

seminars, master- and graduation  
projects architecture + urbanism  
semester B, 2024-2025

eindhoven school of architecture,  
urban design and engineering

24  
25

cover illustration, artwork by Guido van Laar

**7QX5M0, quartile 3**  
**Seminars Architecture and Urbanism**

**7QX5M0, quartile 4**  
**Seminars Architecture and Urbanism**

**7QX2M0, quartile 3-4**  
**Masterprojects Architecture**

**7QW2M0, quartile 3-4**  
**Masterprojects Urbanism**

**7XW1M0, quartile 3-4**  
**Combined Masterproject**

**7X45M0, quartile 3**  
**Graduation Studios Architecture**

**7W45M0, quartile 3-4**  
**Graduation Studios Urbanism**

**7X60M0, quartile 3**  
**Graduation Studios Architecture & Urban Design**

**7QQ5M0**  
**International Academic Workshops**

**7QX5M0, quartile 3**  
**Seminars Architecture and Urbanism**

**Introduction**  
**Seminars Architecture and Urbanism**

**ADE01 Concrete Belgique**

ir. Tom Veeger, ir. Siebe Bakker  
t.t.veeger@tue.nl

**ADE02 Computational Bio-integration — Accommodating Living Systems**

dr.-ing. Cristina Nan  
i.c.nan@tue.nl

**AHT01 Before and After Air Conditioning**

prof. dr. Daniel A. Barber  
d.a.barber@tue.nl

**RA01 House Portraits and Film**

ir. Wouter Hilhorst  
w.hilhorst@tue.nl

**TA01 Canon of Transformation**

ir. Maarten Willems  
m.h.p.m.willems@tue.nl



## **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 five chairs offering seminars:**

- Architectural Design and Engineering (ADE) - prof. ir. Juliette Bekkering
- Architectural History and Theory (AHT) - prof. dr. Daniel A. Barber
- Rational Architecture (RA) - ir. Anne Marie Peters
- Transformational Architecture (TA) - ir. Ruurd Roorda
- Urbanism and Urban Architecture (UUA) - 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 enroll in Osiris before the closing of the registration term (January 5, 2025). If you register too late the first possibility to start with your seminar is Sem B. 2024-2025, quartile 4.
2. We work with a maximum amount (generally 10) students per seminar. Register with 3 preferences. Groups are arranged on first come, first serve basis, but are rearranged if necessary.
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!



## ADE01

### Concrete Belgique

**Image 1: Water Tower Ghlin, V+, Ghlin. Source: Bureau Greisch.**

**Image 2: Structure and Gardens by BAUKUNST, Brussels. Image source: Maxime Delvaux.**

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 analysing several buildings by different architects like BAUKUNST, Ney + Partners, Studio Mouton and Studio MOTO. Secondly we will perform several challenging hands-on experiments where you will make scale models using concrete in which the theme “Precense”, of the Concrete Design competition 2026 is the common thread.

The seminar will include a 4 day roadtrip to Belgium to experience the work of these architects and meet with them (partly sponsored by the Betonhuis). The interviews (physical or online) will be a 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 0,50x0,50x1,0m) 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 analysed buildings. Together with all of the concrete models this will be displayed in a beautiful exhibition. Also all the outcome of the student work will enter the Concrete design Competition 2026.

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. Siebe Bakker**

7QX5M0

semester B, quartile 3

15 students

5 ects







## ADE02

### Computational Bio-integration - Accommodating Living Systems

**Image 1:**  
**Computational  
Concrete Column  
for Biodiversity,**  
student **Nikolett  
Asvanyi**, output  
of master project  
CCP led by  
**Cristina Nan and  
Mattia Zucco.**

**Image 2:**  
**Computational  
Concrete Column  
for Biodiversity,**  
student **Nikolett  
Asvanyi**, output  
of master project  
CCP led by  
**Cristina Nan and  
Mattia Zucco.**

This seminar explores the intersection of digital fabrication and bio-integration in architecture, examining how advanced computational and digital fabrication techniques can incorporate living systems into the built environment. As buildings and urban spaces face increasing pressures to be sustainable, adaptive, and resilient, there is a growing need to develop architecture that seamlessly integrates natural and synthetic materials, supporting ecosystems while enhancing structural and environmental performance.

This studio aims to equip students with the skills and theoretical knowledge to design architectures that are responsive, ecologically integrated, and feasible through digital fabrication. Students will study the principles of bio-integration, focusing on how biological systems can inspire and directly inform design. Through examining case studies and emerging technologies, students will explore strategies for integrating plants, microorganisms, and other biological agents in architectural systems, with considerations for urban biodiversity, air and water filtration, and climate responsiveness.

This studio emphasizes hands-on learning with digital fabrication tools, including 3D printing, and robotic fabrication. Form generation will be guided by both aesthetic and functional considerations, aiming to develop structures that encourage plant growth, water retention, or microbial colonization, while maintaining structural integrity and environmental performance. You will conduct research on bio-integration in architecture and digital fabrication techniques. This includes case studies of living walls, algae facades, and other bio-based architectural systems.

Students will create exploratory models and sketches to propose early design concepts that consider spatial, environmental, and biological requirements. Students will produce a series of digital and physical models, a comprehensive design proposal, and documented prototypes that demonstrate the potential for digital fabrication to achieve bio-integration. Through innovative thinking and practical experimentation, students will contribute to a future where buildings act as part of the ecosystem, enhancing sustainability and creating harmonious connections between nature and the urban fabric.

**dr.-ing. Cristina Nan**

7QX5M0

semester B, quartile 3

10 students

5 ects



## AHT01

### Before and After Air Conditioning

**Image 1: MMM Roberto, Marques do Herval, Rio de Janeiro, 1952. Architects Milton and Marcelo Roberto demonstrating the shading system. Image courtesy of the Núcleo de Pesquisa e Documentação, Faculdade de Arquitetura e Urbanismo, Universidade Federal do Rio de Janeiro.**

**Image 2: Harrison and Abramowitz, Oscar Neimeyer, et. al., United Nations Headquarters, New York, 1952. Office worker demonstrating ‘the Weathermaster.’ Image courtesy Creative Commons.**

The period of carbon profligacy is coming to end. From the 1950s to the 2020s architecture, and the building industry, has been reliant on fossil fuel powered HVAC systems. To mitigate the worst effects of climatic instability, architects can help lay carbon reliance to rest – to work towards reducing demand. This course will begin with the moment that modern designers first engaged climate technologies in the 1930s – through air conditioning systems, but also through shading techniques, thermal mass, passive ventilation and other strategies.

Central to our investigation is the emergence of thermal comfort as part of the design project, with all of its attendant standards and regulations. The management of the thermal interior is an integral part of design, often in collaboration with engineers, to provide a healthy space for life and work. Mechanical HVAC systems exhibit a material and causal chain involving, to put it simply, catastrophic economic and environmental effects – dependence on fossil fuels, their extraction and distribution; toxic emissions and pollutants; labor exploitation and ecological decimation. Thus thermal comfort is also about equity and opportunity, who gets to be comfortable and who pays the price.

Conversely, thermal comfort can also focus on region, custom, and tradition, affirming diverse experiences of the built environment. The seminar will explore a history of buildings as experimental devices for (non-mechanical) climatic adaptability. The archive of case studies is rich and bountiful. And by bracketing out the period of carbon profligacy, we can map a continuous history of low carbon practices and ambitions. This global history of climate-focused design will be developed by students in discussions, readings, lectures, and workshops.

This history will provide a framework for students to speculate on methods, concepts, and technologies that can facilitate new ways of life after air conditioning, through drawing assignments and workshops that consider a life at the edge of comfort, according to the specific needs of a given region, community or building, and with contingent inequities and opportunities at the forefront.

**prof. dr. Daniel A. Barber**

7QX5M0

semester B, quartile 3

10 students

5 ects



## RA01

### House Portraits and Film

**Image 1: Yasujiro Ozu's Tokyo Story (1953), retrieved from: <http://donalkelly.com/article/tokyo-story-stills/>**

One of the buildings featuring in the documentary *Stardust: The Story of Robert Venturi and Denise Scott Brown* (made by their son Jim Venturi in 2024) is the Vanna Venturi House, which Robert Venturi designed for his mother in 1962-64. The documentary conveys information about the house which cannot be gathered from the physical object of the house (or its representation in plans, elevations and sections) alone, but this information proves to be very helpful for a comprehensive interpretation of the house. Film tells the story of the conception of the house.

The other way round would also be possible: a story about an idea can help understand a film. One could think of watching Yasujiro Ozu's *Tokyo Story* (1953) or Akira Kurosawa's *Ikiru* (1952), which both prominently show scenes inside the protagonist's houses, with Junichiro Tanizaki's essay *In Praise of Shadows* (1933) in the back of one's mind.

In this seminar, we will explore both possibilities. As a first step, we will study movies and texts to see how they can help to understand the conception of a house, with special attention to the *thinking* that guided the design process. In the second step, we will portray houses ourselves, exploring cinematographic techniques to either (in a documentary way) provide information which could help an architectural interpretation, or starting from an interpretation, use film to present this.

