

Programme of courses

1st semester 2023/2024

Master 2 – Semester 9

(5th Year)

établissement public
à caractère administratif
du Ministère chargé de la Culture
et de la Communication

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Teaching unit:
M.9.7PA – Project

Teachers:

ZETLAOUI LEGER Jodelle
MOIMAS Valentina
WEBER Bendicht
CARLINI Sara

Ects credits: 11

Number of weeks: 16

Number of hours / semester: 112

Personal work: 128

PROJECT

A - HMU-P901 Participatory Urban Project and Architectural Design

Objectives:

Students introduced to the fundamentals of the urban project and the relationship between use and architectural design find in this unit a deepening of theoretical and methodological tools of the project of renewal of urban spaces. In line with the ambitions of the EFF&T Chair experimenting with manufacturing & transmitting (<http://chaire-effet.net/>), and sharing with various local actors, it is a question of learning by doing: by building and then submitting to the citizen debate a reciprocal interrogation between strategic orientations of urban development, and positions in the form of concrete proposals for intervention. The work process aims to question and deepen the links between the activities of diagnosis, programming and design, with the aim of explaining better and better and knowing how to submit to debate the path of reasoning.

Content:

Spatial planning practices involving inhabitants, users and citizens seem to be more widespread elsewhere than in France, where the affirmation of necessity (especially since the SRU law of 2000) contrasts with a reality of cultures of space production that still seem to be largely opposed to it. By questioning the specific responsibilities of the architect, this teaching aims to study these inertias, and to seek, in situation, levers and concrete possibilities to change practices.

Without renouncing the requirement of a high quality of architectural and urban design, the teaching aims to integrate this work into an urban planning process that involves as much as possible all stakeholders, considering as a subordinate aim an increase in the resource values of inhabited spaces. The teaching proposes to enter into the matter voluntarily by the evaluation of the situations of use of space, then by the critical analysis of the situations and logics of action. It invites experiments in the co-construction of the project with the inhabitants, from the initial intentions to the different stages of the project, combining diagnostic,

programming and design phases. This work is developed jointly with proposals in two stages: "exploratory projects" that advance programming tracks to submit it to debate and validation by stakeholders, followed by "test projects" that are based on programming hypotheses thus validated.

Several project avenues are suggested from the beginning, this year in the framework of partnerships in the City of Bégard in Brittany (the future of the former hospital, in cooperation with the seminar "Built cultural heritage: expertise and reuse in France and internationally") and in Pantin (urban renewal of island 27). The steps taken by the students (observations, surveys, diagnoses, programming and design stages) must allow a critical reassessment of these tracks, by formulating issues and constructing an intervention problem. In this context, students have the opportunity to deepen concerns present, for example, in their master's thesis. The interventions and exchanges address questions of method that arise for architects who wish to work in cooperation with residents, users, associations, elected officials. This year we have the opportunity to deepen the difference of these questions for work on a remote site – a workshop is planned from 28 to 31 October in Bégard/Brittany – and for work on a similar situation (island 27 in Pantin). Students choose to work on one or the other of these two situations.

A 3-day study trip is planned in a European city that is emerging as a place of initiatives to involve residents in urban renewal, with both old and recent experiences. We propose a study path among the processes of recent urban renewal projects giving to reflect, mirroring the French situation, on a context of policy implementation, considering local cultures at the same time political, administrative, associative and professional.

Work required:

Are requested: field work preparation and conduct of exchanges with the various local actors development of analyses, exploratory projects and test project regularly renewed formulations of project issues.

Course materials:

Teaching unit:
M.9.7PA – Project

Teachers:
SAIDI SHAROUZ Mina
MERON Nava
DE BIASE Alessia
EYRAUD Jean Baptiste
BOUCHERON Olivier

Ects credits: 11
Number of weeks: 16
Number of hours / semester: 112
Personal work: 128

PROJECT

A - HMU-P902 Beyond Modernity. Detours in Asia. Ulaanbaatar and Phnom Penh

Objectives: BEYOND MODERNITY (PDLM) - DETOUR IN ASIA: Ulaanbaatar and Phnom Penh

This in-depth project unit is associated with the international workshops Ulaanbaatar (to be held in September 2022) and Phnom Penh (to be held in February 2023)

It precedes and anticipates the supervision of diplomas of the PFE02 unit, PDLM - Return from Asia.

This association makes it possible to confront students with a unique extra-European urban situation by setting up a real field work. On site, they have the opportunity to develop faculties of observation, description and understanding of architectural devices and singular urban systems, then to draw lessons and principles in order to consider their transposition (or not) during the proposal phase and production of projects at different scales.

ENSAPLV teachers: Olivier Boucheron (architect-nelobo), Nava Meron (architect/urban planner-LAA)
as well as Benoît Jacquet (architect-EFEO), Alessia de Biase (architect/anthropologist-LAA)

Content: PP2 - Phnom Penh (Monsoon Asia) and UB7 - Ulaanbaatar (Steppe Asia)

The workshop, which is now taking place in Phnom Penh, was held between 2016 and 2020 in Rangoon (Yangon), but due to the political situation in Burma since the events of March 2020, we are forced to pause our partnership with Yangon Technological University and postpone our return to

this fascinating city to better days. Nevertheless, we remain in close contact with members of the university (faculty and administration) who have joined the NUG (National Unity Government of the Republic of the Union of Myanmar).

After the complicated management of COVID crises and war in Ukraine this year, we finally seized the opportunity to organize our first workshop in February 2022 in Cambodia's capital, Phnom Penh. This city is not unknown to us mainly because Christiane Blancot (who co-directed this course until 2022 and will continue to intervene punctually in 2023) has been working there for nearly thirty years as head of city studies for the Atelier Parisien d'Urbanisme (APUR). We were therefore able to quickly set up the workshop with Norton University to form mixed teams of students (La Villette-Norton).

In February 2022 we mainly surveyed the center, built in colonial times. In 2023 we would like to focus more on the neighborhoods associated with urban and architectural projects of the so-called "new Khmer architecture" period promoted by Norodom Sihanouk and implemented in particular by modernist architects Vann Molyvann and Lu Ban Hap.

The Ulaanbaatar workshop will be the tenth year of cooperation with the City of Ulaanbaatar (UB below), the Mongolian University of Science and Technology (MUST), the Embassy of France in Mongolia and the Atelier Parisien d'Urbanisme.

During our previous workshops, we were successively interested in the situation of ger districts (yurt in Mongolian), the future of collective housing districts resulting from the precepts of Modernity, the question of the centers and peripheries of Ulaanbaatar, the relationship between the city and nature (resources and landscape) and the trajectory of the historic center of the socialist city and in particular the neighborhoods of the "4,000" and "5,000" (housing) which helped to give Ulaanbaatar its image as a modern city, purposely planned for the "New Man". For September 2022, we will resume our series of workshops with our MUST partners in Ulaanbaatar.

With the workshop UB 7: vers une écologie du voisinage / to a neighborhood ecology, we will work on the Amgalan district, where there are still traces of the ancient maimatchen (city) of the Chinese, including forms of horticulture in the city quite unique in the Mongolian capital.

Work required:

As the number of places in this course is limited (about 12 places), we would like each student interested in this course to send us a short letter of motivation, explaining in particular his career and the themes he would like to address for his future master's thesis.

Applications must be sent to olivier.boucheron@paris-lavillette.archi.fr and nava.meron@paris-lavillette.archi.fr during the week of choices of the new school year for Phnom Penh, in June of the previous year for Ulaanbaatar.

For both trips, participating students receive at least aid from ENSAPLV (about 700 euros) for the purchase of the plane ticket.

Course materials:

Teaching unit:
M.9.7PA – Project

Teachers:
FARRET Pierre
PENIN Antoine
COHEN Albert Gilles

Ects credits: 11
Number of weeks: 16
Number of hours / semester: 112
Personal work: 128

PROJECT

A - HMU-P903 Urban forms and residential projects in the Paris region

Objectives: Develop analytical and project tools as well as a body of knowledge that allow students to develop urban form projects and produce residential fabrics in the critical context of contemporary urban peripheries.

