentation will seek to verify.

Three pedagogical objectives are targeted:

- The discovery of the links between techniques, society and constructed form
- The expression of a critical ecological positioning
- Architectural experimentation of collective realization scale 1

Content:

Project Studio Content

The teaching is structured in four stages:

1) The first part is devoted to visits to construction sites, craftsmen, farms and conferences designed to understand the workings of the straw sector. The transition from the notion of material to that of building material will be observed from theoretical and practical angles. This sequence will be conducted in a transdisciplinary way, jointly with the master's students of the Institute of Development Studies of Sorbonne University. Part of the courses will be delivered at the JIT.

2) A second phase, tiled with the first, will put each student in a situation of research and innovation with the development of a research project on the valorization of straw material. Individual research, problematization, group work and experiments will be carried out along three axes that may evolve according to the proposals:

- Straw bales as building materials: geometry, compression methods, finishes, etc.
- Straw as a material to be combined in the design of a material: long fibre weaving, association of short fibres with a matrix, physics and chemistry of the material, etc.
- Straw material in association with living organisms: permaculture, associated fauna, collaborative dynamics, ecology of the sector, etc.

3) The third part, tiled with the first two, is designed in connection with the needs of the "Tropikantes" festival of the students of the IEDES. It will be devoted to design.

4) The last part is devoted to the construction of pavilions, picture rails and furniture at the Jardin d'agronomie tropicale de Paris, with the help of a journeyman carpenter.

This research will be carried out in conjunction with the teaching structure dedicated to the design of the pavilion for the 2024 Olympic Games of the ENSAPLV, in the "Archifolies" inter-school system.

Work required:

Work Required

- 1) Participation in visits and conferences. Production of a group presentation with students from the Sorbonne's Institute of Development Studies
- 2) Individual production of a material project and experimental realization
- 3) Group production of a small-scale building project, furniture, small pavilion, intended for the "Les Tropikantes" festival at the JIT
- 4) Project construction, deconstruction

Course Materials:

Project partners

As of 25 January 2023, the following are partners in the project:

- the RFCP (French straw construction network),
- the IEDES master's degree (Sorbonne Institute of Development Studies),
- The "Tropikante" festival of the IEDES
- The Cité du développement durable of the tropical agronomy garden of the city of Paris
- The EFFET Chair of ENSAPLV,
- The GERPHAU laboratory of ENSAPLV
- the Cité de l'Architecture et du Patrimoine,
- The Federation of Compagnons des Devoirs du tour de France

Teaching unit:
M84 P - PROJECT

Teachers:
HUYNH Michel
GAUDIN Bruno

ECTS Credits: 11
Number of weeks: 16
No. of hours / semester: 112
Personal work: 128

PROJECT

A - AS-P803 The Public Building

Objectives:

The aim of this course is to deepen the knowledge and tools to project a public building, both from the point of view of its inscription in the urban fabric, and from the point of view of its architecture and its representations, through a particular program, that of the Museum. An in-depth knowledge of the challenges of the museum space will thus make it possible to acquire tools specific to this field as well as to broaden these skills to design a public building.

It should be noted here that this exercise is also supervised by Michel Huynh, chief curator of the Cluny Museum

Content:

Below, we will discuss the concepts that occupy a central place in the design of the museum and that will be developed over the course of the semester, in the courses, the presentations of the exercises and during the successive corrections.

- INSCRIPTION IN THE URBAN FABRIC: How does the public building fit into the city? What relationship does it have with public space? In what way does it participate in its structure, does it have to modify it? How to compose the unity and complexity of the building? How to welcome the visitor, which forecourt, what introduction to the museum, what hospitality? The project site, shared by all students, will be located in the inner suburbs of Paris

- DISTRIBUTE: like any public building, the museum is made up of sub-groups that are heterogeneous in terms of their functions and spatial typologies: hall, exhibition spaces, reserves, services to the public, etc. it is then necessary to distribute, order, and prioritize these different entities, and it is the distribution that will play a central role in shaping the project, its overall design. What form should be given to the distribution, in what way does it ensure architectural unity?

- PATHWAY, LIGHT

The exhibition is worked with light, whether to attract the visitor, or by the way it is likely to accentuate the effect of deployment, to arouse curiosity. The notion of rhythm is also crucial in the work of the exhibition: the diversity of the works to be presented calls for differentiated treatments, through the succession of spaces of different scales and atmospheres.

- LIGHT, STRUCTURE

It is a subtle work of dosage, of control: capturing, conducting, reflecting light. We will ask to work on the basis of a principle of zenithal light. This implies thinking concretely about a structure that allows this, which must be thought of in relation to the way in which light is likely to be captured, conducted in space, on the way in which the structure is able to protect from direct radiation, to dose its introduction. This work does not exclude the contribution and necessity of lateral light, any more than views to the outside, and here again everything is a matter of dosage, of work on orientation. It is literally a question of entering into the project, in all its components: interior space, constructive order, materiality, expression, etc. -

- RHYTHM, REPETITION, VARIATION

We have previously mentioned the notion of rhythm, through the succession of spaces of different natures, the alternation of light and shadow, the interplay of spatial dilations and compressions. The rhythm of a project also proceeds from the repetition of a single constructive principle, constituting, so to speak, the "step" of the museum, its fundamental unit of measurement.

- WELCOMING THE WORKS

The staging of the collection raises very concrete questions that require precise answers. First of all, to build a coherent path, a sequence of sequences, rooms, spaces that is based on the narrative written by the curator. The architect must also ensure that: all the works are clearly seen, at the right height, with the right light, without reflections, ensure the safety of the works and their proper conservation..... To this must be added notions that are certainly more subjective but just as useful for the composition of a course. If there is indeed a need for an architectural "party" to welcome the works, that is to say the affirmation of a form, of spatial and constructive principles, of distributive rules..., at the same time this architecture owes to the works a certain silence, a form of withdrawal. The works are the silent inhabitants of the space, they are not the "instruments" of architecture but it is the architectural space that gives voice to the works. This is where he begins to work on the perception and measurement of things, on drawing.

'The glance at history, the retreat to a past period, or, as Racine would have said, to a distant country, gives you perspectives on your time, and allows you to think more about it, to see more of the problems that are the same, or on the contrary the problems that differ - and the solutions

that differ -'. Following the example of Marguerite Yourcenar, we will question History in order to better grasp the present time. This questioning will take the form of a lecture on the main families of public buildings, the School, the Town Hall, the Theatre, the Hospital, the Museum, etc. To the museum's own questions: the genesis of the museum, the presentation of the collections, the place of light in the design of the spaces, etc. To the various notions that have just been mentioned in this short presentation

Work required:

The theoretical lessons are given in the morning, while all the projects are displayed in the afternoon so that all students can simultaneously benefit from the criticisms given to each one. The public building project brings into play all the tools necessary for the complete expression of the architectural project, and all its scales: those that make it possible to explain intentions with regard to an urban and landscape context, 1/1000th, 1/500th, as well as those that are suitable for the deepening of the architectural project and its constructive arrangements (1/200th, 1/50th, 1/20th). This approach is not linear. A series of exercises will address and isolate a particular question: getting acquainted with the collection and representing the works, setting up a fragment of the collection, structure and light for a fragment of the collection, installation and composition of the museum in the site, etc.

Course Materials:

The teaching mornings will most often be devoted to theoretical courses on the question of public buildings, to the presentation of examples of museums, to the analysis of the different constructive and spatial devices that shape the museum project. Visits will also be organised, in particular to the Louvre Museum to discover all the works that make up the collection to be presented as part of this exercise.

Teaching unit:
M84 P - PROJECT

Teachers:
HENRY Didier
MEADOWS Fiona
ADRIAN ARANEDA Luis

ECTS Credits: 11
Number of weeks: 16
No. of hours / semester: 112
Personal work: 128

PROJECT

A - AS-P804 From Idea to Project

Objectives:

The objective of this project group is the desire to understand the architectural project as a thought in action or to produce the formalization of an architectural idea. What we call the project is the reunion, the articulations of four dimensions (or dit-mension according to Jacques Lacan, namely the measure of speech) which are technique, aesthetics, criticism and ethics.

To do this, we offer students two projects:

Short project:

It will be asked, starting from the problematic put forward by an author (writer, painter?) to project spaces and thus make the link between (in the broad sense of the term) and architecture. Initially, while preserving the author's theme, the students will have to design the project of a building integrating the data and urban constraints of a place. In this way, students will be able to isolate a relevant direction to allow the passage from a "force idea" according to Louis I. Kahn's expression to its representation. The project then becomes a chain of progression of meaning that articulates the architectural form. This progression will qualify the project from sketch to sketch and then to its final representation.

Long project:

A long project that will be a museum, to address what it means to be open to the public, with its constraints.

The main subject of this project work is to design a museum space for an author you have studied. It's a question of grasping your author's design approach and trying to make it an architectural transposition. Thus, this museum should produce an urban singularity, an eventuality or emergence in the city, an architectural phenomenon that can stand out to become an urban reference or a landmark for the city of Paris (the museum qualifying and giving the name of the place). To do this, it is important to express your desire for architecture with personal writing.

Above all, you should not copy a work of art to avoid a vision that is too literal or anecdotal for your building.

You also need to think about the scenography of your building, the number of visitors and the path for the reception and presentation of works of art. To do this, you will have to choose the atmospheres (light, material, color) for the exhibition of the works, but also that of the choice of furniture. Emergence of the project, from sketch to sketch.

The first place for the project belongs, by necessity, to the sketching phase of the first drafts of the project. This is the first stage for the creation of an edifice, with the force of the moment and the brilliance, the implementation of a thought.

Lightning Fast

Understanding the urban phenomenon, its openness.

Working on the place, as well as the project, from the point of view of two tutelary figures, Friedrich Nietzsche and Stéphane Mallarmé: "nothing has taken place but the place", the metonymic power of the place.

To teach the importance of the place and its occupation, without it, there is no place for architecture. Every place is a place that provides a shelter for man and all architecture is the presence of man and his place, in contrast, non-place could be the absence of an architectural statement, a non-edification excluding man's stay.

Any architectural expression must manifest this connection. The concern for the site is the architect's business - the most pressing thing to think about - to create new buildings (to use Heidegger's phraseology).

The first task of the project was the choice of a location that allowed for a certain desire for architecture. This place, in this case, is a singular space. We expect from this welcome a possible concord of the architecture with an already there...

Content:

It will be a question of implementing the conceptual and technical tools required to carry out the architectural project: from the idea to its formalization and constructive resolution. We will propose to the students to make two projects whose objective will be to produce an architecture with the will to maintain a common thread, a meaning. With the contribution of the critical analysis of a work, symptomatic of the refusals and issues of "modernity", architecture will be able to constitute its meaning through its own writing. This desire should restore the project's work to its critical function in order to orient students towards manifest architectures. We will therefore propose to open up architecture to other disciplines (literature, cinema, painting, philosophy?) to nourish the conception of the architectural project. From then on, we will try to understand the work of the architectural project as being at the crossroads of the cultural issues offered to us by the open intellectual field of "contemporary modernity".

Work required:

A series of courses will be offered to students:- Course on the author which will allow them to have an in-depth but not exhaustive knowledge of a work. Courses between literature, writing and architecture to give students a corpus of texts and references.- Computer graphics courses to reconcile the transition from an "abstract idea" to its formalization and/or representation. Projects will be presented on A1 formats. For each project, an analytical board (meaning, sketches, sketches?), two to three plates on the universal code of architectural representation (plans, sections, elevations, details?), one to two sensitive rendering plates (perspectives, axonometrics, 3D?).

Course Materials:

Teaching unit:
M84 P - PROJECT

Teachers:
VINCON Jerome
ZETLAOUI LEGER Jodelle
BRUTER Jonathan

ECTS Credits: 11
Number of weeks: 16
No. of hours / semester: 112
Personal work: 128



PROJECT

B - HMU-P805 Living and working: designing diversity

Objectives:

This project course aims to work on the relationships between workspaces and residential spaces, in the context of the contemporary city, through the prism of diversity.

The P805 course – which is part of the Field of Study 'Living in Urban Worlds' (HMU) – focuses on two pedagogical objectives, which will be carried out simultaneously:

- integrate questions of use into the design of an architectural project, by focusing on the characteristics of the spaces that give rise to them or that host them: relationships to the urban fabric, morphology, spatiality, materiality, atmospheres and inclusive approach
- Integrate construction issues into the design of an architectural project, by focusing on the dimensional, functional and typological characteristics of mixed-use buildings (or groups of buildings): location, structural choices, partitions, distributions and environmental approach.

The interdisciplinary pedagogical approach makes it possible to integrate the contributions of the teacher-researchers of the Laboratoire Espaces Travail (LET) into the prospective approach.

This project teaching is linked to the intra-field transversal course: CTID822 - 'Living and working: from the analysis of uses to architectural design', which is part of the same field of study (HMU).

Content:

The project will focus on the design of a mixed-use complex – bringing together business spaces and housing – inscribed in the built fabric of the inner suburbs of Paris. In general, the prospective work combining uses and construction leads to reflection on the environmental and anthropological dimensions of architecture.

- The choice of a project site in the inner suburbs of Paris: in Pantin (an urban context currently being renewed), is based on the hypothesis that

the mix of housing and work can be a lever for regenerating (or breathing) urban dynamics. Thus, it will be a question of considering an architectural project, located in this peri-urban context, capable of giving rise to forms of urbanity mixing places of activity, facilities, landscaped spaces and residential spaces.

The proximity of buildings protected (for their heritage character) will also lead us to question the constitution of built fabrics and ways of establishing a potential 'dialogue' between architectures from different periods.

- The theme of a mix of living and working will be considered as one of the components of an environmental approach that is not based (solely and strictly) on a technical approach, but also participates in land use planning (fight against urban sprawl, balance of mobility) and architectural reflection (exposure and protection, materials and inertia, insulation and solar gains, etc.). ventilation and indoor/outdoor relationships, accessibility and scalability).

If the question of diversity is at the heart of contemporary concerns, it will not – for all that – forget its history, because the mixed character of human settlements have – for a long time – constituted what 'makes the city', by giving them their urbanity (in the original sense of the term).

The mixed-use approach will be apprehended at different scales (block or group of buildings, buildings, workplaces or facilities, apartments) and will place questions of architecture and uses at the centre of the concerns of this teaching. This theme will lead us to explore concrete issues, in particular: articulation of architecture with its context (built and open spaces), forms of urban land use, innovative architecture, evolution of lifestyles, intergenerational housing.

- The structuring of this teaching aims at a gradual integration and a multiscale understanding of the issues and problems of co-education:

- The critical reading of the places visited must allow a detailed understanding of the uses and practices, with a view to better taking them into account in an architectural project

- the analytical approach of the envisaged programmes focuses on the identification of the significant elements they contain, but also on the relationships – and interrelations – that are established between these elements, since they are eminently bearers of meaning and potential qualities

- Typological research, for its part, must be understood as a way of considering the uses, the practices of space – or even the gestures specific to these practices and the atmospheres in which they can be spread out – to explore the nuances between public, collective and private spaces, as well as the relations between the individual and the community, re-examined by the introduction of diversity within buildings or within homes.

Hoping that the workshop will be a place where ideas and proposals are developed, the mornings will generally be dedicated to thematic (theoretical) contributions and the afternoons will be dedicated to prospective (practical) work, the exchanges around the development of projects being an extension of the thematic exchanges in the morning.

Students interested in this course can contact the teacher in charge: jonathan.bruter@paris-lavillette.archi.fr

Work required:

Several steps will be taken to structure the prospective work throughout the semester:

- Visit of the project site and restitution of a 'reading of the places' through which to understand and explain the frameworks and context of the project to be designed (individual work and pooling / 2 sessions)
- Critical reading of the places of activity visited, the restitution of which will feed into the sketch (methodological contribution and collective work)
- Elaboration of the outline for the implementation and organization of a mixed ensemble project (teamwork / 8 sessions)
- Development of a sequence – or a building – of the sketched mixed ensemble project (individual work / 6 sessions).

Professional situation:

- consider uses, in order to integrate the concrete dimensions of the making of the city and architecture
- exchange with professionals to understand their practices and needs (practitioners, project owners)
- develop spatial thinking (formulate architectural intentions and give them substance)
- Consider spatiality and its construction simultaneously (have a constructive idea in mind)

Course Materials:

Teaching unit:
M84 P - PROJECT

Teachers:
SINEUS Merrill
EBODE Sylvain

ECTS Credits: 11
Number of weeks: 16
No. of hours / semester: 112
Personal work: 128

PROJECT

A - CCA-P807 Projecting into reality: scale 1 and residents' demands

Objectives: This course aims to develop students' projectual and critical autonomy.

To do this, they will have to interact with the users and inhabitants of the proposed sites, so that part of the teaching will be done outside the school, at the place of intervention.

The aim of this immersion is to make students aware that the user is the one for whom we design and that we must therefore take into account his or her involvement in the conceptual process. In the same way, the user is not a homogeneous entity: the issues at stake are often multiple, sometimes contradictory. How can we identify them and then act according to these dynamics?

This course introduces students to the practices of participatory design and construction in a real context, in which the simultaneous collective emergence of uses, the project and its concretization is encouraged.

This learning process will focus on the following 3 acquisitions:

- Understanding the place of intervention: geography, history, society, etc., with the aim of identifying urban spaces "in the making", subject to major urban changes underway or announced, but also bearers of collective practices
- Understanding the role of stakeholders: users, associations, public authorities, students, teachers, etc., with the aim of a better understanding of expectations and the collective formalization of demand from the field.
- The construction of a 1-scale prototype: Design, detail drawing, logistics management, etc., in order to build a prototype resulting from the previous analyses, a prototype whose relevance will be observed with regard to the initial expectations.

It is therefore a question, in a pedagogical framework, of pushing students to put the knowledge they have acquired during their bachelor's years at the service of a "field" in the broad sense that they will have to analyze and describe, and in which they will take their place.