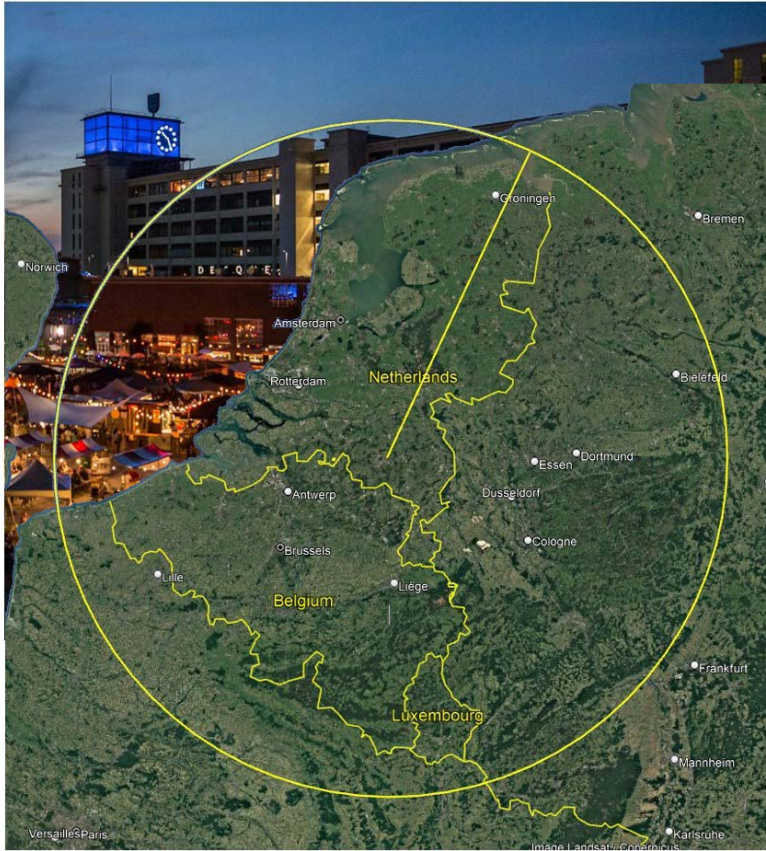
### **ir. Wouter Hilhorst**

7QX5M0

semester B, quartile 3

10 students

5 ects





## TA01

### Canon of Transformation

**Image 1: Target area for the seminar showing the 250 km circle with Vertigo at the center.**

**[Photo Striip S: Jasper Bloem, Google Earth + Maarten Willems].**

This seminar will focus on documenting important architectural transformation projects. Collectively we will investigate a large variety of transformation projects of the past fifty years in the area defined by a circle with a 250 km radius and Vertigo at the center, to arrive at a longlist of projects. (week 1) Subsequently (or simultaneously) we will establish a classification framework based on research and literature to come to a taxonomy of different transformation strategies. This will result in a shortlist. (week 2) Finally, substantiated discussion and profound argumentation on significance, added value, geographical distribution, will lead to a list of exactly 50 transformation projects. (end of week 3.) Each student will adopt 3 to 4 projects, and will visit, photograph and document those. Furthermore you will collectively design a publication format that fits all selected projects (representation, drawing style, color scheme, data and information included, icons, etc.).

The resulting product of this seminar will be a book: a canon with 50 of the most important transformation projects in the area, that can serve as an exemplary anthology for future educational settings regarding transformational architecture.

### **ir. Maarten Willems**

7QX5M0

semester B, quartile 3

14-18 students

5 ects

**7QX5M0, quartile 3**  
**Seminars Architecture and Urbanism**

**7QX5M0, quartile 4**  
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**Introduction**  
**Seminars Architecture and Urbanism**

**AHT02 Thinking Design, Designing Thought**

dr. Jacob Voorthuis

[j.c.t.voorthuis@tue.nl](mailto:j.c.t.voorthuis@tue.nl)

**AHT03 Housing Models**

dr. Sergio M. Figueiredo

[s.m.figueiredo@tue.nl](mailto:s.m.figueiredo@tue.nl)

**UUA01 New Living Concepts: Reimagining Home**

dr. Oana Druta

[o.druta@tue.nl](mailto:o.druta@tue.nl)



## Introduction

### Seminars Architecture and Urbanism

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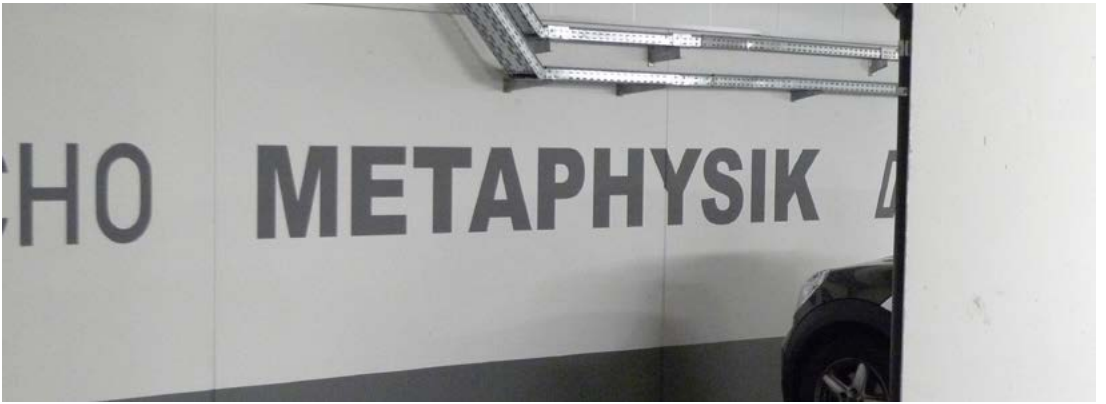
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2. We work with a maximum amount of 10 students per seminar. So the subscriptions are according to the principle 'first come, first served'. If the seminar of your first choice has no places left, subscribe for another one.
3. During the first week of the new quartile students are invited by their tutors to visit the seminar.

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## AHT02

### Thinking Design, Designing Thought

**Image 1: Photo by  
Jacob Voorthuis.**

What does philosophy offer architecture? And what does architecture offer philosophy? In this seminar we are going to explore these two questions in tandem. The way we shall do this is by conceiving of a Musaeum Clausum (do look it up...) in which possible answers to these two questions become the catalogue of a fictitious exhibition. By making models, drawings, diagrams and texts we shall try to reconstruct this museum and thus explore seminal themes in architecture and philosophy. The end product should be a catalogue of this museum's collection, showing images and descriptions.

#### **Possible topics:**

- Objectivity and subjectivity and their mutual importance
- Space and time in philosophy and architecture
- Analysis and critique: Descartes and Brunelleschi
- Truth, beauty and goodness and the three basic forms of judgment
- Metaphors and analogies
- The role of models

**dr. Jacob Voorthuis**

7QX5M0

semester B, quartile 4

12-15 students

5 ects



## AHT03

### Housing Models

**Image 1: Faux Corbu, prototype for cooperative housing in Tunis (Dogma, 2024).**

In April 1995, an exhibition with the playful title *In Holland Staat een Huis* (In Hollands there is a House) opened at the Netherlands Architecture Institute. The playfulness of its title (and its installation) did not obscure the seriousness of the issue being presented and discussed: the chronic shortage of (affordable) housing in the Netherlands. Spread across the floor, the 800.000 small, individual houses, forming ‘an almost endless sea of houses so vast that the individual layout of the parts was completely submerged in the whole,’ represented the number of houses that the government had determined that it was necessary to build within 10 years to resolve the (then) housing crisis. Since then, the problem has only gotten worse, with the current determination being that 1.000.000 new homes must be built by 2030, two-thirds of which are to be affordable housing.

This research seminar will develop comprehensive research into different architectural responses to the housing crisis, exploring innovative proposals that aim to alleviate the shortage of affordable housing. By examining a range of strategies—from modular housing solutions and adaptive reuse of existing structures to the integration of sustainable building practices and community-oriented designs—the research seminar will understand how architecture can contribute to meaningful change.

By directly referring to both the atmosphere and experience of architecture, models are arguably the most complete way to understand architecture from all its possible representations. Beyond being used to develop new ideas, models have also commonly been used to appropriate, document and investigate existing architectural expressions. In this seminar, we will use models as a tool for action and investigation of the architectural qualities of the various architectural responses to the housing crisis. These models will then serve to better understand and assess the innovations proposed by these proposals.