Content: The case of the Parisian metropolis.
The exercise is located on medium-sized sites (from 50 to 100 hectares) in the Paris suburbs, chosen for their composite and hybrid character, the result of the succession of scattered interventions, separate functional areas, streaked with networks and heavy infrastructures and dotted with new neighborhoods that result from the sequence of urban doctrines of the last decades of the twentieth century. The first step, through an in-depth urban analysis of the context and its historical evolution, is to account for existing territorial, morphological, tissue and typological structures, to understand their appearance and mutations, and to sense their development potential that can support more dynamic, coherent, readable and therefore more urban spatial arrangements.
Based on territorial analysis, students divided into groups of 5 to 8 are led to formulate hypotheses of new urban forms, reorganization and requalification of public space and road network, new uses and land division before establishing typological and programmatic choices. These elements will be synthesized at the appropriate scales (between 1/5000 and 1/1000) to constitute the main hypotheses of a guide plan that is both open to inevitable adaptations and morphologically rigorous.
The purpose of such a document is to manage over the medium and long term (between 10 and 30 years) a process of change whose strategic objectives it guarantees and which allows the necessary cyclical adjustments, both morphological and programmatic.
The students will finally be led to measure the relevance of their hypotheses at finer scales (1/500 and 1/200) and to test the relationships between

architectural solutions (at the level of the building or group of buildings) and urban devices, by developing the project of a residential complex of significant size (several dozen dwellings).

Particular attention will be paid to the relationships that take place on the ground floor, between public and private spaces, collective and individual uses, representation and appropriation.

A cycle of lectures and thematic courses related to the history of cities and some founding moments of urban theories, doctrines and experiments and courses delivered by teachers on housing architecture, will complete and enrich the project exercise.

Several visits to emblematic neighborhoods of these experiments will punctuate the semester and concretize the academic approach to the subject.

The most frequently encountered project contexts concern the urban renewal of social housing districts, ZUP, cities and large housing estates, the conversion of brownfield sites, the requalification of the surroundings of major infrastructures.

At social, ZUP, cities and large housing estates the conversion of brownfield sites, the requalification of the surroundings of major infrastructures, etc.

Work required:

The project course is organized on the full day.

The morning is devoted to lectures, courses and afternoon visits to exercise correction.

During the first weeks the collective work focuses on the analysis of the sites, then on the first major orientations of the urban project, the configuration of public spaces and roads, programming, typological choices and their location, landscape structure, etc. The last weeks will be devoted to the preliminaries of the architectural projects themselves which will imperatively be conducted in pairs or trinomials.

Nature of the work requested:

- Graphical analyses and written comments, density calculations and comparative
- Model of the sites
- Global development project and detailed arguments
- Plans, sections and volumetry of architectural projects, typological referents, study model, etc.

Course materials:

Teaching unit:
M.9.7PA – Project

Teachers:
GAUTEL Jakob
MAZLOUMAN Mahtab
DESSARDO Marco

Ects credits: 11
Number of weeks: 16
Number of hours / semester: 112
Personal work: 128

PROJECT

B - AS-P905 Scenography and architecture, from work to place

Objectives:

The function of the scenographer has always been intimately linked to architecture since it consists in inventing to materialize the space and the itinerary of the imaginary journey to which the theater, the city or the ceremony suits the spectator. Scenography offers a privileged field of study for the design of spaces intended to establish relations between transmitter and receiver by broadening the field of research to all designs of spaces intended for contacts, exchanges and representation. It regulates the relationship of the spectator to the work in a certain symbolic context. Approaching cultural equipment projects with performance venues requires scenographic knowledge in order to imagine the place conducive to creation, starting from the tool and being at its service.

Content:

Our pedagogical objective is to approach the teaching of the architecture project as the place of crossing of different artistic and literary disciplines in a complementary approach to space. This teaching is based on interaction and hybridization taking into account the different creative approaches. In this interdisciplinarity the different disciplinary fields work in synergy towards the problem of the architectural project. In this approach to the project, scenography is our common thread.

We approach the architecture of performing arts venues by studying the material and technical framework of the performance, its articulation with the fictitious framework through scenography exercises.

The scenographic approach gives the architect to be at the service of a creative tool, to approach the place through the story, to understand the inherent place of the body, an interest in a specific technique of performance venues...

In order to approach cultural venue projects, it is important to start with the heart of the system, the place of creation which is the stage. These complex projects in their organization and operation, also require programmatic and artistic reflection.

The semester is composed of several projects:

1- a theatrical scenography exercise in collaboration with cultural institutions and in existing settings such as the Théâtre de La Colline and meetings with professionals (scenographers, technicians ...)

2- TDs and feasibility projects for ITI preparations

3- visits and meetings around the projects of the PFE. It is based on two proposals for cultural equipment programs in a real context, in relation to institutions (national stage, drama center, art center, choreographic center,...)

This year, we propose two sites with several programs: a cultural city in Colmar with the creation of a CDN (National Dramatic Center) and other cultural buildings to be defined - and the National Conservatory of Lyon with the creation of a philharmonic hall.

Three plays at the Théâtre de La Colline will be programmed during this semester.

Work required:

- The scenography of a play in collaboration with the Théâtre de la Colline
- Different TDs around the performance venues
- programmatic and urban analyses

Course materials:

Teaching unit:
M.9.7PA – Project

Teachers:
N'THÉPÉ Françoise
LIPSKY Florence

Ects credits: 11
Number of weeks: 16
Number of hours / semester: 112
Personal work: 128

PROJECT

C - MTP-P906 Architecture and Environment

Objectives: GENERAL THEMES : Environment(s), architecture and landscape. PROJECT TITLE in S9: Architecture & Environment

Starting from the premise that human beings need a suitable environment to live and work, the project workshop aims to design new worlds, in which man lives in harmony with his local environment.

The pedagogical aims to:

- the design of the architectural, urban and landscaped project, by its ecological dimension and the manufacture of a sustainable architecture,
- the radicality of the project through the development of a critical spirit relating to the environmental issues of the twenty-first century,
- the coherence of the project as a whole. This acquisition involves the manipulation of different scales, in a non-linear process.

The manufacture of micro-climates

Living environments are defined as compounds of living and non-living organisms, which embody the interaction between man and nature, between the biological and the social. This involves a multi-criteria design process. The project is therefore not limited to the - program and its site- but it opens up to its environment.

The objective is the manufacture of micro-climates, in which architecture and vegetation are the major components of the environment. In this conception, eco-technical issues play a major role.

You will have to design the project in a sustainable and frugal approach, by manipulating:

- climate data (winds, sun, rain)
- natural resources (water, nature and its land),

Architecture

From the notion of environment, architectural design is based on:

- the manufacture of capable and adaptable spaces. The reflection starts from a minimal space of which you think the external extensions.
- university lifestyles that influence spatiality,
- pre-selected shapes (grid, street, street in networks, U-shape, etc.) whose geometries are recognized as among the most adapted to the constitution of the environment.
- Frugal and high-performance façade envelopes in terms of comfort

Theoretical courses

The courses guide your research during the project.

They introduce:

- the contemporary world (the ethics of returning to the land, biodiversity, living and cultivating, etc.),
- Japanese spatiality, which contributes to "relearning to live outside",
- industrial aesthetics (Case Study house, Eames) which combines the search for volumetric simplicity with constructive optimization (Cedric Price, Glenn Murcutt).

Content:

Plateau de Saclay, Bonde sector

Near the large Saclay campus, agricultural land persists. Near Rungis, agricultural farms dedicated to short circuits are in operation. A parallel network is being set up in the island of France.

The project site is located between Palaiseau, Massy, Champlan. It consists of three pieces of land where rapeseed and different cereals are grown.

These lands are now part of a new economic and productive cycle.

The project site (about 7 hectares), mixed with infrastructure, will be devoted to the manufacture of living environments, to learn and teach, in the field of food. It will be a question of designing demonstrators, transformation workshops for start-ups of small and medium-sized distribution.

The opposite couple 'discomfort/comfort' will be major in the reflection on how to inhabit these territories.

The project is based on:

- a climate strategy
- knowledge of agricultural land as the identity of the territory,
- the design of an architecture capable of scalability in changing territories.
- the design of a lightweight architecture capable of capturing its local environment, and protecting against it.

SPEAKER Guests: Nicolas Bel, TOPAGER group engineer, expert in urban agriculture
A/a/representative of the EPA SACLAY

Work required: Representation plays a major role in the project.
It is inseparable in the vision of the territory/project relationship
There is a balance between the way of thinking and the way of representing.