At all stages of the process, it is also a question of confronting the "emerging" project with its reception by future users in order to identify the iterative interactions between one and the other and to test its professional identity during these interactions.

Finally, through the early validation of the construction devices, then through the transition to implementation, it is a question of introducing a new learning sequence by confronting the final prototype with the process that produced it.

Content:

The project proposes to continue the collaboration with the association APPUI (Alternative Pour des Projets Urbains Ici et à l'International), an association bringing together teachers-researchers, professionals in the urban professions, students, activists and residents, intervening at the request of collectives located in working-class neighborhoods, who are confronted with urban projects and who wish to understand them, discuss them, etc. modify them.

The sites proposed in collaboration with APPUI focus on changing urban situations, the presence of involved collectives and the good understanding by elected officials of the autonomy of the educational system.

In recent years, the support cities have been Saint-Denis, Fresnes and Bagnolet.

The 2022 session proposes to return to the previous year's site, at the request of the inhabitants, these are:

- The pointed piece with BLANC-MESNIL

Regardless of the place of application, the aim is to offer students a breakdown of the act of design into precise sequences, for pedagogical purposes:

- Sequence 1:

To analyse and describe the terrain, students will use some of the specific tools of urban analysis and will have to retrace its geographical, demographic, urban, social, cultural history, etc. These analyses will be based on reference documents but also on an in situ involvement, in contact with the users and inhabitants of the chosen site: surveys, interviews, observation sessions, commented tours, etc.

- Sequence 2:

To understand the expectations, students will have to create links with the real actors of these specific urban contexts, and then propose an interaction mechanism allowing the formalization of a collective request for a prototype project

- Sequence 3:

Once the project has been finalized, the prototype will be concretized on a real scale (temporal, financial and constructive) and then built with the users/inhabitants. Depending on the context, local reuse resources may be taken into account.

At the end of the process, students will be able to ask themselves intersecting questions of convergence between architectural design and dynamics from the actors, both from the point of view of practices (use, programs, demand, urban and even political issues), from the spatial point of view (comfort, solutions, flows, scales), or even materiality (construction modes, choice of materials, cost management).

Ultimately, this teaching positions students' work as socially useful in the public and professional debate and reinforces the power of action of users as well as that of future designers.

By taking into account both the social (the current occupation of the city, the demands of something else) and the spatial (alternatives to standard projects, the 1:1 scale prototype, etc.), the course is freely inspired by the practices of the RURAL STUDIO and therefore aims as much at the production of a "real" project as at a better understanding of the complex processes that define it.

Particular attention will be paid to the restitution of student and a fortiori collective productions to the users and inhabitants participating in the experience: production of a final notebook and organization of a "passing of the baton" event at the end of the semester.

Work required:

Mandatory weekly attendance

- Collective work to identify actors
- Working in groups for project development
- Collective work for the transition to reality

Specific courses or lectures

- Cognitive biases
- Organization and facilitation of meetings, workshops or group events
- Urban analysis tools and participatory approaches
- Request, order, expert opinion, etc.
- IT tools
- Structural and constructive principles
- Detail drawing

Working sessions with users (teacher observers)

- Understanding of the sites and the acting
- Co-design sessions
- Field investigations
- Preparation of restitutions (sites, co-produced programmes, projects)
- Verification of project coherence
- On-site construction

Course Materials:

Teaching unit:
M84 P - PROJECT

Teachers:
PENISSON Lionel
MONGIN Lucas

ENGLISH FRIENDLY
communication language

SPANISH FRIENDLY
communication language

ECTS Credits: 11
Number of weeks: 16
No. of hours / semester: 112
Personal work: 128

PROJECT

C - IEHM-P809 Transformation

Objectives: The aim of this semester is to introduce students to questions of architectural heritage but also and above all to that of its reconversion. Balanced by a permanent tension between the desire to safeguard what is already there and the transformation of this heritage, the theme implies a pedagogical approach combining history, construction and project.

The project workshop in question consists of confronting a particular type of building, the tertiary activity building, and transforming it to introduce housing. The design work to be implemented is guided by two major axes: on the one hand, the work on an existing built environment, and on the other hand, the question of inhabiting it.

ISSUES

The main challenge is to interpret a typology of building that is not or not very suitable for housing, to identify its potential in order to develop a strategy for the transformation of this setting and to allow its reconversion.

This implies multi-scale and structured thinking in several layers, closely intertwined.

From the urban scale of the neighbourhood in which the building is located to the close scale of the technical detail, including the scales of the building and the housing unit. Will it be necessary to add, subtract, thicken, reduce, elevate, lower, fill, pierce? A logic of plus/minus, of the positive/negative that is put at the service not only of the future project but also of the surrounding environment. The reflection is carried out on several levels: it seeks to offer a maximum of quality to the housing (sometimes requiring revisiting the existing building and transforming it in places, by means of grafts or amputations), but also to its surroundings, to the adjoining or neighbouring buildings as well as to the public space.

Designing according to the logic/rules of Weiterbauen, i.e. building from and with what already exists. It is not a question of composing with a personal language, but rather on the basis of an already-there-already-there in relation to

which one positions oneself, through a response that proposes the idea of continuity or that opposes it with contrast.

. A reflection on what belongs to the intangible, "hard" parts, and to what belongs to the tangible, "soft" parts. What falls under the safeguarding project? What is part of the transformation project? This makes it possible to establish the architectural and projectual potential of the building.

. A morphological reflection on the thickness of the building. Different attitudes (digging, drilling, drilling, penetrating, etc.) are conceivable in order to find a habitability adapted to the home.

. A technical-constructive reflection that will focus on the notion of a constructive framework perceived as both a guide and a design tool, and on the other hand, on the close links between structure and envelope. This reflection will provide answers to the building's potential for flexibility and will thus guide the choices of spatial organization and transformation.

. A reflection, in terms of uses, on the relationship of the building to the public space and to the neighborhood will be an opportunity to think about the programmatic question, to introduce diversity (work-habitat, public equipment-housing, etc.) and to address the question of multiple accesses at street level.

. A reflection on the typological question and possible experiments in terms of housing. Couple the usual, the standard, with more atypical typologies (cooperatives, roommates, intergenerational housing, student residences, etc.).

PROJECTUAL APPROACH

The projectual approach here involves a reasoning that goes against the reflexive path taken in the case of new construction. We have a constructed context. We are witnessing a reversal of the chronological process of genesis, we no longer start from the programme to lead to the realization of a new construction, but from an existing construction to lead to a new programme.

Taking into account the reflections mentioned above, the project will question and position itself from the scale of the plot to that of the architectural detail.

The student will be led by rational and pragmatic choices in order to establish a viable and rigorous project, concerned with the environment in which he or she is integrated, but also, and in parallel with his or her main study, by sensitive choices drawing the limits of the story he or she wishes to tell, he or she will have to express himself or herself as to the bias towards the past and the memory of the building. Do we choose to make a departure from the history of the building or to celebrate it?

Content:

Students will be fully involved in a process that will structure the semester in several stages: the historical and constructive approaches will offer them a wide

range of knowledge of their subject of study, which will allow them to approach the privileged time of the project with more lightness and rigor.

It will be broken down into three stages:

Time I. Analytical and Critical Work.

Time II. Physical Immersion - Survey, analysis and diagnosis of the existing building.

Time III. Project. Transformation of the existing building.

I. CRITICAL ANALYSIS - THE HOUSING BUILDING

To address the theme of housing, students will be asked to look at a corpus of housing buildings. While it will be narrowed within its geographical (Western Europe, mainly focused on Anglo-Saxon, Swiss and French achievements) and historical (from the 1980s to the present day) boundaries, it will present a diversity of cases demonstrating varied architectural, urban and programmatic attitudes. This will make it possible, upstream of the project work, to reinvest in questions related to structural, framework, material, typological themes, etc. and make them their own intellectually.

The analytical work, accompanied by a critical formulation, will make up the whole of this first phase.

It is then a question of constantly carrying out a project approach by summoning strong references that function as guides.

II. ANALYZING & INTERPRETING - HISTORY & CONSTRUCTION

This semester's exercises will be set against the backdrop of a large building, located in a district undergoing conversion/mutation, in the heart of Paris. This will give rise to a preliminary phase of urban analysis, followed by a phase of survey and architectural analysis of the chosen building. A work that will address the fields of history, theory, construction, economics, sociology...

In their representational work, students will distinguish, by means of systems of representation adapted to this type of exercise, between the elements belonging to the structure and those that participate in the dressing, or the finishes.

Significant work will be carried out to understand the construction arrangements of the building. What is the skeleton of the building? What is irreducible? An analysis prior to the interpretation of spatial possibilities and therefore to any projectual hypothesis.

A detailed understanding of the building, of its unique and common elements, of the construction frameworks, of the thicknesses and depths, of the underfloor heights, will make it possible to define the possible uses to which they are predisposed and thus to determine a possible evolution towards housing and to draw their contours.

III. PROGRAMMING & PROJECTING

The project time will be broken down into a succession of exercises, each calling for the next. This decomposition responds to a series of logical events, starting with the scale of the plot and the building to arrive, in a progressive and deductive way, at the scale of the dwelling, and finally ending at that of the technical and architectural detail.

This breakdown will be done as follows:

Ex 0 - Weft & Thickness

Ex 1 - Programming - Plot occupancy - Volumetry

Ex 2 - Internal organization of the building - Definition of a current floor

Ex 3 - Facade - Surface, Thickness & Light

Ex 4 - Spatiality - Ambience - Comfort

By way of opening, a first, theoretical, short-term exercise will be proposed, allowing the introduction of the questions of housing construction on thick trays governed by a fixed framework.

The next exercise, opening on the existing building, will begin with a reflection on the possible uses of the building and the drafting of a summary program favouring a functional mix, at the scale of the plot, combining housing and other functions (tertiary, educational, commercial, leisure, etc.), and will also consider the possibility of introducing other forms of housing (cooperative housing, shared housing, intergenerational housing, etc.). temporary housing, shared flats, student residences, etc.), based on experiences already carried out.

The different possibilities of intervention will also be evaluated: restoration, rehabilitation, restructuring, extension and elevation.

The programmatic reflection will make it possible to start the projectual approach on the building, first of all at the scale of the plot and in terms of land use.

The student will be required to position himself in relation to the whole building by proposing a global project that will draw in particular on the research work and programmatic proposal established beforehand. The proposal will question the urban notions of location and address, echoing the urban work of the last semesters of the bachelor's degree. The student will therefore approach the conversion of the building as a whole through a reflection on the various situations that characterize the building in an urban environment: the occupation of the ground floor and the relationship to the street, the intermediate floors with the establishment of a floor running the crowning of the building.

This total work will lead him to imagine the possibilities of the converted building but also the efforts necessary to produce in order to establish the project.

What is preserved? What is being demolished? What do we amplify? What do we cross out? For here too it is a question of taking positions vis-à-vis the architectural narrative and the language originally used by the one who preceded us. Depending on the direction in which one chooses, the project can be similar to the image of the palimpsest.

The typological approach will lead the student, in order to better introduce himself into the existing situation, to return to the reflections undertaken upstream: reflections made on technical questions such as the construction framework of the building as well as on morphological questions such as those of thickness and depth. It will determine an efficient spatial device, and a general mode of distribution. More precisely, on several levels, it is a question of optimising the occupation of the inherited skeleton and distributing a certain number of apartments per floor around a naturally lit cage whose location will have to be defined beforehand.

Then comes the time to address the question of the façade and its design, with the presupposition that the façade will respond to the urban challenges of the neighbourhood, that it will respond to a concern for coherence with the surrounding buildings and that its design derives in part from the plan and the internal distribution of the building. This work will be carried out in parallel with an approach to the question of the bay, a constituent and preponderant element of the façade.

It will be in-depth on the one hand with the design of a detail work: a door, a window or a balcony on the other hand with a reflection on the composition of the wall and the insulation of the envelope.

This last exercise, which relates to the general image that the building reflects to the urban space, a work of the alliance between the new and the old, is at the same time a formal, technical and material work.

To conclude the ensemble, the spatial and detail work on the scale of the dwelling will be deepened for some of the most characteristic typologies of the project.

Work required:

Course

Materials:

Teaching unit:
M84 P - PROJECT

Teachers:
MARIN Jerome
JACQUIN Laure

ECTS Credits: 11
Number of weeks: 16
No. of hours / semester: 112
Personal work: 128

ENGLISH FRIENDLY
communication language

ITALIAN FRIENDLY
communication language

PROJECT

C - IEHM-P810 Architectural, urban, heritage and programmatic issues related to the revitalization of town centres.

Objectives:

The theme of RE-employment, RE-use or RE-empowerment answers two questions that are in the news of practice today. First of all, the reality of the architectural commission, as more than 60% of calls for tenders concern existing buildings. Buildings that are often obsolete from the point of view of regulation and use, and which can be considered as economic, social, ecological and material resources... Secondly, the issue of ecology in the broadest sense, with the decrease in natural resources, which requires architects to reflect fundamentally on their practice.

The objective is to reflect on the transformation of an existing building, to think of a new function in coherence with the existing architectural and urban qualities, to think about its preservation with regard to its potential, to consider the overall impact of this building from the point of view of the life cycle of the materials of which it is made. Existing buildings build our collective memory as well as our living environment, so they also have a social role that deserves to be considered well beyond their possible heritage character.

Content:

The RE workshop therefore proposes to reflect on the transformation of buildings or groups of buildings by adopting a prism that is both heritage and ecological, with a view to ideological commitment. It posits the following methodological hypothesis: rehabilitation is an environmentally friendly act and is presented as one of the ways to respond to current ecological challenges.

Work required:

The workshop will focus on Yonne, a department close to Paris that addresses all the issues inherent to rural areas (protection of rural heritage, development of small towns, rurbanisation, requalification of town centres, etc.). Local stakeholders such as the CAUE, the regional order of architects, the municipality and local associations are already

thinking about possible changes in their territory. One of the introductions is to understand the issues and decision-making mechanisms, to meet the actors of the territory to understand their role in the development of projects and the architectural quality.

Course Materials:

Teaching unit:
M84 P - PROJECT

Teachers:
FANG Xiaoling
NAVINER Brigitte
DE MARCO Rosa

ECTS Credits: 11
Number of weeks: 16
No. of hours / semester: 112
Personal work: 128

ENGLISH FRIENDLY
communication language

ITALIAN FRIENDLY
communication language

PROJECT

D - MTP-P811 Landscape/s: the landscape approach for the architectural and urban project

Objectives:

Objectives_

- enrich the culture and the architectural and urban project with culture and landscape projects, and learn about the articulation of these two complementary spatial arts
- practise the design of the architectural and urban project situated, based on the potential of the site, the territory and the 'living environment' existing and to become
- confront the multi-scalar project - from the building, to the city to the territory - participating in the identified urban, territorial and landscape strategies
- Confront the different processes of spatialization of the ecological transition in the urban and metropolitan context.

Content:

Posture_

The architectural and urban project is now increasingly linked to the destiny of large territories as well as to the vision of the future ways of living offered by emerging territorial configurations, intra or extra-metropolitan.

In this context of mutation and metamorphosis, the landscape is situated between the myth of paradise lost and the prefiguration of these 'new worlds to be invented', participating in the contemporary political, social, environmental and spatial challenges of the ecological transition.

The landscape approach is thus proposed as an approach of inventive analysis, and therefore of a project, at different scales. On the one hand, it makes it possible to refine the analytical view of the territories addressed and, on the other hand, to access their potentialities, from the most explicit (those related to life, geology or topography) to the most hidden (collective imaginaries or community metaphors, aesthetic and

ecological values, new representations of "living together", of the human and the non-human, etc.). which govern all socio-spatial constructions, now extended to all living things).

Gait

The emergence of an architectural and/or urban project as well as the "invention" of an appropriate spatial response to the question posed participate in the process of analysis (inventive analysis). This interrelationship between analysis and the emergence of the project punctuates the time of the workshop, which is organized in three stages: Step 1 (collective and in sub-groups): immersion allowing the sensitive recognition of the physical terrain as well as the study of the cultural terrain (1 month)

Step 2 (in sub-groups): elaboration of an urban and landscape development strategy for the land studied (1 month)

Step 3 (in sub-groups with individual in-depth): elaboration of the detailed urban and architectural project for selected sectors on the field studied (2 months)

Terrain

The fields and themes of study proposed by the P811 workshop are taken from current events.

For the past ten years, the P811 workshop has been confronted with the process of metropolisation and territorial transition, by exploring the transformation of the territories of Seine Aval (2015-2020) in the Greater Paris-Seine-Oise or on the Plateau de Saclay (2010-2015), in Essonne. In these workshops, the theme dealt with concerned the interaction of metropolitan fringes with rural territories, and the exploration was focused on new territorial figures and on the inhabited forms that result from them from the landscape approach.

The proposed workshop for 2022 is an extension of the 2021 workshop. The proposed land is close to the capital and concerns the Paris ring road and high-potential sectors located near this infrastructure.

Located at the gateway to Paris itself, the ring road represents the very limit of the historic capital, a physical and symbolic limit at the same time, which articulates the local urban scale with the metropolitan and territorial scale. Numerous urban areas, neighbouring municipalities and various networks – roads and railways, but also green belts and green space systems – are linked to this emblematic ring of the capital.

For several years now, the ring road, the urban sectors and the road networks concerned have been the subject of numerous studies that foreshadow a transformation of the infrastructure and its urban reference system by following the most varied scenarios, utopian or not (boulevard accessible to pedestrians, land reserve for the development of new districts, green belt to be connected to existing green space systems, etc.).

productive agricultural sectors, etc.). These transformations induce a radical change in the nearest urban system as well as in the metropolitan metabolism on a larger scale.

The P811 2024 workshop is part of this reflection that is both urban and territorial, taking advantage of the richness of the ongoing debates, an abundant production of texts and projects, as well as accessibility facilitated by proximity to the city center. The field of study is currently being defined.

