

seminars, master- and graduation
projects architecture + urbanism
semester A, 2023-2024

eindhoven school of architecture,
urban design and engineering

23
24

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Seminars Architecture and Urbanism

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Seminars Architecture and Urbanism

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Seminars Architecture and Urbanism

Introduction

Seminars Architecture and Urbanism

ADEo1 The Formidable Facade

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AHTo1 The Biennale as a Laboratory for Architecture?

dr. Sergio Figueiredo
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RAo1 Brute Architecture and Careful Craftmanship

ir. Renato Kindt
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UUAo1 Architecture and the Lived City

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UUAo2 New Living Concepts: Assessing their effectiveness

dr. Oana Druta
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Introduction

Seminars Architecture and Urbanism

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There are four chairs offering seminars:

- Architectural History and Theory (AHT) led by associate professor dr. Jacob Voorthuis
- Architectural Design and Engineering (ADE) led by prof. ir. Juliette Bekkering
- Rational Architecture (RA) led by prof. dipl.-Ing. Christian Rapp
- 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 (August 27, 2023). If you register too late the first possibility to start with your seminar is Sem A 2023-2024, quartile 2.
- 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!



The Formidable Facade

Form and meaning

Image 1

Basilica Palladiana,
Andrea Palladio
<https://www.pinterest.com/pin/14003448825602869/>

Image 2

National Museum Qatar,
Jean Nouvel http://www.metalocus.es/sites/default/files/styles/mopis_news_carouse_item_desktop/public/metalocus_headquarter_bbva_05.jpg?itok=2O13fzvc

Image 3

Basilica Palladiana,
Andrea Palladio
<https://www.teggelaar.com/vene/vicenza/imagenes/vic224.jpg>

Image 4

Headquarter BBVA,
Herzog de Meuron
<https://mymodernmet.com/national-museum-qatar-jean-nouvel/>

This seminar will be about careful design.

Public space is a something to be cherished. As architect, to consider the design of a building as stand-alone object– the volumetric design, the interiors – should not be the only goal; equally important is the influence the design has on its context, the space the building leaves on the outside; this ‘left-over’ space consist an equally important part of the design. The influence of the façade on the public space surrounding a building – the void – will be a point of study in this seminar.

We will investigate the meaning of the façade, in history and through design– meticulously and with care. What is the meaning of the façade? Which factors determine its potential, the impact of context on the façade, its geographic location, its political climate, its position in a historical timeline? Is the essence of the facade determined through regulations – or in fragmentation or choice of material? How do structural design decisions influence design possibilities? How do we see the street as a continuous façade? We will try to unravel the concept and logics of façade design. We will study the façade through research and design, in material selection and in architectural detail.

In this seminar we will study the façade of the city in relation to the voids and public space surrounding it and research & design the fragility of the façade with precision, its beautiful detail, its relation to the interior spaces that lay behind, the human scale, its subtle play of texture, careful designed niches and extrusions – as an enrichment of our cities.

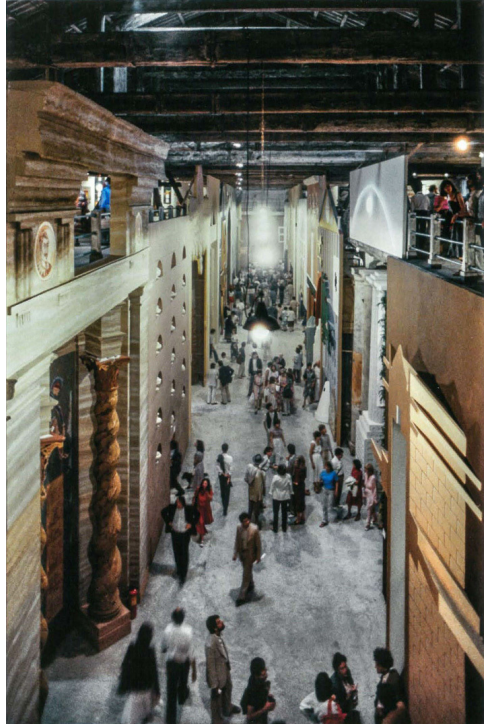
We will investigate the logical form and structure of the façade – and so come to a design ourselves. The medium we will use is drawing, physical modeling, writing, axonometric drawing, and 3D modeling.

Our aim is two fold – to investigate, study and compile our research into a beautiful book – a reference and design handbook for all to use in your further studies.

In addition, together we will build our own skyline, consisting of several facades – one part of which is to be designed by each individual student – and we will combine this into one fantastic, huge, carefully detailed and beautiful model. This composition-model will be included into our reference book, in drawings, photos and text.

ir. arch. Barbara Kuit

7QX5Mo
semester A, quartile 1
5 ects
10 students



The Biennale as a Laboratory for Architecture?

Image 1
 'Strada Novissima, The
 Presence of the Past,'
 installation view, Venice
 Architecture Biennale,
 1980 (Antonio Martinelli)

Ever since its inception in 1980 with the famed 'Strada Novissima,' the Venice Architecture Biennale has continuously been a space for reflecting on the state of the architecture. Every two years, the Biennale Giardini become a space for experimentation and investigation, as multiple national pavilions and representations respond to the theme set by the guest curators/directors for the different editions.

This research seminar aims to document and better understand the current edition of the Biennale Architettura (Venice Architecture Biennale) directed by curator Lesley Lokko, specifically how the invited architects have approached the theme of The Laboratory of the Future. Therefore, we will be investigating how the current edition of the Biennale presents itself as an agent of change by analyzing how its collective narrative unfold in space by documenting and investigating the spatial composition of the two main areas of the Biennale, namely the Arsenal and the Central Pavilion.

Please note that this seminar (in combination with the studio "The World in the Venice") will be traveling to Venice to attend this year's Architecture Biennale sometime in the last week of September or the first week of October.

dr. Sergio Figueiredo

7QX5Mo
 semester A, quartile 1
 5 ects
 10 students



Brute Architecture and Careful Craftmanship

Image 1
Book 'Soviet Bus stops'
by Christopher Herwig
(also photography) page
87 Busstop in Saratak
Armenia

In this seminar an approach towards architecture in a completely different scope of working, thinking and creating is compared and explored. Namely brute architecture and careful craftmanship.

The first step of the exploration starts with reading books (o.a. Craftmanship by Richard Sennett and Space, Hope and Brutalism by Elaine Harwood) and descriptions (consulting online archives might be necessary). The second step is the investigation into the relationship between brute architecture and careful craftmanship by making drawings and model(s). The final result will be a graphic comic novel.

ir. Renato Kindt

7QX5Mo
semester A, quartile 1
5 ects
10 students



Architecture and the Lived City

Image 1
Jacques Tati sketching
Playtime
hansjager.blogspot.com

The relationship between the conceived space and lived space is a subject that takes on different meanings in different historical periods. Philosophers described this relationship, urban planners and architects designed ideal cities, palaces, and homes and clients had some of these designs realised. In this seminar the transformation of the city by introducing new dwelling cultures is the object of study.

Not only the architectural discipline reflected on the design of new dwelling cultures. There is also a large body of cinematographic work that evolves around this subject. Particular in France there are several film makers that take the design of new living and dwelling cultures and their effect on human and social relations as a main topic. These film makers were inspired by French philosophers like Henri Levebvre, Jean Paul Sartre and Simone de Beauvoir.

In this seminar we will study different cinematographic interpretations of Paris by analysing the work of three film makers: Jacques Tati, Eric Rohmer and Jean Luc Godard. Their work reflects on the renewal of the lived space -sometimes in architecture, sometimes in landscape and urbanism. Does it change everyday life of old and new inhabitants, does it produce new life styles and spatial and social relations? How does it affect the behaviour and psychology of individuals? By analysing and producing cinematographic material, these relationships are being studied and compared. The outcome of this seminar is a nowadays perspective on the relationship between the conceived space and lived space.

Please note that this seminar will be traveling to Paris sometime in late September or the first week of October (together with the studio “Intermediate Architecture and the Porous City”). The exact planning is to be discussed with the participants at the start of the seminar.

drs.ir. Like Bijlsma

ir. Jochem Groenland

7QX5Mo
semester A, quartile 1
5 ects
10 students



New Living Concepts: Assessing their effectiveness

Image 1
Gleis 21, Vienna, Southern Façade (Source: Michael Prytula, <https://www.buildingsocialecology.org/projects/gleis-21-vienna/>)

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 recently published journal articles and book chapters that evaluate different architectural concepts, including CPO design, live-work concepts, co-living, co-housing in Dutch and international cases. 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.

