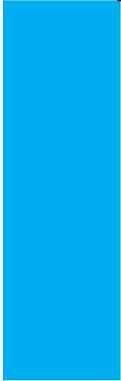


# Graduation Plan

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	Olivier Isidoor Bierens
Student number	4568087

Studio		
Name / Theme	Borders & Territories Graduation Studio: Transient Liquidities Along the New Silk Road	
Main mentors	F. Geerts O.R.G. Rommens	Architecture
Second mentor	G. Koskamp	Building Engineering
Argumentation of choice of the studio	The freedom of spatial investigation and design which the studio facilitates is one of the main arguments for me to choose the studio. The open approach where the outcome of the research informs the design project in a non-traditional way, crossing borders between different disciplines, appeals to me. Together with the chance to explore personal interests and research the limits of architecture make for a very interesting design studio.	

Graduation project	
Title of the graduation project	Transitional territories: Architecture of (post)-extraction
Goal	
Location:	Istanbul, Türkiye: Ağaçlı coal fields north of the city.
The posed problem:	Today, different modes of extraction still sustain Türkiye's society. The country's landscape hosts a diverse range of minerals including copper, chrome, nickel and gold but also sedimentary rocks such as lignite coal. Specifically, the city of Istanbul is surrounded by multiple territories of extraction scattered across the landscape. These "extraction scapes", which were originally located far from the city centre, are now gradually bordering the rapidly expanding urban territory. At the same time these spaces, which are exploited for their resources to secure the development of the city, feel more and more disembodied from society, receded from daily view. While the distribution and export of extractive materials is increasingly globalized, the actual extraction of the

	<p>material is a local activity, metabolized by urbanization, a figurative negative of the city.</p> <p>The extractive contexts of these landscapes possess their own logic, tensions, form and process as a response to complex, dynamic systems. The growing conflicts of space pose the question how we can utilize, mediate, project and above all, understand these landscapes within the current architectural discourse, to offer meaningful connections.</p>
<p>Research questions:</p>	<p>Question 1: How can landscapes of (post)-extraction be maintained, reclaimed and developed?</p> <p>Question 2: How does extraction influence the soil and how can design regenerate this relationship?</p> <p>Question 3: How can methods of extraction research change the relationship between design and soil?</p> <p>Question 4: How can spatial modes and instruments of extraction enable new architectural forms?</p>
<p>Design assignment:</p>	<p>The design project positions itself on the edge between the fields of landscape architecture and architecture. The project addresses the ephemerality of extractive landscapes, imagining new ways of relating to the earth. Seeing soil not as a static being, but as a dynamic vehicle of becoming, a medium constantly in transition, a four-dimensional system, the interventions are the result of concepts and procedures of maintenance and modification. The different interventions together form a larger system, reflecting on the current modes of extraction:</p> <p><u>Observing</u>   <i>Core holes</i>  Frequently used for extraction purposes, drill cores are used to study the earth below. Apart from providing geological insight, drill cores can be interpreted in different ways and are a testimony to the changing ground. Instead of storing them for exclusive access, the cores will be exhibited and displayed to transform and capture the landscape, bringing the soil into the design conversation.</p> <p><u>Becoming</u>   <i>New excavations</i>  Landscapes of extraction are designed based on mathematical rules of yield and production, of capitalism and economics. At the same time, modes of extraction require a thorough understanding of the ground, it's properties and the machinery to excavate the different</p>

voids in the landscape. The design intervention proposes to change the logic to incorporate and legitimate the soil in a way that constructs new spatial relations and forms.

Maintaining | *Topsoil storage*

The excavation of materials from the earth is accompanied by monumental movements of soil. These material volumes change the landscape topography over the course of the period of extraction. During the period of excavation, the conservation of top soil is essential for post-extractive ecological stability. The intervention offers architectural modes of conserving and storing soil for the territory of the future.

Remaining | *Rediscovering landscape*

Post-extraction landscapes are often reclaimed in a way which results in restoration to a former state or previous condition. This automatically implies a form of nostalgia relating to an ideal image of nature and unity. The design intervention questions this narrative by positioning itself on the frontiers of cultivated and wild land, between past and present.

## **Process**

### **Method description**

The research is done through a variety of methods and techniques. Firstly, the larger territory was collectively through the mapping of the soil. Within the area of the research, the focus was on fault lines and associated consequences for the landscape of Turkey. Within this larger collective map, smaller individual case studies were carried out to explore the specific implications for smaller areas of interest. The collective research was the foundation for the further exploration of the relationship between soil and architecture. This relationship, specifically tailored to landscapes of extraction, is approached through academic literature to provide a theoretical framework for the graduation project, resulting in a theoretical essay. Multiple collective theoretical seminars studied mappings as an instrument for architectural investigation. The individual mappings continued on the collective mapping investigation. The individual mappings investigate the spatial conditions and relationships relating to the themes of 'soil' and 'extraction' on different scales. The research is further elaborated by an excursion to the Istanbul area where the territory can be further investigated. The outcomes of the theoretical essay, the collective map and the individual mappings are translated to architectural expressions in the 'modi operandi' workshop. The MSc 3 research phase is followed by the MSc 4 design phase, in which the first statements of intent as formulated during the research phase, will be worked out further. Testing design principles through sketching and model making, the design will become more and more elaborated, constantly reflecting and revisiting the previous research. Through experimentation the design generates new rules and agencies for the development of spaces of extraction.

## Literature and general practical preference

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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)?*

In the present day, space seems more and more influenced by political, economic and ecological pressures. Diverse spatial conditions provide important context and pose challenges which transcend the field of architecture. The contemporary landscape becomes more and more complex and requires interdisciplinary collaboration to test new approaches. The Borders and Territories Studio provides the instruments to research these relationships along the New Silk Road.

Extraction sites operate the landscape through constant internal reconfiguration, altering the landscape in a complex and territorial way. Geographies of extraction are often discontinuous and do not coincide with the notion of city, district or national territory. The graduation project aims to generate alternative strategies and architectural interventions for these extractive landscapes, which can act both local and global. The project can inform and challenge the status-quo and test the limits of the contemporary architectural discourse, changing the perception of these spaces and provide meaning for future territories of extraction.

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

The graduation project explores the role of extraction landscapes within the current debate on the relationship between architecture and soil. The scientific field of soil is currently developing rapidly, reevaluating the ecological and urban potential of this the ground beneath our feet. Thinking of extraction landscapes not solely as landscapes of production, but also as landscapes of maintenance, the project takes position within the debate on soil. The research can provide valuable insights into the current logic and status of extraction landscapes. Generating strategies not purely based on economic, capitalist and mathematical common sense, the project experiments with alternative approaches, producing imaginative perspectives.