As a result, the expected documents are the subject of a course on representation and precise indications, according to graphic charter.
The production of models at different scales is an integral part of the renderings.

The formats and graphic parts are listed before each intermediate rendering.
The renderings are individual and/or subgroup.

Course materials: The project day is Friday, full day of work in the room, and all together.
The exchanges take place by transmission of pdf file on drive, before the session and weekly presentation of the progress of the project.
The French language is preferred, but the workshop can take place in English

Teaching unit:
M.9.7PA – Project

Teachers:
LAPASSAT Agnes
GUIONY Philippe

Ects credits: 11
Number of weeks: 16
Number of hours / semester: 112
Personal work: 128

PROJECT

C - MTP-P908 - Landscape/s: Architecture, cities & territories in transition

Objectives: A GLOBAL PROBLEM, A LOCAL RESOLUTION, between theory and practice.

The objective of this workshop is to study, to criticize the proposals of the movement of the City in Transition and to illustrate this possible transformation of all the spaces of a concrete territory. This year, it will be a question of responding to the challenges of the city of FIGEAC, to think and organize the evolution of the territory. The workshop benefits from an agreement allowing this year to finance the travel and accommodation of the group of students on the site, to meet local actors, working in particular on the theme of reuse.

Our approach will therefore be:

- to apprehend a system or a problem as a whole,
- observe how the parts of a system are connected,
- repair failing systems, by applying learned ideas from sustainable, mature, functioning systems,
- to learn from the natural systems in operation to rethink the relationship of the human being to ecosystems, to the places in which he has settled and which he has damaged with his agricultural and urban systems, most of the time for lack of knowledge and ethics.

The principles of the City in Transition will be analyzed, criticized, exploring their potential for recomposition of architecture, city and landscape, from the territorial scale to that of the building, considering the project as an illustration of the possibilities of these territories.

Content: In search of a greener society, many public and private initiatives tend to change the way buildings and public spaces are designed. Among these initiatives, the "Cities in Transition" initiative takes a particularly interesting

look at the objectives to be achieved on a global scale, proposing and seeking methods and tools to achieve them at a local level.

Movement or network of local and citizen initiatives, the City in Transition is inspired by the principles of permaculture to think and build a society in which intelligence, sobriety and efficiency would allow the energy and ecological transition necessary for an "oil-free" society. This movement, which has become global, nevertheless finds local roots, that of the citizens' initiative.

It was born from a university exercise, an experiment of energy descent, conducted in 2005 by students of the applied sustainability course of the University of Kinsale (Ireland), under the direction of Rob Hopkins, professor of permaculture. In 2006, the city of Totnes (Great Britain) embarked with Rob Hopkins in the implementation of actions that would allow it to think and implement the means of its transition to a world without oil. Rob Hopkins is now considered the founder of this movement, Totnes as the first experiment on an urban scale.

The need to enter into transition is defined by Rob Hopkins in response to the problem of peak oil (how to adapt our lifestyles to this shortage, then this disappearance) linked to that of climate change. Contrary to certain discourses, it is not a question of limiting, of constraining in an attempt to save what can be saved, it is a question of taking note that changes are underway, and that the most beautiful thing that a humanity can do with the knowledge acquired and the technologies it masters is simply to think about its adaptation, and to enter into a process of resilience, allowing us to redefine our actions with respect for the living world, to prepare our living environment so that it can last.

While most of the discourse on the energy transition is anxiety-provoking, militant, has a share of confrontation to convince, of the need to legislate to impose, the initiatives of the actors of the Transition Cities are based on optimism, collegial reflection, the sharing of a project and its implementation in all simplicity.

If the themes addressed by the movement of Cities in Transition are common to many current initiatives (energy autonomy, food autonomy, search for a lower environmental impact, etc.) the particularity of this approach is to overcome them in a way inherited from the agricultural model of permaculture, thinking of the transition no longer as a sum of juxtaposed actions, but by linking these actions in an overall project, seeking coherence between nature & land care, habitat, tools & technologies, education & culture, health & well-being, finance & economy, land & governance. The transition process is a project initiated and controllable by a citizen collective, decided collectively on the basis of research specific to each field concerned (housing, education, culture, agricultural production, energy production), their sharing, for immediate and iterative practice.

The most frequent initiatives concern food autonomy (especially in cities where many alternative vegetable gardens are experimenting with the short circuit), but also alternative, "local" currency (whether it is the "peach" tickets of Montreuil, the "radishes" of Ungersheim, 50 local currencies are currently in circulation, nearly 70 in project), pooling projects for the energy transition of real estate complexes, and of course the construction of buildings.

The development of public space is also part of transition initiatives, even if it is only more rarely mentioned by actors claiming to be part of the City in Transition. Ecological issues, then the budgetary difficulties of many municipalities, have led to think of public space according to an economy of means and energy (public lighting, surface sanitation, differential management of planted areas, etc.). The very choice of plants has evolved towards a greater adequacy with the environment, the ecosystem.

The initiatives are thus public, collective and individual. Each is virtuous and useful, in this rarely put in real relation through the prism of their common potential to redefine our territories, both in functional terms and in technical and aesthetic terms.

The work of going back and forth between the territorial scale and that of the building will be at the heart of the approach. After a short overall analysis, conducted collectively, the individual work will allow everyone to deepen a particular situation.

The semester takes place in 3 stages:

- 1) A first time - short (2 weeks) - of exploration of a corpus of theories and experiments that allow the whole group to access a set of knowledge by pooling research. Each student is responsible for analyzing and presenting an element of the corpus to the group.
- 2) The second phase consists of the exploration and collective analysis of the project site, to draw up an assessment and the outline of collective strategies. These strategies define the link between the projects that will then be developed individually.
- 3) The third phase consists, starting from the intervention strategy on the territory, in developing an individual project, which finds its anchorage in the territorial problem, the common strategy, and proposes an architectural and situated, reasoned response.

Work required:

The sessions are weekly and the emphasis is placed on the coherence between the thought of the project and its graphic and oral expression to lead to a project demonstrating a real capacity for reasoned proposal. The workshop is organized in the form of correction sessions/debate between the students themselves and the teachers. A survey of the work territory will be done with the teachers at the beginning of the semester. The teaching team is provided by an architect/landscape designer.

Teaching unit:
M.9.7PA – Project

Teachers:
GOURVIL Yannick
DANIEL LACOMBE Eric

Ects credits: 11
Number of weeks: 16
Number of hours / semester: 112
Personal work: 128

PROJECT

C - MTP-P909 Inhabited environments-building urbanity in an area exposed to natural hazards

- Objectives:** Urban architecture, dialogue of the city and nature:
It is a question of overcoming the opposition between city and nature, between architecture and landscape. The transformation of mentalities that will make it possible to break with the alienation of urban dwellers vis-à-vis nature requires the invention of a new architecture and a new ecology likely to transform the present city. It is therefore necessary to learn to work from urbanized neighborhoods posing various problems, and not to advocate a boilerplate utopia (towers in nature, the garden city, the ecological subdivision).
- Content:** Building urbanity in an area exposed to natural hazards: open shelters
This involves allowing a group of students to prepare a project based on the study of an urban area exposed to a major natural hazard. It is up to the students to choose their site, but the type of risk envisaged will be given to them and will vary from one year to another, water (flood, drought, storage and treatment of polluted water), air (storm, pollution, fire), land (runoff, erosion, deep pollution). The proposed project must focus on an urbanized area and its transformation. In this context, architecture must make possible a double imaginary: that of the defensive withdrawal of the shelter in whatever way it is conceived, and that of openness to a new mode of relationship with living species and nature. This leads to the heart of a new aesthetic, entirely focused on the active reception of architecture, and based on the implementation of notions from contemporary landscape art.
- Work required:** The implementation of a design working method will be punctuated by a small number of courses in seminars.
- Course materials:**

Teaching unit:
M.9.7PA – Project

Teachers:
HORN Christian
DEHAN Philippe

Ects credits: 11
Number of weeks: 16
Number of hours / semester: 112
Personal work: 128

PROJECT

D - IEHM-P904 Heritage(s) and mutations: an eco-district in rehabilitation/conversion

Objectives:

The workshop focuses on the design of urban changes at the urban and building scale. It mainly concerns banal heritage, residential or industrial buildings of the late 19th or early 20th centuries, and aims to show that we can do a strong architectural work in rehabilitation by integrating contemporary ecological issues. Rehabilitations and conversions make it possible to generate a great architectural richness and qualities that can often not be achieved with new. The workshop will also explore the potential of ecological and bio-based materials to act on existing ones.