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. 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, social inclusion, health and wellbeing. **Competencies:** People centred research, critical literature analysis, fieldwork, design exploration

dr. Oana Druta

7QX5Mo
semester A, quartile 1
5 ects
10 students

7QX5Mo, quartile 1
Seminars Architecture and Urbanism

7QX5Mo, quartile 2
Seminars Architecture and Urbanism

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Graduation studios Architecture

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7QQ5Mo
International Academic Workshops

7QX5Mo, quartile 2

Seminars Architecture and Urbanism

Introduction

Seminars Architecture and Urbanism

ADE02 AI in Architectural Design

dr.-ing. Cristina Nan

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AHT02 The Craft of Criticism

dr. Sergio Figueiredo

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RA02 The Death and Life of Department Stores

ir. Rik de Bondt

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UUA03 New Living Concepts: Housing, Health, Care

dr. Oana Druta

o.druta@tue.nl

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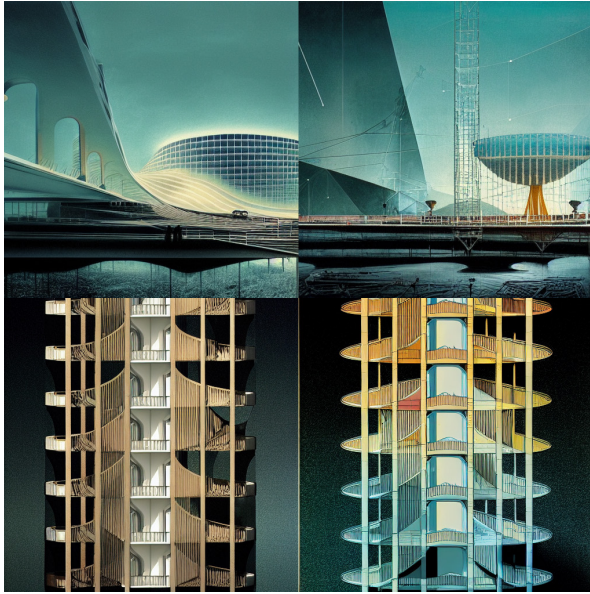
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Looking forward to meeting you in our seminars!



AI in Architectural Design: Synthetic Architectural Imagery and Hallucinating Machines

Image 1
Midjourney x Cristina
Nan

Midjourney. ChatGPT. DALL-E 2. Stable Diffusion. styleGANs. And many more. Architecture witnessed an unprecedented explosion of AI tools in the last few years. Neural networks were only developed in 2014 by Ian Goodfellow (less than 10 years ago) and now they have become ubiquitous in design institutes across the globe. Their impact of AI on the way we practice architectural design cannot be fully anticipated, but it cannot be denied that the ripple effects may be profound. It is important for designers and professionals to be early on exposed to these tools, understand their underlying logic and ways in which they can be utilised as part of the conceptual stage and design process itself.

This seminar focuses on Artificial Intelligence and its implications for architectural design. We follow a holistic approach, examining the theory behind machine learning, the different types of AI and how they can be used to inform spatial concepts. The work and research of leading figures such as Neil Leach, Arturo Tedeschi, Wassim Jabi, Matias del Campo and many more in the field will be analysed and examined. We will test what the notions of control, authorship and creativity of the designer mean within the framework of artificial intelligence.

We will use platforms such as DALL-E 2, Midjourney and Stable Diffusion to experiment with architectural design, spatial strategies and material assemblies. We will integrate traditional methods such as sketches or model pictures into the AI process with Midjourney. How can AI be used to inform conceptual design strategies in a meaningful manner? How can prompts be constructed in a manner that gives a degree of control to the designer? What does it mean to be in control of design in the age of diffusion models and expanding AI? Where does human creativity end and machine hallucination begin?

dr.-ing. Cristina Nan

7QX5Mo
semester A, quartile 2
5 ects
10 students



The Craft of Criticism

Image 1
Frank Gehry gives
journalist the finger and
then describes 98% of
modern architecture as
'pure shit', 2014 (Cerei-
jido/EPA images)

In the past few years, architecture criticism has been considered dead several times over. While that has never really proven to be true, the reality is that architecture criticism has been in a constant state of crisis. As such, it has become more difficult than ever to not only assess what constitutes architecture quality, but also to articulate it to the general public.

The seminar The Craft of Criticism intends to address the current absence of architectural criticism by supporting the emergence of a new generation of architecture critics. In this seminar students will thus develop and sharpen their critical thinking, focusing equally on architectural artifacts as well on the broader conditions for their production and consumption. Ultimately, the objective of this seminar is to support the emergence of an architecture criticism that, while encouraging intellectual depth and curiosity, remains accessible and understandable to everyone.

Throughout this course students will engage with particular issues related to contemporary architecture and investigate how certain ideas relate to specific architectural forms. The development of such understanding will assist students in shaping a critical position towards current architectural design practice of design (both their own production and that of others). Each week, students will conduct a series of close readings of seminal projects and texts (both primary and secondary sources) and discuss them during the seminar meetings.

dr. Sergio Figueiredo

7QX5Mo
semester A, quartile 2
5 ects
10 students



The Death and Life of Department Stores An Inquiry into a Great Urban Building Type

Image 1
<https://www.flickr.com/photos/jansluit-ter/3536691054>

Appearing from the second half of the nineteenth century, great department stores like KaDeWe (Berlin), Bijenkorf (Amsterdam) and Harrods (London) have been significant focal points in urban life. As large monuments for wealth and luxury, they comprised diverse commercial services, like tailors, goldsmiths, hairdressers and restaurants. They set in motion a vibrant urban dynamic, attracting and supporting a range of social, economic and cultural activities. Conversely, the more recent decline of department store chains, due to the rise of e-commerce, has burdened many European cities with something akin to a 'Karstadt' or 'V&D' problem: they are struggling to revive large vacant buildings left behind by perished department store chains.

In this seminar, we will study the development of the department store as a building type, and its role within the urban context. A combination of research methods will be applied. We will select and study relevant literature. We will conduct a drawn and written architectural and urban analysis on a variety of paradigmatic department store buildings, trying to understand them within their spatial, cultural, socio-economic and technical-historical contexts. Throughout, our research will pave the way for an inquiry into the future of this great building type.

This seminar is recommended as preparational research for the 2024 edition of the Spring Academy Ruhr (International Academic Workshop), during which the past, present and future of the department store will be the subject of an international design workshop. The Spring Academy Ruhr will take place in March 2024 in Dortmund.

ir. Rik de Bondt

7QX5Mo
 semester A, quartile 2
 5 ects
 10 students



New Living Concepts: Housing, Health, Care

Image 1
Melbourne Social
Housing under Hard
Lockdown During CO-
VID-19 pandemic

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 recently published journal articles and book chapters examining the topics of health and care in the context of housing design/planning/policy and in relation to current debates about health and social inequalities, and the role of housing as infrastructure of care. 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.

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. At the end of the seminar a booklet of case-studies and essays will be created as a group.

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dr. Oana Druta

7QX5Mo
semester A, quartile 2
5 ects
10 students

7QX5Mo, quartile 1
Seminars Architecture and Urbanism

7QX5Mo, quartile 2
Seminars Architecture and Urbanism

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Masterprojects Architecture

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Masterprojects Urbanism

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Combined Masterproject

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Graduation studios Architecture

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Graduation studios Architecture

7W45Mo, quartile 1
Graduation studios Urbanism

7W45Mo, quartile 2
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7X6oMo, quartile 1
Graduation studios Architecture & Urban Design

7QQ5Mo
International Academic Workshops

7QX1Mo, quartile 1-2

Masterprojects Architecture

Introduction
Masterprojects Architecture

- ADEo1 Character**
ir. arch. Barbara Kuit
b.c.i.m.kuit@tue.nl
- ADEo2 Resilient Architecture Brussel**
ir. Tom Veeger
t.t.veeger@tue.nl
- ADEo3 Computational Clay Protostructure**
dr.-ing. Cristina Nan
i.c.nan@tue.nl
- ADEo4 Le musée imaginaire**
prof. ir. Juliette Bekkering, drawing and representation tutorials with H el ene Aarts
j.d.bekkering@tue.nl
- AHTo1 World in Venice**
dr. Sergio Figueiredo
s.m.figueiredo@tue.nl
- RAo1 Tectonic Exercises**
ir. Renato Kindt, ir. Ralph Brodruck
r.r.w.i.kindt@tue.nl, r.p.g.brodruck@tue.nl
- TAo1 ETT – Easy to Transform**
prof. ir. Paul Diederer, Christopher Ho MSc
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- TAo2 The Factory**
ir. Ruurd Roorda
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- UUAo1 Urban Housing - Living in the City**
MA B.arch. Daryl Mulvihill
d.m.mulvihill@tue.nl

Introduction

Masterprojects Architecture

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- Architectural History and Theory (AHT) led by associate professor dr. Jacob Voorthuis
- Rational Architecture (RA) led by prof. dipl.-ing. Christian Rapp
- Transformational Architecture (TA) led by prof. ir. David Gianotten and prof. ir. Paul Diederer
- Urbanism and Urban Architecture (UUA) led by prof. dr. ir. Pieter van Wesemael

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- 2 You have to subscribe with a first, second and third choice. There will be a period that Osiris will put you on a 'waiting list', don't panic! This only means that you are registered as a student to one of the master projects of your choice. **After August 27, 2023 you will be assigned to your final master project.** It is important to note that the group classification is not final until you have received an e-mail from your master project tutor.
- 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!