The workshop Paris_Rome_#4, organized in partnership with the Department of Landscape Architecture of the University of Rome La Sapienza, will offer students enrolled in this workshop the opportunity to travel and collaborate with Roman students on the themes of the landscape project. It is organized in collaboration with CTID 819 "From perception to understanding of the landscape", and the seminar "Architecture/S and Landscape/S" and will take place in February 2024 (dates to be announced).

_Equipe_enseignante:

_Rosa De Marco, architect, PhD in Architecture and Landscape (EHES - Geography option), co-director of the Architecture, Environment and Landscape Research Unit

_Philippe Hilaire, Landscape Architect, MC ENSAPLV

_Xiaoling Fang, landscape architect and architect, MCFA ENSAPLV

_ External speakers presentis_

Naturalist geologist, hydrologist, representative of local stakeholders.

_ Day and room of the workshop:

Workshop P811 takes place:

FRIDAY

from 10:00 am to 5:00 pm

ROOM 207

Pedagogical _Partenariat and scientifique_

The P811 workshop is linked to the activities carried out within:

- the "Architecture/S & Landscape/S" (A&P) seminar, a place of in-depth study in terms of architectural and urban projects at the interface with culture and the landscape approach.

- the field of study "Environments, Territories, Landscapes", (DE_MTP)

- the "Architecture, Environment, Landscape" research unit (AMP-ENSAPLV-HESAM)

- International teaching and research institutions and networks

- Planned exchanges with partnerships and local stakeholders.

Work required: Debates and exchanges in the workshop / Tutorials / Practical work on site and in the workshop / Experiments with apprehension and representation tools / Documentary research / Non-directive interviews / Logbook / Production of landscape recognition documents / a written and illustrated presentation (A4 colour), panels and models for the final jury a digital presentation 'Power point' for oral presentation.

Course Materials:

Subject:
M84 P - PROJECT

Teachers:
BABLED Thibaud

ENGLISH FRIENDLY
communication language

ITALIAN FRIENDLY
communication language

ECTS Credits: 11
Number of weeks: 16
No. of hours / semester: 112
Personal work: 128

PROJECT

D - MTP-P813 Inhabited Environments - Urban Gene Architecture

**This course is only available to those attending the first semester
EARLY REGISTRATION IN DECEMBER**

Objectives:

The objective is to explore the links that underpin the necessary complicity between architectural scale intervention and the urban, landscape, social and historical scales to which it contributes.

However, we will try to reflect on the architectural scale, the program being that of a hotel with an exceptional character, questioning the complex values of space.

The project course is coupled with an International Workshop that will be developed with the Istituto Universitario di Architettura di Venezia (IUAV), main university partner, which will host us for a week during the 2024 Easter holidays.

The perspective that emerges is to make you work during this stay on a research around the resources and new ways of welcoming that Venice, one of the most visited cities in Europe, can offer in the years and decades to come. It will then be a question of feeding your architectural projects with the content of this research and the issues it may have raised.

The themes we carry, focused on the travel economy and on the intimate inscription of places of welcome within local contexts and territorial resources, will also push us to deepen the urban, social as well as architectural issues that this travel economy generates in the fragile context of the lagoon city.

In this regard, let us recall André Chastel's strong formula: "The Venetian challenge is only the central episode of the crisis of the modern world, which will have to review its way of life."

This Venetian challenge is becoming even more acute today, as the exposure to mass tourism and its perverse effects is redoubling in intensity.

Indeed, among the almost generalized rituals of our contemporary lifestyle, is that of travel, now within reach of the greatest number. However, the notion of travel, with the massification that accompanies it today, has evolved and, from an initiatory quest characterized by the search for a true form of otherness, this notion has often been transformed into a banal and tasteless act of consumption. It is an act of consumption that often goes so far as to pervert its very object which, at the end of the day, remains that of the change of point of view and the enrichment that must be brought to us by elsewhere, the other and its differences.

Venice, the central episode of the crisis of our modern world, yes, without a doubt, in terms of our ways of travelling and hospitality. Should the Serenissima, a jewel built by skilful and intrepid merchants, be destroyed by the vulgar trade of mass tourism, and how many leading cities would follow it in this unenviable destiny?

Can we still consume the places and destinations of our travels, and the City of the Doges in the first place, without risking consuming them?

Can we not envisage another destiny for these destinations, a destiny based on their own resources, whether intellectual and cultural, but also heritage, geographical, ecological and social?

And if it is obvious that Venice will remain a place of convergence for all kinds of travellers, should we not think of a new travel economy and new forms of hospitality?

The pedagogical objectives of the project module and the international workshop will then be as follows:

- Pedagogical exchanges with the IUAV by taking advantage of the knowledge of our correspondents on the lagoon territory, and its resources.
- Analysis and immersion in situ revealing new places, far from the consecrated image of Epinal, places revealing the situations of crisis and imbalance that affect the survival of Venice (City without inhabitants, city exclusively turned towards second homes and tourist accommodation)
- Development of an architectural project based on these observations and proposing new forms of hospitality serving the City in a sustainable way and echoing the tangible problems of a territory, so that it can respond to current and future challenges.

- Deepening of a programmatic reflection linking to the economic, social and cultural characteristics of the city of Venice.
- To allow students to relate their architectural project to the transdisciplinary research on the environment and the context in which it is located.
- Language in which the course is taught: French.
- Maximum capacity of the project group: under definition
- Courses on building scale and construction detail (ED)

Content:

The Travel Economy: Towards New Hospitality.

The international workshop, which we propose to link inseparably to the project module that we have been developing for several years, is part of this theme and will offer students the opportunity to design an architectural project for new places of hospitality inscribed in the particular context of the lagoon city.

Through the international workshop conducted with the IUAV, the aim will be to document, analyse and transform into a project the in-depth recognition of the lagoon environment and the City that occupies its heart. This process will be carried out jointly by the Venetian partner teachers.

This re-enunciated travel economy will involve the recognition of the resources of this environment and their contemporary variations:

- How can we remobilize and redeploy the know-how (artisanal, constructive, productive) that remains despite the omnipotence of mass tourism and the superficial entertainment that accompanies it?
- How can intangible assets be mobilised (cultural, heritage and prospective practices carried out by the cultural events that the city hosts, among others)?
- How can we take advantage of the territorial assets of an exceptional ecosystem (lagoon environment between land and sea, dense urban environment with unique heritage characteristics, built environment in decline, often disused and partially fallow)?

The students' reflection will be programmatic and architectural and will be based on the discovery of several project sites proposed by the teachers: one predominantly natural, the other predominantly urban, and the last in a site to be rehabilitated.

The preparatory work for the international workshop will be carried out during the first weeks of the semester and should allow the students to

identify the potentials of the proposed sites, to present hypotheses for mixed programming associating accommodation places and associated programs in connection with the resources of the context, to initiate the work of the architectural project, which will then be measured in the light of the data collected during the Venetian stay and in contact with the tangible reality of the sites. places once you get there.

Work required:

16 sessions, project workshop: alternating theoretical lessons, presentations/debates and collective corrections. Stay of about 8 days for an International Workshop taking place at the University Institute of Architecture of Venice.

An architectural project associated with a narrative, programmatic and urban reflection, a reflection highlighting the links woven between the different scales of design (from geographical inscription to constructive resolutions). Two intermediate renderings and a final report involving a jury made up of external speakers. Presentations and critical analyses of references.

Course Materials:

Teaching unit:
M84 P - PROJECT

Teachers:
LEITNER Patrick
FAGART David

ECTS Credits: 11
Number of weeks: 16
No. of hours / semester: 112
Personal work: 128

ENGLISH FRIENDLY
communication language

GERMAN FRIENDLY
Communication language

PROJECT

B - HMU-P815 Common

Objectives: LANGUAGE OF INSTRUCTION: French, English, German
LANGUAGE(S) OF COMMUNICATION: French, English, German

CO-SUPERVISOR: David Fagart

For this teaching, it is a question of helping the student to:

- Develop an awareness of the challenges of the city and contemporary society
- Integrate considerations about society, history and the critique of places – including the "already-built", perceptions, uses, etc.
- Reflect on urban ecology and the question of the 'commons' and the 'commons' (in a broad sense)
- Propose strategies and actions to articulate the objectives developed and the spatial proposal
- Giving shape to the space, demonstrating an architectural act
- Make an interesting contribution to current and (sometimes) urgent topics

Content: This design unit focuses on Ivry-sur-Seine, a south-eastern suburb lying just outside of Paris, that experiences great changes in its social and urban fabric. We will be working on one or two — or both — abandoned public buildings : a school and police headquarters (gendarmerie), both built around 1900. Other buildings might be added to this selection.

Instead of accepting the idea of demolition, the approach of this course is to see these buildings as architectural bodies in need of a proper diagnosis and treatment. This treatment, however, is not one of mere restoration.

The objective is to invent appropriate programs and uses that are able to turn these bodies into commons, i.e. a collectively owned resource for all. Architectural design will be able to negotiate between programs and uses on one hand, and the built condition on the other.

We will be discussing the following questions, and many others...:

- What is architecture's role in transforming a building?
- Should the program adapt to the existing building or should the building be transformed to accommodate a supposedly perfect expression of the program?
- What is the right balance here, in terms of the identity of the building, but also (and foremost?) of the carbon footprint?
- Should a building extension contrast with the existing building or be its continuation?
- How to turn a building and site — they were public buildings, yet open only to a specific group of people — into a place of general access and hospitality?
- How can these new commons contribute to enhance the quality of urban life of its surroundings?

This project can be worked on alone or in pairs (binome).

Work required: Production & Method

In terms of working method, in the situations presented on the following page, it will first be necessary to make an inventory, textually and graphically:

- existing places of the common (public, urban, nourishing, productive, cultural, etc.)

- types of resources of the common (material, immaterial, inherited [Michel Bauwens])

- problems and issues,

and then identify:

- Potentials & evolutions

- programmes, temporalities, locations,

and, finally, to give shape to the proposal, whether it is architectural and/or urban and/or centred on living environments.

Regarding our position as teachers, we prefer the posture of a critical accompanist who holds a "mirror" to the student, reflecting back to him or her an enriched image of our reactions, comments, ideas, leads, readings, references, questions, etc.

Our discussions take place during the weekly sessions.

For two to three months, the student presents his or her work using a video projector, which allows all students to really participate. Since these sessions take place in a circular configuration, we call this phase a "project seminar". The remaining sessions are devoted to preparing the textual and graphic elements of the rendering in the form of a display.

This teaching requires work either individually or in pairs.

Teaching unit:

M84 CTID – Intra-domain transversal course 42h

Teachers:

PIGOT Bernard

ECTS Credits: 3

Number of weeks: 14

No. of hours / semester : 42

Personal work: 35

INTRA-DOMAIN TRANSVERSAL COURSES

AS-CTID 801-Time for Performance - Workshop Work

Objectives:

Scenography will be defined as an art of place in that its vocation is to shape the place of representation relative to a given work. His spatial approach stems from a quest for signs and symbols, using 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:

The objective of this workshop is to provide students with the theoretical and practical tools of analysis and scenographic design in the field of theatrical performance: to discover the space of writing, to transform it into a scenographic device, to reflect on the relationship between stage and room, to understand the constraints of the stage and the architectural space.

A theoretical section will provide 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 Bernard Pigot.

Nature of supervision:

- Theoretical course on the profession of director and scenographer.
- Dramaturgy of the chosen play: biography of the author, historical, artistic, philosophical and sociological context of the writing.
- Scenographic accompaniment and weekly correction.

2 - Students form working groups (3 or 4 students per group). They develop their scenography in the stage space of their choice (existing theatres, rural or urban open-air stage space, disused factory, etc.).

3- At the end of the course, each group makes a film of no more than ten minutes giving an account of their entire approach and scenographic project.

Teaching unit:

M84 CTID – Intra-domain transversal course 42h

Teachers:

SZANTO Catherine
DE MARCO Rosa

ECTS Credits: 3

Number of weeks: 14

No. of hours / semester : 42

Personal work: 35

INTRA-DOMAIN TRANSVERSAL COURSES

MTP-CTID817 From Perception to Understanding the Landscape

This course is only available to those attending the first semester

Objectives:

The European Landscape Convention and the numerous French laws on landscape, the recent reflections of architects and urban planners increasingly emphasize the importance of taking the landscape into account in development projects at all scales.

The intensive proposes to explore walking as a tool for reflection at the basis of a landscape approach linking the individual and collective, local and territorial scales.

The intensive is developed in collaboration with the P811 project workshop "The landscape approach for the architectural and urban project", the Architecture/S and Landscape/S seminar in partnership with the Sapienza University of Roma and with the Faculty of Architecture of Florence. The intensive workshop entitled "Paris_Rome_#4" will take place during the intersemester, around the third week of February 2024 (dates to be announced).

This intensive is part of the work carried out by the AMP research team, which is interested in the past and current practices of various forms and scales of interventions on a territory in order to understand how the notions of landscape, architecture, and environment act concurrently.

Content:

Surveying a territory is one of the fundamental steps in any landscaping process. Exploring a place by walking is a first way to "put oneself in a state of effervescence" (Michel Corajoud), to immerse oneself in the site like a "sponge", "by adopting a 'floating attention'" (Bernard Lassus) – to use these expressions proposed by two great French landscape architects.

In this intensive, we will reverse the approach: we will not seek to discover a place through walking so much as to walk in a place (which remains to be chosen) to explore walking itself as a method that allows us

to link perception and understanding of space and to build a shared knowledge from our individual experiences.

It will therefore be a question of exploring a territory by walking, and of reflecting on the methods of analysis of the exploration itself. Students will be led to reflect on the approach itself, and its contribution to the construction of a project that is – also – a landscape project.

Work required:

The intensive workshop will take place during the Easter holidays, for one week (exact date and place to be defined according to the evolution of health conditions).

DETAILS: THE INTENSIVE WILL TAKE PLACE DURING THE ITNERSEMESTER - FEBRUARY 2024

A meeting to present the intensive in detail will be proposed in March. The information will be sent to students registered on Taiga.

Course Materials:

http://194.199.196.236/taiga_ftp/cours/2020/1182/5/Szanto-Proceedings-ECLAS_CONFERENCE_PORTO_2014.pdf

Teaching unit:

M84 CTID – Intra-domain transversal course 42h

Teachers:

PETITRENAUD Antoine

ECTS Credits: 3

Number of weeks: 14

No. of hours / semester : 42

Personal work: 35

INTRA-DOMAIN TRANSVERSAL COURSES

AS- CTID819 Artistic experiments at the northern port of Châlon sur Saône

Objectives:

This course offers students the opportunity to work physically on the former port and river site of Chalon-sur-Saône. The implementation of experimental devices, urban scenographies, ephemeral architectures or 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, April 26 2021 to Saturday, May 1 2021

Content:

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

We offer architecture students the opportunity to physically intervene on the site by confronting the elements and materialities still present. The aim is to invent and manufacture space devices on a scale of 1 to reveal possible imaginaries of this port place. It is a question of experimenting with new ways of reinvesting in this territory, of stimulating new rhythms of vision, of working on the urban future of this river port wasteland.

A mode of plastic intervention in an urban environment questioning spaces in the process of mutation. An attempt to revive spatial mechanisms stemming from these neglected territories and heritages. Dare to do it. The strength of the elements involved demands manifest responses in return,

and the project is thus elaborated on practice. Plastic and architectural primers determine test areas, construction sites of the possible. How can we hold the space, make it spring forth through "risky manipulations"? Produce gestures? Acts - spaces, on, in, and through these territories awaiting transformation. To generate a constructive approach of material reaction that favors the emergence of concepts and a potential for action. In this way, students are led to develop their own critical tools of representation and their own processes of elaboration 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 Persona grata project group. Urban Mobile Interference Structures, Design/Manufacturing

For more information, please visit the website of our research team "Architecture, Environment, Landscape" (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:

M84 CTID – Intra-domain transversal course 42h

Teachers:

PERNIN Juliette

CHASTANIER Frédéric



ECTS Credits: 3

Number of weeks: 14

No. of hours / semester : 42

Personal work: 35

INTRA-DOMAIN TRANSVERSAL COURSES

IEHM-CTID829 The Survey: Knowing and Representing the Existing

Objectives: Acquisition or development of a methodology for surveying and representing an existing building in order to analyze, understand, present and communicate its characteristics.

Content: Exercise of analysis and survey of a building (general and detailed sketches, sketches supporting the minutes of the survey, taking measurements by different tools or by evaluation, photographs, historical and documentary approach) and cleaning up by the tools of architectural representation by hand and with computer tools (geometrics, axonometrics, perspectives, architectural and constructive details, etc.) shadows, materials and implementation).

The semester consists of two exercises:

- A first exercise on an entrance building or a simple building,
- A second exercise on a more complex building.

Preference will be given to buildings on which there is no or insufficient documentation.

Work required: Readings, minutes, clean-up, finalized representation, layout, graphic expression

Course Materials: Jean-Marie Pérouse de Montclos, Architecture, method, vocabulary vocabulary
Benjamin Mouton, Meaning and the Rebirth of Heritage
George Duval, Restoration and Reuse of Ancient Monuments
Yves-Marie Froideveaux, Technique de l'architecture an

Teaching unit:

M84 CTID – Intra-domain transversal course 42h

Teachers:

JACQUIN Laure



ECTS Credits: 3

Number of weeks: 14

No. of hours / semester : 42

Personal work: 35

INTRA-DOMAIN TRANSVERSAL COURSES

IEHM- CTID 830 - Rehabilitation Practices

Objectives:

The proposed CTID is an extension of Philippe Dehan's CTID planned for S7-S9 of the IEHM domain. Philippe Dehan's CTID offers a reading of the theories of restoration through the study of the founding texts. The second semester course is based on theories to address practical cases of intervention in the existing system.

The objective of the course is to build a common knowledge base for students in the field concerning practices in terms of intervention in the existing system. The aim is to understand the sustainability of this practice and its evolution over time, but also to grasp its current issues and to visit examples in order to confront the notions of splicing, sewing and detail.