The site is a territory located in Pantin south, on the edge of the Pré-Saint-Gervais in strong mutation that combines habitats and activities. The group proposes redevelopment hypotheses in which students develop their rehabilitation projects. The program is to be invented according to the building, the PLUi and the evolution of lifestyles.

Organization: the workshop offers an experience of autonomy to help students prepare their EFP: collective management of the organization, coordination and distribution of tasks, working methods and exchanges on design. To promote exchanges and affirm the importance of a theoretical approach, a reading sheet from the bibliography of the CTID 932 course (heritage and mutations that it is advisable to follow in parallel) is requested.

Unfolded: After the critical analysis of the PLUi and the benchmarkings of previous works, the workshop makes a detailed reading of the territory, its public spaces and the potential for mutability of the existing heritage, according to its spatial, technical, historical and aesthetic qualities. This approach is based on the PC archives (partially available on the Internet) and integrates the decryption of a path, analyzed from certain concepts of Gordon Cullen and leads to a landscape and typological reading, plot by plot.

The workshop then proposes an urban project that can be broken down into several hypotheses and integrating the heritage potential, knowing that respect and enhancement of the existing, and a contemporary intervention in accordance with the Venice Charter, are two founding objectives of the interventions.

Students choose the buildings to be rehabilitated by imagining the techniques best suited to the existing and ecological challenges that require the development of innovative construction solutions integrating biosourced materials, a rational and economical use of concrete, metal and wood, and the development of raw earth and stone, thought in "short circuit". The architectural party must be reflected at different scales, in the spatial relationships that the project weaves with the original building and in the technical solutions developed for contemporary interventions. Technical and material solutions are developed down to the technical details, especially at the level of the joints with existing structures.

Content:

Unfolded: After the critical analysis of the PLUi and the benchmarkings of previous works, the workshop makes a detailed reading of the territory, its public spaces and the potential for mutability of the existing heritage, according to its spatial, technical, historical and aesthetic qualities. This approach is based on the PC archives (partially available on the Internet) and integrates the decryption of a path, analyzed from certain concepts of Gordon Cullen and leads to a landscape and typological reading, plot by plot. The workshop then proposes an urban project that can be broken down into several hypotheses and integrating the heritage potential, knowing that respect and enhancement of the existing, and a contemporary intervention in accordance with the Venice Charter, are two founding objectives of the interventions.

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Transversalities:

Jodèle Zetlaoui-Leger, sociologist, will make two interventions on the issues of interviews with residents and on the objectives of the programming of the urban and architectural project

Paul Girard, MCF RA and Architect of France Buildings, will make two interventions around qualitative methods and practices of surveys, in particular the details of the architectures studied

Work required:

- Collective organization of the workshop, method of coordination of work, distribution of tasks
- Urban and collective heritage analysis coordinated by students
- Collective urban project (4 groups) oral presentation and rendering
- Architectural projects in pairs and individuals, classic presentation + model / digital model, videos / oral presentation.
- reading sheet from the bibliography of the course CTID 932 where related to a particular interest of the student on the heritage question

Course materials:

On heritage (CTID932 Heritage and mutations) and contributions throughout the sessions on issues of heritage and historical value, ecological techniques adapted to rehabilitation, and on regulatory issues to be integrated (fire safety, accessibility PRM, etc.)

Teaching unit:
M.9.7PA – Project

Teachers:
MARTINETTI Grichka
CHEDEMOIS Angelique

Ects credits: 11
Number of weeks: 16
Number of hours / semester:
112
Personal work: 128

PROJECT

D - IEHM-P907 Red and Black

Objectives: Red and Black

Le Rouge et le Noir, a novel written by Stendhal and published on November 13, 1830, speaks above all of its time accompanied by its subtitle "Chronique de 1830". Julien, his main character, is torn between his knowledge of the New Testament and his admiration for Napoleon Bonaparte, which puts him in front of a choice, as a metaphor for the architect facing a place. A few days later, on November 25, the post of inspector general of historical monuments was created under the July Monarchy whose mission was to "note the existence and make the critical description of all the buildings of the kingdom which, either by their date, or by the character of their architecture, or by the events of which they were the witnesses, deserve the attention of the archaeologist, the historian."

A year later Victor Hugo's novel Notre-Dame de Paris was published, which included a brief but severe criticism against the hasty restorations of which the historical monuments of his time were victims. Two centuries later it is not so much the Gothic heritage as the modern one that is in danger.

Red and black are also the colors adopted by the French architect Robert de Cotte (1656-1735) to discern in his plans what is of the order of already there, black, and what will be, red. This sensible choice is the expression of the conjugation in the present of a past architectural situation and its future counterpart which makes any intervention in an existing spatial situation the scene of the meeting of two eras, between sedimentation and erosion.

If the ellipses of the industrial nineteenth century and the modern twentieth century may have led us to believe in the mirage of rootless creation, the twenty-first century brings us collectively back to the question of the sustainability of construction, which is today globally the tool of infinite

financial expansion in a finite world and in fact one of the most important contributors to climate change.

A step aside in the heart of the Japanese archipelago, where zotai and wabi are practiced, makes it possible not to remain prisoners of Western thought alone and to question our practices still deeply marked and codified by the chair of history of architecture of the Middle Ages and the Renaissance entrusted to Anatole de Baudot in 1887, just like the legacy of the twentieth century and soon of the twenty-first century, whose inventory is just beginning, invites us to question its future transformations.

Content:

Two centuries after Victor Hugo's apostrophe and his declaration of war on demolition times have not changed much, we continue to demolish architectures that are the witness of different eras and that could have been useful to us.

The workshop is part of the perspective of safeguarding the buildings that reach our contemporary shores because they have lasted, and to whom we owe assistance so that they still last. Contemporaneizing architectures already present is one of the answers that architects can bring to current environmental issues, in a tradition of conservation, in the sense of transmission, of what has already lasted to make it last even longer, in a movement of "sustainable maintenance" through the act of creation to use the recent words of Pierre Caye.

It is a question of making this moment a weighed act to break with the past logics of either destruction or alteration, through observation, acquisition and restitution, while questioning what mutations the constructions we inherit are able to accept in a dialectic between past logics and current desires, between imagining a program and the ability to welcome it. It is also a question of mobilizing material resources with measure and reusing those generated by the interventions made necessary.

The intervention in the existing is cultivated, so the students will be led to analyze the substance of remarkable references.

The intervention in the existing is measured, so the students will engage in a first exercise of survey and diagnosis.

The intervention in the existing is not neutral, so the students will constitute a knowledge of the resources available in a given perimeter, including that of the chosen site, to draw the material of their intervention.

The intervention in the existing is a strong act, so the students will not hide the importance by the use of instantly identifiable colors.

Intervention in the existing is only envisaged if it allows the reception of the living, leading them to question the correlation between uses and spaces.

Intervention in the existing is not a final act but a contemporary proposal which, one day, will give way to a new intervention.

The teaching of the semester is progressive, so as to mature the project.

1 | Apparent disorder, hidden order

At the first stage of the exercise will begin an investigation that will make it possible to reveal from an apparent disorder the principle of causality which from event to event has constituted what presents itself in the eyes of today's students.

2 | Theories and practices, sedimented

This second phase will be that of the exploration of manifest examples through the twentieth and twenty-first centuries, giving rise to a restitution in the manner of a reasoned catalogue.

3 | For today and tomorrow

In the third time it will no longer be the form that will be analyzed but the forces at play that make the place move away, for a time, from the Ruskinian ruin, to meet, for a time also, a future. Here the investigation will no longer have to do with the place but with what surrounds it, human society.

4 | Red and Black

In the fourth time, the architectural project will be able to flourish in the face of fertile questions. Its nature, both material and immaterial, will acquire from phase to phase an increasingly constituted substance and this reflection will lead to the crystallization of a contemporary architecture, in the sense that it will necessarily be that of its time, by marrying red and black.

