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Seminars Architecture and Urbanism

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Seminars Architecture and Urbanism

Introduction
Seminars Architecture and Urbanism

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ADE02  The green city
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RA01   House portraits
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TA01   New Cities
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UUA01  Urban Interstices & Commons in Architecture and Cinema
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Introduction
Seminars Architecture and Urbanism

This brochure aims to give an overview of the themes and subjects that will be offered in the coming semester, so that you can make an informed choice you can be happy about.

There are six chairs offering seminars:
- Architectural History and Theory (AHT) led by associate professor dr. Jacob Voorthuis
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- Smart Architectural Technologies (SAT) led by prof. dr. ir. Masi Mohammadi
- Transformational Architecture (TA) led by prof. ir. David Gianotten and prof. ir. Paul Diederen
- Urbanism and Urban Architecture (UUA) led by prof. dr. ir. Pieter van Wesemael

The short introductory descriptions of the seminars given here will be supplemented with more elaborate descriptions and exact planning schedules closer to their actual starting date. It is possible that some seminars slightly alter their theme or emphasis as a result of changes in staff.

Enrolling in a seminar:

1. You need to enrol in Osiris before the closing of the registration term (January 8, 2023). If you register too late the first possibility to start with your seminar is Sem B. 2022-2023, quartile 4.
2. We work with a maximum amount of 10 students per seminar. So the subscriptions are according to the principle ‘first come, first served’. If the seminar of your first choice has no places left, subscribe for another one.
3. During the first week of the new quartile students are invited by their tutors to visit the seminar.

Be aware: If the number of registrations for a specific seminar does not reach a minimum of ten students, it is possible that this specific seminar will not proceed!

Looking forward to meeting you in our seminars!
In this seminar we will explore how a distinct concrete structure can directly form the architectural expression of a building. We do this by first researching and analyzing several buildings by different architects like Arno Brandlhüber, David Chipperfield and Frohn&Rojas. Secondly we will perform several challenging hands-on experiments where you will make scale models using concrete.

If the Covid measures allow it, the seminar will include a study trip to Berlin to experience the work of these architects and meet with them. The interviews (physical or online) will be an important part of your research. In a final concrete-workshop you will put the lessons you have learned from your analysis to practice in a condensed design challenge. In the hands-on workshop students in teams of two will design and make a cubic model (measuring max 0,75x0,75x0,75m) researching the architectural expression of a concrete structure. The space needs to have a strong architectural expression and spatial quality using a very limited amount of concrete to achieve maximum results.

The result of the seminar will be a joint book about the analyzed buildings. Together with all of the concrete models this will be displayed in a beautiful exhibition.

This seminar places great emphasis on the careful study of existing buildings and design principles, and, in addition to that makes extensive use of various explorative, investigative and presentation techniques and structural design studies.

ir. Tom Veeger
ir. Jan Schevers

7QX5Mo
semester B, quartile 3
5 ects
10 students
For millennia, the question of how the relationship between architecture and nature should be addressed has been central to the discipline of architecture. The French abbot Marc-Antoine Laugier (1713-1769) wrote the influential “Essay on Architecture” in 1755 in which he states that architectural design stems from nature and that the natural environment is the fundamental basis for the conception of architectural form. The second edition of his influential essay includes a drawing as frontispiece that has become known as the 'primitive hut', the representation of the origin mythology of architecture.

Since this emblematic representation of the symbiosis between nature and architecture, the way in which both relate to one another, has been a vital part of the discourse in architecture and has taken many forms: from a source of inspiration for form and ornamentation to an increasingly fundamental relationship in which the starting point is that nature must be literally integrated in buildings and can thus make an important contribution to people’s wellbeing, the sustainability ambitions of buildings and contribute to biodiversity and reducing the effects of climate change.

In recent years the topic of nature and architecture has become a hot topic: we see ever-expanding greenery lining façades and growing into the interiors of buildings, such as in CaixaForum by Herzog De Meuron, the Valley by MVRDV or the Bosco verticale by Stefano Boeri, ranging from a purely decorative function to an essential part of the architecture. Greenwashing? Or essential for biodiversity and wellbeing?

In this seminar, the research will focus on how nature can be integrated into the built environment in a sensible way and how our cities can transform into green environments. We will analyse various projects in which both have been interwoven (biophilic architecture) and draw up a sample of design principles of how nature can be integrated into architecture.

The research of this seminar is part of a research project on Nature Based Solutions with University Utrecht.

The research material will be collected in a beautifully designed book. Parallel to the research, you will be designing a proposal for an exhibition where the topic of Nature Based Solutions in Architecture will be displayed.
In his book *Letters to Camondo* (2021) Edmund de Waal describes the history of the family of count Moïse de Camondo. He does this in a series of posthumous letters to the count, who died in 1935 – De Waal was born in 1964. Moïse de Camondo built a house in Paris, to plans of architect René Sergent, from 1911 to 1914, and this house became a home for his expanding art collection. When his only son, Nissim de Camondo, died in the First World War in 1917, the count occupied himself more and more with his collection, and in the end he left collection and house to the French state, after which it became a museum. One could read the book by De Waal also, in part, as a portrait of this house. The book contains plans, pictures of rooms, and De Waal extensively describes his stay in it, in many different rooms, with different atmospheres, and different connections to the family history.

In a very different book, *Histoire d’une maison* (1873), Eugène-Emmanuel Viollet-le-Duc writes the fictitious story of the designing and building of a house by the young *monsieur* Paul, 16, for his older sister Marie. Although mainly a practical manual on house building, in the guise of a light novel, the book could also be seen as a portrait of a house, especially the chapters about the decisions on the program and the plans.

In this seminar, we will start with the second kind of house portraits: we will try to trace the history of the conception of specific houses (using books, descriptions, perhaps archives), with special attention to the thinking that guided the design process. When taking houses of different moments in time, we can compare and see if, and if so, in which way this thinking changed.

The second step in the seminar will be the exploration of ways to portray the houses we investigated: in drawings, in a model, in a small graphic novel, in a stop-motion film perhaps, or, as Edmund de Waal did, in a series of letters.
Today, 55% of the world's population lives in urban areas, a proportion that is expected to increase to 68% by 2050. This increase comes with many dilemmas. In order to become -or remain- prosperous for its citizens and its enterprises city planning needs to find a balanced disposition of dwelling, education, production, and leisure. An attractive and lively city guarantees the influx of bright and talented citizens. The vicinity, interconnectivity and ecology of these ingredients -leading to weighed, optimal solutions- we will call smart.

Urban densifications within an existing city comes with its limitations and dilemmas: transformation of complex existing structures can be expensive, time-consuming and less sustainable. Changing a system could therefore be more complicated than setting up a new one.

History has shown us examples where new cities have been created without the limitations of the past. Radical new urban ideas, architecture and ways of living have been applied within these cities with different levels of success. For example: Chandigarh (India), Brasilia (Brazil), Almere / Lelystad (The Netherlands) and Masdar City (Abu Dhabi).

With the housing crisis of the Netherlands as a motive we will analyse a number of these new cities: by drawing, measuring and comparing their spatial ingredients, such as floor area ratios, ratio of zoning of functions, expansion of city surface, infrastructure, verticality, education and work over a period of time.

The results of the analysis will be used for reflection and debate. Goal of the seminar is to research and discuss which type of ‘new’ city planning can be called smart and how this can be applied to envision a new city for the Netherlands as a hypothetical solution to the housing crisis.

Christopher Ho MSc

7QX5Mo
semester B, quartile 3
5 ects
10 students
architectural urban design and engineering
Urban Interstices & Commons in Architecture and Cinema

The seminar studies urban fragments and architectural ensembles in which the outdoor spaces create remarkable architectonical & spatial links - intermediating between big and small scale, public and private, landscape and build objects, transitory and solid, and the private and the public domain. The research combines historical traces (e.g. palazzi and albergi in Rome, corrales in Sevilla, ilhas in Porto, courtyard apartments in Chicago, beluiken in Gent, squares & closes in London etc.) with contemporary examples that carry similar mediating qualities.

The specific urban, morphological and architectural elements are all carefully observed and studied - architectonically and also in the context of their specific local political and building culture. To do so, we will combine the two types of space observers as characterized by Michel De Certeau: voyeurs and flaneurs. Voyeurs explore the world from a certain distance, are interested in the general, abstract and theoretical principles of space production and want to totalize them in a conclusive and consistent way. But he argues that space conditions also have an ambiguous side especially when it comes to the culture of the everyday. The flâneur is the imaginary person who can trace the ordinary, the specific and the ambivalent of a place through observation. [1]

We will go at this from both an architectural and a cinematographic perspective. The familiar typo-morphological method of space analysis is combined with and related to the close observation of architecture and spatial conditions in movies. The result of the seminar is intended to be a synthesis of architectural drawings & models, and video-clips of the studied spaces (and actions) and the models (maquettes).