*NB: this seminar is organized in tandem with the master project *In Holland there is a House*.*

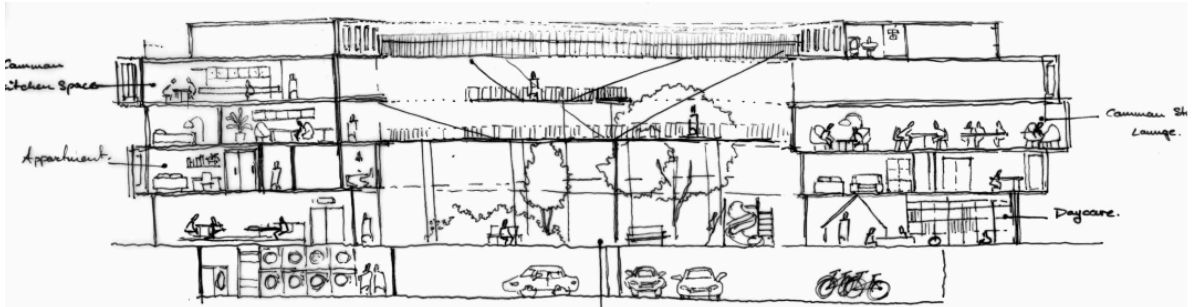
**dr. Sergio M. Figueiredo**

7QX5M0

semester B, quartile 4

10 students

5 ects



## UUA01

### New Living Concepts: Reimagining Home

**Image 1: Sketch, co-housing for expats, project proposal by Cristina Perial.**

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 a set of journal articles and book chapters that tackle the topic of home in feminist urbanism and architecture. the seminar will be engaging with theoretical proposition of feminist thinkers, as well as analyzing existing housing concepts.**

Students will be expected to read and critically reflect on the texts provided. Weekly assignments will include summarizing and presenting the texts, participating in debates and bringing new knowledge to the table. **Specific to this topic, students will work together to stage and experience home environments.**

In addition, each student will conduct independent research into ONE 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.

The seminar collects all it's insights into the digital publication New Living Concepts (<https://oanadruta.substack.com/>).

**dr. Oana Druta**

7QX5M0

semester B, quartile 4

10 students

5 ects

**7QX5M0, quartile 3**  
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**7QX2M0, quartile 3-4**  
**Masterprojects Architecture**

**Introduction**  
**Masterprojects Architecture**

**ADE01 Mobility Hub**

ir. Jan Schevers  
j.p.a.schevers@tue.nl

**ADE02 The Future of Architecture Education**

ir. arch. Mark Hemel, ir. arch. Barbara Kuit  
m.p.hemel@tue.nl, b.c.i.m.kuit@tue.nl

**ADE03 Computational Columns -  
Between Tectonism & Ornamentality**

dr.-ing. Cristina Nan  
i.c.nan@tue.nl

**ADE04 Folie Sacrale: Other functions**

ir. Hajo Schilperoort  
h.schilperoort@tue.nl

**In Holland there is a house**

**AHT01** dr. Sergio M. Figueiredo  
s.m.figueiredo@tue.nl

**RA01 Half of a Housing Block**

ir. Anne Marie Peters

a.peters@tue.nl

**RA02 Tectonic Exercises**

ir. Ralph Brodruck, ir. Renato Kindt

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**RA03 / TA ETT – Easy to Transform**

Hélène Aarts, Femke Stout MSc

h.m.t.aarts@tue.nl, f.m.stout@tue.nl

**TA01 The Factory**

ir. Ruurd Roorda

r.p.j.roorda@tue.nl

**UUA01 Urban Housing - Living in the City**

MA B.arch. Daryl Mulvihill

d.m.mulvihill@tue.nl





## Introduction

### Masterprojects Architecture

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.

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- Transformational Architecture (TA) - ir. Ruurd Roorda
- Urbanism and Urban Architecture (UUA) - 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 enroll 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. 2025-2026.
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.
3. After, January 6, 2025 you will be assigned to your final masterproject. 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!



## ADE01

### Mobility Hub

**Image 1:**  
**Bruther +**  
**Baukunst: Student**  
**Residence and**  
**Reversible Carpark**  
**at the campus of**  
**EPA Paris-Saclay.**

The emerging type of the Mobility Hub is aimed at more than merely providing a space to park cars. It allows for new developments of residential or mixed use areas to be free of cars. The aim is mostly to create a green living environment that stimulates healthy behavior of the inhabitants like going for a walk and casually meeting other people in the community.

This typology of the Mobility Hub is also subjected to major changes in the near future. The use of cars is shifting from private ownership to shared mobility solutions and public transport is becoming more efficient and convenient. And last but not least, people are becoming more aware of the environmental impact of their mode of transport.

In this designstudio you will study the real case of the Veilingterrein Venlo: a 7000m<sup>2</sup> asphalt covered site which is to be turned into a vibrant mixed use area where living, learning, working and relaxing positively influence each other.

You will also study the typology of the Mobility Hub. The project for a reversible carpark and student residence at the Paris-Saclay campus by Bruther and Baukunst will be one of the case-studies. We will visit that building and interview the architect in the research phase of the project.

Your individual design will focus on one of the Mobility Hubs in the masterplan of the Veilingterrein. You will make a detailed design where you will envision both the current use as well as the use of this structure twenty years from now.

Throughout the design process you will make extensive use of 3D modeling and visualization techniques. Workshops on real-time rendering and how to incorporate this workflow in your design-method are provided within this studio. The Digital Design Lab with high-end computers is at your disposal for this.

The development company in charge of repurposing the Veilingterrein is very interested in your ideas. You will present your vision and design to them in several stages of the design process, gaining valuable real-world input for your architectural design.

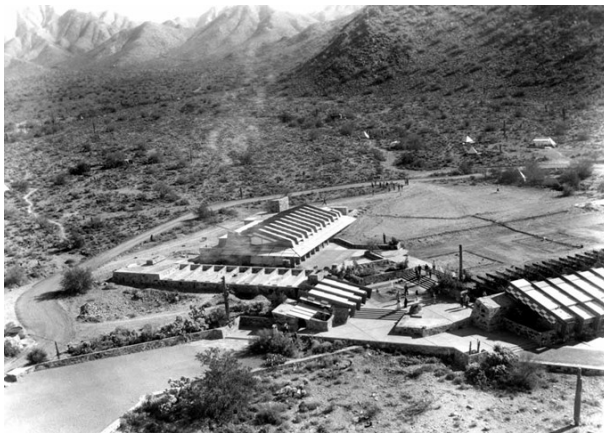
### **ir. Jan Schevers**

7QX2M0

semester B, quartile 3-4

10 students

10 ects





## ADE02

### The Future of Architecture Education

**Image 1:** [https://www.taliesinpreservation.org/wp-content/uploads/2019/06/3063\\_crop.jpg](https://www.taliesinpreservation.org/wp-content/uploads/2019/06/3063_crop.jpg)

**Image 2:** <https://guerrerophoto.com/wp-content/uploads/2015/04/05.AuRevoir.170a.jpg>

**Image 3:** <https://saltriverstories.org/files/original/3556cf3fdb542917b6135be4115908f.jpg>

Recent developments in both the design field (AI) as well as in the way architectural projects are being executed (off-site robotic fabrication) ask for a fundamental reappraisal of what architects should learn during their studies and in particular what new physical environment would better fit the needs of this new generation of architects which will be skilled in both high-tech techniques and critical thinking.

The ongoing shift in architectural education regards both design objectives and methodology, as well as practical technological skills. The architectural education has in fact gradually changed emphasis from original thinking (the architect as artist) to more and more copying and sampling, (the architect as production worker) sometimes even encouraging blatant stealing (the architect as smart villain).

Who is the architect of the future? What should his or her skills be? And what should the physical place ideally be that will provide the right conditions for an architectural student to explore, grow and blossom?

#### **History**

Once upon a time architecture was taught through apprenticeships. You learnt to become an architect by apprentice with a master such as Frank Lloyd Wright, and then went to Taliesin West in the Arizona Desert to experience his mastership. Times have changed, but for the better?

#### **Objective**

In this project we will question what should be the ideal environment for architecture to be studied and taught. We will design our own architecture school on an inner-city site in Amsterdam, where the environment is specifically adapted to the needs of the future young architect.

We will research several educative philosophies, like Perennialism, Essentialism, Progressivism, Existentialism, and Social Reconstructivism, and how those have been translated into school-systems such as Montessori, or Anthroposophy for instance. In their turn, architects have translated those ideas into a spatial and material organization that was to endorse the philosophy at hand.

The location will be the Navy Yard at the Kattenburgerstraat in Amsterdam, an inner-city site in the capital of the Netherlands, a site with cultural exposure, with a loose relation to the city center, strategically positioned, with ample space to integrate landscaping and water. Students will research the theme in groups, but will each individually design the school that will house approximately 1500 students and entail 18.000-20.000 sqm.