Character

Image 1
Jachcha ki Baori,
Rajasthan
<https://www.indianstepwells.com/2020/02/maharashtra-stepwells.html>

Image 2
Chand Bawri in Abhaneri, Rajasthan,
<https://www.bbc.com/future/article/20211012-the-ancient-stepwells-helping-to-curb-in-dias-water-crisis>

Architectural physical space should meet four essential qualities; it should be spatial, (spatiality, going beyond spaciousness), it should be readable (phenomenology), it should be meaningful (semiology)' and it should create possibilities for interaction (dramaturgy). (Schumacher 2022)

In this design studio we will carefully and systematically explore these architectural qualities by doing design research. We will do this through investigating case studies – some from far, and seemingly unrelated - , through typological research; and through intensive design.

Our main question will be to define the architectural quality of space. We will do this in the context of our contemporary times, in which 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. In addition our society is getting more diverse, which means 'identity' seems more complex to define. These enormous challenges require rethinking the position of the architect, and the role architecture can play in addressing these issues. In this research and design studio we will address these whereby we will take a specific focus on social sustainability and designing for the public space.

This project will challenge you to find your position as an architectural designer. We will meticulously study some outspoken examples of traditional architecture in India. Our aim is to extract 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, another scale, in an individual contemporary design. You will research this through design, by defining the spatiality, the readability and the meaning, in various design explorations.

Programmatically, our focus will be to design a building with a societal purpose, an Embassy, of which you are free to choose which country is represented. Extensive programmatic research, and typological studies will be done in parallel.

Our aim is to create a careful architectural design and develop our own theory, which we will express using diagramming, drawing and physical modelling. 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.

ir. arch. Barbara Kuit

7QX1Mo
semester A, quartile 1-2
10 ects
10 students



Resilient Architecture Brussel

Image 1
Brussel: Tom Veeger

This master project recognizes we live in a time of multiple crises and that response may take on many layered and nuanced approaches employing multiple interpretations of resilience. We will focus on two aspects of resilience; industrial and community reliance. Resilience is the capacity to adapt to changing conditions and to maintain or regain functionality and vitality. Resilient Design Institute, (2020).

Brussel

“A healthy city is a productive city. We need to reintroduce the manufacturing industry to our regions: from manufacturing that makes the link between knowledge, innovation, and production, to a circular economy committed to shorter chains and flows of materials and energy. The Flemish-Brussels metropolitan region has a large number of low-skilled unemployed, while old industrial zones languish in the city and its outskirts. The city as a melting pot of knowledge and labour is seen as the ideal breeding ground, with opportunities for the Brussels Canal Zone for developing a circular economy, and for local assembly coupled with a global logistics system” (www.architectureworkroom.eu and <https://vimeo.com/164552744>)

To make more room in the city for an urban economy, we need to combine better, we need to stack more compact and more efficient. We will select a location in the Canal Zone of Brussels and combine the worlds of living, working, recreation, retail and into one hybrid building. A critical analysis of the district and a reflection on the urban design and the social context (urban acupuncture) in relation to the design, will be part of the result. A 2 day excursion to the metropole Brussels (Friday/Saturday) will be part of the studio work.

In order to explore resilient architecture in a broader context, we strongly recommend that students in this master’s project participate in the International Workshop “Climate Heritage Adaptations” in Cappodocia (for more information, see page 109). The workshop will be held in Turkey as part of the e-CREHA Erasmus+ project and it will take place in 4-13 September in Ankara. The topic will be on adaptation of cultural landscapes to the impacts of climate change in Cappodocia (2-day site visit). Students from different disciplinary backgrounds and countries will work on adaptation design solutions for some heritage sites there. <https://www.ecreha.org/>

Please note that registration for the workshop must take place by Friday July 7th

ir. Tom Veeger

7QX1Mo
semester A, quartile 1-2
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10 students



Computational Clay Protostructure: At the Intersection between Computation and the Physical, between Low-Tech and High-Tech

Image 1
Armadillo Vault, ETH
Zurich's Block Research
Group, engineering firm
Ochsendorf DeJong
& Block and masonry
specialist The Escobedo
Group

Advanced digital fabrication and computational design are profoundly changing the nature of architecture and the construction industry. Their impact on the industry is heightened when used in combination with sustainable and low-carbon materials, such as clay, mud or earth-based systems. The core of this studio is anchored around additive manufacturing for sustainable architecture.

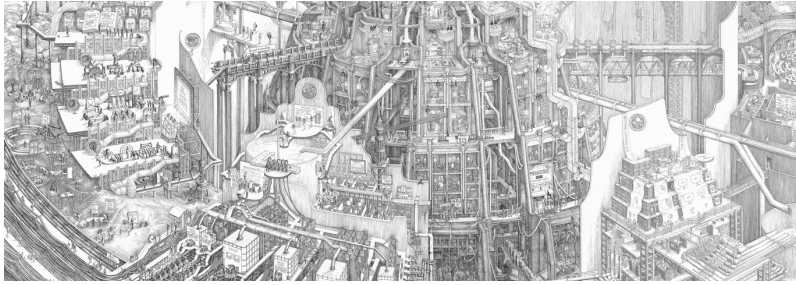
This master studio focuses on the design and the production of a large scale parametric structure based on 3D clay printing. 1:1 prototyping is an essential component of this studio, allowing students to experience all parts of the fabrication and assembly process. Students will participate in the computational design of a full-scale 3D clay printed protostructure to be built on the campus of the TU Eindhoven. The structure will showcase advanced material patterning and performance-based design. The digital tectonic design of the installation makes systematic use of geometry, structural principles and material behaviour. Constraints of the material (or material systems) and of the physical realities of making and assembly are embedded within the computational process of design. Attention will be given to the curation of joints and of the assembly sequence.

The studio follows a holistic approach: from design to fabrication. Students will follow the steps from computational design, technical detailing, project management and logistics, the fabrication of the elements and the assembly of the full large-scale structure on the campus.

You will build up a theoretical and practical knowledge on computational design, robotic fabrication and parametric performance based design principles. Throughout the 16 weeks of the course you will be introduced to advanced parametric design using Rhino 3D and the visual scripting plug-in Grasshopper. Embedded in the course are a set of carefully curated workshops on advanced algorithm-aided design, run by the computational specialist Mattia Zucco in collaboration with Assist. Prof. Cristina Nan.

dr. -ing. Cristina Nan

7QX1Mo
semester A, quartile 1-2
10 ects
10 students



Le musée imaginaire

Image 1

Carlijn Kingma- The Waterworks of money. <https://www.rijksmuseumtwenthe.nl/content/3113/nl/carlijn-kingma-het-waterwerk-van-ons-geld>

Image 2

<https://www.architectural-review.com/essays/books/juhani-pallasmaas-sense-and-sensibility>

Pallasmaa's works often discuss the importance of sensory and atmospheric experiences in architecture. He emphasizes in his writings the idea that architecture should engage and evoke a range of emotions and sensations in its users. In his famous book "The Eyes of the skin: Architecture and the senses" he explores the multisensory aspects of architectural experience.

In this project, we are going to meticulously investigate how a building can be designed so that each space produces a specific imaginary and experience. By very precisely addressing composition, light, materiality and detail, you will be challenged to design space by space a museum of the imagination.

Collages, perspectives, drawings and models will be used to explore how spaces work, how light falls, high spaces versus low spaces, soft and velvety versus hard and smooth. The museum's collection should enter into a symbiotic relationship with the architecture.

Spatial principles such as the labyrinth, the staircase, the colonnade, the hypostyle hall, the poche, the enfilade will form the ingredients of the architecture. You will study them and use them as ingredients for your design. Like a collage, they will be modelled into a whole. The topic you will address is not just the design but also the way you represent the design: the drawings, models, collages and assemblages, form part of the outcome of your project.

The location is a bare landscape and part of the assignment is to design the connection between landscape and the building.

The design process is preceded by a collective group study of museums and the architectural drawing. The results will be collected in a (beautifully designed) research-book.

Part of the studio is an excursion at a location to be determined. Also part of the studio is that during the semester, you will have drawing lessons and representation techniques tutorials.

To participate in this studio, it is desirable that you have good drawing and representation skills.

prof. ir. Juliette Bekkering

Drawing and representation tutorials with H  l  ne Aarts

7QX1Mo
semester A, quartile 1-2
10 ects
10 students



The world in Venice

Image 1
Central Pavilion in the
Giardini, Venice Architec-
ture Biennale, 2023

For over a century, the Venice Biennale has been drawing people to its Giardini for its exhibitions and festivals. While the Biennale's (contemporary) art and architecture exhibitions draw most of the attention, the roster of Biennale events also includes international festivals for music, theatre, film and dance.

