Prof. Maria Conen Architecture and Housing

Prof. Dr. David Kaufmann Spatial Dev. & Urban Policy

Prof. Dr. Max Maurer Urban Water Systems

Birds Views



Master's Thesis FS 2025

Core Program HOUSE EUROPE!

ETHZ D-ARCH

Zoe Leonard, Aerials, 80's

In the early 1980s, artist Zoe Leonard created the photographic series Aerials, which captures landscapes and infrastructures from a bird's-eye view. Her images frame rivers, railways, roads, and grids of housing within the wavering edges of the film negative, emphasizing both the explicit and implicit realities of the built environment. Leonard's perspective is an invitation to reflect on the socio-economic structures that shape urban and suburban landscapes, highlighting the intersection of natural and human-made worlds. This deliberate distance offers a new way to perceive and interpret our surroundings and our own place in the world.

We've been long captivated by the flight and view of birds. From the myth of Icarus to the achievements of the Wright brothers, the pursuit of an elevated perspective of our planet has fascinated humanity - from a bird's point of view, everything appears smaller. This change of perspective, often used to reassign things their true importance, is an invitation to our diploma starting point. A birds view can also be confusing and the broad overview created by distance opens up the question: What's really important?

In our diploma studio we direct our eyes to High-rise infrastructures that, while visually dominant and easily identifiable in the urban structure are highly controversial and create often significant barriers. Inside a high-rise building, we experience this bird's eye view. The visual distance separates us from the groundand these buildings disrupt the migratory patterns of birds and insects fragmenting habitats. How do we deal with this? The relentless densification of urban spaces has contributed to extensive habitat loss, underscoring the urgent need for designs that integrate biodiversity and respect for surrounding ecosystems. How can we accommodate and densify our cities without sacrificing the other beings that inhabit it?

In our diploma studio, we aim to confront the housing crisis by reimagining existing structures as sustainable, multifaceted dwelling solutions. This approach requires a balance between accommodating urban population growth and prioritizing environmental sustainability and biodiversity - places where people, animals, and plants can all thrive together. Like Jane Jacobs wrote: 'Cities have the capability of providing something for everybody, only because, and only when, they are created by everybody.'

Guided by this ideology, our studio will critically examine high-rises in Winterthur, questioning their qualities as an urban figure, façade boundaries, and their relationship with the Earth and adjacent landscapes. We will explore models of communal living and reimagine resource management within urban housing, emphasizing circular systems for water, food, energy, and more. Students are encouraged to propose complementary programs that enrich both the human and ecological dimensions of urban habitats.

Preparation Phase

In the preparation phase, students will conduct extensive research on specific structures and their surroundings. This will involve discovering and mapping existing cycles and illustrating them through various means of expression.

The work will range from a broader understanding of the site and its context to a detailed analysis of its components, providing a strong foundation for the elaboration phase. Also, an analysis of the building components of the given structures will be a fundamental part of the first phase.

Students will examine the given case study and produce an in-depth investigation, examining its history, material qualities, typology, construction, and social dimension. This research will be presented through drawings, including plans, sections, and facades, along with a synthesis drawing, a photographic essay, and text.

At the beginning, we will produce calculations that show the water behavior at the sites and an analysis of the building components, creating a catalog out of it. We will use these elements as a starting point and try to improve the site conditions through the work of the students.

Elaboration Phase

The projects developed by students should engage with social. political, and sustainable visions. The architect's role is to create spaces for humans and other species while taking care of the urban fabric and nature. Students will work around forms of living, but complementary programs can be added according to the story of each project using the knowledge acquired in the preparation phase. The work will embrace formidable challenge of fostering the residential density in a sustainable manner. Utilizing extant structures as foundational elements for extension and/or as sources of construction materials, the objective is to engender increased inhabitation amidst the multifaceted exigencies of contemporary circumstances: re-use. re-form, rethink, re-habit, re-house.

To develop their projects, students will build study models using "found materials" to investigate proposals and prove design decisions - Re-use is encouraged!

In addition to model-making, students will use hand drawings to verify and develop their designs. As structures are dismantled and destroyed every day, materials and resources can find new life and purpose in architectural projects, prolonging their cycle.

Developing a narrative to guide the project is essential to its success!

Ratio Grading

Prenaration phase.		30%	Forms of Living
			Typology
Chair Maria Conen	50%		Cycles
Chair David Kaufmann	25%	25% — Water	
Chair Max Maurer	25%		
			Sustainability
Elaboration phase:		70%	Sociology
Chair Maria Conen	70%		Re-use
Chair David Kaufmann	15%		Working with the Existing
Chair Max Maurer	15%		Elaboration of Drawings
			Synthesis Drawing
			Photo Essay
			Model Making
			Storytelling
			Calculations

Keywords

Maria Conen	David Kaufmann	Max Maurer
Professor for	Assist. Professor	Professor for
Architecture	Spatial Development	Urban Water
and Housing	& Urban Policy	Systems
ETH Zürich,	ETH Zürich,	ETH Zürich,
Department of	Dept. of Civil,	Dept. of Civil,
Architecture	Environmental	Environmental
	and Geomatic	and Geomatic
	Engineering	Engineering
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