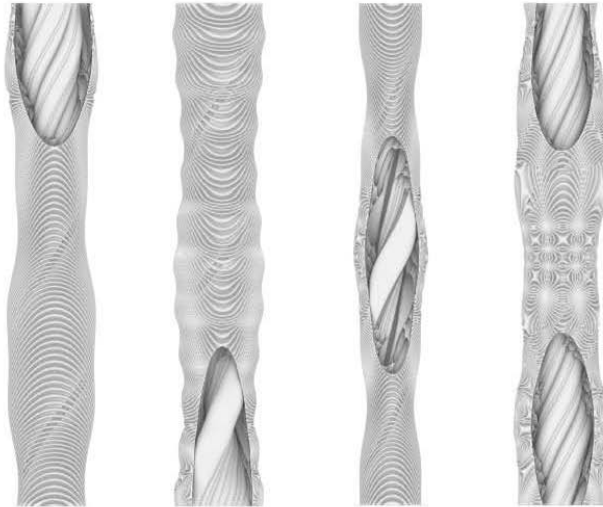
**ir. arch. Mark Hemel, ir. arch. Barbara Kuit**

7QX2M0

semester B, quartile 3-4

20 students

10 ects



## ADE03

### Computational Columns - Between Tectonism & Ornamentality

**Image 1:  
Computational  
Concrete Column,  
output of master  
project CCP led by  
Cristina Nan and  
Mattia Zucco.**

**Image 2:  
Computational  
Concrete Column,  
output of master  
project CCP led by  
Cristina Nan and  
Mattia Zucco.**

In today's context of advanced robotic fabrication and computational design, columns transcend their historical role as mere load-bearing elements. With advancements in 3D printing technology, we can substantially advance their expressive architectural potential while merging function with form, adding both structural integrity and a heightened aesthetic depth to designs. This studio explores the potential of 3D printing in creating innovative, tectonic columns that serve both constructive and expressive purposes, examining materials, fabrication techniques, and the conceptual design process based on a computational design logic. The goal is to investigate the use of 3D-printed columns in self-developed architectural design, focusing on how 3D printing technologies can redefine columns' constructive, functional and expressive roles. This studio seeks to understand the parameters and capabilities of additive manufacturing as a fabrication method for columns and to explore the aesthetic possibilities this technology offers for enhancing architectural spaces. Articulation of form is at the centre of our architectural investigation.

Whether through "organic" forms derived from natural patterns or complex geometries derived from mathematical algorithms, these columns can express movement, flow, and complexity, making them focal points within an architectural composition.

Beyond structural and aesthetic qualities, this studio will consider how 3D-printed columns can integrate diverse functional capabilities, including biointegration, fireproofing, acoustic modulation, and more. Biointegration, for example, encourages micro-ecosystems by integrating plant growth areas directly into the column design. These additional functional layers will push the boundaries of what columns can achieve, making them not only structural and expressive but also adaptable to the environmental and safety demands of contemporary architect. Throughout the studio you will be offered extensive Rhino+Grasshopper tutorials, will work with 3D clay printing and thermoplastics and investigate large-format fabrication.

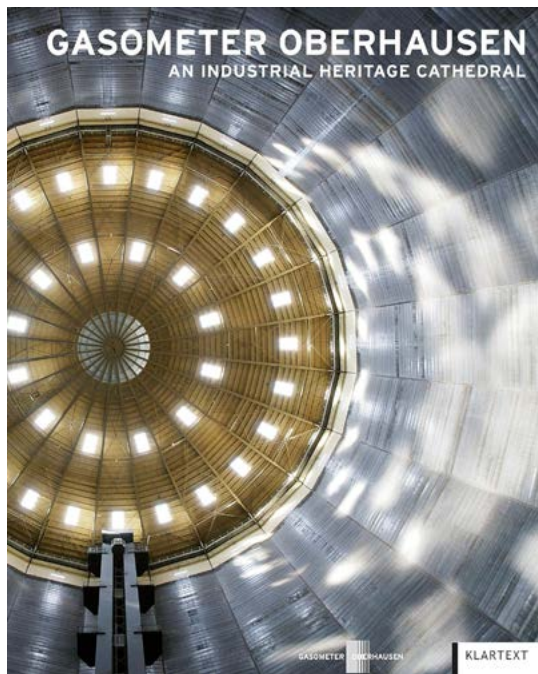
**dr.-ing. Cristina Nan**

7QX2M0

semester B, quartile 3-4

10 students

10 ects



## ADE04

### Folie Sacrale: Other functions

**Image 1: The pleasure of architecture. Follies by Bernard Tschumi for Parc La Villette in Paris, 1982. Collection Canadian Centre for Architecture, Montréal.**

Most architecture has a more or less utilitarian function (but good architecture always transcends a narrow strictly serving role!). There are also genres of architecture though, where practical utility is not even at the center stage to begin with:

The first one is the folly: an architectural work of art; an expression of spatial, material and formal play, with its own set of rules. Follies don't serve a practical purpose; they are free from utilitarian notions of function. Follies might have minor casual uses such as viewpoint or meeting point in public space, but nothing that resembles the design brief of e.g. housing, offices, museums. They are festive exercises in architectural playfulness and pleasure.

**Image 2: (Accidentally) Sacral Space. Repurposed Gasometer in Oberhausen. 1927, 1993.**

The other genre is that of the sacral. Traditionally a place for the gods or spiritual experiences. Here too, practical functions are subordinate to non-utilitarian functions such as providing the conditions for awe, for silence and contemplation, for light and enlightenment, for positive disintegration, for inner experience.

What can be found in these worlds? How do they work (on us)? How to create a folly? How to create the sacral? And what do these excursions to outward positions tell us about central stage functional design?

In this project we explore both genres subsequently (Q3 folly, Q4 the sacral), by philosophical and theoretical exploration, as well as by design experimentation and elaboration. The project involves reading and writing, design (method) research and development, architectural engineering and meticulous modelmaking.

### **ir. Hajo Schilperoort**

7QX2M0

semester B, quartile 3-4

10 students

10 ects



## AHT01

### In Holland there is a house

**Image 1:  
Object One  
(Space&Matter,  
2017).**

In April 1995, an exhibition with the playful title *In Holland Staat een Huis* (In Hollands there is a House) opened at the Netherlands Architecture Institute. The playfulness of its title (and its installation) did not obscure the seriousness of the issue being presented and discussed: the chronic shortage of (affordable) housing in the Netherlands. Spread across the floor, the 800.000 small, individual houses, forming 'an almost endless sea of houses so vast that the individual layout of the parts was completely submerged in the whole,' represented the number of houses that the government had determined that it was necessary to build within 10 years to resolve the (then) housing crisis. With such a clear visualization of the problem at hand, this exhibition provided a materiality to abstract numbers that facilitated discussion making the herculean task of building 800,000 house in the following decade visible for all to see. Since then, the problem has only gotten worse, with the current determination being that 1.000.000 new homes must be built by 2030, two-thirds of which are to be affordable housing.

This design studio will develop comprehensive research into the various architectural responses to the housing crisis, exploring innovative proposals that aim to alleviate the shortage of affordable housing. By examining a range of strategies—from modular housing solutions and adaptive reuse of existing structures to the integration of sustainable building practices and community-oriented designs—the studio seeks to understand how architecture can contribute to meaningful change.

The format of this studio is just as important as its content, since you will experiment with an alternative discursive territory for architecture: architecture exhibitions. Specifically, this research studio will work towards an exhibition that students will organize from start to finish. Thus, this exhibition will be curated, organized, produced, and built by students in order to be installed and presented at Plaza Vertigo at the end of the semester. Since students will develop curatorial concepts, translate them into an installation, and finally build them, the exhibition itself (on architectural responses to the housing crisis) will form the basic design task for this studio. This exhibition, however, is to challenge the conventional presentation of architectural ideas and instead inquire how these can be presented as spatial experience(s).

**dr. Sergio M. Figueiredo**

7QX2M0

semester B, quartile 3-4

10 students

10 ects







## RA01

### Half of a Housing Block

**Image 1&2: Sources deliberately not reported – we want to keep the building a secret.**

This master project is part of a series of redevelopment projects in which the transformation of 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 original building, 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.

*NB: this project can not be doubled due to on site work, especially in quartile 4.*

**ir. Anne Marie Peters**

7QX2M0

semester B, quartile 3-4

12 students

10 ects



## RA02

### Tectonic Exercises

**Image 1:  
Bagsvaerd Church,  
Copenhagen,  
by Jørn Utzon -  
picture Wouter  
Hilhorst.**

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**

7QX2M0

semester B, quartile 3-4

no maximum students

10 ects



## RA03 / TA

### ETT – Easy to Transform

**Image 1:**  
**Architecture School**  
**Nantes, archs.**  
**Lacaton & Vassal.**  
**Image from : [www.architecturedecollection.fr](http://www.architecturedecollection.fr).**

**Source 1:**  
**R. Roorda and**  
**B. Kegge, Vital**  
**Architecture,**  
**Nai010 Rotterdam,**  
**p. 20.**

The project “Easy to transform” focuses on how to build for future transformation(s). Creating buildings that can adapt to changes over time will be our main goal. With the given design brief you will need to look beyond the initial program to develop an intelligent structure open for transformation.