Content:

It will be a question of understanding the challenges of the project in the existing with regard to the various current themes (ecology, sustainability, legibility, etc.) and ancestral ones (structure, survey, analysis, etc.) in order to constitute concrete tools (ideas, methods, techniques) to project with the existing.

Summary of the proposal: 42 hours divided into two parts, the first of 24 hours in lecture hall and the second of 18 hours with visits to exemplary operations. These two periods are interspersed in the semester and each time of the course is marked by a visit.

1. General organization of the course

a. This weekly course of 12 sessions (2 hours) will address the practices of scholarly architecture, or in historic buildings, as well as interventions on ordinary or vernacular heritage.

This course would be open to all students in the IEHM field, regardless of the semester in which they are enrolled.

b. Operational visits: 6 p.m.

4 visits lasting 4 and a half hours each

c. Validation:

The validation of the teaching will essentially be based on the quality of a file which, based on the restitution of the trip, will demonstrate the ability

to theoretically base a discourse on practice, by mobilizing the contributions of the lecture hall.

2. Content of the theoretical part:

- Part 1: Background. This course provides a three-step context for intervention practices in existing buildings. First, through an overview of the practices of building transformation over the long period of history, then through the observation of the movement back to the city and the old that took place from the 1960s onwards, and finally through the contextualization of current professional conflicts.
- Part 2: Typologies of intervention. Themed courses aimed at deciphering interventions in the existing system. These case studies aim to shed light on current practices related to current issues and theories of restoration.
- Part 3: Specific Practices. Courses dealing with themed case studies around a subject that can be, the maintenance of the building, pathologies, materials, reuse and self-construction practices...

Work required:

Course Materials:

Teaching unit:

M84 CTID – Intra-domain transversal course 42h

Teachers:

MACAIRE Elise
D'ORAZIO Anne

ECTS Credits: 3

Number of weeks: 14

No. of hours / semester : 42

Personal work: 35



INTRA-DOMAIN TRANSVERSAL COURSES

HMU -CTID 831 Territories [rural and small towns] in decline and social innovation. Participative workshop in inter-training courses

Objectives:

Intensive organized in the form of a multidisciplinary workshop (inter-training in architecture, design and landscape) on the theme of the abandonment and ecological transition of rural territories (7-day residency trip). Approach and practice the specificities of the design within the framework of a participatory project, with the involvement of the inhabitants (inhabitants understood here as the residents and socio-economic actors of the territory, partnership with didattica - association of the ENSAPLV). Approach to social innovation, the evolution of public policies (service design methods), the narrative of territory (approach by cultural rights, partnership with Petites Cités de Caractère France).

Destination 2024: Chaumont-en-Vexin

Content:

The pedagogy of the workshop is partnership, with other institutions (different depending on the year) including the ENSA of Normandy, the didattica association (Ensaplv), communities: municipalities and intercommunalities, and PPC France (Small cities of character).

The involvement of partners is thus at the heart of the pedagogical system (pedagogical team extended to professionals from the territory + external speakers).

Organization

Saturday: Train and installation with the locals, visit, introduction to the workshop.

Sunday: Working seminar with researchers, local stakeholders and elected officials

Monday: Launch of the week, conferences (speakers), preparation of appointments.

Tuesday: First surveys and participatory workshops with residents and socio-economic actors.

Wednesday, Thursday and Friday: Synthesis and production workshops.
Saturday: Drop-off (in the morning) and return.
Departure from Paris: 04/05/2024
Return Paris: 11/05/2024

Work required: The CTID takes the form of a one-week intensive (42 hours TD). Attendance is mandatory throughout the week, which includes 42 hours of supervised work and a few hours of individual work. A personal assessment of a few pages illustrated by the week's work is requested at the end of the residency.

Course Materials:

Teaching unit:

M84 CTID – Intra-Domain Transversal Course 21h

Teachers:
COUILLARD Denis

ECTS Credits: 1.5

Number of weeks: 14

No. of hours / semester : 21

Own work: 22

INTRA-DOMAIN TRANSVERSAL COURSES

AS-CTID803 Light/Matter=Object/Light

Objectives:

DUE TO COVID MEASURES, THESE EXCEPTIONAL PROVISIONS:

This class in computer room 103, we need internet, is at 7:15 p.m. on Tuesday evenings, your PROJECT or ARCHI classes, finishing at 6:30 p.m., but they always last longer, so this 7:15 p.m., which leaves time for the previous classes.

To adapt to the logic of the school's face-to-face and distance learning, students present in physics, every 15 days, this course, which is face-to-face, is divided into 2 groups, A and B, alternating face-to-face, which fits in with your PROJECT or ARCHII face-to-face classes.

FOR THE PEDAGOGICAL OBJECTIVES:

Without matter, there is no light. Matter transforms and reveals the wave of light, light is radiation, light without matter is invisible to man. Humans perceive only 25% of the natural light spectrum. This is how the object of matter, material, matter/light, imposes itself naturally on our visual gaze, in our daily environment. Light defines visible matter, volume, color of matter, light refracts and diffracts, light changes the spatiality of space. Due to the lack of culture/light, this light, resulting from transformation by matter, is very little exploited and remains in the conceptual use of architects, a secondary artifice, not to say tertiary. However, in painting, sculpture, photography, the arts and other areas of plastic creation, light is a major part of the plastic and creative result, as an example of kinetic art. The plasticity of light transforms architecture, this complex and multiple object then multiplies...

From the natural light object, the sun, to its technical artifice, the electric light bulb, from the metaphor of the art/light object, to literary, cinematographic, plastic, aesthetic, social, architectural, urban, scenographic, theatrical, philosophical, political writing, the field of light

creation, the field of light creation is vast. The materials carry the essential, from the idea of creation to plastic light.

To understand the nature of sunlight is to understand its energy, its power, its light wave. It also means understanding the future resources, applicable to the creation of light, that the technical sciences offer hope for through the creation of new materials.

The exploitation of the relationship between matter and light is ancient, light is part of the architectural aesthetics and sculpture of the architects of the Greek temples, thinking of this light, this pure white matter, of the marble of the Parthenon, the shadow of light.

Today, architects offer their projects accompanied by nocturnal images, dynamic illuminations, light scenographies, sometimes sound. Decisive light, in the presentation of a competition project.

Mastering the matter/light phenomenon means understanding the characteristics of the human gaze, the capabilities of the eye, its physiology, the different visions of living species, the images and technological views produced by our machines, for example the image of the infrared camera.

PVC, glass, optical fibre, laser, flame, UV, gamma ray, neon, photosynthesis and others are subjects of experimentation, enriching the creations of architects, urban planners and landscape architects.

It is necessary to know the costs, uses, durability, energy consumption, implementation, essential conditions of transformation, of the project, into a built reality.

Also, advances in technical equipment make it possible to link light to sound and image, video, enough to produce extraordinary plastic objects...

The most beautiful lights are those dreamed lights, at the cost of the reality of this course!

Content:

One and a half hours of theory and half an hour of tutorials:

- Light/material experiments, in relation to the course and the concepts of objects designed and produced by the students.
- Thematic conferences, documentary videos, kinetic and luminous works of art, presentations on designers, visual artists, light designers and other creators using light/matter.
- Two interventions, an engineer from the French Lighting Association, a lighting designer from the Association of Lighting Designers.
- A visit to the public space of La Défense, on the theme of works of art light and sound.
- An evening of 'Nuits de Paris', the Montmartre district and its lights.

Work required:

Production of a conceptual and technical file of a lighting/sound, on a chosen place/subject. This dossier is produced, point by point, by chapter, in chronology of the course progress.

A real desire to acquire the basics of the technical culture of the light/sound designer in the service of architecture and urban planning.

Course Materials:

A desire for light and sound if possible as a preamble to this course, the reading of the book 'Sons et Lumières', published by the Centre Georges Pompidou, available at the ENSAPLV library. and By night, light and architecture, Montse Borrás 2009- Course in room 103, internet support, images, videos, writings and other documents.

Tutorials in rooms 102 and 103.

Visit of the site of La Défense at night, the works of art lights and sounds of the public space and the Butte Montmartre district always at night.

Teaching unit:

M84 CTID – Intra-Domain Transversal Course 21h

Teachers:
BILLAUX Guillaume

ECTS Credits: 1.5

Number of weeks: 14

No. of hours / semester : 21

Own work: 22

INTRA-DOMAIN TRANSVERSAL COURSES

AS-CTID804 Urban Sound Workshop 2

Objectives:

The interdependence between time and space is never more evident than through the manifestation of sound. The built space disrupts the acoustics of the pre-existing place and changes the perception of it before the intervention. The way the sound propagates reveals the space, in turn, the constitution and configuration of the space shape the sound. The workshop will allow students to reflect on experimental music and the place of sound in art by addressing the notions that, during the twentieth century, have opened up the musical field: noise, silence, indeterminacy, interpenetration, spatiality. We will pay particular attention to this last aspect of sound (spatiality), because sound waves have to go somewhere once they are emitted. The sound is spherical, but when we listen to it, it seems to have only two dimensions: pitch and duration. The third, depth, we know exists but it escapes us. We have forgotten how sound travels through space and occupies it. Each place has its own character that tends to modify, displace and/or fix sounds.

Content:

"Space can only lead to paradise" Marcel Broodthaers
Art/Music/Architecture: Connections, Interactions, Sound Space, Sound as Matter, Soundscape/Landscape. A different way of approaching music, another way of perceiving architecture and distancing oneself from it. To do it by means of music, by means of sound. To approach spaces from the angle of sound, cities of various characters that are very marked in our imagination, to confront this imaginary with the reality of sound, without preconceptions, to confront soundscapes of different places, of different cultures (the city does not sound the same in Oslo or Cairo), based on this experience, to attempt the recreation of spaces in order to better grasp the existing, or at least to try to define, circumscribe, delineate, apprehend, immerse oneself in spaces and represent them in all their dimensions. Every space is a function of silence and sounds, sounds and silence shape the space by giving it its sensitive dimensions.

Each year an Intervention/Conference of different musicians and composers is scheduled...

(Michel Risse, Christophe Widersky, Vincent Epplay, Jacqueline Caux, Pierre Marietan, Nicolas Losson, Jean Jacques Palix, Nicolas Frize...

Work required: Intensive, production of an audio document of 5 minutes maximum.

Course Materials: <http://www.decorsonore.org/>
<http://www.nicolasfrize.com/>
<http://www.jacquelinecaux.com/>
www.o-a.info
www.samauinger.de
<http://soundtransit.nl>

Teaching unit:

M84 CTID – Intra-Domain Transversal Course 21h

Teachers:

DENNEULIN Chimene



ECTS Credits: 1.5

Number of weeks: 14

No. of hours / semester : 21

Own work: 22

INTRA-DOMAIN TRANSVERSAL COURSES

AS-CTID805 Industrial Heritage: Art/Architecture

Objectives:

INDUSTRIAL HERITAGE: ART / ARCHITECTURE

Part 2 = PHOTOMONTAGES

In the 1970s, a group of artists and architects locked themselves in a disused factory in the Ruhr to protest its destruction. Among them were the photographers Bernt and Hilla Becher, who photographed blast furnaces, headframes and 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 of their region had and a very ambitious requalification program was launched in the 80s by an international architecture exhibition.

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

Through the study of a few notable cases (Ruhr, Detroit, Lens), students will analyze the place of collective representations and imaginaries in projects to rehabilitate industrial heritage. Then, students will be invited to create images of their own, through photography and then photomontages.

By way of introduction:

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

"The problem is now at the centre. What doesn't work, what is dysfunctional, takes up all the space. Failure 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, in place of everything that is broken.'

Content:

14 classes (1h30/week) spread over the entire semester 2. Every Tuesday morning from 9 am to 10:30 am (from Tuesday 1 March at 9 am) with a possible grouping for shots and Photoshop© sessions - to be arranged together during the first class.

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

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

CALENDAR - from Tuesday 28 February to Tuesday 14 June - gathering to be organised

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

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

3 - 6 hours Photoshop©: adjustments, transformation, retouching, masking...

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

5 - 6 hours Follow-up of personal work: a photographic series and photomontages

6 - 1h30 Final correction

Work required:

©Photoshop is a prerequisite to install on your laptop

Course Materials:

Superarchitecture - The Future of Architecture 1950-1970 : Rouillard, Dominique: Amazon.fr: ... Publisher: Editions de la Villette (1 November 2004) ..

Pablo Servigne, Raphaël Stevens and Gauthier Chapelle, Another End of the World Is Possible: Experiencing Collapse (and Not Just Surviving It), Paris, Seuil, coll. "Anthropocene", 2018, 327 p. (ISBN 978-2-02-133258-2).

Rob Hopkins What If...? Unleash our imagination to create the future we want, Éditions Actes Sud, coll. "Domaine du possible", April 2020, 304 p. (ISBN 9782330132859)

Cultural facilities in the Emscher Valley (Ruhr, Germany): from urban regeneration to the development of a cultural and creative economy

Cultural facilities in the Emscher Valley (Ruhr, Germany): from urban regeneration to the development of a cultural and creative economy

Bruno Lusso
<https://journals.openedition.org/belgeo/13358>

Detroit Wild City
<https://www.youtube.com/watch?v=YSwGqxySNLY&t=69s>
<https://www.cairn.info/revue-pour-2014-4-page-89.htm>

Conversion of former mining sites into cultural sites Territorial issues and appropriation in the Nord-Pas-de-Calais mining basin
<https://hal.archives-ouvertes.fr/tel-02478106>

<https://www.franceculture.fr/emissions/lsd-la-serie-documentaire/que-fait-le-maire-44-loos-en-gohelle-un-maire-dans-la-transition-democratique>

Germinal - Zola

It Starts Today - Bertrand Tavernier

Teaching unit:

M84 CTID – Intra-Domain Transversal Course 21h

Teachers:

ADRIAN ARANEDA Luis

ECTS Credits: 1.5

Number of weeks: 14

No. of hours / semester : 21

Own work: 22

INTRA-DOMAIN TRANSVERSAL COURSES

**AS-CTID806 Looking at architecture and the city through
photography**

Objectives:

Architectural Photography

The Imaginary / The Concept:

- Express an idea and make it visual
- Looking, Analyzing and Communicating one's own imagination in order to make a deliberate statement
- Allow the student to prepare for a research activity.

Content:

'Photography, in that it distinguishes and composes at the same time the most subjective (the photographer's own genius) and the most objective (recording by the camera), is probably the best way to help us understand how the gaze is constructed, this link between subject and object'.

BERQUE A. 'The Thousand Births of the Landscape'. Photographic landscape in France the eighties ed. Hazan, 1989, Paris.

These questions focus on the construction of the gaze in relation to architecture, the city and the landscape, So on the role of photography as a revealer of concepts.

To communicate through an image is to construct an image in order to make a deliberate statement.

This construction of the image necessarily implies a construction of the gaze.

The construction of a photographic gaze consists in defining one's subject, in analyzing in order to understand the various relationships that bind him to what surrounds him.

Depending on what you want to say or communicate, the technical choices and framing vary when you take the shot.

It is the ability to make these choices, in relation to one's purpose, what one seeks to acquire.

Such an experience makes it possible, even outside the field of architectural and landscape design, to participate in raising awareness of the way we look at space and its problems.

Apart from the fact that photography has never ceased to look at the city and to question the architectural space and the landscape, it allows us to show the relationship between man and his environment, to stage it and to become aware of its own situation in space.

Photography depends first of all on the shooting, i.e. on the vision of a certain reality, but it depends even more on the mastery that one can have of this tool to formalize a communicable result and thus hold a deliberate purpose.

Work required:

Scouting and photo reports. - Photographic exercises: linking dream and reason / plasticity, imagination and intuition.

- A3 landscape file (paper) and digital jpg file, including all the exercise renderings.

Course Materials:

Teaching unit:

M84 CTID – Intra-Domain Transversal Course 21h

Teachers:

SAIDI SHAROUZ Mina
DUGAVE Chantal

ECTS Credits: 1.5

Number of weeks: 14

No. of hours / semester : 21

Own work: 22

INTRA-DOMAIN TRANSVERSAL COURSES

AS-CTID808 Cities and public spaces in pictures

Objectives:

An articulation between research, photography and video.

Learn to think about and use the image in research around architecture and space.

This course helps in the formulation of master's theses for some PFEs.

How the image can account for a reflection. Both in the construction of each image and in the associations of the images with each other.

The aim of this course is to develop a sensitive and pragmatic approach to rapidly changing urban spaces through the use of video tools and photography, based on three levels of understanding:

- Looking: it is a question of developing a personal and original look at places and architectural and urban objects and on human practices.
- Experiment with places, objects and practices
- Create urban spaces based on the imagination and use of places.

Video and photography will be used as a pedagogical support to train the gaze. For us, filming is a different way of looking. This makes it possible to observe the rhythms and uses of the place in a precise way. Audio sound is another medium that we will use to discover space. Moving from one sound to another is another way of navigating the space.

This investigation, carried out through a transversal artistic, political and scientific approach, will aim to highlight the way in which public spaces emerge, live, move and disappear according to the socio-political and economic context in each of these countries. Public space is never fixed, it is both the "visible" and "invisible" revealer of the evolution of a society. Their role becomes all the more important in situations where social control is more severe. Through the study of urban situations in global cities, we will question the universality of urban public spaces.

The CTID is open to all master's students interested in the use of images in their dissertations and research in the humanities.

Content:

Gait:

Depending on the dissertation topics, each student will find visual forms that contribute to enriching the content and presentation of their research.

Theoretical definitions and analysis of images around urban and architectural issues, preferably in relation to the subject of the dissertations.

Practical work: We will ask students to make images about their research objects. Correction sessions and exchanges with teachers will take place over 5 sessions according to a pre-established schedule.

Teachers: Valérie Jouve and Mina Saidi-Sharouz

Objective to be achieved:

- Learn how to analyze the image
- Learn to think about/through images
- Learn how to make images
- Learn how to use images in research.