Work required:

Collective work

Studio as a place for debate

Students will be led to participate in a collective and continuous debate throughout the semester in order to sharpen everyone's critical thinking. Current events will be discussed, as will the works of yesterday and today that participate in the intellectual life of architects.

Readings

The semester will be punctuated by the reading of selected texts that will allow to apprehend the philosophical framework in which the intervention in an existing place is inscribed. At each session these texts will be debated with the students.

Collective analysis

The semester will begin with a collective work to build an atlas of interventions in the existing begun in 2021 at ENSA Nantes, which has been there ever and in which the workshop will participate both in a sharing issue throughout the semester and in the long term for future generations.

Resource Analysis

Depending on the distribution of the different sites selected by the students, working groups will be formed to investigate the material resources available for future projects.

Individual work

Expected

The expectations of each phase will be defined during the collective sessions of each week with a view to adapting them to the progress of all students to maintain a requirement of the quality of the work in line with the real conditions of the semester.

Material of the site

Students will be led to reflect on the use of the material of the site. This questioning will be the subject of a specific exercise of manipulation of the material from the site to produce a large-scale artifact (from 1/1 to 1/10), accompanied by an argumentation of the device produced in the overall architectural project developed.

The interest sought can be multiple or aims at a specific function:

- sensitive to the manner of the works of Arte Povera and other artistic currents questioning the space, the material and the time that will be presented during the studio,
- social by its ability to produce as a group,
- technical by demonstrating the response to a functional problem,
- economic by demonstrating its efficiency in relation to the resources required,
- ecological by its ability to store carbon, replace consumer devices, serve a form of autonomy, produce biodiversity, etc.,
- architectural because it serves a production of qualitative space with regard to the (non-restrictive) criteria listed above.

The objective is to produce a collection of proposals subject to debate, testing through experimentation the intrinsic power of materials in their concrete reality.

Workbook

Students will have to record all their research in a workbook that will be requested from students at each session and that will be regularly scanned to present the substance during the last two phases of the project.

Continuous monitoring

The semester will be marked by several milestones giving rise to juries leading students to present the progress of their work by all the means of representation and restitution acquired during previous years, including the model which will be at the heart of the teaching by learning its valorization as an object of rendering, then end with a final jury.

Course materials:**THEORETICAL AND PRACTICAL CONTRIBUTIONS**

Many theoretical interventions related to the project will be proposed to students to build a solid cultural and philosophical background in the field of intervention in the existing. The presence of practical teachers will make it possible to bring a look anchored in the physical dimension of architecture and the modalities of its material presence. Tools will be given to students to intimately link these two Vitruvian fields that the architectural discipline has been manipulating for several millennia.

Colorimetric coding

The studio Le Rouge et le Noir aims to structure the thought and think the structuring of the intervention in the existing of the architects in the making who accompany us during this semester.

This requires the adoption of a geometric colorimetric code, specific to each act, in order to be able to measure, evaluate, understand the material movements made.

The precise definition of these colors will be the subject of work led by a dedicated group and whose research will be presented to the entire studio.

Black

Conservation. Any element that will be kept will be drawn with the color black.

Sun yellow

Depositing it. Any intervention involves depositing elements, which will be represented on a plan and with a specific color.

Red

Creation. It is a question here of identifying what is materially exogenous to the place. This color, adopted in the eighteenth century, and found on the first page of Victor Hugo's novel Notre-Dame de Paris, is by analogy that of novation, arterial blood.

Blue

Reuse. Contemporary ecological concerns have brought up to date a banal act in the history of architecture, that of reusing the material present on site. Also by analogy to human anatomy, blue represents venous blood.

GLOSSARY**Renovation**

Repair of a structure, in a condition similar to the original state. This operation implies the maintenance of the previous function of the structure.

Restoration

Restoration, identically, of a work of marked architectural or historical interest.

Rehabilitation

General improvement or compliance with the standards in force (comfort standards, electrical and sanitary standards, heating, insulation, etc.) of a structure.

Restructuring

Rehabilitation that involves a modification of the superstructures or infrastructures of the structure.

Transformation

Rehabilitation that involves a change in the purpose or mode of operation of the structure.

Reconstruction

Construction of a similar building after the original one was destroyed.

Deconstruction

Selective and thoughtful dismantling of built elements.

Recycling

A waste treatment process for end-of-life products that allows some of their materials to be reintroduced into the production of new products.

Reuse

Operation by which a product is given or sold by its initial owner to a third party who, a priori, will give it a second life.

Extension

Extension of the existing surface either vertically or horizontally, in continuity with the existing building.

Teaching unit:
M.9.7PA – Project

Teachers:
LESAGE Laetitia
CHALLES Philippe

Ects credits: 11
Number of weeks: 16
Number of hours / semester: 112
Personal work: 128

PROJECT

D - IEHM-P911 Elevation and restructuring of ordinary residential assets

Objectives: For students, it is a question of acquiring the bases of a real competence in a field: the rehabilitation-restructuring of ordinary residential heritage, which constitutes for young architects a growing professional outlet.

Content: We propose to explore, through a building project inscribed in an urban environment, the theme of the restructuring-elevation of ordinary residential heritage in Paris and its suburbs, whether this heritage is old (buildings of the 'Faubourien' type in half-timbered and plaster) or more recent (60s to 80s)

The future of a heritage engages an architect's reflection. It is his competence to know how to propose the best ways for a qualitative and sustainable evolution of the residential complex. Elevation, renewal of the envelope, interior redistribution and possible densification can thus be convened.

Elevation, in particular, is one of the solutions promoted by the City of Paris to deal with the housing shortage in the city, at the same time as it is a way for condominiums in difficulty to finance the rehabilitation and upgrading of their building, particularly in the context of energy improvements. Institutional donors may also be keen to increase the capacity of buildings, and thereby increase their assets.

Partnerships may be established with private condominiums, with Parisian social landlords, for example two subsidiaries of the RIPV: Heneo (homes) and Habitat Social Français, as well as with the Atelier Parisien d'Urbanisme (Apur) which has initiated reflection in this area since 2014.

The work will also be based on the experience of the City of Geneva, initiated in 2008, and on the methodological tools it has developed at the different levels of intervention and perception.

Work required:

The project, approached at multiple scales, at the urban level as well as at the detail level, will be developed through morphological and constructive studies of existing buildings, resulting in detailed plans and large models. A contribution from teachers from the STA field will therefore be welcome, both on the structural issue and on energy rehabilitation.

Course materials:

Teaching unit:
M.9.7PA – Project

Teachers:
PONTOIZEAU Gabriel
DUJON Marc

Ects credits: 11
Number of weeks: 16
Number of hours / semester: 112
Personal work: 128

PROJECT

D - IEHM-P912-Rural Resources

Objectives:

RURAL RESOURCES
An Hors-les-Murs workshop in Charente-Maritime

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

https://issuu.com/ressources_rurales/docs/ensaplv-rr79-2022_2023-livret_issuu_extraite

Context.

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

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

Scenario.

Through the establishment of a partnership between ENSAPLV and the DDTM of Charente Maritime, a 4-day Outside the Walls Workshop at the beginning of the semester allows the direct situation of students and the

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

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

Restitution and dissemination.

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

Content:

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

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

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

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

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

- Explore. This first sequence at the workshop aims to actively prepare the workshop outside the walls. Each pair is asked to address a problem associated with potential intervention sites. Each group focuses its research on concrete and precise existing situations, summoning documentary resources available and developed by themselves (drawings, models of the existing, structural analysis of the building). The first targeted

project hypotheses will make it possible to question and directly test the potential for transformations of the place. In parallel, the whole group is preparing an atlas to feed the discussions and questions to the various actors present during the trip - Presentation and Display of an Atlas.

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

Work required:

- The workshop is designed to accommodate up to 30 students. It requires a strong motivation, a diligent investment as well as a predisposition to teamwork, (collective coordination and development of projects in pairs). An appetite for the problems related to the intervention in the Existing as well as an ease in the production of models is imperative.
- LANGUAGES: The workshop takes place in French, possibility to exchange, discussion in English. An intermediate practice of the French language is necessary in order to exchange with elected officials, inhabitants, partners,...