*“Architecture (...) can in principle be understood as a contramal of its design requirements: a snapshot of guidelines, thoughts and dreams for human lives and how to accommodate these. These design requirements are constantly evolving in the wake of changes in the views of people and society. These changes start at the moment architects begin to design a building; and this programmatic change never stops, not even after completion. This happens because life is ever changing. Unfortunately, a building usually only complies with the original design requirements. Much architecture comes with an element of friction.”<sup>1</sup>*

A longer building lifespan means less demolitions and waste, more efficient material use and reuse of valuable resources. Making sure new buildings can easily be transformed in the future could therefore be considered one of our best strategies towards a more sustainable built environment.

What can we learn from ETT examples? How can we create new intelligent ETT buildings that are perfectly adaptable to time but also fit in their context?

Goal: design a mixed use ETT building (2024) and show how this building can be transformed in two transformation phases, (2035 and 2045).

## **Hélène Aarts, Femke Stout MSc**

7QX2M0

semester B, quartile 3-4

20 students

10 ects



## TA01

### The Factory

In this project we will explore the architectural design of the factory. We will depart from the analysis of historically and architecturally important factories, will dive into the historical development of the production of goods, will focus on establishing a specified production line and will ultimately head for the design of a factory that produces a chosen good, on a yet to be decided site.

Architecturally, a factory can be seen as the outcome of economic siting and 'enveloping' of a production line of goods, with a well-considered connection to resources, to energy, to infrastructure, to labour, to consumers. One might think: factory architecture seems to be a sort of industrial design, but then a quite expanded version of it.

But to add to this: a production unit only works when it is prepared for the future.

It may need an architecture that deals with issues of technology, with good labour conditions, with issues of sustainability and with a collective understanding of how goods are being produced.

This understanding has been continually shrinking from the moment industrial production started to replace craft. The shrinking was caused on the one hand by expelling goods production from city life, as a rational (CIAM-)reply to bad living conditions. On the other hand, today's automation, digitization and robotization have made industrial production grow increasingly complex, scaled-up and even more detached from human life.

In the master project, out of the analysis of reference factories and the exploration of historical developments in producing goods a personal approach is derived, that enables to design a contemporary site layout and architectural shell around a specified production line: a factory that is made for the goods of the future. The architectural shell will be further elaborated technically, focusing on issues of daylight, circulation, structure and material.

### **ir. Ruurd Roorda**

7QX2M0

semester B, quartile 3-4

10 students

10 ects



at Life and Climate Resilience embedded into Design - Alnus Ponds - Urban Housing Master Studio - The Courtyard



## UUA01

### Urban Housing - Living in the City

**Image 1: social life and climate resilience embedded into design - Alesia Prenci - Urban Housing Master Studio - The Courtyard.**

Housing serves as the fundamental and essential unit of a city. Providing adequate housing poses the greatest challenge for cities, as they strive to create high-quality urban environments that go beyond mere accumulation of dwelling units. The quality of living spaces intersects with the quality of public spaces, requiring designs which go beyond functional requirements and embrace a sense of generosity that enables freedom of occupation.

This studio delves into the design of residential environments and urban neighbourhoods. Students will explore the interplay between the following aspects:

- Densification strategies and urban structure
- Residential typologies and open-space design
- Functionality and flexibility of use
- The public, private, and collective domains
- The floor plan and daily life

The studio encompasses three phases:

#### **I. Research, Analysis and Urban Strategy**

Students begin by conducting research and developing an ongoing database of housing projects. Through an analysis and comparison of various case studies, students establish the foundational building blocks and design principles for their own projects.

#### **II. Design**

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

#### **III. Presentation**

This phase allows students a focused period to produce key drawings and visualizations, honing their detailed design and presentation techniques.

## **MA B.arch. Daryl Mulvihill**

7QX2M0

semester B, quartile 3-4

10 students

10 ects

**7QX5M0, quartile 3**  
**Seminars Architecture and Urbanism**

**7QX5M0, quartile 4**  
**Seminars Architecture and Urbanism**

**7QX2M0, quartile 3-4**  
**Masterprojects Architecture**

**7QW2M0, quartile 3-4**  
**Masterprojects Urbanism**

**7XW1M0, quartile 3-4**  
**Combined Masterproject**

**7X45M0, quartile 3**  
**Graduation Studios Architecture**

**7W45M0, quartile 3-4**  
**Graduation Studios Urbanism**

**7X60M0, quartile 3**  
**Graduation Studios Architecture & Urban Design**

**7QQ5M0**  
**International Academic Workshops**

**7QW2M0, quartile 3-4**  
**Masterprojects Urbanism**

**Introduction**  
**Masterprojects Urbanism**

**UUA02 Brabant Waterland**

Diana Carrillo Silva MSc, ir. Patrick Limpens  
d.carrillo.silva@tue.nl

**UUA03 A Home for All**

ir. Daniek Reijnders, ir. Chris Steenhuis  
d.a.h.reijnders@tue.nl



## **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 is one chair offering masterprojects urbanism:**

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

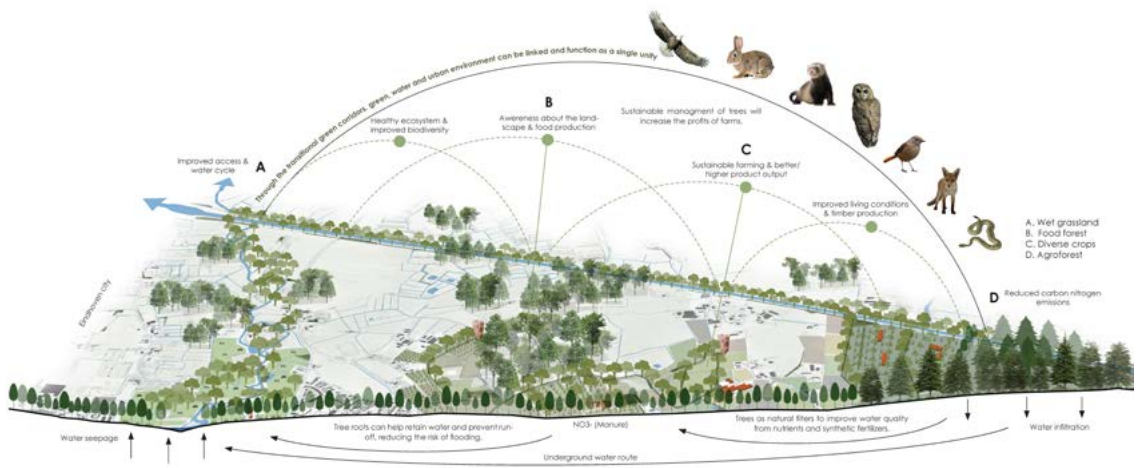
The short introductory description of the studios given here will be supplemented with more elaborate descriptions and exact planning schedules closer to their actual starting date. It is possible that some projects alter the theme or emphasis slightly as a result of changes in staff.

#### **Enrolling in a masterproject:**

1. You need to enroll 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. 2025-2026.
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!



## UUA02

### Brabant Waterland

**Image 1: Section of “Ecolink”:  
Cultivating connectivity in the countryside by Alexia Chatzistamatiou.**

This studio will focus on the spatial and programmatic developments in some smaller or midsize municipalities around the ‘Naad van Brabant’ near Waalwijk, Drunen, Oosterhout and others. In this area, water plays a special role because the groundwater is influenced by seepage from the higher grounds of Brabant. The new policy named ‘Water and soil as a principle for all new developments’ will greatly impact this region. The vision for the ‘Naad van Brabant’ is to adapt the landscape to climate change. By making the landscape work as a sponge, it both protects the land against flooding and makes it robust in times of drought. By doing this, the groundwater level will rise, affecting agriculture, urbanization, heritage and nature. The exact effects are yet unknown.

The province, waterboard and different municipalities are aiming to study these effects across disciplines and juridical boundaries, to find synergies and deal with these challenges holistically. Post-war planning in the Netherlands has long been famous for its integral planning, based on the twin aims of compact urbanization and the modernization and scaling-up of agriculture. The so-called synergetic interests (in Dutch: *‘meekoppelende belangen’*) of both sectors have been instrumental in the success of post-war planning. This is not the case anymore. The interests of different sectors such as agriculture, nature, water, and urban development often are juxtaposed to each other. In this studio, we work together with the province and water board. We will develop different scenarios for the effects of the rising groundwater level. The starting point of this collaboration is that the regional water structure could be a productive way to connect different challenges. The aim of this studio is to provide the government with new insights into the effects of a new water system on spatial developments.

**Diana Carrillo Silva MSc, ir. Patrick Limpens**

7QW2M0

semester B, quartile 3-4

10 students

10 ects





## UUA03

### A Home for All

**Image 1:  
Transformation  
Eksterhof,  
The Hague  
(Masterstudio A  
Home for Youth  
2022) - Thérèse  
van Rijckevoorsel.**

Housing is a right. The shortage of affordable housing is a major problem in the Netherlands. While the importance of a stable housing situation is increasingly recognized as a precondition for personal development, the national statistics agency (CBS) estimates that in 2022 approximately 5.100 young people (aged 18 to 27) in the Netherlands were homeless. These numbers are received with suspicion by professionals, and it is estimated that the actual number is much higher. Hidden homelessness is especially common among young people, though it affects a growing number of individuals, single parents and older adults. Also among labour migrants and refugees, situations of homelessness, or unfit housing conditions are rising.