Complementing its rather unique organization, the Biennale also has a remarkable architectural formal expression. The Giardini accommodates not only a large exhibition hall (where the themed exhibition curated by the Biennale's guest director is hosted), but also approximately 30 permanent national pavilions (where the national representations of the participating countries are hosted). Built at different periods, these pavilions are owned and managed by the individual countries participating in the Biennale.

This studio will investigate how architecture translates cultural ambitions, economic goals, national identities and social representation by designing a set of new national pavilions in the Giardini. However, while questions of identity and representation will guide the designs' conceptual development, practical issues such as the designs' flexibility, detailing, spatial qualities, programmatic complexity, and ability to accommodate a variety of functions during different periods of the year will be equally important.

Please note that this studio (in combination with the seminar "The Biennale as a Laboratory for Architecture?") will be traveling to Venice to attend this year's Architecture Biennale sometime in the last week of September or the first week of October.

dr. Sergio Figueiredo

7QX1Mo
semester A, quartile 1-2
10 ects
10 students



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

7QX1Mo
semester A, quartile 1-2
10 ects
10 students



ETT - Easy to Transform

Image 1

“In 20 years, who can say that the architectural school will still be there, or that it won't have completely changed?”
(Jean Philippe Vassal, 2009)

Lacaton & Vassal, ENSA Nantes, 2009 photo by Valery Joncheray

The project “Easy to transform” focusses 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.” [1]

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).

[1] R. Roorda and B. Kegge, Vital Architecture, Naio10 Rotterdam, p. 20

prof. ir. Paul Dierenen

Christopher Ho MSc

7QX1Mo

semester A, quartile 1-2

10 ects

20 students



The Factory

Image 1
Factory Icon Png - Free
Icons Library

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 masterproject, 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

7QX1Mo
semester A, quartile 1-2
10 ects
10 students



Social Life and Climate Resilience embedded into Design - Alena Prendi - Urban Housing Master Studio - The Courtyard

Urban Housing - Living in the City

Image 1
Social Life and Climate
Resilience embedded
into design.
Alesia Prendi
Urban Housing 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.

Keywords: **Scales:** Neighbourhood, Ensemble. **Themes:** Urban Transformation, Public Space. **Competencies:** Spatial Research, Urban Design, Typological Design, Architectural Design.

MA B.arch. Daryl Mulvihill

7QX1Mo
semester A, quartile 1-2
10 ects
10 students

7QX5Mo, quartile 1
Seminars Architecture and Urbanism

7QX5Mo, quartile 2
Seminars Architecture and Urbanism

7QX1Mo, quartile 1-2
Masterprojects Architecture

7QW1Mo, quartile 1-2
Masterprojects Urbanism

7XW1Mo, quartile 1-2
Combined Masterproject

7X45Mo, quartile 1
Graduation studios Architecture

7X45Mo, quartile 2
Graduation studios Architecture

7W45Mo, quartile 1
Graduation studios Urbanism

7W45Mo, quartile 2
Graduation studios Urbanism

7X60Mo, quartile 1
Graduation studios Architecture & Urban Design

7QQ5Mo
International Academic Workshops

7QW1Mo, quartile 1-2

Masterprojects Urbanism

Introduction
Masterprojects Urbanism

UUAo1 Water Machine Mozaïek Dommelvallei
ir. Marian de Vries
m.j.d.vries.1@tue.nl

UUAo2 Designing the Climate Resilient City
ir. Joeri Sowka, ir. Evi van de Logt
j.sowka@tue.nl, e.m.a.v.d.logt@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

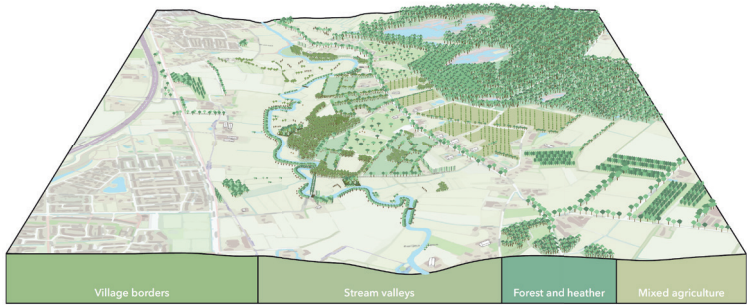
The short introductory description of the studios given here will be supplemented with more elaborate descriptions and exact planning schedules closer to their actual starting date. It is possible that some projects alter the theme or emphasis slightly as a result of changes in staff.

Enrolling in a masterproject:

- 1 You need to enrol in Osiris before the closing of the registration term. **It is possible to enroll until August 27, 2023.** If you register too late the first possibility to start with your masterproject is Sem B 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!



Water Machine Mozaïek Dommelvallei

Image 1
Masterplan Mozaïek
Dommelvallei.png by
Sara van der Ent en
Marita Louwes

Image 2
Masterplan Mozaïek
Dommelvallei2.png by
Tijn Loeffen

This studio will focus on the spatial and programmatic developments rural areas around the river the Dommel in North Brabant around the municipalities of Meierijstad, Vught, Sint Michielsgestel and Son en Breugel. These municipalities share various challenges related to the transition in the agricultural sector (nitrogen), climate change (drought and flooding), urbanization, heritage protection and nature development.

The municipalities are aiming to handle these challenges in an integral way, to find synergies and deal with these challenges in a smart way. 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. The interests of the different sectors such as agriculture, nature, water and urban development often are juxtaposed to each other and call for a reevaluation of synergetic design.

The municipalities and other organizations such as the water boards are collaborating in the Mozaïek Dommelvallei to find an alternative way to find common ground and guide regional development. The starting point of this collaboration is that the regional water structure could be a productive way to connect different challenges. In the past, they developed the concept of six 'water machines'. Each water machine could guide the development in an area integrating different challenges, such as (1) the redevelopment of industry, (2) redevelopment of tree nurseries and countering drought, (3) developing leisure and (agro)tourism, (4) the transition of large-scale agriculture, (5) development of suburban areas, and (6) the competitiveness of innovative industries in a rural context.

The aim of this studio is to develop regional strategies that deal with multiple challenges and elaborate the solutions into a more detailed design. During the studio we will possibly collaborate with the partners of the Mozaïek Dommelvallei. For more information see: www.tue-urbanlabs.nl and www.mozaiekdommelvallei.nl

Keywords: **Scales:** Provincial, regional, local. **Themes:** Transition in agriculture, biobased building, biodiversity, nature development, city-countryside connection, water. **Competences:** Spatial Research, Concept design, Landscape Design, Regional strategies

ir. Marian de Vries

7QW1Mo
semester A, quartile 1-2
10 ects
10 students



Designing the Climate Resilient City

Image 1
Design by Inge Timmermans (2022-2023 Semester A)

With a changing climate and the rising frequency of extreme weather conditions the need for improving the water system within the city is becoming increasingly urgent. This studio will focus on the integration of sustainable water solutions in a residential neighbourhood in Eindhoven.

The challenge of developing water resilient cities is not so much the development of new technical or spatial solutions: a huge 'catalogue' of measures is widely available. The main obstacle in developing water resilient cities is the complexity of the development process. The transition to a resilient system requires the integration of many aspects and involves many stakeholders. Solutions for water-related problems are often purely technical. The aim of this project is to deal with urban water not as a 'problem' but as an 'opportunity' for the city. Water has enormous potential to enhance the spatial quality and the liveability of a city. If creatively done, embedding water into the city can add tremendous value. Nevertheless, it is often difficult to make a clear case to 'prove' the added value of a well-designed water solution.

This year, the focus will be on the business park 'Eindhoven Airport district' and to turn it into a future-proof part of the city. The starting question will be on how to become climate resilient, but we will also try to answer other questions related to the mobility transition, the housing shortage, health & well-being, biodiversity and more.

In this studio we will be working closely with the experts from Waterboard De Dommel and Eindhoven Municipality. Students will design innovative solutions that improve upon the water system and the spatial quality. A team of experts will then assess these results (both qualitatively and quantitatively). After this assessment students will improve their designs and report the results back to the expert group.