Course materials:

Possible relationships with other teachings:

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

S8: CTID829 The statement: knowing and representing the existing, Mr. Chastanier, Ms. Pernin

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

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

Teaching unit:
M.9.7PA – Project

Teachers:
GRISPELLO Carlo
HARDY Eric
CHABARD Pierre

Ects credits: 11
Number of weeks: 16
Number of hours / semester: 112
Personal work: 128

PROJECT

E - CCA-P910 - REAAC-Economic Research Applied to Contemporary Architecture

Objective Keywords:
S:

Economy of the project, economy of means, circular economy, territorial economy, reuse, housing, equipment, urban strategies, architecture, concrete architecture, representation

Presentation:

As contemporary architecture becomes more and more assimilated to a trade good, the project studio "REAAC. Recherches économiques appliquées à l'architecture contemporaine" is interested in studying the relationships between architectural fabrication and its economic dimension. The studio explores the possibility of architectural design by taking as a starting point the economic question as a formal producer, its material dimension and use.

By analyzing the history of architecture of the last century we can notice a striking coherence between the dominant economic model, market demand, its production model, social value, architectural production and innovations developed by our society. Economic issues increasingly condition our civic lives and our practice as architects. They become an indispensable thermometer influencing our judgment and design choices. They allow us to be credible towards architectural production where any discourse based solely on composition or on a certain formal aesthetic sounds more and more hollow. The goal is to make students aware of this fact through the design of an architectural project where the different economic aspects will be taken as a starting point for its design and not as a subject to be settled later. This posture will be as open as possible in order to bring out project intelligence and its relevance within the socio-economic mechanisms of the fabric of space. It will not be a question of creating a thrifty project, nor of "costing" a building (unless you deem it necessary). Rather, we will be interested in understanding how quality in architecture is often related to its economic

dimension of the project (in the broadest sense of the term) and to the definition of the intrinsic conditions of necessity for each project. The more the mastery of construction systems, the resources used or the uses are defined, the more obvious the design of an experimental posture becomes. All the best examples in our field tell us that. This framework ultimately allows us to focus on the formal question not as an aesthetic act but as the construction of critical thinking.

In order to have an awareness of the subject in all its aspects, we will focus this year on the design of a mixed program combining the design of housing and public facilities. These mixed programs play an increasingly central role in the identification of contemporary territory. Their urban situation, their relationship to the already there and the resulting economic model need to be reconsidered in depth. Imagine a mixed building not as a simple exchange value but as an element that is durably integrated into the socio-economic fabric of a city. We are interested in identifying what is strictly necessary for a building to "work".

The studio's work is based on the exploration of the possibility of designing an architectural project (by rehabilitating, elevating, or rebuilding) that takes into consideration the specificities of a commission, a program and to question the conceptual and operational tools for its projection.

The objective of the proposed studio tries to confront students with an extremely contemporary problem (the economy in the fabric of space) that highlights the mechanisms of architectural and urban design in all its facets. Lead them to take a stand, as architects, on this issue through relevant and feasible architectural proposals. It will therefore be a question of considering situations typical of ordinary production, architecture and the city, of criticizing them, and then of relying on these skills to formulate, through an architectural project, alternative proposals. A reconquest of this conceptual vacuum seems possible, to which the working group set up by the master's studio can contribute, by drawing up a critical reading and formulating concrete proposals. Particular requirements will be placed on the material dimension of the architectural design, its representation and implementation.

The selected project sites are renewed each year and are chosen according to their development needs and their urban and architectural relevance. Each student - in groups for the masters and then individually - will be free to choose their problem and their site of intervention (within the city of action).

For the academic year 2023-2024 the action site will be the city of Bayonne. The city is of particular interest to us because it has recently undergone a major socio-economic and tourist upheaval. Current urban policy also contributes to a major transformation of the city and its environments. In our opinion, this current situation condenses a multitude of questions that could feed future projects. We will question the urban fabrics, the projects in progress and in the making at the beginning of a questioning as open as possible on the definition of a city in the making such as Bayonne is now. The project work will be done in close collaboration with several territorial partners.

Content: The studio's methodology will explore the intersection of empirical and theoretical, in situ and ex situ approaches in order to develop critical tools to address the economic question in its entirety.

The studio will be structured in several sequences:

- 1) Survey of the relationship between economics and architecture, and of the chosen architectural program. Urban and architectural scale.
- 2) Identification of the project problem, the architectural programming strategy on the chosen site.
- 3) Development of the architectural proposal. Form of completion: response at the architectural scale, with a careful look at the impact at the urban-territorial scale.

For example, see:

<https://www.dropbox.com/scl/fo/vg7xlj9ogrg0413zc2j0j/h?rlkey=ospjnzam9nt2ot0nxzzohio4v&dl=0>

<http://enseignements.paris-lavillette.archi.fr/CCA/>

Teaching team:

Carlo Grispello, TPCAUI

Eric Hardy, TPCAUI

Pierre Chabard, HCA

**Work
required:
Course
materials
:**

Teaching unit:
M.9.7PA – Project

Teachers:
POIRIER Vincent
GAUBIN Franck

Ects credits: 11
Number of weeks: 16
Number of hours / semester: 112
Personal work: 128

PROJECT

E - CCA-P914 Architecture, rehabilitation, transformation

Objectives:

The objectives of this project unit are to:

- to increase the competence of architecture students to design the architectural project with awareness of the reality of contexts (cultural, economic, land, etc.).
- develop their ability to mobilize their technical knowledge at the right time in the project design process and thereby deepen the relationship between architecture, construction requirements and technical cultures,
- to address the question of the process of materialization of the project: the objective is to develop the project until taking a position on the approach of implementation, and to establish the choice of materials and products, design and represent the details.
- to confront the students with a project related to an existing building: it will be a question of developing the project by evaluating the potentialities of extension, elevation, rehabilitation of the existing.

Content:

The project unit, in order to allow in the short period of time of the semester to address the materiality of the project, limits the project to the scale of a building, with a precise program, which of course does not exclude contextualized reflection, nor to consider the project in a broader urban problem. But the project work will be oriented towards the building in order to develop a reflection and a project at the scale of the building.

The general phases of progression will be:

- critical analysis of the context and the programme,
- accurate readings and diagnoses of existing
- the inventory and synthesis of what constitutes the regulatory framework (PLU, fire, accessibility ...)
- the search for reference elements, development of founding ideas, generating concepts, which implement architectural culture and technical culture,

-the 'architectural forming': the project, its different scales (from global to detail), its different stages (the progression of choices), its different evaluations (relevance, efficiency and coherence),
-the means of its materialization and the evaluation of the orientations taken. The experimental or innovative character will be assessed both from the point of view of the experimentation of new tools, and the prescription of new materials, accompanied by measurements and/or performance evaluations.

Intermediate renderings will be organized with the presence of external guests.

Occasional interventions of specialists will be organized (BET, companies ...)

Work required:

Course materials:

Teaching unit:

M9.8PH/SH – Philosophy / Sociology

Teachers:

TUSCHER DOKIC Anne

Ects credits: 2**Number of weeks:** 14**Number of hours / semester:** 21**Personal work:** 23***PHILOSOPHY OR SOCIOLOGY***

PH901 Philosophy 1: Philosophical Foundations of "Neuroarchitecture": Towards a New Architectural Theory?

Objectives:

This course aims to develop the ability to analyze, evaluate and formulate philosophical arguments, focusing more particularly on the relationship that recent developments in neuroscience may have with architecture. Neurosciences of architecture or neurosciences for architecture? This last possibility, transformed into a promotional tool in its broadest and strongest version, has recently been adopted with an ad hoc terminology: "neuroarchitecture". We will try to evaluate its significance by critically examining philosophical theories (phenomenology, embodied cognition, etc.) that claim not only to found it, but also to make it a new theory for architecture.