Work required:

Course Materials:

Teaching unit:

M84 CTID – Intra-Domain Transversal Course 21h

Teachers:
HILAIRE Philippe

ECTS Credits: 1.5

Number of weeks: 14

No. of hours / semester : 21

Own work: 22

INTRA-DOMAIN TRANSVERSAL COURSES

**MTP-CTID811 Contextualization and consideration of the landscape
in the architectural project**

Objectives:

The contextualization of the architectural project cannot be limited to a simple shaping of the immediate surroundings of a building. It is necessary that the architectural project be part of a number of contexts, and that the choices made for the development of the programme,

for implementation and formalization, are articulated with various issues. Whatever the nature of the sites on which we intervene (from gardens to industrial wastelands), the landscape is no longer a setting, a kind of but a primary parameter that is expressed in geomorphological, historical, environmental, social, etc.

within which an argument must be constructed.

The site chosen for this exercise is a historic garden of about 40 ha located in a forest valley landscape in a peri-urban area and on the

It is proposed to build a structure for the reception of the public and a caretaker's accommodation.

The diversity of possible approaches to such a site makes the range of responses wide enough to approach the project with different attitudes. very varied.

Content:

The objective of the exercise is to obtain a progression in the consideration of the landscape that begins at the site visit and ends at the end of the in the form of the project. This progression becomes more complex as the process progresses and knowledge is provided by

that the interlocking of ladders are no longer perceived simply as a linear sequence (from the general to the particular), but that they become a kind of network of data worked on simultaneously, that the consideration of the different themes no longer produces a juxtaposition but a constructed and argued whole, so that the project process is legible from one end of the work to the other.

The exercise consists of an orderly sequence that begins with a visit to the chosen site and the provision of the necessary knowledge in the form of courses to present the different contexts. It continues with a restitution of this first stage and a definition of the issues in terms of and ends with the shaping of a program for an architectural object and the realization of a sketch.

Work required:

The student will be required to provide a project diary that shows his/her progress from the visit to the project, as well as an A0 synthetic board on the which will present the essential elements for understanding his approach. Emphasis is placed on the argumentation of the choices made for the implementation of the project in a large site that integrates the garden but also the whole of the valley that hosts it.

Course Materials:

Teaching unit:

M84 CTID – Intra-Domain Transversal Course 21h

Teachers:
LAPASSAT Agnès



ECTS Credits: 1.5

Number of weeks: 14

No. of hours / semester : 21

Own work: 22

INTRA-DOMAIN TRANSVERSAL COURSES

MTP-CTID814 Micro-Megas, the rural territory in question

Objectives:

These courses offer an "objective" look at the rural territory, by playing with perpetual back and forth between "micro", the scale of an element, a component of the territory, and "mega", the scale of the ensembles in which it participates. The confrontation of these two scales makes it possible to understand that the rural territory is a real construction articulating topography, hydrology, infrastructures, the presence of plants, exploited or not, and built.

It is not the apparent or real modesty of these works that is remarkable, but the articulation of the different components, the contexture of these territories (the way in which the different parts of a whole are assembled), what they allow, what they engender. Thus, the refers to the land that it protects, that it develops, whose occupation and exploitation it allows, while the village located on this land does not refer in an obvious way to what allows it to exist.

This contexture of the rural territory, which was very legible until the middle of the twentieth century, has been thwarted by the evolution of our society, striving to adapt living things and the territory to industrial and economic requirements.

Today, this "industrial" agricultural model is being questioned for its economic, social and ecological dysfunctions. Successive agricultural crises have raised questions about the future of production and, beyond production, the development of the territories that support it, and the resulting landscapes.

The question of societal supply is added to the agricultural question. The inhabitants of these territories have expectations, the consumers of the products of these territories have others, the consumers of the induced landscapes still others. The rural territory is thus the bearer of seemingly irreconcilable issues. It is a real quest for identity, to which the architect

can respond, through his ability to define the possible transformations of the place, in respect of heritage, economic, societal and aesthetic notions. Alternative agricultural models (agroforestry, permaculture) imply a different territorial functioning, a construction that it is up to us to support.

Content:

- 1. From the ecosystem to the agrosystem, agricultural production shapes the territory.
- 2. Roman Gaul and the Middle Ages, two models of political and economic construction of the territory
- 3. Controlling water: the impact of hydrology on the construction of the territory, driving force, river transport
- 4. The Enlightenment and Physiocracy: When Science Thinks About Agriculture and Calls into Question Feudal Social Functioning
- 5. Liberty, Equality, Fraternity: The Nineteenth Century, the Evolution of the Notion of Private Property.
- 6. The Twentieth Century, from Peasant to Farmer: The Adaptation of Living Things to Industrial Contingencies.
- 7. Adapting the territory to the machine: land consolidation. The Breton Marsh, when a territorial construction is no longer viable.
- 8. The evolution of the "village" entity, the search for the appropriate administrative scale: commune / intercommunality. Case study on the EPCI of Val Bréon.
- 9. A Certain Look at Rural Heritage: Rémy Zaugg and Blessey's New Patrons.
- 10. Screening of the film by D. Marchais: "The Time of Graces". Testimonies on the current situation and ways forward.
- 11. The Têt Valley: adapting the form and content to preserve the meaning.
- 12. Questioning nature / culture: towards the construction of a cosmology of the future

Work required:

12 lectures of 1h30, written exam of 1h30, oral remedial.
Attendance: 25% of the final grade

Course Materials:

Teaching unit:

M84 CTID – Intra-Domain Transversal Course 21h

Teachers:
BILLAUX Guillaume

ECTS Credits: 1.5
Number of weeks: 14
No. of hours / semester : 21
Own work: 22

INTRA-DOMAIN TRANSVERSAL COURSES

HMU-CTID818 Aesthetic Acoustics 2

Objectives: To move away from 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.
Take into account the sound dimension in architectural design.

Content: This teaching is based on a methodology of listening as a daily discipline, by means of group exercises during the course that must be practiced individually afterwards. The study of sound as a dimension of architectural and urban space will be based on theoretical work and on the acoustic-aesthetic analysis of remarkable urban sites, with a reference site.
Deepening of the skills acquired in the optional Aesthetic Acoustics 1.

Work required:
Course Materials:

Teaching unit:

M84 CTID – Intra-Domain Transversal Course 21h

Teachers:

BLANDIN Philippe

ECTS Credits: 1.5

Number of weeks: 14

No. of hours / semester : 21

Own work: 22

INTRA-DOMAIN TRANSVERSAL COURSES

HMU-CTID820 Sustainable Project Professional Practices

Objectives:

Introduction to sustainable projects in the field of the built environment in France and abroad.

Content:

INTERNATIONAL RESPONSE FRAMEWORK: technical, legal, economic and institutional data.

EXAMPLES OF SPECIFIC INTERVENTIONS: Requalification of brownfield sites into eco-districts, new Valencian districts, problem of intervention in a protected perimeter: Eco district of Senlis. Sustainable international projects, NEW YORK, MOSCOW, HANOI, PRISTINA, MOGADISHU, PANAMA.

Examples of speakers:

1- "Sustainable Development Approaches: Cities and Neighbourhoods"

Gérard Radigois : Public Investigator ile de France URBA, IUP,

2- "The language elements of sustainable projects"

Philippe Delaroche: Editor-in-chief of Lire, journalist, writer.

3- "BROOKLYN (NY) and sustainable projects":

Jessica Label: Architect DPLG / MA / After studying at Columbia University (New York), Jessica Label created the architecture studio IN/ON in Paris in 2000. Among its achievements: 15 housing units in the 11th arrondissement of Paris, 12 housing units in the 18th arrondissement of Paris, 4000m2 of renovation in the 10th arrondissement of Paris, the head office of Westfalia Systemtechnik Germany, the headquarters and production unit of Westfalia USA, the competition for the new Museum of Fine Arts in Lausanne, private residences, the Lille and Valenciennes eco-district 28,000 m², the Senlis eco-district 110,000 m², etc.

4- 'URBAN PROJECT AND POLITICAL COMMUNICATION': Olivier BINST
Parliamentary Assistant

Work required:

Lectures, visits, conferences and debates

Teaching unit:

M84 CTID – Intra-Domain Transversal Course 21h

Teachers:

ZETLAOUI LEGER Jodelle
FENKER Michael

ECTS Credits: 1.5

Number of weeks: 14

No. of hours / semester : 21

Own work: 22

INTRA-DOMAIN TRANSVERSAL COURSES

HMU-CTID822 Living and working: from use analysis to architectural design

Objectives:

The objective of this course is to nourish architectural design based on the understanding of the richness of living and working situations that take place in space. The ambition to grasp the complexity of social practices in their relations to space leads to the study of the uses and the plurality of points of view that the actors concerned have on these relations. It also presupposes the designer's ability to explain the particular social, cultural and economic context of an architectural project and to develop a reflexive distance from the normative elements that underlie the relationship to uses. Beyond the development of analytical means, the teaching aims to show how attention to uses can be part of a programming approach in articulation with design.

Content:

The course proposes to understand the problem of gender diversity in architecture through the complexity of perspectives on the use in the field of housing, workplaces and public facilities by starting from three types of inputs: that of the results of sociological analyses, that of the professional practices of the speakers, that of the empirical investigations that the students will have to carry out on concrete places and real behaviors. With regard to workplaces and public facilities, we will study the relationships between the organization of work and the organization of space, the contemporary forms of workplaces, the processes and actors of the production of spaces. We will develop a critical analysis of companies' current policies in terms of architecture and space and examine the articulations they propose between organizational logics and logics of use. As far as housing is concerned, our analysis of urban and architectural morphology will focus on the way in which it welcomes people and enhances certain lifestyles. What is the purpose of hospitality in urban public spaces? What forms of social ties are promoted or hindered? How

to understand the different scales of diversity and the modalities of use related to housing in the programming.

The course will also examine the emergence of new ways of living and working and, where appropriate, their consideration in achievements. Beyond the study of the specificity of these different types of achievements, it will be a question of asking in a transversal way a set of questions on the articulation between lifestyles and work and the built environment. How do spaces give rise to relational, social and organizational dynamics? How do they participate in forms of recognition or degradation of social relations? How can programming and design approaches address the social, productive, institutional and urban issues of gender diversity intentions? How can we think about the complexity of the design in the light of the plurality of project recipients?

Work required:

Students will have to analyse a dwelling, a workplace or a public facility (e.g. a reception situation, a mixed-use building).

Course Materials:

Teaching unit:

M84 CTID – Intra-Domain Transversal Course 21h

Teachers:

PATTERSON Michael Brent

ECTS Credits: 1.5

Number of weeks: 14

No. of hours / semester : 21

Own work: 22

COURSE IN ENGLISH

INTRA-DOMAIN TRANSVERSAL COURSES

CCA-CTID824 Architectural Instability and Indeterminacy: Accident, error, open source and the unworking of architecture

Objectives:

From theoretical, philosophical, architectural and other disciplinary texts, students develop a culture and knowledge of architectural theory. Build the 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 lead the student to communicate in a foreign language. ENSAPLV offers this teaching in English in order to allow students to participate in international educational activities (international workshops and colloquiums organized by the school, exchanges in foreign higher education institutions). Course open to exchange students.

Content:

This course offers an introduction to architectural theory, particularly around the question of the nature of "work" and its status as a profession. The aim is to reflect on this work in terms of: the history of training and learning, the evolution of professional practices, the theorization of "doing" and "creativity", the experimentation of materiality ("new materialism"), the roles of "new technologies" and new economic and political paradigms, etc.

How does the architect position himself in relation to the builder/worker, craftsman, engineer, client, critic, other architects, etc.? Architect as "producer", "author", designer, artist, political figure, user, citizen, dissident, etc. Different themes will be addressed such as: role/place of risk, obsolescence, representation and social media, aesthetic issues, ethical dilemmas, creative ecologies, immaterial work and automation, artificial intelligence, participation and open source, design between formal and informal, autonomy, resistance, posthuman, etc. Students will be asked to confront theory with practice. What are our prejudices and preconceptions about architecture and the way in which it is designed?

What is the nature (and evolution) of this 'work'? How do architects present themselves and how are they represented? What are his 'professional' speeches/narratives? How can we 'deconstruct' this profession? How can we imagine other interpretations and potentialities? What is the role of the architect?

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

Course Materials: Daniel Abramson, *Obsolescence: An Architectural History* (University of Chicago, 2016)
 Chandler Ahrens & Aaron Sprecher, eds., *Instabilities and Potentialities: Notes on the Nature of Knowledge in Digital Architecture* (Routledge, 2019)
 Zeynep Çelik Alexander & John May, eds., *Design Technics: Archaeologies of Architectural Practice* (Minnesota, 2020)
 N. Axel, B. Colomina, N. Hirsch, A. Vidokle & M. Wigley, eds., *Superhumanity: Design of the Self* (e-flux/Minnesota, 2018)
 Jane Bennett, *Vibrant Matter: A Political Ecology of Things* (Duke, 2010)
 Rosi Braidotti, *Posthuman Knowledge* (Polity, 2019)
 Benjamin Bratton, *The Stack: On Software and Sovereignty* (MIT, 2015)
 James Bridle, *New Dark Age* (Verso, 2018)
 Mario Carpo, *The Second Digital Turn* (MIT, 2017)
 Beatriz Colomina & Mark Wigley, eds., *Are we human?* (Lars Müller, 2016)
 W. Davidts, S. Holden & A. Paine, eds., *Trading between Architecture and Art* (Valiz, 2019)
 Peggy Deamer, ed., *The Architect as Worker: Immaterial Labor, the Creative Class, and the Politics of Design* (Bloomsbury, 2015)
 Peggy Deamer, *Labor and Architecture* (Routledge, 2020)
 Keller Easterling, *Extrastatecraft: The Power of Infrastructure Space* (Verso, 2014)
 Kenneth Frampton, *Labour, Work and Architecture* (Phaidon, 2002)
 Hélène Frichot, *Creative Ecologies: Theorizing the Practice of Architecture* (Bloomsbury, 2018)
 Catherine Geel & Clément Gaillard, eds., *Extended French Theory & The Design Field... On Nature and Ecology* (T&P, 2019)
 Andrew Goodhouse, ed., *When is the Digital in Architecture?* (Sternberg, 2017)
 Ariane Lourie Harrison, *Architectural Theories of the Environment: Posthuman Territory* (Routledge, 2013)
 Tim Ingold, *Making* (Routledge, 2013)
 Tahl Kaminer, *The Efficacy of Architecture: Political Contestation and Agency* (Routledge, 2017)
 Nadir Lahiji, ed., *Architecture Against the Post-Political* (Routledge, 2014)
 Alexandra Midal, *Design by Accident: For a New History of Design* (Sternberg, 2019)
 Miguel Paredes Maldonado, *Ugly, Useless and Unstable Architectures* (Routledge, 2019)

Markus Miessen, *Crossbenching: Toward Participation as Critical Spatial Practice* (Sternberg, 2016)
Doina Petrescu & Kim Trogal, eds., *The Social (Re)Production of Architecture* (Routledge, 2017)
Monica Ponce de Leon, *Authorship* (Princeton, 2020)
Carlo Ratti, *Open Source Architecture* (Thames & Hudson, 2015)
M. Schalk, T. Kristiansson & R. Mazé, *Feminist Futures of Spatial Practice* (AADR, 2017)
Bernard Stiegler, *Automatic Society* (Polity, 2016)
Bernard Stiegler, *The Age of Disruption* (Polity, 2019)
Albena Yaneva, *Five Ways to Make Architecture Political: An Introduction to the Politics of Design Practice* (Bloomsbury, 2017)

Teaching unit:

M84 CTID – Intra-Domain Transversal Course 21h

Teachers:

GUENA François

ECTS Credits: 1.5**Number of weeks:** 14**No. of hours / semester :** 21**Own work:** 22**INTRA-DOMAIN TRANSVERSAL COURSES****CCA-CTID825 Digital Systems for Digital Design****Objectives:**

This option follows on from the optional TR707 'Introduction to parametric modelling' in semester 7. It is a deepening of the notions acquired by presenting examples of generative digital methods to assist design in architecture. Parametric design, generative design, algorithmic design, data-driven design etc. are English terminologies that correspond to digitally assisted design activities and are becoming increasingly popular in the architectural sector. The objective of this option is to train students in the use of different digital techniques to implement these emerging design activities.

Content:

The teaching consists of two main parts. The first, entitled 'Generative Parametric Design', presents methods for generating shapes from algorithms, rules, etc. The second part presents applications of machine learning to predict the results of evaluations, group objects into categories, recognize objects, generate code, images, etc.

Generative Parametric Design: Subdivision Surfaces, Implicit Surfaces, Multi-Agent Systems and Swarm Intelligence, Cellular Automata, Fractals, L-Systems.

Machine Learning: Supervised Learning, Predictive Function Learning, Classification, Unsupervised Learning, Categorization, Deep Learning, Creating a Learning Model, Reusing and Adapting Existing Models, Query Engineering for ChatGPT, MidJourney etc.

The course is carried out entirely remotely through a website dedicated <http://sapi.paris-lavillette.archi.fr/CTID825>.

Every week a new course is posted on the website by the teachers.

Work required:

Weekly exercise in relation to the course content

Rhinoceros and Grasshopper are the main tools used. It is preferable to have already been introduced to these tools to carry out the exercises.

It's also best to use a Windows PC.

Course Materials:

Jean-Pierre Couwenbergh , Mohamed-Anis Gallas, Parametric Design with Rhino and Grasshopper: Applications in Architecture, Engineering and Design, Eyrolles, 2021 dedicated website <http://sapi.paris-lavillette.archi.fr/CTID825>

Teaching unit:

M84 CTID – Intra-Domain Transversal Course 21h

Teachers:
POIRIER Vincent

ECTS Credits: 1.5

Number of weeks: 14

No. of hours / semester : 21

Own work: 22

INTRA-DOMAIN TRANSVERSAL COURSES

CTID 833 Detail Design

Objectives: Acquire a methodology that leads the student to make reasoned constructive, aesthetic and economic choices in order to master the design of construction details.