This studio is part of the Climate Resilient City DesignLab, a collaboration between Eindhoven Municipality, Waterboard De Dommel and TU/e UrbanLabs. For more information see: www.tue-urbanlabs.nl

Keywords: **Scales:** Region, City, Neighbourhood. **Themes:** Water, Sustainable Development, Public Space, Housing, Energy. **Competencies:** System Research, Spatial Research, Urban Design

Partners: Municipality of Eindhoven & Waterboard De Dommel

ir. Joeri Sowka

ir. Evi van de Logt

7QW1Mo
semester A, quartile 1-2
10 ects
10 students

7QX5Mo, quartile 1
Seminars Architecture and Urbanism

7QX5Mo, quartile 2
Seminars Architecture and Urbanism

7QX1Mo, quartile 1-2
Masterprojects Architecture

7QW1Mo, quartile 1-2
Masterprojects Urbanism

7XW1Mo, quartile 1-2
Combined Masterproject

7X45Mo, quartile 1
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7X45Mo, quartile 2
Graduation studios Architecture

7W45Mo, quartile 1
Graduation studios Urbanism

7W45Mo, quartile 2
Graduation studios Urbanism

7X6oMo, quartile 1
Graduation studios Architecture & Urban Design

7QQ5Mo
International Academic Workshops

7XW1Mo, quartile 1-2

Combined Masterproject

Introduction

Combined Masterproject

RA/UUAo1 Antwerp

dipl. -ing. Haïke Apelt, MA B.Arch. Daryl Mulvihill
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 (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 erts instead of the regular 120 erts. 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/register-tracks/au-de-for-architects-and-urbanists-register-combined>



Antwerp

Image 1
Morphological map of
Antwerp 2016 (Source:
Atlas of the graduation
studio “Antwerpen – De
Getekende Stad”, 2016)

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 (7QX1Mo or 7QX2Mo) and a regular Masterproject in Urbanism (7QW1Mo or 7QW2Mo) 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.

dipl.-ing. Haike Apelt

MA B.Arch. Daryl Mulvihill

7XW1Mo
semester A, quartile 1-2
10 ects
10 students

7QX5Mo, quartile 1
Seminars Architecture and Urbanism

7QX5Mo, quartile 2
Seminars Architecture and Urbanism

7QX1Mo, quartile 1-2
Masterprojects Architecture

7QW1Mo, quartile 1-2
Masterprojects Urbanism

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Combined Masterproject

7X45Mo, quartile 1
Graduation studios Architecture

7X45Mo, quartile 2
Graduation studios Architecture

7W45Mo, quartile 1
Graduation studios Urbanism

7W45Mo, quartile 2
Graduation studios Urbanism

7X6oMo, quartile 1
Graduation studios Architecture & Urban Design

7QQ5Mo
International Academic Workshops

7X45Mo, quartile 1

Graduation studios Architecture

Introduction
Graduation studios Architecture

- ADE/AHTo1 Architecture: models, thought, design**
dr. Jacob Voorthuis
ir. Jan Schevers
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- SATo1 Stimulating Healthy Environments (SHE)**
prof.dr.ir. Masi Mohammadi
ir. Leonie van Buuren, EngD
ir. Maarten Willems
m.mohammadi@tue.nl, l.p.g.v.buuren@tue.nl, m.h.p.m.willems@tue.nl
- TAo1 A House for 2nd Place**
prof.ir. David Gianotten
ir. Maarten Willems
d.gianotten@tue.nl, m.h.p.m.willems@tue.nl
- UUAo1 Intermediate Architecture and the Porous City**
prof. dr. ir. Pieter van Wesemael
drs. ir. Like Bijlsma
ir. Jochem Groenland
ir. Wouter Hilhorst
p.j.v.v.wesemael@tue.nl, e.bijlsma@tue.nl, j.groenland@tue.nl, w.hilhorst@tue.nl
- RAo1 Abitare Venezia**
prof. dipl-ing. Christian Rapp
dipl-ing. Haike Apelt
ir. Wouter Hilhorst
c.rapp@tue.nl, h.apelt@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/programs/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 Diederer
- 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 1:

- 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 2.
- 2 You have to subscribe with a first and second choice. This is possible until Sunday August 27, 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 August 28, 2023. First subscribe in Osiris, after that upload your motivation letter in Canvas. Use the correct course code (7X45Mo).

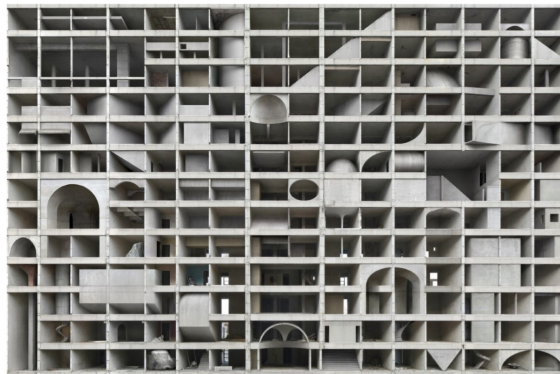
The motivation letter should be no longer than 1 A4 (.pdf file) and name this file as following: your last name – code studio 1st choice/code studio 2nd choice (for instance: Hemesath – ADE-UUA01/RA01). Mind you: without motivation letter you won't be assigned to a studio.

- 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/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!



Architecture: models, thought, design

Image 1

Thomas Demand: "Repository", 2018 (photo paper model)
<https://www.takaishii-gallery.com/en/archives/3536/>

Image 2

Philip Dujardin: "Memorial V", 2020 (photomontage)
<https://www.artsy.net/artwork/filip-dujardin-memorial-v>

Architects don't build buildings, they design them. They do so through the creative exploration of possibilities and then by making solid design decisions backed up by evidence. That evidence is of two sorts, it is rational evidence and empirical evidence, and these always work together. The empirical basis of an architectural design decision rests on the architect's experience and causal knowledge of lived space: how good is she at understanding spaces, materials, structures, organisations of elements and spaces, their various uses? To acquire that causal knowledge, we analyse existing buildings both as historical precedents and as living labs. And we explore possibilities, using models. The rational basis of an architectural decision is that it fits in a coherent view of what architecture is about and what this specific project is about. The success of the architect then rests upon her ability to express and communicate her intentions accurately, precisely, and evocatively. We do this using models. Models play a seminal role in architecture. We use them to think with, just like we do in science, in the other arts and in philosophy. Through simulations and their careful evaluation, we avoid the social, environmental, economic, and reputational cost of making bad design decisions. With simulations we explore the qualities of designed spaces that have not yet been built. In this studio we are going to investigate the working and power of models, digitally rendered models, sketch models, presentation models, full scale mock-ups, models of thought, and we are going to analyse and critique them so that we acquire a much deeper appreciation of the role of models in design and design thought. We are going to interview model-makers and people with a special position regarding models. We are going to make models; beautiful models, and we shall use all that knowledge to design and make explicit the qualities we believe a good building should have.

dr. Jacob Voorthuis

ir. Jan Schevers

7X45Mo
 semester A, quartile 1 (1-2-3-4)
 45 ects
 10 students



Stimulating Healthy Environments (SHE)

Exploring the opportunities of smart health architecture on ageing in place

Image 1
Architects Pierre Chareau and Bernard Bijvoet designed Maison de Verre in 1932 with the use of innovative technologies at that time to stimulate healthy living. How would you design living environments with the current innovative possibilities?
<https://archive.curbed.com/2016/11/2/13498528/pierre-chareau-maison-de-verre-jewish-museum>

The Dutch population is ageing, which allows us, as (future) architects, to design suitable living environments for this growing target group by exploring the potentials of smart health architecture. The wish of many senior citizens is to live independently at home as long as possible. And also, the government is steering at this solution. However, ageing comes with possible physical and cognitive challenges; for example, mobility issues, decreasing view and hearing, and dementia. Research has shown that suitable living environments could facilitate, support, and enable senior citizens in ageing in place. The question arises of how these spaces (both the house and the neighborhood) should be designed.

In line with Le Corbusier's open stance towards technology, we want to develop renewed concepts for adaptive home environments that support self-reliance and independent living in this graduation studio. Though, the scope of this studio goes beyond the technological possibilities. By merging social innovation, emerging technologies and architectural concepts, innovations in housing design will be developed and tested in co-creation with (older) people living independently. How can Le Corbusier's and other innovators in architecture be translated to our greying society?

We will examine the possibilities of implementing smart technologies in our design solutions to create an 'enabling environment' and their consequences on architecture. We will particularly work on design solutions supporting prevention and a healthy lifestyle. Possible themes for your graduation project are healthy living, accessibility, wayfinding, and smart homes to engage and enable residents.

Using methods like Evidence-Based Design and Research-Based Design, we will study the possibilities. It is impossible to design for people without thoroughly understand the people. Therefore, we will organize experience workshops and excursions, and you will talk with the senior citizens. The set-up of this studio is: conducting research, developing, and designing stimulating healthy environments. Research and design, therefore, go hand in hand in this studio.

prof.dr.ir. Masi Mohammadi

ir. Leonie van Buuren, EngD

ir. Maarten Willems

7X45Mo
semester A, quartile 1 (1-2-3-4)
45 ects
10 students



A House for 2nd Place

Image 1
 Paul Klee, Zwei Männer
 (einander höherer Stellung
 vermutend), etching
 on zinc 1903.
 Two men meet (each
 believing the other to be
 of higher rank)
[https://www.nga.gov/
 collection/art-object-
 page.11549.html](https://www.nga.gov/collection/art-object-page.11549.html)

The winner takes it all. Not just a song but also the motto of today's world. Our society is made for protagonists. First place counts, the rest are losers. But if we look more careful, we see that 2nd places not only mean that there is only one ahead, but that they are characterized by an intriguing mix of discomfort, fighting spirit, humbleness, resilience and perspective. This graduation studio seeks to revalue and rehabilitate those who were so close to the top and build them a dignified accommodation. You will investigate collectively the concept of 2nd place. Its dominant meaning seems to be 'not-first'. If something has been traded three, four or more times, it remains 'secondhand'. We will look for ways to architecturally/spatially celebrate silver medalists, runners-up, underdogs, running mates, sidekicks, stand-ins, substitutes and 'losers'.

