

# Graduation Plan

Master of Science Architecture, Urbanism & Building Sciences



## Graduation Plan: All tracks

Submit your Graduation Plan to the Board of Examiners ([Examencommissie-BK@tudelft.nl](mailto:Examencommissie-BK@tudelft.nl)), Mentors and Delegate of the Board of Examiners one week before P2 at the latest.

The graduation plan consists of at least the following data/segments:

Personal information	
Name	Yin Tat Chan (Kurt)
Student number	5575117

Studio		
Name / Theme	Architectural Design Crossovers	
Main mentor	Johan van Lierop	Architecture (Design Tutor)
Second mentor	Florian Eckardt	Technical Building Design
Third mentor	Alper Semih Alkan	Architecture (Research Tutor)
Argumentation of choice of the studio	In an increasingly interconnected world, architectural challenges have become increasingly multifaceted and move beyond the built environment. ADC provides an opportunity to embrace such heterogeneity and engage in multiple design disciplines to better understand the actors at play. The studio embraces various scales from city to object to gain a holistic understanding of the problem and the various forces influencing it. By synthesizing such findings, a clearer system can be seen. It is precisely this emphasis placed on design beyond the conventional site, that is invaluable. To understand how an architectural intervention fits into the larger puzzle of study.	

Graduation project	
Title of the graduation project	Crafting Along Material Wear <i>Interweaving crafts and materials towards wear in architecture &amp; beyond</i>
Goal	
Location:	Reusing Decommissioned Water Deposit in Nuevo Norte master plan, Madrid
The posed problem,	The institutionalization of the architectural practice has consequently caused a linear life cycle from production, construction, to demolition and waste. The overreliance on mass standardized and optimized components, not only exacerbate ecological effects but also breed mediocrity in architecture. An epistemic break from the expressive and physical process of crafting, which has been marginalized into a practice of the past. The growing pains towards the aforementioned restrictive qualities of the practice have bred new counter ideologies in repair and reuse that embrace the heterogeneity of wear.
research questions and	How can the historic material culture and rituals in Madrid be interwoven within the emerging crafting of wear to discover alternative forms of architectural expression?

design assignment in which these result.

Investigating, the end life cycle of materials through contextualizing Madrid's current waste system, highlights the severe limitations of current material life cycle strategies in Madrid. A system that relies on techno fixes like recycling, incurring high costs, intensive labour, energy and more importantly degrades material qualities into byproducts. Presenting an opportunity to transition Madrid's waste system towards reuse and repair. Rotor's analysis of the current reclamation market that prioritizes economic viability, underscores a need for a more creatively driven practice that would stimulate and move beyond existing products in the reuse market. Moving beyond reuse towards an overall reparative approach, an alternative system that embraces the variability of aging materials, synergizing with existing material culture and rituals, and extending beyond.

This begins with empowering this epistemological domain of physical and reproductive labour in manual skill and craft expertise through the network of traditional craftsmen of Madrid. Moreover, galvanizing overlooked actors in care and maintenance, enriching discourse by exchanging their material expertise towards a more comprehensive hybrid architectural expression embracing the heterogeneity of wear. The transformative influence of embracing wear in the urban fabric, can foster a collective ethos and culture towards material aging. In synergizing knowledge domains at various scales towards design with wear, flourishes into an interdependent network, an urban common of crafters in Madrid.

## Process

### Method description

#### Conceptual and Contextual

The research begins with understanding the theoretical and conceptual concepts behind crafts, reviewing ideas like *Towards a Material Ecology*, *The Craftsman*, *Actor-Network Theory* and more. The concepts are then applied to Madrid through more contextual research in the form of historical archives, interviews, literature reviews, cinematography, etc. These temporal conditions are then translated into mapping and diagrammatic exercises, to understand the interdependences of the system, that reveal potential challenges and potentials for intervention.

#### Design

The design draws from the essence of the aforementioned diagrams, which is then translated into a design brief. Outlining project ambitions, site requirements and clients that leads to the selection of project locations and programming. Located within an urban development, a timeline/roadmap is developed to further outline the temporal strategy and the role of various stakeholders along its development. The reuse of an empty concrete concrete slab water deposit structures, presents the freedom and potential in exploring varying methods of designing towards wear. Studying the life cycle of materials and how the concept of ageing can be expressed architecturally.

## Literature and general practical references

### Main Sources:

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Bakshi, Anita, and Frank Gallagher. "Design with Fourth Nature." *Journal of Landscape Architecture* 15, no. 2 (May 3, 2020): 24–35. <https://doi.org/10.1080/18626033.2020.1852690>.

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"Plan de Gestión de Residuos de Construcción Y Demolición." RCD, 2017.

Sennett, Richard. *The Craftsman*. New Haven: Yale University Press, 2008.

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Topalov, Hugo, Victor Meesters, and Coralie Van Pottelsberghe. "FCRBE Pilot Operations." FCRBE, 2021.

### Other Sources:

Carpo, Mario. *Beyond Digital: Towards a New Materiality of Architecture*. The MIT Press, 2023.

Croxford, Ben. *Foundries of the Future: A Guide for 21st Century Cities of Making*. TU Delft Open, 2020.

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### Reflection

1. What is the relation between your graduation (project) topic, the studio topic (if applicable), your master track (A,U,BT,LA,MBE), and your master programme (MSc AUBS)?

The studio Architectural Design Crossovers, regarding "The Expanded City/Madrid", approaches both research and design through a multidisciplinary methodology. Similarly, my project not only begins with addressing the diminishing value of craftsmanship in the built environment, but delves deeper into the sociological dimensions of Madrid's cultural and historical extraction of materials. Moreover, encapsulating such concepts of craft and material rituals within the context of repair, reuse and waste within an urban context. A project that synthesizes these concepts in various scales and topics, into an incubator for crafting salvaged and neglected materials.

2. What is the relevance of your graduation work in the larger social, professional and scientific framework.

This graduation project hopes to explore the reintroduction and evolution of the productive epistemological domain of crafting materials in architecture. A hybrid approach that preserves and empowers traditional actors of crafting while infusing emerging practices of repair, reuse and waste in architectural expression. This research takes Madrid as a laboratory in testing the conceptual approach of reintroducing crafting in a city. Towards a material ecology, that empowers both human actors, but more importantly non-human things (materials). Mapping and tapping into potential challenges and potentials within the system. Ultimately, the research hopes to provide insight and a possible model in the return of architectural crafting in the city towards the embrace of wear.