Content: Study of the fine-tuning of details. The student will analyse a constructive detail of his/her choice encountered during a visit to a completed building, or from a documentary database, in conjunction with the project's stakeholders (BET/Architects)

In particular, it will have to take into account the following criteria: appearance, technical performance, cost.

The following steps should be taken into account in the study:

- Status and restitution of details
- Multi-criteria analysis of the chosen detail
- Development of an evaluation grid
- Comparison with other similar models

All the studies are kept and archived in order to constitute a corpus.

Work required:

- Attendance and participation in lectures (3 sessions)
- Tutorials (collective follow-up of studies) 8 sessions
- Intermediate report in the middle of the semester (1 to 2 sessions)
- Rendering of a file (working in pairs) in digital format.

Course Materials: Submitted at the beginning of the year

Teaching unit:

M84 CTID – Intra-Domain Transversal Course 21h

Teachers:
JACQUET Benoit

ECTS Credits: 1.5
Number of weeks: 14
No. of hours / semester : 21
Own work: 22

INTRA-DOMAIN TRANSVERSAL COURSES

MTP-CTID834 History of Timber Construction in Japan

Objectives: To understand Japanese spatiality through the analysis of the structure and space of buildings built in Japan from antiquity to the contemporary era.

Content: Each week, we will present an example of architecture built in Japan and we will see how this type of 'traditional' construction has evolved over time, what can be learned today from this knowledge, techniques, structure and space, and how this tradition has been interpreted in the discourse and spatial production of contemporary architects.

Work required: The work required is:

- an active presence at the seminary.
- the preparation and presentation of a descriptive sheet on a building presented at the seminar.

Course Materials: Benoît Jacquet, Philippe Bonnin and Nishida Masatsugu, *Devices and Notions of Japanese Spatiality*, Lausanne, Presses polytechniques et universitaires romandes, 2014.

Benoît Jacquet, "Introduction to Japanese Spatiality", in Benoît Jacquet et al. (eds.), *Devices and Notions of Japanese Spatiality*, Lausanne, Presses polytechniques et universitaires romandes, 2014. URL: https://www.academia.edu/39738461/Introduction_à_la_spatialité_japonaise

Benoît Jacquet, "Words and Discourses on the Monumentality of Japanese Architecture", in Benoît Jacquet et al. (eds.), *Devices and Notions of Japanese Spatiality*, Lausanne, Presses polytechniques et universitaires romandes, 2014, p. 169-189. https://www.academia.edu/79270695/Les_mots_et_les_discours_sur_la_monumentalité_de_larchitecture_japonaise

Benoît Jacquet, "From the Path to the Square: The Traces of Traditional Spatiality in the Contemporary Japanese City", in *Architectures et villes de l'Asie contemporaine*, ed. Nathalie Lancret and Corinne Tiry-Ono, Brussels, Mardaga, 2015, p. 77-101. URL:

https://www.academia.edu/19291283/Du_chemin_à_la_place_les_traces_de_la_spatialité_traditionnelle_dans_la_ville_japonaise_contemporaine

Benoît Jacquet, Teruaki Matsuzaki, Manuel Tardits, *The Carpenter and Architecture: A History of Timber Construction in Japan*, Lausanne, Presses polytechniques et universitaires romandes, 2019.

Benoît Jacquet, Teruaki Matsuzaki, Manuel Tardits, *The Carpenter and the Architect: A History of Wood Construction in Japan*, Lausanne, EPFL Press, 2021.

Benoît Jacquet, Jérémie Souteyrat, *The Architecture of the Future in Japan. Utopie et Metabolism*, Poitiers, Le Léopard Noir, 2020.

Benoît Jacquet, "In the Utopia of the Metabolist City", *Archiscopie* 17, 2019, p. 19-25.
URL: https://www.academia.edu/39713449/Dans_lutopie_de_la_ville_métaboliste

Benoît Jacquet, "Itō Chūta and his Architectural Study of Hōryūji (1893): How and Why to Integrate Japanese Architecture into a World History", *Ebisu* [Online], 52 | 2015. URL: <https://journals.openedition.org/ebisu/1615>

Benoît Jacquet and Yann Nussaume, "The Evolution of Takamatsu Shin's Architecture and the Transition to the Heisei Era: Continuity or Fluctuation?", *Ebisu* [Online], 57 | 2020. URL: <http://journals.openedition.org/ebisu/5077>

Itō Chūta, *Kenchiku tetsugaku 建築哲學 (Philosophy of Architecture)*, master's thesis at Tokyo Imperial University (Tōkyō teikoku daigaku), 1892

Itō Chūta, "Hōryūji kenchikuron" 法隆寺建築論 (An Architectural Study of Hōryūji), *Kenchiku zasshi 建築雜誌*, November 1893, 7 (83), pp. 317–350.

Tange Kenzō, Kawazoe Noboru, Watanabe Yoshio, *Ise: Prototype of Japanese Architecture* (Cambridge: MIT Press, 1962).

丹下健三、川添登、渡辺義雄『伊勢・日本建築の原型』

Teaching unit:
M85 HA - History

Teachers:
POLYCHRONIADI Aikaterini

ECTS Credits: 2
Number of weeks: 14
No. of hours / semester : 21
Personal work: 23

HISTORY

HA801- Stories of the Event City

Objectives: Stories of the event city

The event city: the role of sporting and cultural events, large or small, in the urban transformation and the imaginary of the city

This course aims to explore in the first part the different facets of the organization of major events in urban and territorial transformation. In a second part, it aims to explore the conditions of production and their impact on the making of the imaginary of a territory, of the facilities, especially cultural, created to strengthen the candidacy of a city and/or to accompany major events. Finally, in a third part, it aims to explore the event city through ephemeral cultural events in the public space.

Content: The hosting of major events (Olympic Games, World Expos, European Capitals of Culture, etc.) systematically shakes up prior urban planning, when they do not impose planning on areas that did not have it. This phenomenon can affect an entire territory or a part of it. By studying the impact of these events on the transformation of the territory, on a small or large scale, we will also focus on the actors involved in the making of the city. Governance arrangements and financing methods inevitably have an impact on the forms, architecture, sociology and urban functions developed.

On an architectural scale, these major events lead to the construction of new cultural venues that will subsequently occupy a specific place in the urban imagination. Being the subject of competitions and provoking debates, the fact is that the construction of a large-scale facility (opera, museum, theatre, etc.) has a profound impact on a neighbourhood or a city. Over time, the logic of urban renewal has integrated this element as a central parameter for reflecting on and initiating a change in the character

of the neighborhood or territory in which it is located, to feed a new imaginary, a "storytelling" of the city.

These same logics of urban renewal also increasingly promote cultural events that take as their framework the existing public space, modify it in an ephemeral way, reveal its potential and contribute to a re-meaning of the chosen places. These events, even if they do not directly transform the materiality of the city, they lay the foundations for a subsequent transformation by often, and very consciously, opening up to new developments.

From the World Expos of the 19th century to the organisation of the contemporary Olympic Games, including events such as the Nuit Blanche, the course will present the different facets of the event city and the urban policies that accompany it, while being sensitive to the specificities of the political and geographical contexts of the various territories. It is a back-and-forth between general urban policies and decisions and consequences on a specific place. These urban policies, linked to events and the use of culture as a driver of urban transformation, will be explored in a comparative way, with an emphasis on the transfer of models and the possible standardization of processes and results.

Work required: Course in two parts: Lecture and then in the second part, a presentation by one or more students on a case study or a theme chosen at the beginning of the semester. Time will also be set aside at the end of each session on students' personal work.
The ability to read in English is highly recommended.

Course Materials: PPT Presentations & Articles

Teaching unit:
M85 HA - History

Teachers:

ECTS Credits: 2

Number of weeks: 14

No. of hours / semester : 21

Personal work: 23

HISTORY

HA802 - Twentieth Century Architecture in North Africa: Vernacular Inspirations

Objectives: This course offers a different reading of the history of architecture in North Africa, exploring how the master builders there reinvented architectural modernity by drawing inspiration from local building traditions.

Content: Mostly Western-trained, architects in North Africa sought to interpret modernity to adapt it to the local context throughout the twentieth century. The Maghreb in particular was a testing ground for mass collective housing, before the development of large social housing complexes in France. Two tours are organised to approach history also through observation and drawing, and to understand important notions such as the relationship between architecture and the city, and the "second life" of the building: the way it evolves over time, as well as the materiality and construction techniques inspired by tradition.

Work required: The notebook reproduces the work of observation through the drawing, and the reading notes.
The analysis file presents one of the themes seen in class through the study of a project.

Course Materials:

Teaching unit:
M85 HA - History

Teachers:
GALLO Emmanuelle

ECTS Credits: 2
Number of weeks: 14
No. of hours / semester : 21
Personal work: 23

HISTORY

HA803 - History of Technical and Thermal Equipment

Objectives: History of technical and thermal equipment, accompanied by some case studies

The aim here will be to develop knowledge and curiosity about the architectural heritage from the point of view of technical equipment and thermal comfort.

One of the objectives is to raise awareness that environmental concerns, comfort and energy dependencies are not new, each era responds to them in its own way. In my opinion, there are inspirations to be found in answers from the past as well as in technological innovation.

Content: The history of heating, lighting and ventilation will be discussed. This course develops thematic aspects and then presents different case studies. Traditional heating appliances: the world of the lean-to fireplace, stoves, the cohabitation of the two systems late eighteenth century in France and improvement of homes, natural lighting, element of climate history the pioneers of central heating with air, water, steam, heating of public buildings in the nineteenth century, Available energies (wood, peat, coal, gas, coke, etc.), the use of solar radiation, the development of heating systems at the beginning of the twentieth century (electricity, fuel shortages, first thermal calculations, the beginning of insulation, the first underfloor water heating), swimming pools and recycling, the history of district heating and geothermal energy, radiant steel radiators, the history of air conditioning and cooling networks, the second twentieth century: the democratization of domestic heating, large-scale heating, oil flowing freely, crisis and counter-crisis, techniques adapted to the restoration of old buildings: hypothermos or tempering and other strategies. Finally, I will present my personal research on cavity walls and the use of phase change materials as a thin accumulator.

Work required:

File reporting on a personal investigation related to the course, a case study in the Paris region

Course Materials:

Teaching unit:
M85 HA - History

Teachers:
MAUMI Catherine



ECTS Credits: 2
Number of weeks: 14
No. of hours / semester : 21
Personal work: 23

HISTORY

HA804 The House We Live In

Objectives: Enshrined in the Climate and Resilience Act, the objective of zero net land artificialization (ZAN) by 2050 makes ruins and abandoned places a major project material for architecture.

- To interrogate through history the imaginaries and knowledge attached to ruins and abandoned places.

- Develop the methods and tools of micro-history to grasp the processes of transformation.

Course language: French

Language of communication: French and English

Content: The ruin is a marker of Western historiography. According to archaeologist Alain Schnapp, "ruin is the form of a representation of history [...] it can only exist in societies that are aware of the inevitable transformation of monuments in the face of time, and that work to document this process" (SCHNAPP, 2020). "Points of ruins, then, before the vision of human destiny structured in past, present and future, as it was conceived during the Renaissance," said art historian Michel Makarius (MAKARIUS, 2004) The ruin is materially an edifice returned to nature. The sociologist Georg Simmel gives an almost biological, if not moral, definition: "What has erected the edifice in an upward impulse is the human will, what gives it its present appearance is the mechanical force of nature, whose forces of degradation tend downwards" (SIMMEL, 1908). The ruin is first and foremost a history of deconstruction. Caused by abandonment or accident, ruin comes in the form of fragments. For the modern mind, it is the part of a whole that must be reconstructed through imagination and knowledge, the boundaries of which are here revealed to be porous. This "unraveling architecture" (KADERKA, 2012) is an architecture in the making. "Its value is similar to that of a monument, but

its transitory form accumulates fluctuating meanings," notes archaeologist Rémi Hadad (HADAD, 2021). In this master's course, the investigation of the ruins brings together the history of the arts (architecture, cities, painting, engraving, photography, literature, cinema,...) and science (history, art history, archaeology, geography, sociology, anthropology and philosophy). Ruin is a focal point on the Western world. This history course, from the return to antiquity to urban exploration, probes the "regimes of historicity" (HARTOG, 2003), i.e., the relationship between society and time.

Session 1 - February 27

The Ruin, an Object of History (Introduction)

Session 2 – March 6

Ruin in the Rome of the Popes (16th-17th centuries)

Session 3 – March 13

Piranesi and the Roman ruins (18th century)

Session 4 – March 20

The Discovery of Pompeii (18th-19th centuries)

Session 5 – March 27

Anticipated Ruins: Architecture in the Future (18th century)

Session 6 – April 3

Viollet-le-Duc and the ruins (19th century)

Rendering of the documentary file

Session 7 – April 17

1. Interim Evaluation: Documentary Package

Session 8 – May 10

The unhealthiness of "old Saint-Denis" (19th-20th centuries)

Session 9 – May 15

The Ruins of Artist Gordon Matta Clark (1970s)

Session 10 - May 22

The Destruction of Large Housing Estates: From "Pruitt-Igoe" in St. Louis (Missouri) to the "4000" of La Courneuve (second half of the twentieth century)

Session 11 – June 5

Abandoned Strait (20th-21st centuries)

Session 12 – June 12

2. Final evaluation: scientific poster

Work required:

The evaluation of the Ruins History course is akin to a "ghost hunt." Gathered in groups of four or five students, you carry out an investigation on an abandoned building in Saint-Denis (93). By applying the methods of micro-history, you uncover the processes of transformation of the building and their determinants. In fact, it is a question of identifying its different historical strata and deepening one of them, by mobilizing and cross-referencing sources (archives, mediagraphy, bibliography, site visit). While providing information about the building (dates, architects, project owner, companies, owners, inhabitants,...), you are interested in its construction materials and techniques, its spaces and their uses, and the urban environment.

Course Materials:

Teaching unit:
M85 HA - History

Teachers:
KOERING Elise

ECTS Credits: 2
Number of weeks: 14
No. of hours / semester : 21
Personal work: 23

HISTORY

HA805 - Women Architects in the Twentieth Century: A History in the Making

Objectives: The pedagogical objectives of this course are:

- To present to students the news of a research project under construction.
- To evoke issues and female figures that are little or not addressed in the curriculum of architecture schools.
- To allow them to reflect on the challenges of a history of women architects (and gender).
- To provide research and analysis methods for the design of a dossier and/or an oral presentation.

Content: Despite the steady increase in the number of female architecture students since 1968 and their majority presence in schools today (60%), women remain minor figures in the history of architecture.

This course is anchored in a historical perspective by emphasizing the period before the Second World War, without neglecting the second half of the twentieth century or the present time. In this way, it attempts to give an account of a history in the making, its relevance and its stakes.

In this context, this course seeks to expose the historiographical reality of women architects, the discourses produced by the profession on these women throughout the twentieth century – and therefore their reception – , the postures taken by these professionals according to the contexts and obstacles they face, as well as their inscription in the evolution of teaching and the profession in France from the end of the nineteenth century.

This course is also an opportunity to study works by women builders or related women, to highlight some forgotten female figures in the world of construction, to show the evolution of the conditions of their practice, to address the question of the user and the answers given by some to build mixed spaces and, more broadly, to evoke the history of feminism and the

very current notions of gender, differentiation, hierarchy or complementarity of the sexes.

The program includes contributions from specialists from various disciplines (sociologists, historians) and actors in this history, making it possible to enrich and broaden the subject.

This course is also part of a strong research project with the holding of conferences and the publication of unpublished books or articles on the subject.

Work required: To be defined according to the number of students enrolled in teaching: a presentation and/or a written file on a case study.

Course Materials:

Teaching unit:

M85 PH SH – Philosophy / Sociology

Teachers:
TUSCHER DOKIC Anne

ECTS Credits: 2
Number of weeks: 14
No. of hours / semester : 21
Personal work: 23

PHILOSOPHY OR SOCIOLOGY

PH801 Philosophy of the Image and Digital Transition: Perspectives on Architectural Representations

Objectives: The aim of this course is to develop the ability to analyze, evaluate and formulate philosophical arguments, with a particular focus on the relationships that the different techniques of graphic representation in architecture (sketching, geometry, axonometry, perspective, 3D modeling) can have with recent developments in cognitive science.

Content: First, it will propose a general introduction to the objectives and interdisciplinary methods of cognitive science through their application in the general field of spatial representation. Next, we will examine from a philosophical point of view the relationships between the representational properties and the configurational properties of an image (its content and matter). Then, we will look at the following question: is linear perspective the most appropriate method of creating representational images? We will show that the cognitive functions of the different techniques of representation are not equivalent, both in the context of image perception and in the context of image production. Finally, we will focus more specifically on the latter. We will question the effects of the "digital transition" in architecture, during which new digital tools (calculator, screen, keyboard, mouse) have taken precedence over the architect's manual skills and traditional instruments (ruler, tee, square, compass). Recent object-oriented modeling tools seem to consecrate a paradigm shift in the art of elaborating representations of architecture. It will be a question of evaluating this multi-level reversal in the order of representation - not only in the architect's gestures but also in his thought patterns - in order to measure the consequences for architectural design.

Teaching unit:

M85 PH SH – Philosophy / Sociology

Teachers:

JAUPITRE Julie

ECTS Credits: 2**Number of weeks:** 14**No. of hours / semester :** 21**Personal work:** 23**PHILOSOPHY OR SOCIOLOGY****PH802 Architectural Enunciation****Objectives:**

The aim of this course is to provide a better understanding of the political dimension at work in architecture based on the thought of the psychoanalyst Felix Guattari (1930-1992), better known by architects for his collaborative work with the philosopher Gilles Deleuze (1925-1995). As a precursor, Guattari has paved the way for new and innovative questions about the discipline that this course aims to explore. Following the first generalized and major crisis for the profession in the 80s, this author was able to anticipate the need to reflect on the way of saying and doing architecture by revealing the major subversive role of spatiality and the architect in relation to the dominant mentalities. Today, in a context of unprecedented massive globalization where the shaping of the built environment tends to become more standardized, how paradoxically could architecture and the architect be the key to the change of subjectivities? Is this not the mark of a limit of philosophical thought incapable of going beyond ideological discourse? How can architecture come to reflect on its practice?