Research phase (3 months)

We start with a group investigation, definition, research and mapping exercise exploring the concept of 2nd place, in literature, history and media, and digging into architectural precedents around the world. We will also visit at least one relevant precedent in The Netherlands or Europe. After the joint research phase each student will chose a city around the world where they want to create their own House for 2nd Place, formulate a research question and will focus on site analysis and the brief for the building.

Design Phase (7 months)

In this phase of the project each student will make an individual design uniting the identified opportunities and challenges of the program, site and strategy, resulting in a building, ensemble or transformation that will celebrate the 2nd Place. This final architectural design needs to be represented in a thesis, posters, renderings, a model (or a movie/clip), and in a preliminary, midterm and final oral presentation. In this stage the whole group of students will get the opportunity to work and design on their projects within the OMA offices in Rotterdam for a week (exact moment TBD).

prof.ir. David Gianotten

ir. Maarten Willems

3rd tutor of individual choice

7X45Mo
 semester A, quartile 1 (1-2-3-4)
 45 ects
 10 students



Intermediate Architecture and the Porous City

Image 1
Passage Choiseul, ca.
1910
Roger Viollet / The Image
Works

Image 2
Passage des Panoramas,
excursion Paris March
2023.
L. Bijlsma

In the essay 'Naples' (1925) the radical thinker and cultural critic Walter Benjamin together with actress Asja Lācis characterize Naples as a porous city. Here the main element of architecture is not the house or building block - let along the type. Instead, Benjamin and Lācis call attention to its in-between spaces, like caves, cellars, courtyards, arcades, staircases, windows, gateways, and balconies. This porous domain - where the public is inextricably entangled with the private - allows for a new reading of urban spaces and their relation to architecture and urbanism. Their essay includes several aspects worth remembering: porosity connects the built environment with social as well as with natural elements; it participates in scripting the rituals of upper and lower classes and its impermanence suggests a tension with order and planning.

With this socio-spatial concept of the porous city in mind, the studio investigates the urban function of 'Intermediate Size' buildings (De tussenmaat, 2006). In this semester we will look into the emergence and further development of Intermediate Size typologies in Paris - from the bourgeois Hotel to the workers street - until modern times. Which specific typological, functional and architectural elements are used and how do they relate to urban and dwelling cultures? How do Intermediate Size typologies accommodate the complexity of the present city-life and its rapidly changing patterns?

This studio is the third of a sequence of graduation studios. Both research and design work will contribute to a body of work for a follow-up publication. In this stage of the research, we study the most relevant specific architectural elements which directly or indirectly relate to a specific urban culture and dwelling culture. It therefore includes not only the usual typo-morphological aspects such as distribution, spatial transitions, and scenography but also other aspects such as social function, cultural representation, phenomenological interpretation and their changing roles in different time periods. By looking at the city along the radial cross-sections, we read the city from pre-modern, to present-day, and the contemporary lived city.

(Please take into account a study trip is scheduled late September 2023.)

drs. ir. Like Bijlsma

ir. Jochem Groenland

ir. Wouter Hilhorst

responsible professor: prof. dr. ir. Pieter van Wesemael

7X45Mo
semester A, quartile 1 (1-2-3-4)
45 ects
10 students



Abitare Venezia

Image 1
Piazza San Marco, Venezia (Haike Apelt)

This studio is organized by the chair of Rational Architecture, which focuses on an architectural tradition that builds on the idea of 'type' as the constant carrier of architectural design. Continuity as architectural culture, 'Weiterbauen' in German, in order to respond to contemporary building conditions, characterizes this position.

Within the graduation studios of the past years which are part of our European City Series (<https://rationalarchitecture.nl>) we have developed a methodical approach that is strongly based on drawn analysis, in which the critical relationship between the urban condition and the architectural project is studied. The studio will this year be devoted to the morphological and typological analysis of the city of Venice, focusing in the problem of dwelling. This thematic focus is to be explored both through the lens of historical development (understanding the forms and types specific for the case of Venice) and through lens of contemporary reality in which dwelling (and related housing) has become problematic.

In the first semester, you 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)form(ation) of the city. This collective effort will result in a so-called atlas, which consists of essays and analytical drawings (maps) and which will form the basis for the - free - individual design projects in the second semester.

To implement the aspect of international experience (15 ects) a three month' stay abroad is compulsory when participating in this studio. An exclusive Erasmus-agreement will ensure students can apply for a grant. Our collaboration with the IUAV in Venice will involve an excursion to Venice at the start of the semester, joint presentation moments throughout the project to enrich the discussion and the said stay abroad to learn from architectural cultures abroad.

Collaboration with:
prof. Marco Pogacnik, et al. University of Venice (IUAV)

prof. dipl-ing. Christian Rapp
dipl-ing. Haike Apelt
ir. Wouter Hilhorst

7X45Mo + 7X15Mo
semester A, quartile 1 (1-2-3-4)
45 ects + 15 ects; (incorporating international experience)
8 students; if more students apply, we select by portfolio

7QX5Mo, quartile 1
Seminars Architecture and Urbanism

7QX5Mo, quartile 2
Seminars Architecture and Urbanism

7QX1Mo, quartile 1-2
Masterprojects Architecture

7QW1Mo, quartile 1-2
Masterprojects Urbanism

7XW1Mo, quartile 1-2
Combined Masterproject

7X45Mo, quartile 1
Graduation studios Architecture

7X45Mo, quartile 2
Graduation studios Architecture

7W45Mo, quartile 1
Graduation studios Urbanism

7W45Mo, quartile 2
Graduation studios Urbanism

7X6oMo, quartile 1
Graduation studios Architecture & Urban Design

7QQ5Mo
International Academic Workshops

7X45Mo, quartile 2

Graduation studios Architecture

Introduction

Graduation studios Architecture

ADE/AHTo1 Architecture: models, thought, design

dr. Jacob Voorthuis

ir. Jan Schevers

j.c.t.voorthuis@tue.nl, j.p.a.schevers@tue.nl

UUAo1 Intermediate Architecture and the Porous City

prof. dr. ir. Pieter van Wesemael

drs. ir. Like Bijlsma

ir. Jochem Groenland

ir. Wouter Hilhorst

p.j.v.v.wesemael@tue.nl, 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/programs/graduate-school/masters-programs/architecture-building-and-planning/curriculum/graduation-project>

There are two 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 History and Theory (AHT) led by associate professor dr. Jacob Voorthuis
- 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 2:

- 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 2023-2024, quartile 3.
- 2 You have to subscribe with a first and second choice. This is possible until Sunday August 27, 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 August 28, 2023. First subscribe in Osiris, after that upload your motivation letter in Canvas. Use the correct course code (7X45Mo).

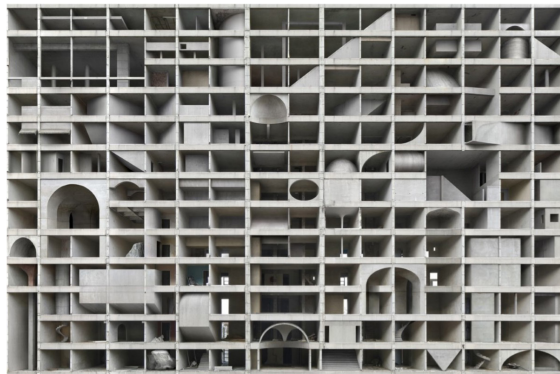
The motivation letter should be no longer than 1 A4 (.pdf file) and name this file as following: your last name – code studio 1st choice/code studio 2nd choice (for instance: Hemesath – ADE-UUA01/RA01). Mind you: without motivation letter you won't be assigned to a studio.

- 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/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!