In 2022 the national government developed a National Action Plan with the goal to 'significantly and structurally reduce homelessness' in the Netherlands by 2030 (Ministry of Health, Welfare and Sport, 2022). Hailed as a step in the right direction by civil society, the Action Plan highlights the need for a paradigm shift to address homelessness, which should focus on prevention and Housing First.

Nevertheless, there remain significant challenges to resolve homelessness. These include a largely unsuitable housing stock - housing corporations often own a high number of family houses that are inhabited by single-person households - combined with little to no (market) incentive to build small and affordable housing for young people. Disparities between housing allowances and social income f, and the actual cost of living further complicate housing trajectories. Another challenge is regulations that forestall the ability of people to access housing allowances – such as the 'own front door regulation' stipulating that housing allowance can only be applied for when living independently. The unnecessary combination of emergency housing regulations with care provision often results in people remaining homeless because they do not qualify for emergency housing if they are otherwise healthy.

In this studio we will explore the transformation possibilities and development of new living concepts that answer the needs of vulnerable groups in society. Students will work in participatory settings with societal partners to formulate a vision, design brief, and detailed design at neighbourhood as well as building scale for specific locations in the city of Eindhoven and/or surroundings.

This project is part of the Jongeren WoonLab (Youth Housing Lab) of TU/e Urban Labs. In the coming three years, the studio will be part of a larger collaborative research project funded by the Dutch governments through the call 'Home in diverse forms of housing'. The Jongeren WoonLab collaborates with NGOs that work with (homeless) youth, housing associations and municipalities. These partners will be part of the studio at various moments.

**ir. Daniek Reijnders, ir. Chris Steenhuis**

7QW2M0

semester B, quartile 3-4

10 students

10 ects

**7QX5M0, quartile 3**  
**Seminars Architecture and Urbanism**

**7QX5M0, quartile 4**  
**Seminars Architecture and Urbanism**

**7QX2M0, quartile 3-4**  
**Masterprojects Architecture**

**7QW2M0, quartile 3-4**  
**Masterprojects Urbanism**

**7XW1M0, quartile 3-4**  
**Combi Masterproject**

**7X45M0, quartile 3**  
**Graduation Studios Architecture**

**7W45M0, quartile 3-4**  
**Graduation Studios Urbanism**

**7X60M0, quartile 3**  
**Graduation Studios Architecture & Urban Design**

**7QQ5M0**  
**International Academic Workshops**

**7XW1M0, quartile 3-4**  
**Combi Masterproject**

**Introduction**  
**Combi Masterproject**

**RA03 ANTWERPEN – Kievit Fase 1**  
**/ UUA** dipl. ing. Haike Apelt, MA B.Arch. Daryl Mulvihill  
h.apelt@tue.nl



## **Introduction**

### **Combined Masterproject**

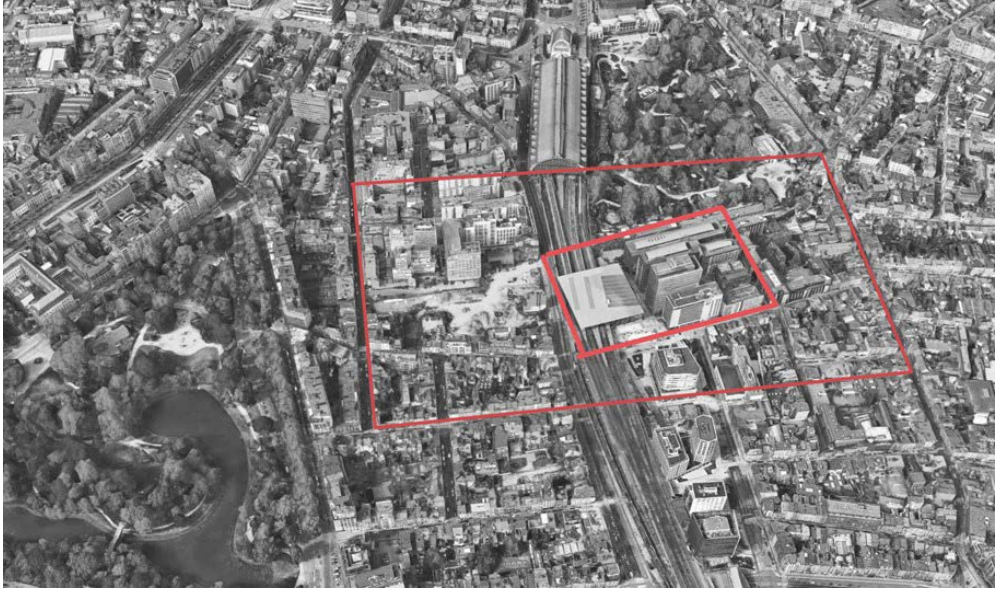
There is a special subject package for students who want to register both as an architect and as an urban designer in the Dutch register of architects, the combined masterproject is part of this package.

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 (7QX1MO or 7QX2MO) and a regular Urbanism masterproject (7QW1MO or 7QW2MO) 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 Rational Architecture (dipl.-ing. Haïke Apelt) and 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/register-tracks/aude-for-architects-and-urbanists-register-combined>



## RA03/UUA

### ANTWERPEN – Kievit Fase 1

**Image 1:  
Antwerpen, study  
area and project  
area “Kievit  
Fase 1”.**

The combined Masterproject Architecture and Urbanism 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!

**Image 2: Volume  
model study VUB.**

The studio is devoted to the typomorphological analysis of the city of Antwerp, focusing on a specific area presently in development (both in building as in plan making) around the south entrance of the Antwerp Central Station (part of the so-called “Stadsbouwmeesterproject”). While the study area includes a wider context and several planning- and building activities, the project area is focused on the so-called “Kievit Fase 1”, the place of the to-be-demolished office buildings east of the southern station, including the building of the station itself.

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.

**dipl. ing. Haike Apelt,  
MA B.Arch. Daryl Mulvihill**

7XW1M0

semester B, quartile 3-4

10 students

10 ects

**7QX5M0, quartile 3**  
**Seminars Architecture and Urbanism**

**7QX5M0, quartile 4**  
**Seminars Architecture and Urbanism**

**7QX1M0, quartile 3-4**  
**Masterprojects Architecture**

**7QW1M0, quartile 3-4**  
**Masterprojects Urbanism**

**7XW1M0, quartile 3-4**  
**Combined Masterproject**

**7X45M0, quartile 3**  
**Graduation Studios Architecture**

**7W45M0, quartile 3-4**  
**Graduation Studios Urbanism**

**7X60M0, quartile 3**  
**Graduation Studios Architecture & Urban Design**

**7QQ5M0**  
**International Academic Workshops**



**7X45M0, quartile 3**  
**Graduation Studios Architecture**

**Introduction**  
**Graduation Studios Architecture**

**ADE01/TA/AHT The Gender of Architecture**

dr. Jacob Voorthuis, ir. arch. Barbara Kuit, ir. Ruurd Roorda  
j.c.t.voorthuis@tue.nl, b.c.i.m.kuit@tue.nl, r.p.j.roorda@tue.nl

**AHT01 Sufficiency Consultancy**

prof. dr. Daniel A. Barber  
d.a.barber@tue.nl

**RA01 Intermediate Architecture and Dwelling Culture:  
A Tale of Two Cities**

drs. ir. Like Bijlsma, ir. Jochem Groenland, ir. Wouter Hilhorst  
e.bijlsma@tue.nl, j.groenland@tue.nl, w.hilhorst@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 four 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) - prof. ir. Juliette Bekkering
- Architectural History and Theory (AHT) - dr. Jacob Voorthuis and dr. Sergio M. Figueiredo
- Rational Architecture (RA) - Anne Marie Peters
- Urbanism and Urban Architecture (UUA) - 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. 2025-2026, quartile 4.
2. You have to subscribe with a first and second choice. This is possible until Sunday January 5, 2025.
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 January 6, 2025. 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/programs/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!



## ADE01/TA/AHT

### The Gender of Architecture

**Image 1: American Embassy, 1959 The Hague NL arch. Marcel Breuer**  
<https://019-ghent.org/servinglibrary/alphabetum-west-the-hague/>

Recently, job adverts often invite applicants to identify themselves by defining their gender through selecting f/m/x. No longer is gender defined by birth only, and no longer is it needed, nor relevant to be one or the other – it makes our communities richer and more diverse.

Some aspects associated with gender come to the fore, when related to architecture. The male: objectivation, engagement, the sky, preference of objects that stand out, combat, strength, contrast, freedom, the convex, the exterior. The female: subjectivation, nurture, the earth, preference of cohesion between the objects, harmony, sensitivity, inclusion, the concave, the interior. Then, what is the role of non-binary when it comes to architecture?