Content:

In his book, *Schizoanalytic Cartographies* in the chapter on architectural enunciation, Felix Guattari presents the main character traits of architecture and exposes what he calls architectural concepts. Like Gilles Deleuze and Michel Foucault, this author believes that philosophy cannot be confined to the sole theory of creating conceptual abstractions. On the contrary, this discipline must be part of and encourage action, which becomes both practical and reflective. These philosophers had the advantage of investing in the field of architecture by participating, notably Guattari, in the *Métabolistes'* project competitions. Their political and human thoughts have also been widely received by architects to this day. But more importantly, it reveals the desire for open disciplines, the end of a rigid separation between theory and practice, paradoxically bringing new horizons and, in the best case, novelty.

Work required: A written report or in the form of a presentation on the texts studied in class is requested at the end of the semester. The philosophical texts are excerpted from the following works

Course Materials:

Teaching unit:

M85 PH SH – Philosophy / Sociology

Teachers:

ECTS Credits: 2

Number of weeks: 14

No. of hours / semester : 21

Personal work: 23

PHILOSOPHY OR SOCIOLOGY

SH801 Sociology: The Metropolis of the Social Sciences

Objectives:

To develop a dual sociological and urban perspective on the contemporary transformations of cities and metropolises. The internationalization of cities will make it possible to update sociological and scientific debates on the social, political and economic issues of cities in the first and second worlds, from formal urbanizations to the most popular.

Content:

This course presents the main themes of analysis of the city and inhabited spaces by comparing the observations, approaches and reasoning that guide the understanding of social changes in metropolitan spaces since Simmel and the Chicago School. The course is constructed according to several entrances that make it possible to problematize the relationship to the city and the issues of change: local and international division of labor and metropolisation, residential mobility, migration and integration in the city, city-to-city and face-to-face urbanity, the visible and non-visible actors of the making of the city, the city as an economic actor and as a vector of internationalization. These major entrances are the basis for addressing themes that will be present in the project and seminar workshops, as elements of diagnosis or evaluation: public space and security at stake, segregation revisited, city dwellers in the new conceptions of urban renewal and the project.

Work required:

Assignments required: Original file, the content of which will have been discussed beforehand with the teacher

Course Materials:

Teaching unit:

M86 CTA – Construction / Ambiances

Teachers:

LEYRAL Marc

ENGLISH FRIENDLY
communication language

SPANISH FRIENDLY
communication language

ITALIAN FRIENDLY
communication language

ECTS Credits: 3

Number of weeks: 14

No. of hours / semester : 42

Personal work: 35

CONSTRUCTION - ATMOSPHERES

CTA801 Architectonic Sculpture: Building to Scale 1

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, such as the Catalan vault), the thematic courtyard offers in-depth research, both architectural and technical, on this new architecture and the realization of a pavilion project on scale 1.

A certain transversality will be set up with the TC of Small Builders (S. Ebode / M. Leyral).

Pavilions from previous years can be seen here:
<https://www.instagram.com/construirarchi/>

Content:

The project will be developed during the first semester:

- A pavilion of approximately 30 m², determined at the end of a mini-competition between students

- On an experimental theme: this year 2023-24, it will be a question of building a vault or dome project (in bricks or other material to be defined).

- Intended to be built in the second half of the year in a park in Paris as part of the CTA Experimenting at scale 1

- Objective of participation/presentation at conferences of the work done (DMS, IASS, etc.)

A publication support will be produced by the students, with the help of the supervisors.

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

Work required:

The semester consists of 14 sessions of 3h00.

These sessions will be broken down into 4 preparation sessions / 7 prefabrication sessions / 2 on-site construction sessions / 1 inauguration

The course will use the techniques of parametric architecture/structure. A good knowledge of Rhino and Grasshopper is an asset but an upgrade will be made at the beginning of the TC on this theme.

Course Language: French

Communication languages: English, Spanish, Italian

Course Materials:

All course materials and tools useful to the TC are published online:
www.construire-l-architecture.com / Part: Scale 1

Teaching unit:

M86 CTA – Construction / Ambiances

Teachers:

MAHIEU Yves
PETITRENAUD Antoine
BILLAUX Guillaume

ECTS Credits: 3

Number of weeks: 14

No. of hours / semester : 42

Personal work: 35



CONSTRUCTION - ATMOSPHERES

CTA802 Musical Structures (Design and Build)

Objectives:

CTA802 MUSICAL STRUCTURES

Wednesday from 9:00 a.m. to 12:00 p.m.

LANGUAGE OF INSTRUCTION & COMMUNICATION: FRENCH

=> Students must have a sufficient command of French so that we can exchange ideas, especially with regard to technical concepts.

With:

Yves MAHIEU accompanied by:

guillaume BILLAUX(acoustician)

Antoine PETITRENAUD

To instruct, through experimentation, the relationships between structure, form and sound, in a minimalist perspective from the point of view of the material.

This last point (saving materials) seems appropriate with regard to the ecological transition.

Beyond the form/function relationships traditionally taught in architecture, it is therefore a question of:

1- To understand, through manipulation, the complexity of the relationships between structure and form.

This theme places this teaching:

- in the continuity of the Structural Morphology course provided in L1 and

- in parallel with other courses offered in the Master's program:
 - * CTA707: Lightweight Art and Biomechanical Structures.
 - * Project P708: PERSONA GRATA Urban Mobile Interference Structures.

<https://www.youtube.com/watch?v=4T7FMvRLWkU>

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

2- Add the sound.

It will therefore be a question of experimenting in reality with the relationships between sounds on the one hand, and forms and materials on the other.

For example, the following can be designed and built:

- acoustic correctors that modify the characteristics of a place
- Sound installations that generate sounds that can be modulated according to variable shapes thanks to adjustable structures. In the end, it was a question of making giant instruments.

...

Other critters from your imagination that we hope are overflowing and that would bring into play the relationships between structure, form and sounds.

Content:

LANGUAGE OF INSTRUCTION & COMMUNICATION: FRENCH

=> Students must have a sufficient command of French so that we can exchange ideas, especially with regard to technical concepts.

The first sessions will be guided, the following sessions will be supervised, but offered at the initiative of the students who will present an original creation.

Part 1: Visiting, seeing, hearing, experimenting, analyzing

It will essentially be a matter of hearing and possibly interacting with places dedicated or not to music.

Part 2: Design & Build

These sessions will be dedicated to experiments leading to original installations designed and built in small groups of 2 to 4 students.

The last session will allow students to report on their work with the presentation of a film and plates analyzing the structural and acoustic modes of operation of their creations.

Work required:

Design and production of a static or dynamic structure emitting or correcting sounds.

Structural analysis of achievements (files and films)

Teaching unit:

M86 CTA – Construction / Ambiances

Teachers:

HAMANI Dalil

BEAUTEMS Dominique

ECTS Credits: 3

Number of weeks: 14

No. of hours / semester : 42

Personal work: 35

CONSTRUCTION - ATMOSPHERES

**CTA803 Constructive analysis by digital survey and lasergrammetry
for heritage restitution**

Objectives:

In the context of asset restitution and constructive verification, we are often confronted with major problems of surveying, representation and simulation. Traditional graphic media can no longer meet all the needs that arise in architectural restoration.

This is why we wish to question in this course the services that digital survey techniques, in particular the 3D laser-scanner, can provide, and to reflect on their uses for the restitution and simulation of historic buildings and monuments in their environment.

The objective of this course is to introduce students to heritage restitution and constructive questioning which involves all the knowledge of different disciplinary fields (history, architecture, construction).

In practice, this consists of carrying out the digital survey of historic buildings or monuments using 3D laser-scanner (Lasergrammetry), then producing different types of representations with more or less high levels of detail and oriented towards the business. These productions will be used to study the construction and structural systems, to digitally reconstruct the entire building as well as possibly its damaged or missing parts.

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

- Master the techniques of surveying buildings listed for their heritage character by Lasergrammetry, in order to achieve a volumetric representation of the construction system.
- The representation of the project in its context will also contribute to the considerations, given the heritage character of the object studied.
- Retrieve technical information to understand levels of detail and old states in order to restore damaged or disappeared parts of the building.

- Carry out various studies on the architectural objects that will be modelled (resistance of materials, construction system, structure, etc.)
- Produce different types of representations (aspects, textures, colors and materials, 2D and 3D representations, etc.).
- Develop a database that gathers all the architectural and construction data of the building studied.

Content:

In this course, we discuss the techniques of "digital surveying" by architectural lasergrammetry that are used in the field of heritage digitization.

We also present case studies that have been carried out using this tool as well as applications in professional life.

Each heritage restoration project requires an in-depth knowledge of the geometry of the building: facades, roofs, interiors, construction system are all elements that we record by Lasergrammetry (supplemented by traditional surveys, meter and paper, for some interiors) and then transfer them to 2D plans.

As part of this teaching, we will use this process to digitally record buildings (old or new) in their true dimensions and then to reproduce them in plans, sections, elevations and 3D models. This will be used to develop a study, possibly a diagnosis (constructive, structural, etc.).

The graphic expression and its restitution methodology are part of the expectations of the exercise.

This teaching is punctuated by two main stages:

1. Survey campaign with Lasergrammetry of the building on site:

- The on-site identification of the entire building to be scanned makes it possible to understand the number of stations to be made, the potential locations of the 3D scanner, the type and number of landmarks (flat targets or spheres) to be placed.
- The "3D laser survey" of the building, which occupies 80% of the working time on site. The objective is to obtain measurements or "points" on all the equipment visible and accessible by laser of the architectural project.

2. Data analysis and analysis. The students group all the stations (assembly) in a single point cloud. From these point clouds, we will generate a 3D model of the object or extract the characteristic lines in the form of a façade plan, elevation or section, simulate the layout and restitution of the construction system. The point cloud can be compared to the theoretical model of the building to be studied to detect deviations, collisions, and in most cases the conformity of the model, measure distances, angles and slopes, make plane projections, elevations and transfer them to other CAD applications e.g. Autocad, Archicad, Revit, 3DSmax or others, calculate vertical sections on the point cloud and transfer them e.g. to Autocad, Rhino...

Work required:

- Theoretical course of 1h30 and tutorials of 2h per week in the computer room.
- Pedagogical modalities (hours): CM: 9 p.m. TD: 28 h TP: Personal work: 9 p.m.

- Interventions by experienced professionals in the field of heritage and lasergrammetry to present a pragmatic approach to the themes studied,
- Dividing students into several groups.
- Study trip during the Easter holidays to carry out the on-site survey campaign of the building to be studied.

Course Materials:

Teaching unit:

M86 CTA – Construction / Ambiances

Teachers:

SURCHEVA KIROV Cveta

ECTS Credits: 3

Number of weeks: 14

No. of hours / semester : 42

Personal work: 35

CONSTRUCTION - ATMOSPHERES

CTA804 Diagnosis and pathologies of old buildings

Objectives:

1.INTRODUCTION

· In addition to the "classic" pathologies, there are now new pathologies resulting mainly from:

· the incorporation of "solutions", aimed at energy savings, which do not sufficiently take into account the particular functioning of each construction typology, the particular characteristics of each building. This problem is particularly relevant for old buildings characterized by a diversity of construction typologies, materials and forms of occupation in different microclimates.

· "new pathologies" resulting from: poor rehabilitation, incorrect use of new materials or construction systems, inadequate forms of occupation of buildings, with consequences on the health of people and property (e.g. indoor air quality in housing, deterioration of buildings by fungi and wood-boring insects, etc.). that have always existed but are much more present)

· The economic impact of pathologies is very significant. For example, an international study carried out in 1990 showed that corrosion problems in concrete structures cost between 2 and 5% of GDP, and that 15 to 25% could have been avoided if adequate technology had been used for its treatment.

· Regular maintenance of buildings can significantly reduce the occurrence of pathologies

2.OBJECTIVES

· To be able to identify the functioning of the different buildings (ventilated box? breathable system ?...) in order to be able to understand the functioning of construction technologies, and from there, their pathologies.

· Develop skills to "see" and "detect" the main pathologies and dysfunctions, both visible and occult. Determine the need for surveys.

· Determine the probable causes of malfunctions and pathologies: physical, mechanical, chemical, inadequate use, etc. Changing needs?

· Assess the impact, the extent of the problem, its impact on safety, health, functionality, etc. Assess the scope of the work in terms of budget,

time and complexity of interventions and administrative difficulties that may be encountered.

- Adopt a diagnostic methodology, analysis of causes and a first draft of solutions that integrate the notion of prevention: preventing disorders is the basic objective.

- Have a clear awareness of the limitations of interventions, knowing what type of expertise to use on a case-by-case basis.

Introduction to the knowledge of building physics allowing students to better master and analyze construction techniques and the choice of materials

Content:

- To place the diagnosis of pathologies and dysfunctions within the general framework of a global diagnostic methodology

- The different origins of pathologies. Different dysfunctions and their link with architectural typologies.

- Study of the isolated behaviour of materials and the behaviour of materials in different construction systems. Mechanisms: physical, chemical, mechanical?

- Technical diagnostics Examples: structural diagnostics, diagnosis related to humidity problems. Diagnosis of hygrothermal and acoustic problems. Diagnosis related to incompatibilities of either construction systems or materials? Case Studies

Work required:

50% lectures and 50% tutorials. The tutorials are carried out on 'real' buildings where the students observe and analyse pathologies and dysfunctions.

- Two distinctive approaches: a first intuitive approach and a second based on the knowledge of building physics acquired. Site visits. Final result: file focused on the diagnosis of the pathologies and dysfunctions studied (case sheets observation, description of the phenomenon, probable causes and solutions)

Course Materials:

Teaching unit:

M86 CTA – Construction / Ambiances

Teachers:

RAYNAUD Alain

BERGNA Jacques



ECTS Credits: 3

Number of weeks: 14

No. of hours / semester : 42

Personal work: 35

CONSTRUCTION - ATMOSPHERES

CTA805 Constructive analysis through the model

Objectives:

CONSTRUCTIVE ANALYSIS BY THE MODEL

' Wooden furniture, a digital tool approach for design '

Through the creation of several models at different scales, it is required to make a constructive analysis of a piece of furniture linked to a universe (office, early childhood, etc... subject varies from year to year :) a reference in the history of design in the twentieth and twenty-first centuries.

Based on this analysis work, it is a question of designing a piece of furniture, which, after the design and analysis work, will be made to a full-scale plywood panel with a thickness of 15 mm in the format of 153 x 153 cm.

The constituent parts will be cut with a CNC milling machine and must be assembled without glue, nails or screws.

This furniture, the finishing of which is left to the student's initiative, must be dismantled and produced in small series.

Content:

Individual Exercise

Week 1: Topic presentation. Beginning of exercises to learn the proper use of basic model tools: cutter, circular saw, laser cutting, lapidary, etc...

Week 2: Continuation of the learning exercises. Beginning of research and studies of 4 reference wooden furniture, with the same function but very different characters.

Week 3: End of learning exercises. Choice of the type of furniture and start of the design.

Week 4: Presentation of the analysis of the reference furniture (file A4). Continuation of the design.

Week 5: Presentation of the design sketches of your furniture, and validation.

Week 6: Continuation of the design: Drawings (top, face, profile, assembly details, 3D), model of principle. This work will be presented in the form of an A4 file.

Week 7: Creation of a 1/10° scale study model whose materials and assemblies will be identical to those of the 1 scale furniture.

Week 8: Continuation of the model, and constructive analysis of it (stability, solidity, ergonomics, elegance, assembly process, number of parts, etc...)

This analysis (texts, drawings, photos) should be attached to the file.

Week 9: Start of the manufacture of the furniture.

Week 10: Continued

Week 11: Continued

Week 12: Continued

Week 13: Rendering of the furniture and the complete A4 file. Corrections.

Work required:

Course language: French

Language of communication: French + some English and Spanish.

Course Materials:

Teaching unit:

M86 CTA – Construction / Ambiances

Teachers:

HAMANI Dalil

BEAUTEEMS Dominique

ECTS Credits: 3

Number of weeks: 14

No. of hours / semester : 42

Personal work: 35

CONSTRUCTION - ATMOSPHERES

CTA806 BIM at the service of construction

Objectives:

To train students in "BIM" methodologies for the management of the project and the architectural, technical, economic, methodological and contractual constraints it covers.

This knowledge of "BIM" should be an aid to the creation of quality architectural projects rather than a hindrance.

Content:

Building Information Modeling (BIM) or in its French transcription: Building Information Modeling.

BIM is defined as:

- a process of data integration, production, management and visualization
- a model of the building as complete as possible recorded in a digital file, including all the technical information necessary for its construction, maintenance, repairs and modifications and "deconstruction"
- an environment that integrates a series of software.
- a shared digital model for collaborative work, and its use by the various project stakeholders, architects, engineers, economists, companies, etc.

BIM should facilitate the feasibility of architectural projects, but it does not help the quality of architectural and urban design in the upstream phases of the project.

The notion of project management using a digital model will be studied, processes and methods will be apprehended in a theoretical and practical way, with the help of examples.

These experiments will make it possible to evaluate the interest and limitations of BIM in a concrete way.

Work required:

Ways of using BIM will be analysed during the courses, as well as exercises on implementation, structural and technical analyses, environmental impact, etc.