Architecture: models, thought, design

Image 1

Thomas Demand: "Repository", 2018 (photo paper model)
<https://www.takaishii-gallery.com/en/archives/3536/>

Image 2

Philip Dujardin: "Memorial V", 2020 (photomontage)
<https://www.artsy.net/artwork/filip-dujardin-memorial-v>

Architects don't build buildings, they design them. They do so through the creative exploration of possibilities and then by making solid design decisions backed up by evidence. That evidence is of two sorts, it is rational evidence and empirical evidence, and these always work together. The empirical basis of an architectural design decision rests on the architect's experience and causal knowledge of lived space: how good is she at understanding spaces, materials, structures, organisations of elements and spaces, their various uses? To acquire that causal knowledge, we analyse existing buildings both as historical precedents and as living labs. And we explore possibilities, using models. The rational basis of an architectural decision is that it fits in a coherent view of what architecture is about and what this specific project is about. The success of the architect then rests upon her ability to express and communicate her intentions accurately, precisely, and evocatively. We do this using models. Models play a seminal role in architecture. We use them to think with, just like we do in science, in the other arts and in philosophy. Through simulations and their careful evaluation, we avoid the social, environmental, economic, and reputational cost of making bad design decisions. With simulations we explore the qualities of designed spaces that have not yet been built. In this studio we are going to investigate the working and power of models, digitally rendered models, sketch models, presentation models, full scale mock-ups, models of thought, and we are going to analyse and critique them so that we acquire a much deeper appreciation of the role of models in design and design thought. We are going to interview model-makers and people with a special position regarding models. We are going to make models; beautiful models, and we shall use all that knowledge to design and make explicit the qualities we believe a good building should have.

dr. Jacob Voorthuis

ir. Jan Schevers

7X45Mo
 semester A, quartile 2 (2-3-4-1)
 45 ects
 10 students



Intermediate Architecture and the Porous City

Image 1
Passage Choiseul, ca.
1910
Roger Viollet / The Image
Works

Image 2
Passage des Panoramas,
excursion Paris March
2023.
L. Bijlsma

In the essay 'Naples' (1925) the radical thinker and cultural critic Walter Benjamin together with actress Asja Lācis characterize Naples as a porous city. Here the main element of architecture is not the house or building block - let alone the type. Instead, Benjamin and Lācis call attention to its in-between spaces, like caves, cellars, courtyards, arcades, staircases, windows, gateways, and balconies. This porous domain - where the public is inextricably entangled with the private - allows for a new reading of urban spaces and their relation to architecture and urbanism. Their essay includes several aspects worth remembering: porosity connects the built environment with social as well as with natural elements; it participates in scripting the rituals of upper and lower classes and its impermanence suggests a tension with order and planning.

With this socio-spatial concept of the porous city in mind, the studio investigates the urban function of 'Intermediate Size' buildings (De tussenmaat, 2006). In this semester we will look into the emergence and further development of Intermediate Size typologies in Paris - from the bourgeois Hotel to the workers street - until modern times. Which specific typological, functional and architectural elements are used and how do they relate to urban and dwelling cultures? How do Intermediate Size typologies accommodate the complexity of the present city-life and its rapidly changing patterns?

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(Please take into account a study trip is scheduled late September 2023.)

drs. ir. Like Bijlsma

ir. Jochem Groenland

ir. Wouter Hilhorst

responsible professor: prof. dr. ir. Pieter van Wesemael

7X45Mo
semester A, quartile 2 (2-3-4-1)
45 ects
10 students

7QX5Mo, quartile 1
Seminars Architecture and Urbanism

7QX5Mo, quartile 2
Seminars Architecture and Urbanism

7QX1Mo, quartile 1-2
Masterprojects Architecture

7QW1Mo, quartile 1-2
Masterprojects Urbanism

7XW1Mo, quartile 1-2
Combined Masterproject

7X45Mo, quartile 1
Graduation studios Architecture

7X45Mo, quartile 2
Graduation studios Architecture

7W45Mo, quartile 1
Graduation studios Urbanism

7W45Mo, quartile 2
Graduation studios Urbanism

7X6oMo, quartile 1
Graduation studios Architecture & Urban Design

7QQ5Mo
International Academic Workshops

7W45Mo, quartile 1

Graduation studios Urbanism

Introduction

Graduation studios Urbanism

UUA01 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

UUA02 Intermediate Architecture and the Porous City

prof. dr. ir. Pieter van Wesemael

drs. ir. Like Bijlsma

ir. Jochem Groenland

ir. Wouter Hilhorst

p.j.v.v.wesemael@tue.nl, e.bijlsma@tue.nl, j.groenland@tue.nl, w.hilhorst@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/programs/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 1:

- 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 2.
- 2 You have to subscribe with a first and second choice. This is possible until Sunday August 27, 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/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 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

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 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, City, Region. **Themes:** Mobility, Water, Energy, Health, Youth, Inclusive Development, Learning Cities, Sustainable Development, Urban Transformation, Public Space. **Competencies:** Literature Review, Spatial Analysis, Strategy & Scenario Design, Regional Planning, Urban Design.

dr.ir. Dena Kasraian

dr. Gamze Dane

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

7W45Mo
semester A, quartile 1 (1-2-3-4)
45 ects
10 students



Intermediate Architecture and the Porous City

Image 1
Passage Choiseul, ca.
1910
Roger Viollet / The Image
Works

Image 2
Passage des Panoramas,
excursion Paris March
2023.
L. Bijlsma

In the essay 'Naples' (1925) the radical thinker and cultural critic Walter Benjamin together with actress Asja Lācis characterize Naples as a porous city. Here the main element of architecture is not the house or building block - let along the type. Instead, Benjamin and Lācis call attention to its in-between spaces, like caves, cellars, courtyards, arcades, staircases, windows, gateways, and balconies. This porous domain - where the public is inextricably entangled with the private - allows for a new reading of urban spaces and their relation to architecture and urbanism. Their essay includes several aspects worth remembering: porosity connects the built environment with social as well as with natural elements; it participates in scripting the rituals of upper and lower classes and its impermanence suggests a tension with order and planning.

With this socio-spatial concept of the porous city in mind, the studio investigates the urban function of 'Intermediate Size' buildings (De tussenmaat, 2006). In this semester we will look into the emergence and further development of Intermediate Size typologies in Paris - from the bourgeois Hotel to the workers street - until modern times. Which specific typological, functional and architectural elements are used and how do they relate to urban and dwelling cultures? How do Intermediate Size typologies accommodate the complexity of the present city-life and its rapidly changing patterns?

This studio is the third of a sequence of graduation studios. Both research and design work will contribute to a body of work for a follow-up publication. We study the most relevant elements which directly or indirectly relate to urban and dwelling culture - including not only typo-morphological aspects as distribution, spatial transitions, scenography, but also social function, cultural representation, phenomenological interpretation and their changing roles in different time periods. By looking at the city along the radial cross-sections, we read the city from pre-modern, to present-day, and the contemporary lived city.

The studio results in an elaborate urban design, special attention is paid to the connection to and overlap with architectural design.

(Please consider a study trip is scheduled late September 2023.)

drs. ir. Like Bijlsma

ir. Jochem Groenland

ir. Wouter Hilhorst

responsible professor: prof. dr. ir. Pieter van Wesemael

7W45Mo
semester A, quartile 1 (1-2-3-4)
45 ects
10 students

7QX5Mo, quartile 1
Seminars Architecture and Urbanism

7QX5Mo, quartile 2
Seminars Architecture and Urbanism

7QX1Mo, quartile 1-2
Masterprojects Architecture

7QW1Mo, quartile 1-2
Masterprojects Urbanism

7XW1Mo, quartile 1-2
Combined Masterproject

7X45Mo, quartile 1
Graduation studios Architecture

7X45Mo, quartile 2
Graduation studios Architecture

7W45Mo, quartile 1
Graduation studios Urbanism

7W45Mo, quartile 2
Graduation studios Urbanism

7X60Mo, quartile 1
Graduation studios Architecture & Urban Design

7QQ5Mo
International Academic Workshops

7W45Mo, quartile 2

Graduation studios Urbanism

Introduction

Graduation studios Urbanism

UUA01 Density and other Matters

prof.dr.ir. Pieter van Wesemael

dr.ir. Dena Kasraian

dr. Gamze Dane

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UUA02 Intermediate Architecture and the Porous City

prof. dr. ir. Pieter van Wesemael

drs. ir. Like Bijlsma

ir. Jochem Groenland

ir. Wouter Hilhorst

p.j.v.v.wesemael@tue.nl, e.bijlsma@tue.nl, j.groenland@tue.nl, w.hilhorst@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/programs/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 2:

- 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 2023-2024, quartile 3.
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- 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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<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 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

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 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, City, Region. **Themes:** Mobility, Water, Energy, Health, Youth, Inclusive Development, Learning Cities, Sustainable Development, Urban Transformation, Public Space. **Competencies:** Literature Review, Spatial Analysis, Strategy & Scenario Design, Regional Planning, Urban Design.

dr.ir. Dena Kasraian

dr. Gamze Dane

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

7W45Mo
semester A, quartile 2 (2-3-4-1)
45 ects
10 students



Intermediate Architecture and the Porous City

Image 1
Passage Choiseul, ca.
1910
Roger Viollet / The Image
Works

Image 2
Passage des Panoramas,
excursion Paris March
2023.
L. Bijlsma

In the essay 'Naples' (1925) the radical thinker and cultural critic Walter Benjamin together with actress Asja Lācis characterize Naples as a porous city. Here the main element of architecture is not the house or building block - let alone the type. Instead, Benjamin and Lācis call attention to its in-between spaces, like caves, cellars, courtyards, arcades, staircases, windows, gateways, and balconies. This porous domain - where the public is inextricably entangled with the private - allows for a new reading of urban spaces and their relation to architecture and urbanism. Their essay includes several aspects worth remembering: porosity connects the built environment with social as well as with natural elements; it participates in scripting the rituals of upper and lower classes and its impermanence suggests a tension with order and planning.