The idea of this project is that architecture, being the only art that by definition leads to a related exterior and interior, and therefore serves both object and subject, is best made by acknowledging its fundamental versatility in relation to gender. Making good architecture then starts with its maker dealing with this versatility.

Therefore the project will move from non-binary, female to male and back. The order in which this is done is to be decided by the students.

The project will start with discovering the theme, by doing intra- or extradisciplinary research, in order to define the boundaries of the theme and its possible meaning in architecture. This research will lead to essays on the topic.

Secondly, equipped with knowledge, and focused by a definition of gender, every student will analyze one striking building in relation to the theme of the assignment.

As a group an urban context for a new embassy district in the Benelux is chosen. Every student will then make an architectural design for an embassy or consulate in which a non-binary, a male and a female approach may be combined, or -depending on the represented country- a politically correct (or corrective) stance is chosen.

**dr. Jacob Voorthuis, ir. arch. Barbara Kuit,  
ir. Ruurd Roorda**

7X45M0

semester B, start quartile 3

10 students

45 ects



## AHT01

### Sufficiency Consultancy

**Image 1: Shin Shin Architects, a “Catalog of Unconditioned Spaces” to describe their Fifty Fifty Fourplex entry to the Low-Rise Los Angeles Housing Competition, February 2021. <https://shinshinarch.com/Fifty-Fifty>.**

What comes after sustainability? This studio considers how increasing climate instability, and the inequities it intensifies, are transforming the means and ends of design practice. We frame our investigations in relationship to vibrant economic, urban, and material science discussions around sufficiency, to consider how architecture not only interacts with technological refinement of complex energy systems, but also allows for behavioral and cultural changes focused on reducing energy demand.

Again, what comes after sustainability? Architecture, as part of the broader UN sustainability framework, has heretofore focused on efficiency measures to both mitigate carbon emissions and to integrate environmental concerns into the design process. Solar panels, insulated glass facades, and carefully engineered mechanical systems allow designers and collaborators to provide a recognizable social service (a building), but one that operates more efficiently.

Efficiency measures have been inadequate, for three reasons: first, the embodied energy costs of efficiency technologies compromise carbon savings; second, sustainability-as-efficiency has, much like net-zero parameters more broadly, operated as a permission structure allowing the building sector to continue with business-as-usual design and construction practices; third, while we have been building more efficiently, we have also simply been building more. Again the challenge of demand management.

So, what comes after efficiency? The different projects of the studio will reflect a focus on sufficiency measures. As IPCC author Yamina Saheb defines it, “sufficiency is a set of policy measures and daily practices which avoid the demand for energy, materials, land, water, and other natural resources, while delivering wellbeing for all within planetary boundaries.” Avoid the demand is the challenge, finding ways to engage the built environment that, rather than using energy more efficiently, uses less in a way that still feels comfortable, healthy, and sustainable as a way of life.

The Sufficiency Consultancy speculates at the scale of the discipline, both in drawing on historical and adjacent formations for practice, and in considering the changing role of architectural services amidst a deepening polycrisis. In addition to specific design and material challenges of a given site, students will be expected to frame an expanded design practice appropriate to these new imperatives.

**prof. dr. Daniel A. Barber**

7X45M0

semester B, start quartile 3

10 students

45 ects







## RA01

### Intermediate Architecture and Dwelling Culture: A Tale of Two Cities

**Image 1: Palazzo  
San Felice, Napels.  
Foto: graduation  
students 2022.**

**Image 2:  
'Spaarndammer-  
hart', Amsterdam.  
Foto: Dennis de  
Smet.**

**Source 1: The  
Intermediate Size  
- A Handbook  
For Collective  
Dwellings, SUN  
2006.**

“The social practice of a society reveals itself when one deciphers its space” says Henri Lefebvre in *The Production of Space (La production de l'espace, 1974)*. How one dwells in a city can then, accordingly, be found by looking at how space is organised and used, and then perhaps best at the point where the private space of the home meets the public space of the city: in its most concentrated manifestation in the architecture of the intermediate typology. These architectural ensembles *mediate* between the urban culture and the private sphere.

To read and understand these typologies in their context, we will study and visit two cities that are spatially, culturally and socially related but different – with particular attention for:

- dwelling culture and how this can be read in floorplans, sections, facades, ...
- the specific local ‘architectural language’, considering the practical, aesthetic, cultural and political aspects of architectural detailing

In a layered research-by-design process we will gradually bring this knowledge to architectural design workshops, city travels, and by exploration of different techniques such as collage, modelmaking, photography, and film. The core of the studio evolves around the development of critical architectural **models and typologies for urban transformation** which can drive both the social and functional transformation of the city. The search for long-term solutions and a gradual evolution of architectural identity and architectural language will lead to a sustainable transformation interventions.

The result of the studio is an individual design proposal for the transformation of a specific urban neighborhood, or building. It is a design for an architectural ensemble that builds on local architectures and uses local cultures, materials and skills. Such ensembles - for a diversity of inhabitants - bring in specific urban conditions and housing qualities: semi-public or collective rooms, spheres or zones – a new inner world of the city consisting of intimate courtyards, alleys, patios, enclosed gardens, ....

This studio is part of a series of seminars and graduation studios investigating the ‘Tussenmaat’<sup>1</sup> from a spatial, socio-cultural and aesthetic perspective. The research and designs will form part of a body of work that will form the basis of a subsequent publication.

**Drs. ir. Like Bijlsma, ir. Jochem Groenland,  
ir. Wouter Hilhorst**

7X45M0

semester B, quartile 3-4

10 students

45 ects

**7QX5M0, quartile 3**  
**Seminars Architecture and Urbanism**

**7QX5M0, quartile 4**  
**Seminars Architecture and Urbanism**

**7QX1M0, quartile 3-4**  
**Masterprojects Architecture**

**7QW1M0, quartile 3-4**  
**Masterprojects Urbanism**

**7XW1M0, quartile 3-4**  
**Combined Masterproject**

**7X45M0, quartile 3**  
**Graduation Studios Architecture**

**7W45M0, quartile 3-4**  
**Graduation Studios Urbanism**

**7X60M0, quartile 3**  
**Graduation Studios Architecture & Urban Design**

**7QQ5M0**  
**International Academic Workshops**

**7W45M0, quartile 3-4**  
**Graduation Studios Urbanism**

**Introduction**  
**Graduation Studios Urbanism**

**UUA01 Density and Other Matters**  
dr.ir. Dena Kasraian, Aroosha Zahid MSc  
d.kasraian@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.** They often 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:

- Urbanism and Urban Architecture (UUA) - 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 3-4:

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 B. 2025-2026, quartile 1.
2. You have to subscribe with a first and second choice. This is possible until Sunday January 5, 2025.
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 January 6, 2025. First subscribe in Osiris, after that upload your motivation letter in Canvas. Use the correct course code (7W45M0).

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/programs/graduate-school/masters-programs/architecture-building-and-planning/curriculum/graduation-project>

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Looking forward to meeting you in our graduation studios!



## UUA01

### Density and Other Matters

**Image 1:**  
**Eindhoven skyline,**  
**BlowUp Media.**

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 raises all kinds of issues and questions. What does densification mean for the quality of life? What are its consequences 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 Eindhoven city region. 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 develop a conceptual model to structure how their variables of interest and interventions are related, 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 potential intervention areas in Eindhoven region. 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.

**dr.ir. Dena Kasraian, Aroosha Zahid MSc**

7W45M0

semester B, quartile 3-4

10 students

45 ects

**7QX5M0, quartile 3**  
**Seminars Architecture and Urbanism**

**7QX5M0, quartile 4**  
**Seminars Architecture and Urbanism**

**7QX1M0, quartile 3-4**  
**Masterprojects Architecture**

**7QW1M0, quartile 3-4**  
**Masterprojects Urbanism**

**7XW1M0, quartile 3-4**  
**Combined Masterproject**

**7X45M0, quartile 3**  
**Graduation Studios Architecture**

**7W45M0, quartile 3-4**  
**Graduation Studios Urbanism**

**7X60M0, quartile 3**  
**Graduation Studios Architecture & Urban Design**

**7QQ5M0**  
**International Academic Workshops**



**7X60M0, quartile 3**

**Graduation Studios Architecture & Urban Design**

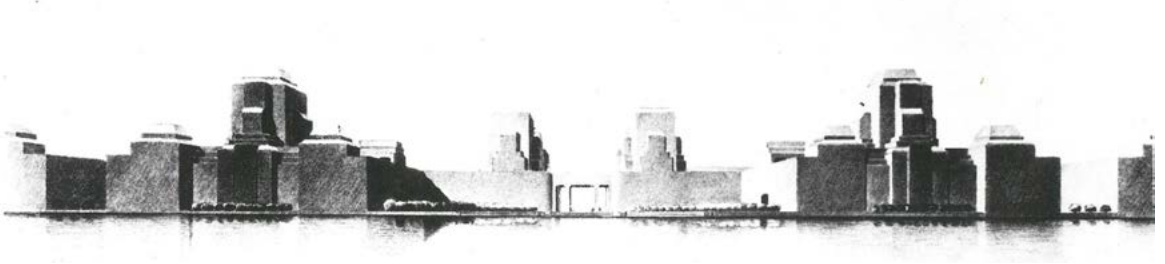
**Introduction**

**Graduation Studios Architecture & Urban Design**

**RA02 Unbuilt ANTWERPEN**

**/ UUA** dipl. ing. Haike Apelt, MA B.Arch. Daryl Mulvihill

[h.apelt@tue.nl](mailto:h.apelt@tue.nl)



## RA02

### Unbuilt ANTWERPEN

**Image 1: no source.**

**Image 2: ontwerp  
Poort van  
Vlaanderen, Van  
de Velde voor  
Linkeroever  
(1926).**

The combined Graduation studio Architecture and Urbanism 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) and a combined Masterproject in Architecture and Urbanism (7XW1M0) may apply for the combined Graduation studio.