The last third of the semester will be spent completing a project in small groups
Knowledge of 2D/3D modeling tools: AutoCAD or ArchiCAD and/or Revit

Course Materials:

Teaching unit:

M86 CTA – Construction / Ambiances

Teachers:

ROLL Arnaud
POIRIER Vincent

ECTS Credits: 3

Number of weeks: 14

No. of hours / semester : 42

Personal work: 35

CONSTRUCTION - ATMOSPHERES

CTA807 Technology and Construction

Objectives:

By taking into consideration the direct links between the design and the realization of the project, this course proposes - through the discovery of the construction process, the systems of actors and production - to be initiated into the field of techniques and implementation devices with the aim of reappropriating the control of the site.

Please note: given the specificity of the CTA and in order to make site visits operational, the number of students in this CTA is reduced (a maximum of a dozen students).

Content:

This course alternates between themed site visits, lectures and tutorials.

It is structured around the following themes:

o Carrying out the project in the construction process:

- Reminder and analysis of the various project management missions, from preliminary studies to the completion of the operation.
- The 'permeability' of the different stages, their interactions and their limits.

o Choice of construction methods / Site preparation:

- Tools and operating procedures in the Infrastructure, superstructure and finishing phases.
- Methods of construction / Selection criteria.
- Planning and works

o The organization and progress of the site (the various stakeholders, the monitoring of the site).

Work required:

- Lectures (4 sessions)
- Site visits (6 visits per student) alternating with tutorials (3 sessions)
- Follow-up and evaluation of the file

Teaching unit:

M86 CTA – Construction / Ambiances

Teachers:

COMITO Viviana

ENGLISH FRIENDLY
communication language

SPANISH FRIENDLY
communication language

ITALIAN FRIENDLY
communication language

ECTS Credits: 3

Number of weeks: 14

No. of hours / semester : 42

Personal work: 35

CONSTRUCTION - ATMOSPHERES

CTA808 Materials-Territories: Life Cycles and the City

Objectives:

Develop autonomous critical thinking on issues of 'sustainability', which takes into account its different facets.

Become familiar with continuous back-and-forth between the different scales of the project, on the large-scale consequences of a sum of minimal actions and vice versa. The complementarity of materials is highlighted, with a view to making the appropriate choices ("the right material in the right place").

To develop the link between urban metabolism and constructive detail, to question, through the choice of materials, the distinction between architecture and landscape.

Content:

At the interface between matter and energy, an exploration of what lies behind the act of building, with the aim of reducing its environmental impact.

A paradox: high-performance buildings may require more energy to build than they will consume during their short lifespan. The same will be true with greenhouse gases.

Obviously, the city rejects waste and emissions while consuming the territory, near or far.

Based on these observations, solutions are being outlined:

Designing to dismantle or transform, build an extension to preserve the existing, reuse even more than recycle. Bio- and geo-sourced materials (straw, hempcrete, earth, stone, etc.) are becoming essential, while concrete and plastic can be considered valuable and to be used sparingly.

This new approach to architecture concerns both the life cycles of materials and the attempt to restore natural cycles through the management of waste - construction site or anthropogenic - and that of water and energy.

Joint visits to production sites, buildings and construction sites are planned. One or two sessions will be dedicated to the implementation of clay plaster or to a course in the construction of dry stone walls.

Participation in the competition:

<https://site.cycle-up.fr/concours-etudiants-2023/>

2023, manufacture of a low-tech object: Norwegian cooking pot / desert fridge

Keywords: urban ecology, ecological footprint, urban metabolism, ecosystem, sustainability, mutability, grey energy, building waste

See: <https://ensaim.jimdofree.com/materiaux-territoires-s8/>

Work required:

Work in small groups.

1- Reading and analysis of given texts (metabolic function), their succinct oral presentation as a basis for debate.

2- What is produced in Ile-de-France and surroundings? Site visits, e.g. quarries, sawmills, brickworks, reuse platforms, etc., writing of summary sheets. Insertion in a common cartography (database of happy frugality).

3- Analysis of an exemplary building with metabolic functioning: low impact & global approach, interaction with the environment.

Individual work.

1. Detail drawing from live model: deduce the constructive detail from observation and measurements (group visit). Think with your hands.

2. Hand-drawn reconstruction of the exemplary building studied, focusing on a low-impact construction technique among those presented

Course Materials:

Pdf of the courses. Building by promoting biodiversity, Natureparif, Victoires éditions, Paris, 2012 (available online in pdf).

Carolyn Steel, Hungry City, How Food Shapes Our Lives?, Rue de l'Echiquier, Paris, 2016.

Film: No Man Is an Island, Dom

Teaching unit:

M86 CTA – Construction / Ambiances

Teachers:

ROUGELOT Benoît

ECTS Credits: 3

Number of weeks: 14

No. of hours / semester : 42

Personal work: 35

CONSTRUCTION - ATMOSPHERES

CTA809 From a post-extractivist perspective, is bio-climatic architecture an appropriate response to the climate crisis?

This course is only available to those attending the first semester

Objectives:

This course aims to raise students' awareness of the current challenges of the climate crisis, seen from the architectural profession.

Any act of construction is predatory of the environment.

This year, Raw Earth will be in the spotlight: the 13 sessions of the CTA will consist of the design of two raw earth cubes for a social landlord in the 20th arrondissement to the production of urban planning documents to be able to build them in a sustainable way during a complementary but non-mandatory CTID which will take place in September 2023 (or February 2024)

Content:

The course proposes to question today's society in a transversal way. To draw a post-extractivist horizon if it exists.

Consider viable solutions to address them. Is vernacular architecture an answer? What bio-climatic architecture is needed? And is it enough? Are the BEPOS, BBC, Passiv'haus, Bas Carbone labels solutions? Is it enough? Can we stop climate change at the level of professionals in the living environment? How far can/should we go?

Detailed case studies and site visits (Rosny sous Bois, Paris Habitat) will illustrate the content of the course

Touching real post-extractivist material (straw bales, raw earth, non-industrial wood, etc.)

Design of a real project located in the 20th arrondissement / Submission of urban planning documents / Details /

Real (non-compulsory) implementation work around the Raw Earth in September 2023 (or February 2024)

Work required: Personal research (text criticism, exercises, short presentation)
As part of the tutorials, practical application on a post-carbon project (two cubes of 3m on each side) in a courtyard of a building of 140 housing units in the 20th arrondissement: visit of the site, meeting with the public project owner, volumetric prefiguration, test of suitability of flood earth in the Ile-de-France region...
Visits to post-extractivist projects (bio-based, geo-sourced, frugal): photographs, drawings, note-taking, interviews
Meeting of professionals Short circuit wood, raw earth, ITE Straw
Participatory construction site made of straw and raw earth.

Course Materials: Sent to the student at the beginning of the session.
Note-taking and practice.
Discussions and corrections in small groups. A more complete list will be sent at the beginning of the course:

but will include:

Guide to Good Practices for Raw Earth Construction (Cob, Pisé, Brick, Cob, Plaster)

-The Energy of Denial (Mignerot), The Endless World AND Its Critique (Jancovici/Blain), Everything Can Change (Naomi Klein), Beyond Nature and Culture (Descola), Natural History of Architecture (Rahm), Fossil Fascism (Zetkin Collective), Rekindling the Embers of Life (Morizot), Bioclimatic Design (Courgey/Oliva), Manual of Natural Architecture (Wright), Starhawk, Vidalou, Jounin...

in 2022, we worked on the Jardins des Vertus in Aubervilliers: how to build a communal cabin.

Antoine Chao (France Inter) came to interview us:

<https://www.radiofrance.fr/franceinter/podcasts/c-est-bientot-demain/c-est-bientot-demain-du-dimanche-10-avril-2022-8326776>

During a session on Wednesday, we also did some thermal insulation from the outside with straw bales, then made the raw earth plaster in the schoolyard (still visible)

Teaching unit:

M86 CTA – Construction / Ambiances

Teachers:

BERGIS Louis

ECTS Credits: 3

Number of weeks: 14

No. of hours / semester : 42

Personal work: 35

CONSTRUCTION - ATMOSPHERES

CTA810 – Structural Interventions on Twentieth Century Buildings

Objectives:

This course aims to discover and explore through 1-scale construction the systems of crossing space based on arches, vaults and shells.

These natural crossing systems were massively used until the middle of the twentieth century before being supplanted by systems using beams and slabs, which were more economically efficient.

They are experiencing a revival of interest today because of the formal richness they allow to be implemented and the economy of materials that characterize them.

Students will be led to discover and practice several conceptual tools:

- Physical experiments based on models to develop an intuitive understanding of the shapes generated
- Learning the basics necessary to digitize these models using specific parametric design software such as Rhinoceros and its dedicated plugins: RhinoVault, Grasshopper, kangaroo and Karamba
- Scaling up construction by developing actual construction details, but also learning how to manage orders, keep a schedule and budget.
- Construction of the project(s)

The course will also offer courses in historical situations by exploring the careers and works of some architects and/or engineers who have used these specific forms in their projects.

This year, 2 sequences are offered to students:

- A first sequence focused on the line

This introductory sequence will allow students to familiarize themselves with the main principles of generating bows that stand upright.

The sequence will end with the full-scale construction of arches made of compressed mud bricks

- A second sequence focused on the surface

This final sequence will allow students to deepen their knowledge and extend it to the generation of stable, regular and irregular shells.

The sequence will end with the construction of a full-scale hull

This year, the prototype chosen is a shell made of wooden cells planted with flowers and spices in order to brighten up the schoolyard and supply the cafeteria: a flowery and vegetable shell.

Content:

14 sessions distributed as follows:

- 1 introductory session with a reminder of the essential principles of this type of structure, organization of groups
- Sequence 1: The line (individual work)
 - o 1 physical test session in a mock-up
 - o 1 Numerical Modeling Session of Physical Tests
 - o 1 organizational session
 - o 2 full-scale construction sessions with compressed mud bricks
- Sequence: the surface (group work)
 - o 1 physical test session in a mock-up
 - o 2 Numerical modelling sessions of physical tests
 - o 2 organizational sessions
 - o 3 full-scale construction sessions with compressed mud bricks

Each course will be structured as follows:

- Mini presentation of 5 minutes on a topic related to the thematic nature of the course
- Theoretical course of 30 to 45 minutes on:
 - o An architect and/or engineer who has used these specific shapes in his projects
 - o Physical shape-finding tools
 - o Digital shape search tools
 - o Working drawings
 - o Management of planning, budget, order, logistics
- Tutorial work and correction by the teacher – 2 hours

Work required:

Mandatory weekly attendance

- Individual and collective work for the development of projects
- Individual and collective work for the transition to reality
- Ability to mobilize a variety of tools

Course Materials:

Power point on:

- Architects/engineers using this type of structure
 - Physical shape-finding tools
 - Digital shape-finding tools such as Rhinoceros and its dedicated plugins: RhinoVault, Grasshopper, kangaroo and KaramBeyond Bending - editions Detail
- Shell structures for architecture - Editions Routledge
The barefoot architect - Editions shelter

The Great Book of Carpentry - Editions Eyrolles

...

Teaching unit:

M86 CTA – Construction / Ambiances

Teachers:

RANCK Louise



ECTS Credits: 3

Number of weeks: 14

No. of hours / semester : 42

Personal work: 35

CONSTRUCTION - ATMOSPHERES

CTA811 Timber Construction

Objectives:

Towards sobriety: Timber construction in renovation - Case studies, details, construction site

- Understand the current context: the new challenges of renovation and carbon sobriety.
- Reducing the environmental impact of a project: what are the possible levers?
- Overview of virtuous solutions
- Have a technical, pragmatic and operational approach to solutions

Content:

Reducing your environmental impact: presentation of economical, sober, reversible and scalable solutions

- Analysis of virtuous buildings in renovation and timber constructions
- Visits to construction sites and projects

Work required:

Analysis file of an existing building and proposals for virtuous solutions
Analysis & Detail Mock-ups

Course Materials:

Teaching unit:

M86 CTA – Construction / Ambiances

Teachers:

JOUVEAU Marie-Jeanne

ECTS Credits: 3

Number of weeks: 14

No. of hours / semester : 42

Personal work: 35

CONSTRUCTION - ATMOSPHERES

CTA812 Rehabilitation of 20th Century Heritage Envelopes

Objectives:

The observation of material abundance in our society, due to hyper-productivity since the end of the Second World War and their accumulation, is reflected in the field of construction. Urbanization on a global scale, accompanied by a sprawl of housing and service buildings, resulting from rapid and low-cost but rarely qualitative production, leads us to the observation that truly contemporary architecture should refrain from producing additional buildings.

On the contrary, it is the challenge of deconstruction, dismantling or revalorization that are the real architectural challenges for the future of our society.

Unfortunately, the functioning of society, which is mistakenly based on 'economic' imperatives, seems more and more incapable of articulating this future for our practice. The modest steps taken towards a real revaluation of the built heritage are aligned with an obsolete system, promoting the waste of resources, pushing for the most energy-intensive and destructive solutions. The result is a significant unnecessary recourse to raw materials, to the prescription of highly processed materials, resulting from an irreversible petro-chemical process, while at the same time blocking more sensitive and more appropriate approaches that must nevertheless be sought today by everyone at their own level. This ethic is first and foremost the responsibility of the architect.

The CTA 812 course 'Bio-based materials and rehabilitation' opens a look at the challenge of rehabilitation in minimally processed materials, which must become a common practice in our profession in the future, which plays a key role in the building design process.

A theoretical basis on the applicable techniques and the analysis of concrete examples, partly from my own practice, will be complemented by a design work that will be developed during the tutorials and which will focus on the thermal renovation of the home.

Content:

Work required: Each student will choose a project, preferably the project of their own current student housing.

He will work on the rehabilitation of the building he lives in by using lightly processed building materials.

Hand drawing will be the only working tool allowed, the practical sessions will be moments of exchange, orientation and optimization, pencil in hand.

Course Materials:

Subject:

M86 TR – Digital Transition – BIM – Representation

Teachers:

SATTLER Lea

GUENA François

HAMANI Dalil

BEAUTEEMS Dominique

ECTS Credits: 2

Number of weeks: 14

No. of hours / semester : 21

Personal work: 23

ECOLOGICAL TRANSITION

TR801 BIM at the service of the project

Objectives:

Today, a new organization of work has been put in place, and continues to evolve, in architectural production, around the concept of the BIM (Building Information Model/Management) digital model. BIM is a new way of working based on the collaboration of all those involved in design and construction around a digital model. This digital model is based on a standardized IFC (Industry Foundation Class) format that can be used by various business software. It is this unique format that allows the interoperability of the various construction stakeholders (architects, engineers, specialists, companies, developers).

The objective of this course is to introduce you to the digital transition generated by BIM around a new 2D/3D production method resulting from the integration of business software into the production process of an architectural project and the life cycle of a building.

The teaching is given in the form of lectures of 1h30 in the lecture hall. This course will be enriched throughout the term by a series of interventions by professionals practicing BIM in the different fields of architectural production and management of built heritage.

Content:

This course will address the following topics:

- Presentation of the building's digital environment
- BIM to meet the challenges of the digital transition
- Definition, functioning, actors and uses of BIM in architecture
- Presentation of business software using the BIM process
- The IFC format and the data exchange between the various software
- Applications in the building industry
- Collaborative work in the BIM environment.

Work required:

Course Materials:

Teaching unit:

M86 TECO – Ecological Transition

Teachers:

PEDELAHORE Christian
LAPASSAT Agnès
NUSSAUME Yann
JEUDY Olivier
HORN Christian
HILAIRE Philippe
BRUTER Jonathan
BRINGAND Flore

ECTS Credits: 2

Number of weeks: 14

No. of hours / semester : 21

Personal work: 23

ECOLOGICAL TRANSITION

TEC801 Ecological Transitions: Critical Approaches (1)

Objectives:

- Problematize the current imperative of ecological transitions
- Analyze experiences and experiments conducted in this regard in the fields of architecture, the city and territories
- Develop critical approaches, imagine possibilities and the conditions for their implementation.

Content:

The focus of this master's degree spread over two semesters (S8 & S9) is that of ecological transitions. It will necessarily spill over into energy transitions. Led by teachers in the "City and Territories" field, this course aims to develop a critical culture of the ecological transitions at work based on the analysis of texts, experiments, concrete achievements and a debate of different points of view.

It is organized in three sessions of four sessions each divided into 3 interventions by 3 different teachers, and a debate session around the theme developed, in the presence of the 3 teachers and introduced by the presentation of a remarkable experience presented by an external personality invited, if necessary. The title of each session is an action verb with in S8: Understand, Transform (1), Design and in S9: Transform (2), Invert, Invent. An overview introduces the three sessions. The last week is reserved for the final exam.

The syllabus of this course will be distributed at the beginning of each semester.

Work required:

Readings of the texts indicated by the teachers and personal research that can be used during the final exam.

Course Materials: Differing by teacher

Teaching unit:
M86 DC – Construction Law

Teachers:
BUSSERY Anne

ECTS Credits: 1
Number of weeks: 14
No. of hours / semester : 21
Personal work: 12

CONSTRUCTION LAW

MDC801 Construction Law

Objectives:

- 1) Presentation of the architect's legal environment
- 2) Acquisition of the fundamental concepts of construction law
- 3) To enable students to identify and use legislative or regulatory texts relating to the issues they will face in their professional lives, as well as reliable documentation.

Content:

- The different branches of private and public law related to architecture, the competent courts.
- Civil and criminal liability
- Natural and legal persons
- private markets
- Warranties and insurance
- Council of the Order of Architects: status, composition, role (including disciplinary chambers). Code of Ethics. The Order's Standard Contracts
- Tax law, a few notions
- Copyright: presentation, civil and criminal penalties rights of the salaried architect
- go to the court and the Court of Appeal to attend hearings

Work required:

FLE students. : Students whose mother tongue is not French and who do not speak it can only be assessed in continuous assessment.

Based on the weekly lesson, they will develop a handwritten lexicon that will include for each course two words and expressions heard in the lecture hall and chosen by the student.
Work must be turned in weekly.

For each word the student will give a definition, the etymology, two quotations, and a sentence of his composition integrating it.