With this socio-spatial concept of the porous city in mind, the studio investigates the urban function of 'Intermediate Size' buildings (De tussenmaat, 2006). In this semester we will look into the emergence and further development of Intermediate Size typologies in Paris - from the bourgeois Hotel to the workers street - until modern times. Which specific typological, functional and architectural elements are used and how do they relate to urban and dwelling cultures? How do Intermediate Size typologies accommodate the complexity of the present city-life and its rapidly changing patterns?

This studio is the third of a sequence of graduation studios. Both research and design work will contribute to a body of work for a follow-up publication. We study the most relevant elements which directly or indirectly relate to urban and dwelling culture - including not only typo-morphological aspects as distribution, spatial transitions, scenography, but also social function, cultural representation, phenomenological interpretation and their changing roles in different time periods. By looking at the city along the radial cross-sections, we read the city from pre-modern, to present-day, and the contemporary lived city.

The studio results in an elaborate urban design, special attention is paid to the connection to and overlap with architectural design.

(Please consider a study trip is scheduled late September 2023.)

drs. ir. Like Bijlsma

ir. Jochem Groenland

ir. Wouter Hilhorst

responsible professor: prof. dr. ir. Pieter van Wesemael

7W45Mo
semester A, quartile 2 (2-3-4-1)
45 ects
10 students

7QX5Mo, quartile 1
Seminars Architecture and Urbanism

7QX5Mo, quartile 2
Seminars Architecture and Urbanism

7QX1Mo, quartile 1-2
Masterprojects Architecture

7QW1Mo, quartile 1-2
Masterprojects Urbanism

7XW1Mo, quartile 1-2
Combined Masterproject

7X45Mo, quartile 1
Graduation studios Architecture

7X45Mo, quartile 2
Graduation studios Architecture

7W45Mo, quartile 1
Graduation studios Urbanism

7W45Mo, quartile 2
Graduation studios Urbanism

7X6oMo, quartile 1
Graduation studios Architecture & Urban Design

7QQ5Mo
International Academic Workshops

7X6oMo, quartile 1

Graduation studios Architecture & Urban Design

RAo1/UUAo1 ANTWERP – Sprong over Ring en Rivier
dipl. -ing. Haïke Apelt, MA B.Arch. Daryl Mulvihill
h.apelt@tue.nl, d.m.mulvihill@tue.nl



ANTWERP – Sprong over Ring en Rivier

Image 1
Morphological map of
Antwerp 2016 (Source:
Atlas of the graduation
studio “Antwerpen – De
Getekende Stad”, 2016)

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 (7QX1Mo or 7QX2Mo) and a regular Masterproject in Urbanism (7QW1Mo or 7QW2Mo) and a combined Masterproject in Architecture and Urbanism (7XW1Mo) may apply for the combined Graduation studio.

The studio will be devoted to the typomorphological analysis of the city of Antwerp, focusing on specific urban situations which play an important role within the actual debate. Within the strategic plan of the department of urban planning an expected population growth of about 30 000 families until 2030 is discussed, which rises (among others) questions of urban and architectural nature. As there are limits to the densification of the inner city, the so-called “Sprong over Ring en Rivier” (Jump over Ring and River) is to play a central role in accommodating an expected population growth, but it will also in many ways redefine the city as we know it.

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. 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

7X60Mo
semester A, quartile 1 (1-2-3-4)
60 ects

7QX5Mo, quartile 1
Seminars Architecture and Urbanism

7QX5Mo, quartile 2
Seminars Architecture and Urbanism

7QX1Mo, quartile 1-2
Masterprojects Architecture

7QW1Mo, quartile 1-2
Masterprojects Urbanism

7XW1Mo, quartile 1-2
Combined Masterproject

7X45Mo, quartile 1
Graduation studios Architecture

7X45Mo, quartile 2
Graduation studios Architecture

7W45Mo, quartile 1
Graduation studios Urbanism

7W45Mo, quartile 2
Graduation studios Urbanism

7X60Mo, quartile 1
Graduation studios Architecture & Urban Design

7QQ5Mo
International Academic Workshops

7QQ5Mo, quartile 1
International Academic Workshops

ADE01 “Climate Heritage Adaptations” in Cappodocia

ir. Tom Veeger
t.t.veeger@tue.nl

RA01 Venice 2023

Ir. Anne Marie Peters
a.peters@tue.nl



“Climate Heritage Adaptations” in Cappadocia

Image 1
Cappadocia : e-CREHA
organizaEon

The Chair of Architectural Design and Engineering is participating in the e-CREHA Erasmus+ project which is being organized by the TOBB University of Economics and Technology (TOBB ETU), in Ankara Turkey.

Cultural heritage in Europe, as well as worldwide, is threatened by human-made disasters and climate change, which impair its integrity and threaten its values. Continual losses of architectural heritage can have a negative impact on local and national communities for their cultural, historical, and socioeconomic values. Heritage contributes to social cohesion, sustainable development, and psychological well being.

source: e-CREHA

Part of this project is the student workshop “Climate Heritage Adaptations” that will be held in Turkey as part of the e-CREHA Erasmus+ project and it will take place in 4-13 September in Ankara. The topic will be on adaptation of cultural landscapes to the impacts of climate change in Cappadocia including a 2 days field trip to this amazing topography and landscapes – it’s the top touristic spot of Turkey. Students from different disciplinary backgrounds and countries will work on adaptation design solutions for some heritage sites there. <https://www.ecreha.org/>

To allow sufficient time with the preparation of the workshop, registration will take place via a pre-selection, registration should take place via email by Friday July 7th, 2023 addressed to Tom Veeger t.t.veeger@tue.nl. The application should consist of a short motivation.

Please note: the workshop will take place in the first two weeks of the semester A. Registration for this workshop is a pre-registration. Additional selection criteria, as defined by the organizers of the workshop, may apply.

For more information, please contact Tom Veeger: t.t.veeger@tue.nl

ir. Tom Veeger

7QQ5Mo

semester A, quartile 1

workshop in Ankara: September 4th – 13th 2023

5 ects

max. number of participants is 10



Venice 2023

Image 1
<https://blog.italotreno.it/wp-content/uploads/2018/03/arrivare-a-veneziasanta-lucia-in-treno-copyright-didier-descouens-wiki-media-commons.jpg>

The chair of Rational Architecture is participating in the International European Summer Academy in Venice, organized by the TU Dortmund. Participating also will be students from the Universities of Dortmund, Potsdam, Wiesbaden and Venice. The Summer Academy consists of an analytic design workshop, supported by lectures and excursions. During the workshop you will work in mixed groups, supervised by teaching staff from the different universities, which involves significant aspects of international experience on a high academic level. You will be provided with working spaces in Venice, offered by the IUAV, in the so-called ‘magazzini’.

This year’s assignment reads: The railway bridge “Ponte della Ferrovia”, today also called “Ponte Vecchio”, was opened in 1846 with two tracks and provided the first connection from the mainland to Venice that did not cross the water by boat. The “Ponte della Libertà”, designed in 1931 by the architect Eugenio Miozzi and opened in 1933 by Benito Mussolini under the name “Ponte Littorio”, doubled the old bridge and opened the way for car traffic to Venice. Today, 90 years after the construction of the motor bridge, the maxim of having to reach Venice by car seems more obsolete than ever. We plan to make Venice car-free. The remarkable multi-storey car park at Piazzale Roma, also designed by architect Eugenio Miozzi, will be “mirrored” and rebuilt at the other end of the bridge on the shore of the lagoon in Marghera. The “Bridge of Freedom” is now available for new development. We are planning a linear ribbon city. The aim of the design is to create a new place to live, especially for the many students commuting to Venice, at the entrance to the lagoon city. The use of the bridges as routes for the railway and the rail-guided bus “Translohr Venezia” is to be preserved.

During the Summer Academy, students will stay in Venice for two weeks to attend the workshop. Travel and stay have to be arranged by the students as part of the preparation. Involved also is some post-production: an exhibition and a booklet to present the results of the Academy afterwards at the TUE. **Please register before July 4th, 2023 to allow sufficient time for preparation and send an e-mail to h.apelt@tue.nl, so she can get in contact with you! Any later requests for registration need to be done both on canvas and via e-mail as well.**

Collaboration with: Prof. Wouter Suselbeek (Technical University of Dortmund), Prof. Silvia Malcovati (University of Applied Science Potsdam), Prof. Georg Ebbing (Hochschule RheinMain), Prof. Marco Pogacnik (University of Venice (IUAV)) and Prof. Gundula Rakowitz (University of Venice (IUAV)).

ir. Anne Marie Peters

7QQ5Mo

semester A, quartile 1

workshop in Venice, Italy: September 3th – 15th 2023

5 ects

max. number of participants is 10; if more students apply, we will select by portfolio

JAM
BLT
ENV

department of the
built environment

architectural urban design
and engineering

AUDE