Content:

Neuroscience is one of the recent cognitive science disciplines that provide a better understanding of the influence of constructed environments on human behavior and mental functions. In recent years, the notion of "neuroarchitecture" has been taken up by some architectural theorists, and even some practitioners, interested in the possibility of a "scientifically established" architecture. While it is undoubtedly necessary to make a reasoned critique of this movement, taking up in its broad lines the arguments opposed to neuroaesthetics, it is nevertheless necessary to recognize its merit, namely that of seeking to refound architecture on better knowledge of the interactions between man and his environment, in particular built. Among these, embodied cognition benefits from new approaches, which emphasize the role of the body, as well as the structure of the space we inhabit, in cognition and experience. This notion of incarnation partially overlaps with the concept of empathy ("Einfühlung") which, since the late nineteenth century, has been a major category of philosophical aesthetics. It will be a question of studying the real scope of this concept, as well as its derivatives

(incarnation, mental simulation, imagination, etc.), for architecture. To do this, we will draw on the literature of complementary fields in cognitive science, from neuroscience to philosophy.

Work required:

Course materials:

Teaching unit:

M9.8PH/SH – Philosophy / Sociology

Teachers:

JAUPITRE Julie

Ects credits: 2**Number of weeks:** 14**Number of hours / semester:** 21**Personal work:** 23***PHILOSOPHY OR SOCIOLOGY*****PH902 Philosophy 2: Analogy, a genealogy of the project****Objectives:**

The analogy etymologically means "proportion" among the Greeks. From the Latins with Vitruvius the "proportio" becomes the relation of a whole according to commensurable relations. However, the theories of architecture of the 17th century indicate the turning point of modernity from which just like the Latin proportion, the analogy belongs only to the order of knowledge. This new thinking engages those who will come later concerning the premises of the development of the project, the creative dimension of the architect present in Aldo Rossi for example. This course wishes to question the relationship between the living myth and the reality of the analogy conceived as a genealogy of the project. This paradoxical situation of analogy is conveyed by repetitive or new questions in the history of ideas that must be identified in modern and contemporary thought and practice of architecture, painting, art history, landscape and aesthetics.

Content:

Analogy as a principle has long been associated with the history of the composition of proportions in architecture and has therefore not been the subject of its own study in this discipline. It is not the same today when the analogy finds a new interest. It is at the crossroads of disciplines around points of view on analogy that conceptions of the specific creative process of the architect in relation to the artist, the landscaper and the modern scientific approach in general are fully manifested. This teaching is organized around the examination of the notion of analogy, its unity, its origin and the questions that this raises in history with regard to the current reception, distanced or not, of the latter.

In addition to the critical dimension of the course, it is a question of questioning the paradox that the analogy carries and which is never really resolved of the conception in the broad sense of the project.

Work required:

An individual written rendering or a presentation based on the texts or architects studied in class is requested. Philosophical or architectural texts are taken from the following works classified by field and chronological order. The writings on analogy and its modern and contemporary reception are not exhaustive but target major trends of thought.

Course materials:

Teaching unit:

M9.8PH/SH – Philosophy / Sociology

Teachers:

ZANINI Piero

DE BIASE Alessia

Ects credits: 2**Number of weeks:** 14**Number of hours / semester:** 21**Personal work:** 23***PHILOSOPHY OR SOCIOLOGY***

SH 901 Sociology: Inheriting the City - For an anthropological approach to time and urban temporalities

Objectives:

introduce students to a temporal approach

Content:

INHERITING THE CITY

FOR AN ANTHROPOLOGICAL APPROACH TO TIME AND URBAN TEMPORALITIES

The work on times that the course proposes consists in questioning the linearity of history – which would like a past that has definitely been, a fleeting present, and a future that is not yet – to question it in order to understand how in practice, both of the inhabitant, the architect and the researcher, the "field of lived experience", and its "horizon of expectation" are continually intertwined to build what is called the "present". Articulating the times then becomes a means of understanding urban transformations. How are the times of these conceived, lived and metabolized (manufactured) by territorial actors and inhabitants? Working on the temporal dimension makes it possible to create a dialogue between the "small scale" of daily tempos and the spatial and temporal "large scale" of horizons of change, and thus bring out another narrative and an experience of a more complex and often unexpected territory (space). It will be a question of understanding how a work on time and urban temporalities can be today a new key to understanding the city. It will be a question of presenting a series of research developed within the LAA (www.laa.archi.fr, Laboratory Architecture Anthropology, research unit of the school), ongoing research, to test the theoretical issues to the test of reality and to allow students to understand the analytical devices implemented.

Work required:

intermediate renderings

Teaching unit:

M99CTA – Construction / Environments

Teachers:

LEYRAL Marc

AUGROSCHEVA KIROV Cveta

GAUBIN Franck

Ects credits: 3

Number of weeks: 14

Number of hours / semester: 42

Personal work: 35

CONSTRUCTION - ATMOSPHERES**CTA901 Fire Regulation/Project Economy****Objectives:**

Fire regulations: the objective of the course is to present in a very condensed way the principles and rules relating to fire regulations, for residential buildings and for establishments open to the public

Content:

Fire regulations: the course is built in two parts: the first devoted to housing regulations and the second to ERP regulations. The course presents, for each of the two categories: the classification of buildings, constructive provisions, while defining the different concepts and principles common or specific to each category. The course is based on a slide support.

Work required:**Course materials:**

PDF downloadable from Taiga.

Teaching unit:

M99CTA – Construction / Environments

Teachers:

AUGROSCHEVA KIROV Cveta
JOUVEAU Marie-Jeanne
POIRIER Vincent
BALEZ Suzel

Ects credits: 3

Number of weeks: 14

Number of hours / semester: 42

Personal work: 35

CONSTRUCTION - ATMOSPHERES

CTA902 Life Cycle Assessment/Existing Interventions

Objectives:

This Master 2 course is mainly intended to introduce students to two emerging and/or essential themes:
Life Cycle Assessment and Interventions on Old Buildings

Content:

1. Life Cycle Assessment (Cveta Kirova, MCFA)

Evaluate a real estate transaction using a multi-criteria approach and a standardized tool, in order to quantify the environmental impacts from the design to the end of life of an operation.

The three courses offered to students, concerning this approach, are articulated around the objectives that aim:

- To appreciate the complexity of the phenomena,
- To learn a methodology
- To formalize through concrete cases the added value that this evaluation approach presents.

2. Interventions on old buildings (S. Balez, M. Lopez Dias, V. Poirier)

It is a general introduction to the rehabilitation process with different focuses:

2.a Knowledge of old Parisian buildings: from the Middle Ages to Art Deco (V. Poirier, MCF)

- Dating of old buildings by analyzing facades from the Middle Ages to Art Deco.
- Knowledge of old buildings: Adaptation to the ground (foundations), main structures (floors, load-bearers, frame), Envelope.

2.b Diagnosis and pathologies (M. Lopez Diaz, MCF)

- The place of diagnostics in the different stages of the life of a building.
Example of functional diagnostics: the case of facades.

- Introduction to pathologies: "Obsolescence" of buildings vs "Pathologies" of buildings.

Transmission of a method of observation and analysis of pathologies.

2.c Thermal renovation of old buildings (V. Comito, MCFA)

- Some thermal reminders (notions of comfort, temperature felt, heat transfer modes, insulation and inertia, thermal insulator/corrector, ITE-ITI-ITR, thermal bridges, sun protection)

Hygrometry: diffusion of water vapour, breathable walls, insulation properties (hygroscopicity), vapour brake or vapour barrier.

-Thermal renovation strategies: case studies

Work required: Attendance at lectures.

Course materials: Submitted by each stakeholder

Teaching unit:

M99CTA – Construction / Environments

Teachers:

ROUGELOT Benoit

Ects credits: 3

Number of weeks: 14

Number of hours / semester: 42

Personal work: 35

CONSTRUCTION - ATMOSPHERES

CTA903 Straw Pro Steering Wheel

Objectives:

To understand the straw bale material, to know its characteristics and limitations.

Know the basics of thermal and building physics.

Know the regulatory context applicable to straw construction.

Learn to use and master the Professional Rules of Straw Construction.

Discover and practice the main straw construction techniques.

Make the first layer of attachment of a coating on a straw support.

Write a straw implementation quality control sheet.

Content:

Design and implementation rules to be applied for the use of straw bales as insulating filler and coating support. The Pro-Paille training allows you to understand and master these Professional Rules from practical exercises and theoretical courses.

DAY 1

UE1 Introduction and background (room)

State of play and history of straw construction.

Presentation of construction sites: individual and collective housing, establishments open to the public, tertiary buildings, agricultural and industrial buildings, etc.