The studio is devoted to the typomorphological analysis of the city of Antwerp, focusing on the genesis and transformation of the city over time, the multiple reasons of it's contemporary condition.

The studio aims at developing an understanding of the critical relationship between the urban condition and the architectural project. In the first semester, the students will study the morphological genesis and transformation of the city and related building types. The typo-morphological research will be combined with a literature study in order to explain the interrelationship between societal, political and economic changes and the (trans)formation of the city. We will, in this research, focus on the built, but also -and in particular- on the unbuilt, meaning the imagined, planned, and unfinished urban plans that each stand for a particular idea (and perhaps also ideal) of the city. This collective effort will result in a so called 'atlas', which consists of essays and analytical drawings and which will form the basis for the individual research and design projects in the second semester.

**dipl. ing. Haike Apelt,  
MA B.Arch. Daryl Mulvihill**

7X45M0

semester B, quartile 3-4

no maximum

60 ects

**7QX5M0, quartile 3**  
**Seminars Architecture and Urbanism**

**7QX5M0, quartile 4**  
**Seminars Architecture and Urbanism**

**7QX1M0, quartile 3-4**  
**Masterprojects Architecture**

**7QW1M0, quartile 3-4**  
**Masterprojects Urbanism**

**7XW1M0, quartile 3-4**  
**Combined Masterproject**

**7X45M0, quartile 3**  
**Graduation Studios Architecture**

**7W45M0, quartile 3-4**  
**Graduation Studios Urbanism**

**7X60M0, quartile 3**  
**Graduation Studios Architecture & Urban Design**

**7QQ5M0**  
**International Academic Workshops**

**7QQ5M0, quartile 3**  
**International Academic Workshops**

**Introduction**  
**International Academic Workshops**

**RA01 International Academic Workshop: In Front of the  
Central Station: past – present – future**

dipl. ing. Haike Apelt, Msc. Rik de Bondt,  
ir. Anne Marie Peters

[h.apelt@tue.nl](mailto:h.apelt@tue.nl), [r.l.d.bondt@tue.nl](mailto:r.l.d.bondt@tue.nl), [a.peters@tue.nl](mailto:a.peters@tue.nl)



## International Academic Workshop Dortmund 2024

### In Front of the Central Station: past – present – future

**Image 1: <https://www.dortmund.de/newsroom/nachrichten/einrelikt-des-alten-hauptbahnhofs-in-der-innenstadt-west-ist-denkmal-des-monats-juli-2023.html>.**

The chair of Rational Architecture is participating in the *13th International Spring Academy* which is organized by the TU Dortmund. Participating will be teachers and students from the universities from Dortmund, Naples, Gothenburg, Ghent and Eindhoven. This year's subject is "In Front of the Central Station: past, present, future" with the station forecourt in Dortmund as subject of the design task.

*Ever since the railway has existed, station forecourts have defined the transition from the "transportation structure of the train station" to the urban body. In this sense the square provides a lasting first impression of the city for the arriving traveller, but also the last impression for the departing traveler. The station forecourt thus takes on the function of a gateway to the city. It is an intermediary between the dynamic movements of a traffic hub and the grown, rather static city with its buildings, streets, alleys and other squares. Therefore it is the visiting card of a city and should fit seamlessly into the network of other city squares. (excerpt from the task description)*

The Spring Academy will involve participation in an international design workshop in Dortmund for 10 days, 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. It is of course an excellent choice for students following the combined register track.

**dipl. ing. Haike Apelt, Msc. Rik de Bondt,  
ir. Anne Marie Peters**

7QQ5M0

semester B, quartile 3

10 students

5 ects

## Regulations Graduation Studios

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There is one chair offering Graduation Studios in Urbanism. The contact person for the chair is as follows:

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

The short introductory description of the graduation 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.

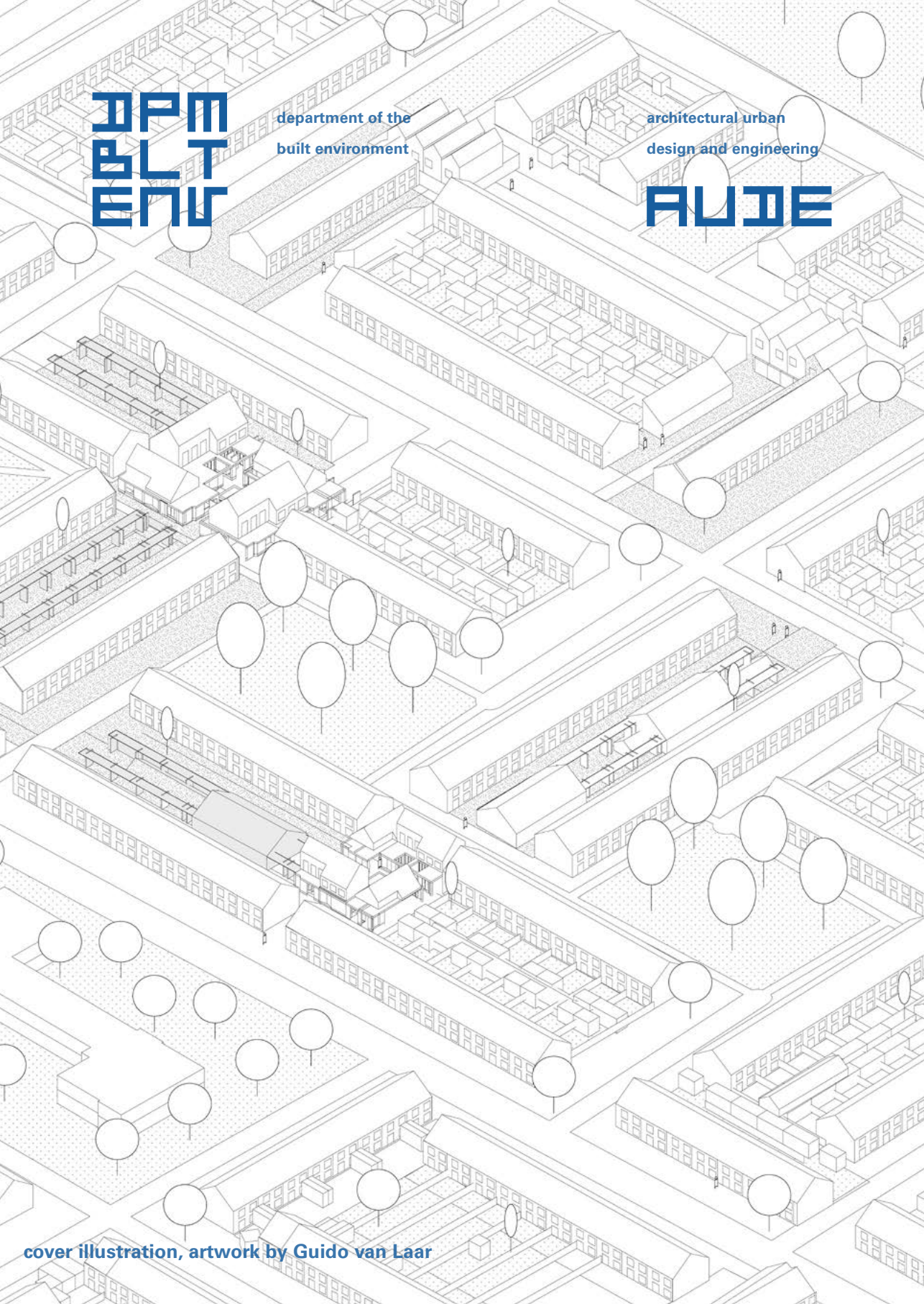
Enrolling in a graduation studio – starting in quartile 2:



1. Students eligible for entering the graduation phase need to enroll in Osiris before the closing of the registration term (**August 24, 2025**). If you register too late the first possibility to start with your graduation project is Sem B 2025-2026, quartile 3.
2. You have to subscribe with a first and second choice. This is possible until Sunday **August 24, 2025**.
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.
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Looking forward to meeting you in our graduation studios!



**DPM  
BLT  
ENC**

department of the  
built environment

architectural urban  
design and engineering

**AUDE**

cover illustration, artwork by Guido van Laar