The outcome of the seminar will be further explored in the master course 'Architectural Analysis' (7QX7MO – Q₄). Students who are interested in this course are especially recommended to participate in the seminar.

The study will be elaborated in a co-operation with the Faculty of Design Sciences, University of Antwerp, and with AIR Rotterdam - aiming for a next exhibition in de Architectuur Maand 2023. [1] Michel De Certeau, 'Walking in the City', The Practices of Everyday Life (Berkeley: University of California Press, 1988)

ir. Jochem Groenland
drs. ir. Like Bijlsma

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ADE03  Adding to the Wall
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SAT01  Architecture as medicine
prof.dr.ir. Masi Mohammadi
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UUA02  Home in the City: Housing Concepts for Urban Collective Living
dr. Oana Druta
o.druta@tue.nl
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Seminars Architecture and Urbanism

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1. You need to enrol in Osiris before the closing of the registration term (March 26, 2023). If you register too late the first possibility to start with your seminar is Sem. A. 2023-2024, quartile 1.
2. We work with a maximum amount of 10 students per seminar. So the subscriptions are according to the principle ‘first come, first served’. If the seminar of your first choice has no places left, subscribe for another one.
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Looking forward to meeting you in our seminars!
Advanced tools of manufacturing, computational design and digital fabrication strategies have radically transformed both architecture and construction industry. This seminar focuses on advanced additive manufacturing — 3D printing with concrete (3DCP) and clay. The seminar explores computation in relation to material logic, tool properties, process logic of the machine. Understanding the interdependencies between these parameters allows for the development of intelligent and sustainable design strategies and ultimately architectures.

We will take a close look at the evolution of technologies — from analogue to digital — revolving around concrete and clay. We explore the relationship between geometry, fabrication technique and advanced digital tools of making. Through the identification and analysis of relevant case studies, from practice and research, we determine and systematise different strategies of analogue, digital and hybrid approaches to concrete and clay. The analysis allows for an in-depth understanding of the relationship between material, robot, geometry and computation from which then the manufacturing logic derives.

Students will develop parametric wall systems based on a filigree-like geometry. Additionally, selected student designs will be 3D concrete printed at full scale by making use of the robotic concrete printing facilities of the Eindhoven based company Vertico.

To further inform your research, we will be joined in this seminar by Volker Ruitinga, the founder and owner of Vertico, and a study trip to Vertico and their 3D concrete printing facility will be offered. Your analysis will be accompanied by a series of hands-on experiments with the concrete workshops. Digital and physical prototyping of self-developed proposals will be informed by your research, but also help reevaluate it through the material realities of making. To allow for the development of your designs, you will also receive throughout the seminar an introduction to 3D modelling with Rhino and entry level parametric modelling with Grasshopper.

The output of this seminar will be your physical 3D concrete printed models and a joint research catalogue of high graphic quality, documenting research, talks and experiments — digital and/or material.

**dr.-ing. Cristina Nan**

7QX5Mo  
semester B, quartile 4  
5 ects  
10 students
Architecture as medicine

Architecture is a creative process affecting the occupant’s health and sense of well-being, especially when these users have one or multiple vulnerabilities. How buildings influence user behaviour, and their physical and mental health has been the subject of numerous studies. Yet, many questions remain open when it comes to how to design these buildings to enhance occupant health. In this seminar, we will study senior citizens’ (embodied) experiences and behaviour in care organisations and focus on how they affect architecture.

By applying a mixed method (i.a., observations, big data, and sensor technologies), we can identify the behaviour and movement patterns of senior citizens in these buildings. You will learn to use these innovative instruments and tools to collect peoples’ needs. Additionally, you will acquire more skills to understand building performances and their impact on the inhabitants’ behaviour. Finally, as an architect-to-be, you will learn how to use sensor technologies to design user-centered buildings. The result of this seminar is a set of design criteria contributing to the quality of architecture for health.

This seminar is related to a real-life living lab in the Netherlands. We will conduct this seminar in collaboration with the living lab partners from practice, which includes an architectural firm and a healthcare organisation.

prof.dr.ir. Masi Mohammadi

7QX5Mo
semester B, quartile 4
5 ects
10 students
HOUSING AND THE CITY

Edited by Katharina Borsi, Oldem Excl, Jonathan Hale, and Nick Haynes
New living concepts (including some re-valued older one) have come to the fore as solutions to the crisis of home and housing in contemporary societies. Co-housing, co-living, tiny-houses, cooperatives, flex-housing, shared living, serviced accommodation, homesharing, intergenerational co-living, ecovillages, hofjes, to name just a few, are living concepts that promise different approaches to tackling affordability and accessibility issues in housing. From a social perspective, they promise healthier community life, more self-reliant aging in place, easier transitions out of the parental home, more flexible ways of dealing with unforeseen situations and transitional housing needs. They also make claims about tackling the climate crisis, with more judicious use of materials and energy, and the smart use of technology to bring down environmental impacts, to name just a couple.

Will new living concepts become a prominent alternative to conventional housing? How can we critically assess the positive and negative aspects of different propositions? What are the implications for inclusive urban living? How about circular building and architectural design? In this seminar we will read one of the latest book publications in the field: Borst, Ekici, Hale & Haynes (2022) Housing and the City to delve into the theoretical discussions in the architectural field, as well as analyse case studies for diverse geographies both global North and South. Students will be expected to critically reflect on the environmental impact of different housing typologies, their contribution to community resilience, and the politico-economic mechanisms that enable to hinder the achievement of social and environmental goals in different contexts.

In addition, each student will conduct independent research into ONE collective housing concept of their choice. Independent research can be structured according to the student’s methodological interest, and can include in-depth field research, secondary data analysis, or research through design explorations. At the end of the seminar a booklet of case-studies and essays will be created as a group.

Keywords:
Scales: Neighbourhood, block, building;
Themes: Housing, circularity, social inclusion, health and wellbeing;
Competencies: people centred research, critical literature analysis, fieldwork, design exploration

**dr. Oana Druta**

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semester B, quartile 4
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Masterprojects Architecture

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Masterprojects Architecture

ADE01 Work-in-progress Models
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ADE02 A House as a Museum, a Museum as a House
ir. John Swagten
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ADE03 Synthetic Imaginaries of Infrastructure - Artificially Intelligent Architectures
dr.-ing. Cristina Nan, Konstantinos Papasimakis (OMA/AMO)
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ADE04 Breathing Space
ir. Arch. Barbara Kuit
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AHT01 A climate for survival
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RA/TA01 The Empty Box
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RA01 Tectonic Exercises
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TA01 Building for Time
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UUA01 School is out? Home for Youth!
ir. Tjeerd Wessel
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UUA02 Urban Housing - Living in the City
MA B.arch. Daryl Mulvihill
d.m.mulvihill@tue.nl
This brochure aims to give an overview of the themes and subjects that will be offered in the upcoming semester, so that you can make an informed choice you can be happy about.

There are five chairs offering masterprojects:
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- Transformational Architecture (TA) led by prof. ir. David Gianotten and prof. ir. Paul Diederen
- Urbanism and Urban Architecture (UUA) led by prof. dr. ir. Pieter van Wesemael

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Enrolling in a masterproject:

1. You need to enrol in Osiris before the closing of the registration term. If you register too late the first possibility to start with your Master project is Sem A. 2023-2024.
2. You have to subscribe with a first, second and third choice. There will be a period that Osiris will put you on a ‘waitinglist’, don’t panic! This only means that you are registered as a student to one of the masterprojects of your choice. **After, January 8, 2023 you will be assigned to your final masterproject.**
3. During the first week of the new quartile students are invited by their tutors to visit the master project of their first or (if that particular project has been oversubscribed) their second or third choice.
4. The tutor of your 1st master project will be your mentor, for the duration of your whole master program.

Be aware: If the number of registrations for a specific master project does not reach a minimum of ten students, it is possible that this specific project will not proceed!

Looking forward to meeting you in our masterprojects!
At the epicenter of an architectural design process we can find the Working Model; a three dimensional physical or digital representation of the idea that was before residing only in the mind of the architect. These models allow us to critically reflect on the design, to communicate about it with clients and colleagues, to develop the idea and make it evolve.

In this studio we will research the role of the physical and digital model in established design practices like Caruso St. John, Herzog & de Meuron as well as young firms like 31/44, Claus Pryds, BaillieBaillie Jean-Christophe Quinton and many more.

During your own design process you will continually produce new sketch-models and renders to evaluate, test and discuss your design. An instruction on how to efficiently produce 3D visuals using ArchiCAD and Twinmotion will be part of this M-Project. The result of this model-centered work method will be the design of a multi-story maker space on a challenging given location.

Finally all work-in-progress models and images will be presented in an exhibition where we allow an unprecedented view behind the scenes of your elaborate design process.

ir. Jan Schevers

7QX2Mo
semester B, quartile 3-4
10 ects
10 students

Work-in-progress Models

Image 1
Evolution of WIP-Renders to test spatial quality, light and material expression in a preliminary design for a house by OAO - Jan Schevers

Image 2
Sketch models of houses by 31/44 Architects.
Image Source: https://www.3144architects.com/the-grand-home/
A House as a Museum, a Museum as a House
a design for a Museum House for ‘t Hool

Last Summer 2022 a successful pop up exposition in Winkelcentrum Woensel on photos of the realization of district ‘t Hool in Eindhoven and on models of the diverse dwelling types celebrated a post covid 50 years anniversary. At Monument Day in September the idea was launched to work towards a permanent museum in one of the 1000 dwelling of ‘t Hool.

The Vereniging Hendrick de Keyser will be addressed to house this museum; It has more than 400 precious monuments from 15th till 20th century buildings including the Slegers House by Gerrit Rietveld. In some of the monuments the public is able to have a stay and others can be hired.

The project asks for a precise analyze of the archive and qualities of ‘t Hool, one of the outstanding housing projects of urbanist and architect Jaap Bakema, as one unity designed from the urban scale toward the architectural level till the smallest detail. ‘t Hool importance was stated some years ago by National Heritage to give it its status as a Wederopbouw monument.

The neighborhood consists of rich variety of 14 different dwelling typology, from the compact rowhouse, the terrace house, the patio house, the drive-in house, split-level bayonet house, back-to-back patio house, split-level appartement to the bungalow.

Each student will adapt a dwelling type, make a model from existing drawings and design a museum in this type. The house will be a museum as well as a museum to stay.

In the first quartel we will research ‘t Hool and its types as well as famous museum houses; we make an urban model and a model of one house type. The second quartel we find our position in designing the museum in the given house type for the Hendrick de Keyser Vereniging. Our products of research and proposals will be part of the collection of the museum house.

ir. John Swagten

7QX2Mo
semester B, quartile 3-4
10 ects
10 students
architectural urban design and engineering
In the aftermath of conceptualisation and now realisation of the 4th industrial revolution and its fundamental shifts, automation — of fabrication but also of design — becomes an important driver for both human and non-human environments. This leads organically to an older question dating back to the late 18th century, who is designing? Where does authorship lie? Who is in control?

In our studio we are using AI, in particular machine learning, to develop new imaginaries of obsolete infrastructures and large-scale machine landscapes. The abandoned infrastructures will be deconstructed and reconfigured into new aggregations of elements, components, parts and pieces to form new synthetic imaginaries. As a studio we will jointly curate the creation of a self-contained synthetic architecture for living, working, production, consumption and culture. Strategies of reuse, disassembly, assembly and reassembly of the infrastructural repertoire will be explored and pushed to their limits.

The collaboration between AI and designer will lead to synthetic imaginaries, characterised by the unfamiliarily strange and strangely familiar. Through the use of machine learning we interrogate architectural expressions of space, form, geometry, assembly and clustering strategies. Simultaneously machine learning will help students rethink the constructive nature of architecture.

The generated synthetic images will be translated into architectural proposals by exploring various representational strategies to which you will be introduced. Throughout the studio you will be introduced to parametric design via Rhino + Grasshopper, the use of AI and machine learning, digital fabrication, and 3D clay printing, using the WASP printers on site at TU/e.

A field trip of three days is planned for this studio to familiarise yourself with the chosen site. Its secret location (NL/BE) will be disclosed at the opportune moment in the semester.

**dr. -ing. Cristina Nan**

**Konstantinos Papasimakis (OMA/AMO)**

7QX2Mo
semester B, quartile 3-4
10 ects
10 students
In our contemporary times, we are facing serious challenges. Population growth leads our cities to being overfull, resulting in a lack of green area and putting an enormous burden on our existing shared space. The enormous climatic challenges require rethinking the position of the architect, and the role architecture can play in addressing these issues. This rethinking should address various scales; the urban scale, the architectural scale, the scale of the detail. In this research and design studio we will address these scales whereby we will take a specific focus on social sustainability and designing for the public space. Within this context our particular focus will be to design a main public building connected to a shared space in an inner city context.

In politics, recent developments show various splinter parties, new and varied lines of thought are developing. Similarly, in contemporary architecture, a plethora of designs, with all sorts of forms and volumes, are emerging, in which there no longer seems to be designed according to carefully defined design-rules, as all seems to be possible technically, and all appears to be allowed aesthetically. This project will challenge you to find your position as an architectural designer.

We will meticulously study some outspoken examples of traditional Japanese Imperial villa & garden architecture. Our aim is to extract the essential spatial qualities, find design definitions, and use these to design an own architectural interpretation. Each will ‘adopt’ these as guidelines, to interpret in another context, in another scale, in an individual contemporary design. We will study a selection of case studies and theorists. Following this you take your position by designing a building. Programmatical, our focus will be to design a building with a political purpose, our own House of Parliament for the European Youth. Extensive programmatic research, and typological studies will be done in parallel.

With a thematic approach, we will carefully investigate contrast between small and large spaces, narrow and wide, low and tall, and design the Main Parliament room as the culminating endpoint form its various entrances. Or aim is to create a careful architectural design and develop our own theory, which we will express using writing, diagramming, drawing and physical modeling. Our ambition is to fully integrate architecture and structure in our designs, in which we will give proper design attention to the outdoor public space directly adjacent to the building, and the meaning of the facades in their environment.

**Breathing Space**

Left & Right Images: Bamboo Grooves, Kyoto, Arashiyama & Sagano Bamboo, [https://www.Kyoto_Arashiyama_Sagano_Bamboo](https://www.Kyoto_Arashiyama_Sagano_Bamboo)

Middle Image: Baobab Avenue, National forest, Madagascar, [https://en.wikipedia.org/wiki/Avenue_of_the_Baobabs](https://en.wikipedia.org/wiki/Avenue_of_the_Baobabs)

ir. Arch. Barbara Kuit

7QXzMo
semester B, quartile 3-4
10 ects
10 students
Let’s be real. We are not going to make the Paris agreement. We are not going to make any agreement. We’re going to quibble until we even stop doing that. The earth is going to heat up, the climate will alter, people will start migrating, there will be hardship. Who and what will survive? Why? How will we survive? Is there still scope for architecture in such an environment? How will this group of survivors respond to their situation? Will they have learnt from history? What infrastructures, if any, will still be in place to help accommodate these people? What kind of creatures will these survivors be?

This project is going to combine research, design, and our imagination. We are first of all going to build a picture on the basis of the best evidence available on what the world will look like at various specified points in the future and what the conditions will be in which people will have to survive. The challenge that is given you is to accommodate a group of people (the size of that group will have to be determined on the basis of good arguments) in a potentially hostile environment (the nature of that hostility will become clear from our research, with a clearly defined program (which again will depend on how you formulate your challenge)

You are to think of a community that will be autarkic and largely self-sufficient that can respond to various threats and yet be true to the purpose of architecture which is to accommodate us intelligently, intelligibly, comfortably, securely and enjoyably. But what will that mean?

The final product will be a set of drawings and, above all, a good model accompanied with a brief description of what you have designed and a thorough argumentation of why. We shall try to work towards a small exhibition of the products.
WHO CAN AFFORD TO BE CRITICAL?
This masterproject is part of a series of redevelopment projects in which the transformation of post war architecture is crucial. The existing building as a basis for re-use -and coherent with that- the re-designing of the city and its surroundings. The question for the architect is to progress on existing qualities and to add new qualities. Or in other words; how to make a ‘new’ architecture upon and within ‘old’ architecture?

In the first part of the project the focus is primarily on the existing buildings and the program, the context is being disregarded. On the one hand the typology is being analysed thoroughly by means of reference projects and texts, on the other hand the quality of the existing by means of the following concepts: structure, materialization and scale.

On the basis of this analysis an individual design is made for a given program. The context in the widest sense of the word is being analysed. Besides, the existing (hidden) qualities of the existing building are being explored in depth by means of the following concepts: light, texture, detail, sequence. The initial design in which typology, structure, materialization and scale are central will finally be embedded within the context, whereby one concept obtained from the second analysis serves as “Leitmotiv”. Research by design and representing the analysis and the design by means of different kinds of drawings, collages and the making of several physical models runs as a red thread through the project.
The church the Danish architect Jørn Utzons designed in Bagsvaerd, near Copenhagen, is a beautiful example of how construction, the logic of making, and the utilisation of the specific qualities of materials can be made to work together to achieve architecture in the true sense of the word. In this church the materials used, the way they are used for the construction, the way this construction organises space and coincides with the typology of the building, the way the materials, construction and typology determines the way daylight enters the building, and these four together – materials, construction, typology and daylight – constitute an inextricable unity in complete harmony with the function of the building. In this way this church can be seen as a perfect illustration of Framptons saying “The full tectonic potential of any building stems from its capacity to articulate both the poetic and the cognitive aspects of its substance” (Kenneth Frampton, Studies in Tectonic Culture). This design project will explore this tectonic potential.

In architecture, tectonics can be understood as the relationship between experience and expression. The expression is partly determined by how the architectural object is made. We organise the design process so that the process of making has the most significant possible influence. We investigate the tectonic relationship while the object is created. How does that which is inextricably bound to the earth - the massive, monolithic, eternal - relate to that which is assembled and composed, filigree, temporary and impermanent? What is the relationship between bearing and being carried? What is the relationship between structure and construction, skeleton and skin? In what way can the interior be experienced on the outside and to what extent do outside influences penetrate the interior? To what size do these relationships resonate in the game of concealing and revealing? What meanings and connotations emerge? Which program suits a certain quality? How does the oppressive relate to the rising, the narrowing to the receding, mobile to immobile, soft to concrete, cold to heat? Which sensory areas are addressed? How do soft surfaces, soft light, soft sounds and colours interact? Or how do light materials, soaring suggestions of motion, clear acoustics and light falling from a high merge? What atmosphere is created? What state of mind resonates with this atmosphere? We try to answer these questions by describing and discussing the object in its presence. The exploration will be done in different staged exercises. Specific literature on the subject, in bilateral relationships with the subsequent exercises, will aim at a range of tectonic aspects.

ir. Ralph Brodruck
ir. Renato Kindt

7QX2Mo
semester B, quartile 3-4
10 ects
10 students
Building for Time

This project will focus on how to build a potentially long-term architecture. Buildings that last for ages usually outlive their original program or ideology due to two seemingly paradoxical properties: their ability to transform and to be loved-as-they-are.

In many cases their specific original program is at some point replaced by a generic program, like for instance housing.

In their lives their loadbearing structure serves as a firm backbone on the long run. All other ‘shearing’ layers of their bodies will possibly have changed in order to achieve a new destination.

In the studio a short goal-oriented research will be carried out to understand what happens architecturally with buildings during time and why.

The design part of the project is divided into two separate phases. Both will be dedicated to creating starting points for transformation and human bonding.

First a detached semi-public building will be designed, with an emphasis of making a firm loadbearing structure and a spatial composition that together offer possibilities for change. Making a large scale-model of this structure will be part of this section.

Secondly the first design will be transformed following a more generic program, since the first program has proved to be too ambitious in the short time of its existence. Both phases will be presented in the same state of elaboration.

An interlude between the two design phases will deal with a further broadening of architectural horizons.

ir. Ruurd Roorda

7QX2Mo
semester B, quartile 3-4
10 ects
10 students
Recently more attention is drawn to the growing problems of young people experiencing homelessness in the Netherlands. The national statistics agency (CBS) established that on January 1st, 2021, approximately 5,670 young people (aged 18 to 27) in the Netherlands were ‘de facto homeless’, meaning that they are registered as homeless. The numbers are received with suspicion by professionals, and it is estimated that the actual number is much higher. There are many invisible homeless people: those who live in various places but do not have a roof over their heads. Consider the nationwide problem of students who start their studies and can't find a living space. The nationwide shortage of affordable housing is a major problem for young people in general, while the importance of a stable housing situation is increasingly recognized as a precondition for personal development.

This project, in collaboration with the Municipality of The Hague, will look into the transformation potential of social real estate in The Hague. Two schools in Ypenburg have been selected to be repurposed for homeless youth and asylum status holders. You will investigate the current potential and develop a transformation strategy considering the urban, socio-cultural and economic factors. This project takes the diversity of youth with varying needs and backgrounds as its point of departure. During the project we will do research on what helps young people to thrive and what makes a home.

This project is part of the Jongeren WoonLab (Youth Housing Lab). Within the Jongeren WoonLab we collaborate with NGOs that work with homeless youth, housing associations and municipalities. These partners will be part of the studio at various moments. Parallel to this project the Jongeren WoonLab also provides an urbanism studio on the topic of youth experiencing homelessness. There will be regular exchange moments during the studio.

Keywords: Scales: Neighbourhood, Ensembles, House; Themes: Youth. Inclusive development, Public Space, Housing; Competencies: Social-cultural research, Governance research, Spatial Research, Architectural Design, Typological Design.
Urban Housing - Living in the City

Housing is the most basic element and essential unit of the city. The provision of adequate housing is the biggest challenge cities face, simultaneously cities and high-quality urban environments are much more than an accumulation of dwelling units. The quality of living space overlaps with the quality of public spaces, both living and public spaces need to be designed beyond the functional and with a generosity that provides freedom for occupation.

This studio focuses on the design of residential environments and urban neighbourhoods. In the studio, students will explore the relationship between:

- density and urban structure
- residential typology and open-space design
- functionality and flexibility of use
- the public, private, and collective domains
- the floorplan and daily life

The studio is organised around three phases:

I. Research and Analysis
The students start with research and development of an ongoing database of housing projects. Through an analysis and comparison of the case studies, students develop the building blocks and design principles for their design project.

II. Design
The development of a detailed design project ranging from neighbourhood level design to detailed floorplans and public spaces.

III. Presentation
A focused period to develop key drawings and visualisations to develop your detailed design and presentation techniques

MA B.arch. Daryl Mulvihill

7QX2Mo
semester B, quartile 3-4
10 ects
10 students
7QX5Mo, quartile 3
Seminars Architecture and Urbanism

7QX5Mo, quartile 4
Seminars Architecture and Urbanism

7QX2Mo, quartile 3-4
Masterprojects Architecture

7QW2Mo, quartile 3-4
Masterprojects Urbanism

7XW1Mo, quartile 3-4
Combined Masterproject

7X45Mo, quartile 3
Graduation studios Architecture

7X45Mo, quartile 4
Graduation studios Architecture

7W45Mo, quartile 3
Graduation studios Urbanism

7W45Mo, quartile 4
Graduation studios Urbanism

7QQ5Mo
International Academic Workshops
7QWzMo, quartile 3-4
Masterprojects Urbanism

Introduction
Masterprojects Urbanism

UU01  Forgotten spaces? Home for Youth!
ir. Marian de Vries
m.j.d.vries.1@tue.nl

UU02  Urban Housing - Living in the City
MA B.arch. Daryl Mulvihill
d.m.mulvihill@tue.nl
Introduction
Masterprojects Urbanism

This brochure aims to give an overview of the themes and subjects that will be offered in the coming semester, so that you can make an informed choice you can be happy about.

There is one chair offering masterprojects urbanism:
- Urbanism and Urban Architecture (UUA) led by prof. dr. ir. Pieter van Wesemael

The short introductory description of the studios given here will be supplemented with more elaborate descriptions and exact planning schedules closer to their actual starting date. It is possible that some projects alter the theme or emphasis slightly as a result of changes in staff.

Enrolling in a masterproject:

1. You need to enrol in Osiris before the closing of the registration term. If you register too late the first possibility to start with your masterproject is Sem A. 2023-2024.
2. The tutor of your 1st master project will be your mentor, for the duration of your whole master program.

Be aware: If the number of registrations for a specific master project does not reach a minimum of ten students, it is possible that this specific project will not proceed!

Looking forward to meeting you in our masterprojects!
Forgotten spaces? Home for Youth!

Recently more attention is drawn to the growing problems of young people experiencing homelessness in the Netherlands. The national statistics agency (CBS) established that on January 1st, 2021, approximately 5,670 young people (aged 18 to 27) in the Netherlands were ‘de facto homeless’, meaning that they are registered as homeless. The numbers are received with suspicion by professionals, and it is estimated that the actual number is much higher. There are many invisible homeless people: those who live in various places but do not have a roof over their heads. Consider the nationwide problem of students who start their studies and can’t find a living space. The nationwide shortage of affordable housing is a major problem for young people in general, while the importance of a stable housing situation is increasingly recognized as a precondition for personal development.

Simultaneously, we see countless undefined empty spaces in the city: messy grassy strips, unused parking lots, an impoverished courtyard. In this project we will explore housing opportunities for young people at these ‘forgotten’ locations in the city. A vital city is an inclusive city: where every neighborhood contributes to a safe living environment for young people who have nowhere else to go. By linking the development of a site to opportunities across all scale levels, the feasibility of a development is increased. This way we will not only work on housing solutions for young people, but also on strengthening the neighborhood, the district, and the city. In this project we work together with housing association Woonbedrijf and look into various neighborhoods where they are active.

This project is part of the Jongeren WoonLab (Youth Housing Lab). Within the Jongeren WoonLab we collaborate with NGO’s that work with homeless youth, housing associations and municipalities. These partners will be part of the studio at various moments. Parallel to this project the Jongeren WoonLab also provides an architecture studio on the topic of youth experiencing homelessness. There will be regular exchange moments during the studio.

Keywords: Scales: Neighbourhood, Ensembles, House; Themes: Youth. Inclusive development, Public Space, Housing; Competencies: Social-cultural research, Governance research, Spatial Research, Typological Design.

ir. Marian de Vries

7QW2Mo
semester B, quartile 3-4
10 ects
10 students
Housing is the most basic element and essential unit of the city. The provision of adequate housing is the biggest challenge cities face, simultaneously cities and high-quality urban environments are much more than an accumulation of dwelling units. The quality of living space overlaps with the quality of public spaces, both living and public spaces need to be designed beyond the functional and with a generosity that provides freedom for occupation.

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The studio is organised around three phases:

I. Research and Analysis
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II. Design
The development of a detailed design project ranging from neighbourhood level design to detailed floorplans and public spaces.

III. Presentation
A focused period to develop key drawings and visualisations to develop your detailed design and presentation techniques
7QX5Mo, quartile 3
Seminars Architecture and Urbanism

7QX5Mo, quartile 4
Seminars Architecture and Urbanism

7QX2Mo, quartile 3-4
Masterprojects Architecture

7QW2Mo, quartile 3-4
Masterprojects Urbanism

7XW1Mo, quartile 3-4
Combined Masterproject

7X45Mo, quartile 3
Graduation studios Architecture

7X45Mo, quartile 4
Graduation studios Architecture

7W45Mo, quartile 3
Graduation studios Urbanism

7W45Mo, quartile 4
Graduation studios Urbanism

7QQ5Mo
International Academic Workshops
Introduction
Combined Masterproject

RA/UUA01 Antwerpen
prof. dipl. -ing. Christian Rapp, prof.dr.ir. Pieter van Wesemael,
dipl. -ing. Haike Apelt, MA B.Arch. Daryl Mulvihill
c.rapp@tue.nl, p.j.vv.wesemael@tue.nl, h.apelt@tue.nl, d.m.mulvihill@tue.nl
Introduction
Combined Masterproject

There is a special subject package for students who want to register both as an architect and as an urban designer in the Dutch register of architects, the combined masterproject is part of this package.

The combined masterproject Architecture and Urbanism aims at students who want to earn a double degree in Architecture and Urbanism. Only students who have already successfully finished a regular Architecture masterproject (7QX1M0 or 7QX2M0) and a regular Urbanism masterproject (7QW1M0 or 7QW2M0) may apply for the combined masterproject.

Being a completely unique program in the Netherlands, students have the chance to combine the two disciplines of Architecture and Urban Design in their MSc-study without following two completely separate MSc-programs. A special subject package has been designed for students who want to register both as an architect and as an urban designer in the Dutch register of architects. This subject package counts 150 ects instead of the regular 120 ects. Students who want to develop themselves in both ways, must take into account a study extension of at least 6 months.

This study package consists of regular courses and projects that are also part of the study packages of future Architects and/or Urban Designers. Two new projects, combining Architecture and Urban Design, have been added to the study package: a combined master project Architecture and Urbanism and a graduation project that combines Architecture and Urban Design. The combined projects ‘Architecture and Urbanism’ are organized by the chair of Rational Architecture (prof. Dipl.-Ing. Christian Rapp) and the chair of Urbanism and Urban Architecture (prof. dr. ir. Pieter van Wesemael), representing both disciplines within the Unit AUDE.

For details see: https://educationguide.tue.nl/programs/graduate-school/masters-programs/architecture-building-and-planning/curriculum/registerracks/aude-for-architects-and-urbanists-register-combined/?L=2
The combined Masterproject Architecture and Urbanism is organized by the chair of Rational Architecture (prof. Christian Rapp) and the chair of Urbanism and Urban Architecture (prof. Pieter van Wesemael), representing both disciplines within the Unit AUDE. The studio is aimed at students who want to earn a double degree in Architecture and Urbanism. Only students who have already successfully finished a regular Masterproject in Architecture (7QX1M0 or 7QX2M0) and a regular Masterproject in Urbanism (7QW1M0 or 7QW2M0) may apply for the combined Masterproject. Please take the necessary steps in the selection procedure when applying for this project!

The studio will be devoted to the typomorphological analysis of the city of Antwerp, from its early beginnings up to its contemporary constitution, focusing on a specific area of the city which the design project will be dealing with. We depart from the assumption that the rich history of this city is readable in its urban form and its buildings. Therefore, historical knowledge must lay at the basis of any attempt to read, understand and make visible ‘time’ within ‘space’.

The project aims at developing an understanding of the critical relationship between the urban condition and the architectural project. We will start with a typo-morphological analysis of the location and its greater context. This research is supported by a literature study to explain the interrelation between societal, political and economic changes and the transformation of the city. The analysis will form the basis for a design project that will cover a wide span of scales and questions of both urbanistic and architectural nature: from the reflection on the greater urban scale to a masterplan for a site, the design of an ensemble of buildings and the surrounding urban space, up to the elaboration of the constructive and spatial structure of the buildings, their architectural expression and material detail. The interrelation of urban and architectural aspects is herein of uttermost importance.

prof. dipl.-ing. Christian Rapp
prof.dr.ir. Pieter van Wesemael
dipl.-ing. Haike Apelt
MA B.Arch. Daryl Mulvihill

7XW1M0
semester B, quartile 3-4
10 ects
10 students
7QX5Mo, quartile 3
Seminars Architecture and Urbanism

7QX5Mo, quartile 4
Seminars Architecture and Urbanism

7QX2Mo, quartile 3-4
Masterprojects Architecture

7QW2Mo, quartile 3-4
Masterprojects Urbanism

7XW1Mo, quartile 3-4
Combined Masterproject

7X45Mo, quartile 3
Graduation studios Architecture

7X45Mo, quartile 4
Graduation studios Architecture

7W45Mo, quartile 3
Graduation studios Urbanism

7W45Mo, quartile 4
Graduation studios Urbanism

7QQ5Mo
International Academic Workshops
7X45Mo, quartile 3
Graduation studios Architecture

Introduction
Graduation studios Architecture

ADE01 The Wunderkammer as a Public Imaginary
prof.ir. Juliette Bekkering
dr.-ing. Cristina Nan
ir.arch. Barbara Kuit
j.d.bekkering@tue.nl, i.c.nan@tue.nl, b.c.i.m.kuit@tue.nl

UUA01 Intermediate spaces and the Porous City
prof.dr.ir. Pieter van Wesemael
ir. Jochem Groenland
drs. ir. Like Bijlsma (Planbureau voor de Leefomgeving)
p.j.v.v.wesemael@tue.nl, j.groenland@tue.nl, e.bijlsma@tue.nl
Introduction
Graduation studios Architecture

Every quartile architecture and urbanism students are given the opportunity to start a graduation studio. This brochure means to give you an overview of the themes and subjects that will be offered over the coming semester so that you can make an informed choice you can be happy about. For a detailed explanation of the objectives, requirements and planning of the graduation studios we would like to refer to the Graduation Guide AUDE. A link may be found at the AUDE website: https://educationguide.tue.nl/opleidingen/graduate-school/masters-programs/architecture-building-and-planning/curriculum/graduation-project/

There are six chairs offering Graduation Studios. Most of them collaborate with other chairs in the Architecture and Urban Design (AUDE) unit. The names of people listed below are names of those tutors who can chair the various studios available:
- Architectural Design and Engineering (ADE) led by prof. ir. Juliette Bekkering
- Architectural History and Theory (AHT) led by associate professor dr. Jacob Voorthuis
- Rational Architecture (RA) led by prof. dipl.-ing. Christian Rapp
- Smart Architectural Technologies (SAT) led by prof. dr. ir. Masi Mohammadi
- Transformational Architecture (TA) led by prof. ir. David Gianotten and prof. ir. Paul Diederen
- Urbanism and Urban Architecture (UUA) led by prof. dr. ir. Pieter van Wesemael

The short introductory description of the studios given here will be supplemented with more elaborate descriptions and exact planning schedules closer to their actual starting date. It is possible that some studios alter the theme or emphasis slightly as a result of changes in staff.

Enrolling in a graduation studio – quartile 3:

1 Students eligible for entering the graduation phase need to enroll in Osiris before the closing of the registration term. If you register too late the first possibility to start with your graduation project is Sem B. 2022-2023, quartile 4.

2 You have to subscribe with a first and second choice. This is possible until Sunday January 8, 2023.
The students are required to prepare a written motivation for their first and second choice of their studio and upload this motivation letter in Canvas before Monday January 9, 2023. First subscribe in Osiris, after that upload your motivation letter in Canvas. Use the correct course code (7X45Mo).

The motivation letter should be no longer than 1 A4 (.pdf file) and name this file as following: your last name – code studio 1st choice/code studio 2nd choice (for instance: Hemesath – ADE-UUA01/RA01). Mind you: without motivation letter you won’t be assigned to a studio.

During the first week of the new quartile students are invited by their tutors to visit the graduation studio of their first or (if that particular studio has been oversubscribed) their second choice. Students are required to present their grade list (fully up to date) to the Supervisory Committee.

For the requirements to start we would like to refer to the Graduation Guide AUDE which may be found at the AUDE website: https://educationguide.tue.nl/opleidingen/graduate-school/masters-programs/architecture-building-and-planning/curriculum/graduation-project/

Be aware: If the number of registrations for a specific graduation studio does not reach a minimum of twelve students and in the case of the continuous studios four students, it is possible that this specific studio will not proceed!

Looking forward to meeting you in our graduation studios!
The Wunderkammer as a Public Imaginary
Earthen Architecture, Robotic Fabrication and the Public Realm

In recent years, across the planet the architectural debate is focussed on the lack of housing. Although this is an urgent topic, the pandemic and its aftermath have demonstrated the importance of social interaction, inter-human relationships and generous public spaces, which allow for these encounters to happen. Currently, our cities often lack of these generous public and cultural spaces.

This research and design studio will focus on the aspect of public life and space. Following a thorough investigation with a cultural, geographic and historic perspective and typological research, students will be asked to question what a contemporary public space should entail. Students will be invited to imagine and design a public Cabinet of Curiosities, a Public Wunderkammer. Cabinets of curiosities describe collections of unusual, extraordinary objects or rarities. They served as entrainment but also as spaces of people to come together, observe, learn, wonder and be exposed to the novelties of the world. What is today’s equivalent of a Wunderkammer? How can we revive the public domain? We will investigate how qualities of entertainment, learning, and museum display, can be merged within the public space while offering visitors a sense of wonder and discovery.

As a building material we will focus on earth-based material systems, such as rammed-earth, clay, bricks and adobe, carefully looking back into a long history of these being used in vernacular architecture. The Wunderkammer, a concept from the past, and earth as a material, will be used to realise a cutting-edge proposal for a public building. Within the context of the circular economy, we consider earth as a material with great potential, as yet under explored in today’s architectural practice. Although often taught of as a vernacular material, earth and earth-based material mixtures are used in advanced robotic fabrication.

Throughout the studio you will be introduced to parametric design via Rhino + Grasshopper, digital fabrication, and 3D clay printing, using the WASP printers on site at TU/e. The 3D clay printers will be used to produce large-scale models of your facades and interiors.

Dr.-Ing. Cristina Nan
Ir.arch. Barbara Kuit
Responsible Professor: Prof.Ir. Juliette Bekkering

7X45Mo
Semester B, quartile 3 (3-4-1-2)
45 ects
10 students
Intermediate spaces and the Porous City

In the essay ‘Naples’ (1925) the radical thinker and cultural critic Walter Benjamin and actress Asja Lãcis portray Naples as a porous city. Here the main element of architecture is not the house or building block. Instead, Benjamin and Lãcis call attention to its caves, cellars, courtyards, arcades, staircases, windows, gateways, and balconies, all elements that feed the ephemeral and the theatrical. This porous domain - where the public is intermingled with the private - allows for “new, unforeseen constellations”. It can absorb the complexity of modern city life and its ever-changing uses. The impermanence of the porous domain suggests a tension with order and planning; it plays an important role in the social rituals of different classes and communities.

With the socio-spatial concept of the porous city in mind, the studio investigates the architecture of ‘Intermediate Size’ typologies (De Tussenmaat, 2006). Robustly designed intermediate spaces are key in all references. Do they have the same porous qualities as Benjamin and Lãcis describe?

Aim of the graduation studio is to develop plans structured by porous interspaces; spaces that can mediate between big and small scale, public and private, landscape and build objects, transitory and solid – and thus can accommodate different models of society in the long term. Thorough elaboration in materials and details are indispensable – there will be ample attention to style, detailing and the logic of making.

General aspects
• In the studio, that also questions the relationship architecture-urbanism, architecture and urbanism students cooperate.
• Model making and the development of drawing language are essential.
• We will travel in Benjamin’s footsteps, comparing Intermediate Typologies in two culturally similar cities.
• Collaboration with Faculty of Design Sciences, Antwerp.
• Interaction in the primary phase of the research with the seminar Urban Interstices & Commons in Architecture and Cinema (see p.15)

See https://www.criticalintermediateaffairs.com/ for previous themes, results, exhibitions events of the CIA studios.

ir. Jochem Groenland
drs. ir. Like Bijlsma (Planbureau voor de Leefomgeving)

Responsible Professor: prof.dr.ir. Pieter van Wesemael

7X45Mo
semester B, quartile 3 (3-4-1-2)
45 ects
10 students
7QX5Mo, quartile 3
Seminars Architecture and Urbanism

7QX5Mo, quartile 4
Seminars Architecture and Urbanism

7QX2Mo, quartile 3-4
Masterprojects Architecture

7QW2Mo, quartile 3-4
Masterprojects Urbanism

7XW1Mo, quartile 3-4
Combined Masterproject

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Graduation studios Architecture

7X45Mo, quartile 4
Graduation studios Architecture

7W45Mo, quartile 3
Graduation studios Urbanism

7W45Mo, quartile 4
Graduation studios Urbanism

7QQ5Mo
International Academic Workshops


Introduction
Graduation studios Architecture

ADE01 The Wunderkammer as a Public Imaginary
prof.ir. Juliette Bekkering
dr.-ing. Cristina Nan
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UUA01 Intermediate spaces and the Porous City
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ir. Jochem Groenland
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p.j.vv.wesemael@tue.nl, j.groenland@tue.nl, e.bijlsma@tue.nl
Introduction
Graduation studios Architecture

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- Urbanism and Urban Architecture (UUA) led by prof. dr. ir. Pieter van Wesemael

The short introductory description of the studios given here will be supplemented with more elaborate descriptions and exact planning schedules closer to their actual starting date. It is possible that some studios alter the theme or emphasis slightly as a result of changes in staff.

Enrolling in a graduation studio – quartile 4:

1. Students eligible for entering the graduation phase need to enroll in Osiris before the closing of the registration term. If you register too late the first possibility to start with your graduation project is Sem A, 2023-2024, quartile 1.

2. You have to subscribe with a first and second choice. This is possible until Sunday March 26, 2023.
3 The students are required to prepare a written motivation for their first and second choice of their studio and upload this motivation letter in Canvas before Monday March 27, 2023. First subscribe in Osiris, after that upload your motivation letter in Canvas. Use the correct course code (7X45Mo).

The motivation letter should be no longer than 1 A4 (.pdf file) and name this file as following: your last name – code studio 1st choice/code studio 2nd choice (for instance: Hemesath – ADE-UUA01/RA01). Mind you: without motivation letter you won’t be assigned to a studio.

4 During the first week of the new quartile students are invited by their tutors to visit the graduation studio of their first or (if that particular studio has been oversubscribed) their second choice. Students are required to present their grade list (fully up to date) to the Supervisory Committee.

5 For the requirements to start we would like to refer to the Graduation Guide AUDE which may be found at the AUDE website: https://educationguide.tue.nl/opleidingen/graduate-school/masters-programs/architecture-building-and-planning/curriculum/graduation-project/

Be aware: If the number of registrations for a specific graduation studio does not reach a minimum of twelve students and in the case of the continuous studios four students, it is possible that this specific studio will not proceed!

Looking forward to meeting you in our graduation studios!
The Wunderkammer as a Public Imaginary
Earthen Architecture, Robotic Fabrication and the Public Realm

In recent years, across the planet the architectural debate is focussed on the lack of housing. Although this is an urgent topic, the pandemic and its aftermath have demonstrated the importance of social interaction, inter-human relationships and generous public spaces, which allow for these encounters to happen. Currently, our cities often lack of these generous public and cultural spaces.

This research and design studio will focus on the aspect of public life and space. Following a thorough investigation with a cultural, geographic and historic perspective and typological research, students will be asked to question what a contemporary public space should entail. Students will be invited to imagine and design a public Cabinet of Curiosities, a Public Wunderkammer. Cabinets of curiosities describe collections of unusual, extraordinary objects or rarities. They served as entrainment but also as spaces of people to come together, observe, learn, wonder and be exposed to the novelties of the world. What is today’s equivalent of a Wunderkammer? How can we revive the public domain? We will investigate how qualities of entertainment, learning, and museum display, can be merged within the public space while offering visitors a sense of wonder and discovery.

As a building material we will focus on earth-based material systems, such as rammed-earth, clay, bricks and adobe, carefully looking back into a long history of these being used in vernacular architecture. The Wunderkammer, a concept from the past, and earth as a material, will be used to realise a cutting-edge proposal for a public building. Within the context of the circular economy, we consider earth as a material with great potential, as yet under explored in today’s architectural practice. Although often taught of as a vernacular material, earth and earth-based material mixtures are used in advanced robotic fabrication.

Throughout the studio you will be introduced to parametric design via Rhino + Grasshopper, digital fabrication, and 3D clay printing, using the WASP printers on site at TU/e. The 3D clay printers will be used to produce large-scale models of your facades and interiors.

dr.-ing. Cristina Nan
ir.arch. Barbara Kuit
Responsible Professor: prof.ir. Juliette Bekkering

7X45Mo
semester B, quartile 4 (4-1-2-3)
45 ects
10 students
In the essay ‘Naples’ (1925) the radical thinker and cultural critic Walter Benjamin and actress Asja Läcis portray Naples as a porous city. Here the main element of architecture is not the house or building block. Instead, Benjamin and Läcis call attention to its caves, cellars, courtyards, arcades, staircases, windows, gateways, and balconies, all elements that feed the ephemeral and the theatrical. This porous domain - where the public is intermingled with the private - allows for “new, unforeseen constellations”. It can absorb the complexity of modern city life and its ever-changing uses. The impermanence of the porous domain suggests a tension with order and planning; it plays an important role in the social rituals of different classes and communities.

With the socio-spatial concept of the porous city in mind, the studio investigates the architecture of ‘Intermediate Size’ typologies (De Tussenmaat, 2006). Robustly designed intermediate spaces are key in all references. Do they have the same porous qualities as Benjamin and Läcis describe?

Aim of the graduation studio is to develop plans structured by porous interspaces; spaces that can mediate between big and small scale, public and private, landscape and build objects, transitory and solid – and thus can accommodate different models of society in the long term. Thorough elaboration in materials and details are indispensable – there will be ample attention to style, detailing and the logic of making.

General aspects
• In the studio, that also questions the relationship architecture-urbanism, architecture and urbanism students cooperate.
• Model making and the development of drawing language are essential.
• We will travel in Benjamin’s footsteps, comparing Intermediate Typologies in two culturally similar cities.
• Collaboration with Faculty of Design Sciences, Antwerp.
• Interaction in the primary phase of the research with the seminar Urban Interstices & Commons in Architecture and Cinema (see p.15)

See https://www.criticalintermediateaffairs.com/ for previous themes, results, exhibitions events of the CIA studios.

ir. Jochem Groenland
drs. ir. Like Bijlsma (Planbureau voor de Leefomgeving)

Responsible Professor: prof.dr.ir. Pieter van Wesemael

7X45Mo
semester B, quartile 4 (4-1-2-3)
45 ects
10 students
7QX5Mo, quartile 3
Seminars Architecture and Urbanism

7QX5Mo, quartile 4
Seminars Architecture and Urbanism

7QX2Mo, quartile 3-4
Masterprojects Architecture

7QW2Mo, quartile 3-4
Masterprojects Urbanism

7WX1Mo, quartile 3-4
Combined Masterproject

7X45Mo, quartile 3
Graduation studios Architecture

7X45Mo, quartile 4
Graduation studios Architecture

7W45Mo, quartile 3
Graduation studios Urbanism

7W45Mo, quartile 4
Graduation studios Urbanism

7QQ5Mo
International Academic Workshops
Introduction
Graduation studios Urbanism

UU Ao1  Density and other Matters
prof.dr.ir. Pieter van Wesemael
dr.ir. Dena Kasraian
dr. Gamze Dane
p.j.v.v.wesemael@tue.nl, d.kasraian@tue.nl, g.z.dane@tue.nl
Introduction
Graduation studios Urbanism

Every quartile architecture and urbanism students are given the opportunity to start a graduation studio. This brochure means to give you an overview of the themes and subjects that will be offered over the coming semester so that you can make an informed choice you can be happy about. For a detailed explanation of the objectives, requirements and planning of the graduation studios we would like to refer to the Graduation Guide AUDE. A link may be found at the AUDE website: https://educationguide.tue.nl/opleidingen/graduate-school/masters-programs/architecture-building-and-planning/curriculum/graduation-project/

There is one chair offering Graduation Studios Urbanism:
- Urbanism and Urban Architecture (UUA) led by prof. dr. ir. Pieter van Wesemael

The short introductory description of the studios given here will be supplemented with more elaborate descriptions and exact planning schedules closer to their actual starting date. It is possible that some studios alter the theme or emphasis slightly as a result of changes in staff.

Enrolling in a graduation studio – quartile 3:

1 Students eligible for entering the graduation phase need to enroll in Osiris before the closing of the registration term. If you register too late the first possibility to start with your graduation project is Sem B. 2022-2023, quartile 4.

2 You have to subscribe with a first and second choice. This is possible until Sunday January 8, 2023.

3 During the first week of the new quartile students are invited by their tutors to visit the graduation studio of their first or (if that particular studio has been oversubscribed) their second choice. Students are required to present their grade list (fully up to date) to the Supervisory Committee.
For the requirements to start we would like to refer to the Graduation Guide AUDE which may be found at the AUDE website: 
https://educationguide.tue.nl/opleidingen/graduate-school/masters-programs/architecture-building-and-planning/curriculum/graduation-project/

Be aware: if the number of registrations for a specific graduation studio does not reach a minimum of twelve students twelve students and in the case of the continuous studios four students, it is possible that this specific studio will not proceed!

Looking forward to meeting you in our graduation studios!
Density and other Matters

We need to build around one million houses in the Netherlands in the next decade to address the increasing housing shortage. Most of these houses will be built in the existing urban areas within big cities. Many projects are being prepared with densities higher than what we are used to in Dutch cities. This rises all kinds of issues and questions. What does densification mean for the quality of living? What does it mean for mobility? How can we guarantee enough green and protect biodiversity? How can we achieve human scale and environmental quality?

In this studio we will explore the potentials and limits of high density. The focus area will be the city of Eindhoven. Students are encouraged to address several scales in their research and design from the metropolitan region of Eindhoven and the city to a number of select neighborhoods. Besides the common focus on density, students will choose an individual theme to work on. By studying these themes students will address the impacts of high density from several perspectives. We encourage students to develop their individual theme before starting the studio.

This studio applies a knowledge-based approach. Following a systematic methodology, the students will formulate the problems related to their theme(s) and identify the gaps and research questions. They will conduct a (systematic) review of state-of-the art literature, policy documents and case studies to gather evidence on the mechanisms of action and successful spatial/policy interventions related to their chosen themes. Building on their knowledge-based findings and spatial (GIS-based) analysis they will identify areas in need of intervention in Eindhoven. Finally, they will suggest policies and interventions to solve the identified problems. The expected outcomes are i) an academic paper (max. 8000 words) and ii) a design booklet including the spatial analyses, a region/city-wide strategy, and more detailed (design) interventions at the neighborhood level.

Keywords: Scales: Neighbourhood, Ensemble, City, Region; Themes: Mobility, Water, Energy, Health, Youth, Inclusive Development, Learning Cities, Sustainable Development, Urban Transformation, Public Space.

**dr.ir. Dena Kasraian**
**dr. Gamze Dane**

**Responsible Professor: prof.dr.ir. Pieter van Wesemael**

7W45Mo
semester B, quartile 3 (3-4-1-2)
45 ects
10 students
7QX5Mo, quartile 3
Seminars Architecture and Urbanism

7QX5Mo, quartile 4
Seminars Architecture and Urbanism

7QX2Mo, quartile 3-4
Masterprojects Architecture

7QW2Mo, quartile 3-4
Masterprojects Urbanism

7WX1Mo, quartile 3-4
Combined Masterproject

7X45Mo, quartile 3
Graduation studios Architecture

7X45Mo, quartile 4
Graduation studios Architecture

7W45Mo, quartile 3
Graduation studios Urbanism

7W45Mo, quartile 4
Graduation studios Urbanism

7QQ5Mo
International Academic Workshops
Introduction
Graduation studios Urbanism

7X45Mo, quartile 4
Graduation studios Urbanism

UUA01 Density and other Matters
prof.dr.ir. Pieter van Wesemael
dr.ir. Dena Kasraian
dr. Gamze Dane
p.j.vv.wesemael@tue.nl, d.kasraian@tue.nl, g.z.dane@tue.nl
Introduction
Graduation studios Urbanism

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There is one chair offering Graduation Studios Urbanism:
- Urbanism and Urban Architecture (UUA) led by prof. dr. ir. Pieter van Wesemael

The short introductory description of the studios given here will be supplemented with more elaborate descriptions and exact planning schedules closer to their actual starting date. It is possible that some studios alter the theme or emphasis slightly as a result of changes in staff.

Enrolling in a graduation studio – quartile 4:

1 Students eligible for entering the graduation phase need to enroll in Osiris before the closing of the registration term. If you register too late the first possibility to start with your graduation project is Sem A. 2023-2024, quartile 1.

2 You have to subscribe with a first and second choice. This is possible until Sunday January 8, 2023.

3 During the first week of the new quartile students are invited by their tutors to visit the graduation studio of their first or (if that particular studio has been oversubscribed) their second choice. Students are required to present their grade list (fully up to date) to the Supervisory Committee.
4 For the requirements to start we would like to refer to the Graduation Guide AUDE which may be found at the AUDE website: https://educationguide.tue.nl/opleidingen/graduate-school/masters-programs/architecture-building-and-planning/curriculum/graduation-project/

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This studio applies a knowledge-based approach. Following a systematic methodology, the students will formulate the problems related to their theme(s) and identify the gaps and research questions. They will conduct a (systematic) review of state-of-the art literature, policy documents and case studies to gather evidence on the mechanisms of action and successful spatial/policy interventions related to their chosen themes. Building on their knowledge-based findings and spatial (GIS-based) analysis they will identify areas in need of intervention in Eindhoven. Finally, they will suggest policies and interventions to solve the identified problems. The expected outcomes are i) an academic paper (max. 8000 words) and ii) a design booklet including the spatial analyses, a region(city-wide strategy, and more detailed (design) interventions at the neighborhood level.

Keywords: Scales: Neighbourhood, Ensemble, City, Region; Themes: Mobility, Water, Energy, Health, Youth, Inclusive Development, Learning Cities, Sustainable Development, Urban Transformation, Public Space.

**dr.ir. Dena Kasraian**  
**dr. Gamze Dane**  
**Responsible Professor: prof.dr.ir. Pieter van Wesemael**

7W45Mo  
semester B, quartile 4 (4-1-2-3)  
45 ects  
10 students
7QX5Mo, quartile 3
Seminars Architecture and Urbanism

7QX5Mo, quartile 4
Seminars Architecture and Urbanism

7QX2Mo, quartile 3-4
Masterprojects Architecture

7QW2Mo, quartile 3-4
Masterprojects Urbanism

7XW1Mo, quartile 3-4
Combined Masterproject

7X45Mo, quartile 3
Graduation studios Architecture

7X45Mo, quartile 4
Graduation studios Architecture

7W45Mo, quartile 3
Graduation studios Urbanism

7W45Mo, quartile 4
Graduation studios Urbanism

7QQ5Mo
International Academic Workshops
7Q5M0
International Academic Workshops

RA01  City Harbour - Harbour City
prof. dipl.-ing. Christian Rapp, dipl.-Ing. Haike Apelt, ir. Anne Marie Peters
c.rapp@tue.nl, h.apelt@tue.nl, a.peters@tue.nl

RA02  Learning from Pompeii
prof. dipl.-ing. Christian Rapp, dipl.-Ing. Haike Apelt
c.rapp@tue.nl, h.apelt@tue.nl
City Harbour - Harbour City

The chair of Rational Architecture is participating in the 11th International Spring Academy which is organized by the TU Dortmund. Participating will be teachers and students from the universities from Dortmund, Naples, Gothenburg, Berlin and Eindhoven. This year’s subject is ‘City Harbour - Harbour City’. The City Harbour in Dortmund will be the subject of this year’s design workshop.

The Spring Academy will involve participation in an international design workshop in Dortmund for 10 days in March, together with some preparatory work during the pre- and postproduction. Parallel to the workshop, lectures and excursions will be organized. During the workshop you will work together in small mixed groups, thereby getting acquainted with a different cultural and academic background of your peers. Supervised by teaching staff from the different universities, the workshop involves the development of skills regarding communication and collaboration, the exploration of different design methods, and most importantly, significant aspects of international experience which will broaden your horizon and may provide useful contacts for your future carrier.

Pre-production will involve the preparation of necessary photographic and plan material for a case study (for example Eindhoven). After the workshop, during post-production, a small booklet will be compiled to collect all material presented at the final day of the workshop.

This workshop is recommended for architecture students with an interest in matters of urban design, or to urbanism students with an interest in matters of architectural design, and is of course an excellent choice for students following the combined register track.

Organized by: Prof. Olaf Schmidt/ Prof. Michael Schwarz, TU Dortmund

Participating also: Universita‘degli Studi di Napoli Federico II, Chalmers University Gothenburg and Technische Hochschule Berlin

prof. dipl.-ing. Christian Rapp
dipl.-Ing. Haike Apelt
ir. Anne Marie Peters

semester B, quartile 3 (workshop in Dortmund March 13 - 22, 2023)
5 ects
max. participants is 15 (if more students apply, we will select by portfolio)
Learning from Pompeii

The chair of Rational Architecture is participating in the International Academic Workshop titled “Learning from Pompeii” which is organized by the University of Naples Federico II. We are invited to bring 5 students who will collaborate with students 5 students each from Naples, Aachen, Dortmund, Potsdam and Graz on a task which involves an analysis of a particular part of Pompeii and an analytical design. The analysis will be prepared in Eindhoven, in small groups of students assembled from the different universities by ways of blended learning. A more intensive 5 days workshop will be spent on site in Pompeii/ Naples, hosted by the University of Naples Federico II (ca. end of June/ beginning of July). Travel and stay are to be organized by the students.

During the workshop you will work together in small mixed groups, thereby getting acquainted with a different cultural and academic background of your peers. Supervised by teaching staff from the different universities, the workshop involves the development of skills regarding communication and collaboration, the exploration of different design methods, and most importantly, significant aspects of international experience which will broaden your horizon and may provide useful contacts for your future carrier.

Excerpt from the introductory text by Prof. Federica Visconti:
The theme concerns a specific reading angle of the ancient city seen as an exemplar lesson of architecture. (...) Studying the ancient can give appropriate teachings for contemporaneity, linked to the systems that determine the urban settlement: systems of relations, distribution, orientation, as well as relationship between open spaces and built spaces. (...) The lesson of the ancient city relates to contemporary architecture precisely in reasoning about the city. Working on Pompeii represents in this sense summary and addresses how to work in architecture with a variety of materials, also including the archaeological ones, which have like others - or perhaps more than others – the capability to accompany and enrich architecture in its contemporary expression.

Early registration is recommended, please contact: h.apelt@tue.nl

Collaboration with:
Prof. Federica Visconti/
Prof. Renato Capozzi,
Università degli Studi di Napoli Federico II

Prof. Uwe Schröder,
RWTH Aachen

Prof. Olaf Schmidt/
Prof. Michael Schwarz,
TU Dortmund

Prof. Silvia Malcovati,
University of Applied Science Potsdam

Prof. Anselm Wagner,
TU Graz

prof. dipl.-ing. Christian Rapp
dipl.-Ing. Haike Apelt

7QQ5Mo
semester B, quartile 3 (with a 5 day’s workshop on location at the end of Q4)
5 ects
max. participants is 5 (if more students apply, we will select by portfolio)
cover illustration, artwork by Bruce Verdonschot