French regulatory and normative context:

Legal obligations.

Documents to know.

Insure to build in straw.

UE 1 Material Performance and Supply (room)

Main characteristics (thermal, acoustic, sanitary, fire, environmental...).

Produce, order, transport, store straw bales.

UE2 Preparation of straw bales and carrying out coating tests (workshop)
 Check the material before its implementation:
 Measure the relative humidity of the material and determine its density.
 Complete the quality control sheet.

DAY 2

UE 2 Implementation of straw bales (room)

Prerequisites: receive the necessary material, works and supports before implementation.
 Organize and start the construction site.

UE 3 The different wood frames (room)

Discover the different construction systems.

UE 3 Fill a wood frame with straw (workshop)

Implementation of boots.
 Cut and resize the boots.
 Control the quality of implementation.

DAY 3

TRANSVERSAL Building physics: reminder of the main concepts (room)

Understand and master:
 Water vapour migrations in insulated straw walls.
 Water and airtightness of structures and junctions between constructive elements.

UE2 Preparation of the straw wall (workshop)

Know how to erect a wall.
 Know how to prepare the wall according to the chosen coating:
 Clearing straw bales brush.
 Closing of voids.
 Know how to use complementary insulation coating support.

DAY 4

TRANSVERSAL SD exercises and calculations

UE 4 Exterior joinery (room)

Know the rules for laying berries in insulated straw walls.
 Ensure water and air tightness at interfaces.
 Anticipate the realization of the watertightness and air tightness of the wall.
 Provide for the installation of occultations (shutters, blinds, etc.).

UE 4 Equipment (room and workshop)

Know the rules for installing equipment in insulated straw walls
 Ensure water and air tightness at interfaces.
 Attach a light element in an insulated straw wall.
 Attach a heavy element in an insulated straw wall.
 Set up networks: plumbing, ventilation, electricity.

TRANSVERSAL Site or workshop visit

DAY 5

UE 5 Coatings, cladding and other coatings (room)

The different facings of a straw bale building:
 Coatings.
 Siding.
 Other coatings: plates, panels, paneling...
 Anticipate the management of water and airtightness.
 Manage the interfaces between current wall and openings.

UE5 Straw coatings (room and workshop)

Binders:
 Clay.
 Lime
 Determine appropriate binder/load proportions.

Apply coatings:
 Apply a clay-based coat.

Check the strength of the coatings:
 Know how to perform a test in accordance with the CP2012 rules protocol.
 Complete the quality control sheet.

RFCP Trainee Assessment Test (room)

DAY 6

UE 7 Analyzing and treating disorders (room)

Identify sensitive points and their pathologies.

Repair disorders.

UE 6 Estimating the cost of works (room)

Examples of projects already carried out.

Cost of a straw frame fill.

Cost of different coatings.

Cost of a dry finish.

UE 6 Communicating the use of straw in construction (room)

Qualities and limits of the material, scope of use.

Argue against prejudices: fire, insects, rodents...

Thermal and comfort advantages.

Environmental assets.

RFCP communication tools.

Work required:

PREREQUISITES

Have a copy of the latest edition of the CP 2012 Rules (<http://go.rfcp.fr/ReglesPro>).

It is recommended to have read them beforehand.

Course materials:

Have a copy of the latest edition of the CP 2012 Rules (<http://go.rfcp.fr/ReglesPro>).

Teaching unit:

M99TECO – Ecological transition

Teachers:

LAPASSAT Agnes
NAVINER Brigitte
JEUDY Olivier
HILAIRE Philippe
HELAND Laure
DURAND Anne
BRINGAND Flora

Ects credits: 1

Number of weeks: 14

Number of hours / semester: 21

Personal work: 23

ECOLOGICAL TRANSITION

TEC901 Ecological transitions: critical approaches (2)

Objectives:

Build an informed debate on the urban issues of ecological transitions and in particular those having an impact on the design of space projects and their production.

Deepen a reflection and a reasoned position vis-à-vis the issues addressed

Content:

With the current health crisis, the question of transformations in the conditions of habitability of the Earth in connection with human activities has taken on an unprecedented scale. The theme of ecological transitions occupies an increasingly important place in the media sphere as well as in the political sphere and public policies. The topic is no longer just a matter of technical issues. It is eminently political and social, on a global scale and concerns all citizens of the world. The complexity of the issues raised and the orientations proposed by governments (where there are any) to respond to them encourage us to approach this theme in an open and vigilant manner by instructing a collective critical debate between teachers and students. That is why it is not a course strictly speaking but a teaching. It was designed within the group of teachers in the "City and Territories" field and is taught by them over two semesters in S8 and S9. Coordinated by a teacher from the "city and territories" field, the teaching of S9 extends that of S8 according to similar modalities, namely 3 sessions of 4 sessions each, including 3 sessions of interventions by 3 different teachers and a debate session organized by a collective of students in connection with the teachers of the session.

In 2022-2023, the organization of the three sessions is planned according to the following progression:

Session 1: Understand. The aim here will be to try to understand and debate some of the solutions currently proposed concerning the 'ecological transition' in spatial planning at different scales.

Session 2: Reverse. It will explore other ways of seeing and analyzing places and territories as well as various ways of engaging in a project process in order to broaden the field of possibilities likely to respond to the current ecological crises.

Session 3: Experiment/invent. It will be a question of pushing the investigation further by analyzing various experiences engaged in and towards a profound transformation of lifestyles combining ecology-economy-participatory democracy.

A document summarizing the organization of the semester and the content of each intervention will be provided at the beginning of the semester.

Work required:

Realization of a personal sheet per session based on the 3 interventions and the reading of a book chosen from the bibliography, in order to bring out a reasoned questioning that will be used to prepare the debates.

Takes charge of the animation of the questions of one session (in group), and active participation in the three debates.

Course materials:

Powerpoint, texts,... according to stakeholders.

Teaching unit:
M99DU – Planning Law

Teachers:
By ORAZIO Anne

Ects credits: 1
Number of weeks: 14
Number of hours / semester : 22
Personal work: 12

URBAN PLANNING LAW

DU901 Urban Planning Law and the Making of the Contemporary City

Objectives: Urban planning law and the making of the contemporary city.

This course is intended to familiarize Master students with the conventional and regulatory framework of the production of the contemporary city from a critical and reasoned approach to urban planning law, considered in its codified dimension as in its operational practice. The proposed point of view aims to analyze the conditions of manufacture of the contemporary city both from the point of view of its ordinary, particular or singular processes and from the point of view of its processes.

Specific attention will be paid to rules and procedures aimed at land control and control as well as to territorial planning and development strategies, as well as to related policies, whether they are led by the public actor or negotiated with the private sector.

Content: In this context, a particular reflection will be developed on the plurality of professional practices that contribute to the making of the city and the urban and the place of designers in this organization. Skills and knowledge will be questioned in order to debate the principles, techniques and operational tools of urban action.

Urban planning and its law do not escape the great contemporary debates of our urban worlds, so it will be a question here of understanding how the principle of the rule and its codification accompanies the social, economic and political imperatives of our societies. Since the early 2000s, public action has been "greened", by integrating the challenges of the ecological transition and the participatory imperative.

The proposed course is structured around 5 major sequences that rely on a contextualization and a genealogical approach of the concepts developed in

order to ensure the pedagogical progression of the student and to allow a mastery of the complexity of the contents and their interactions.

- 1st sequence: The institutional and organizational framework of urban planning and development in France.
- 2nd sequence: From the right of the soil to the land strategy: regulation and control of property.
- 3rd sequence: Urban planning and development strategy: the public action in question.
- 4th sequence: Operational control and modes of intervention: what dialogue between general interest and economic interest?
- 5th sequence: Recent urban reforms facing contemporary challenges in urban worlds: ecological transition and participatory imperatives.

This course taught in full promotion aims beyond its masterful character to allow as much as possible participation and questioning in session. Beyond a precise attention paid to the definitions and urban planning concepts conveyed, it will be a question of starting from concrete situations to analyze and debate case studies. Urban planning law is understood here as a living matter that goes beyond simple regulatory imposition and makes it possible to reveal the strategies and operational resolutions proposed by the actors. This pedagogical bias explicitly aims to develop a reflexive and critical posture of professional situations and practices that students may have to know.

Work required:

Course materials: