

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), 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	Xinyu Lin
Student number	5787513

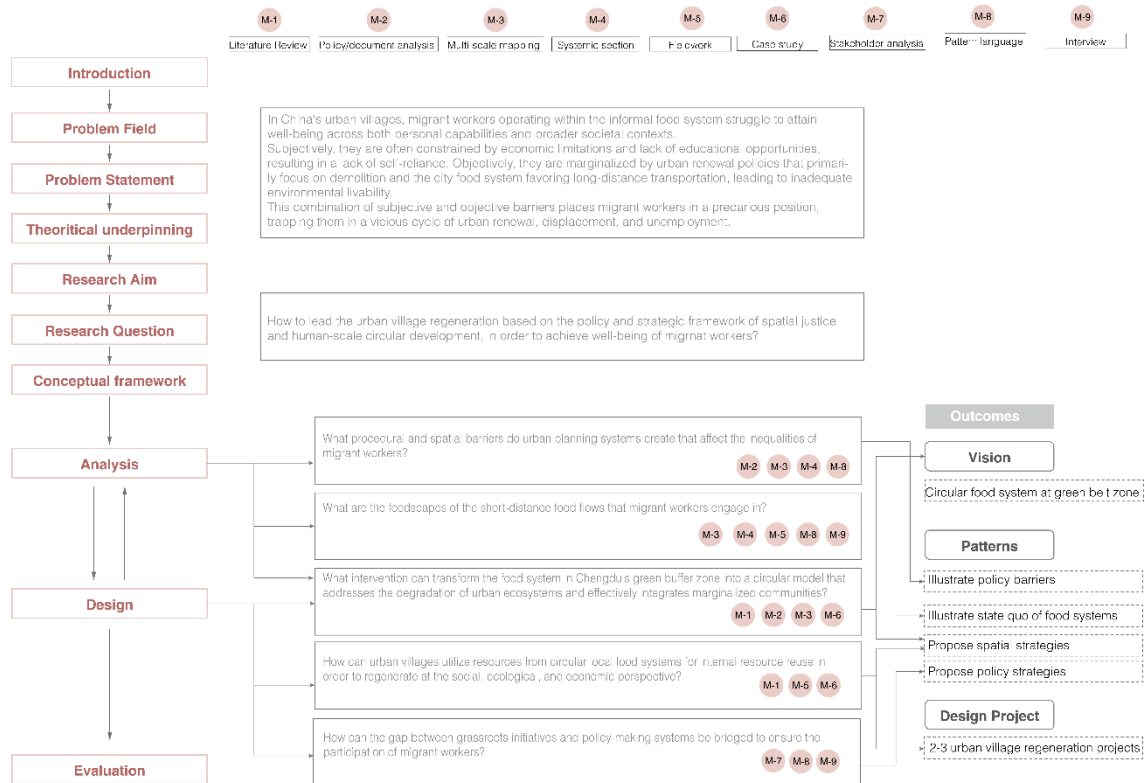
Studio		
Name / Theme	Planning Complex Cities	
Main mentor	Marcin Dabrowski	Circular Development and Spatial Justice
Second mentor	Birgit Hausleitner	Pattern Language
Argumentation of choice of the studio	My engagement with the Complex City Studio is driven by a keen interest in the sociocultural impact of urban village renewal in Chengdu, China, particularly those centered around demolition. I focus on the dynamics within informal food sectors and the consequent impact on marginalized communities, including migrant workers. This concern extends to reviewing the equity of existing urban planning and policies and advocating for more inclusive renewal strategies to support these vulnerable groups. The project demands a nuanced systemic analysis, diving into the complexities of urban planning, policymaking, and implementation. The instructional approach of the Complex City Studio, with its emphasis on policy, governance, and public participation, is well-aligned with my project's objectives. The studio's commitment to promoting institutional change and clarifying the interplay between institutional frameworks and spatial development coincides with my research goals.	

Graduation project	
Title of the graduation project	From Arrival City to Circular City: The Circular Development Approach to Incorporating Migrant Workers into the Urban Village Regeneration
Goal	
Location:	Green Belt Zone at Urban Expansion Boundary, Chengdu, China
The posed problem,	Achieving human well-being requires addressing four key dimensions: personal attributes, objective actions, material resources, and external interactions.

	In China's urban villages, migrant workers operating within the informal food system struggle to attain well-being across both personal capabilities and broader societal contexts. Subjectively, they are often constrained by economic limitations and a lack of educational opportunities, resulting in a lack of self-reliance. Objectively, they are marginalized by urban renewal policies that primarily focus on demolition and the city food system favoring long-distance transportation, leading to inadequate environmental livability. This combination of subjective and objective barriers places migrant workers in a precarious position, trapping them in a vicious cycle of urban renewal, displacement, and unemployment.
research questions and	How to lead the urban village regeneration based on the policy and strategic framework of spatial justice and human-scale circular development, to achieve the well-being of migrant workers? Sub questions: 1. What procedural and spatial barriers do urban planning systems create that affect the inequalities of migrant workers? 2. What are the foodscapes of the short-distance food flows that migrant workers engage in? 3. What intervention can transform the food system in Chengdu's green buffer zone into a circular model that addresses the degradation of urban ecosystems and effectively integrates marginalized communities? 4. How can urban villages utilize resources from circular food systems for internal resource reuse to regenerate from the social, ecological, and economic perspectives? 5. How can the gap between grassroots initiatives and policy-making systems be bridged to ensure the participation of migrant workers in urban village regeneration?
design assignment in which these result.	Sub question 1 Methods to answer this question: • Policy analysis: Dual urban-rural household registration policy, Regulations on Resettlement for Land Collection in Chengdu, Urban Renewal Implementation Procedure • Document analysis: Green Belt Plan Outcomes: • Patterns and Pattern Field: Patterns are used to illustrate the complexity of policies, plans, and their

	implementation processes related to urban renewal and green belt planning. Pattern fields are used to clarify the systemic linkages between policies and plans and to expose the recognition, distributional, and procedural barriers faced by migrant workers. Sub question 2 Methods to answer this question: • City-scale Mapping: Urban Village Distribution, Urban Village Development Timeline, Foodscape in the informal food sector. • Pattern Language: Summarize the foodscapes in short-distance food system • Systemic section: Local vegetable production-distribution flow. • Fieldwork and interview: Observation trips to urban villages and interviews with migrant workers engaged in the retail sale of fruits and vegetables. Outcomes: • Urban Village Typology • Patterns and Pattern Field: Summarize the foodscapes in the informal food system and use pattern field to illustrate the interconnectedness of these foodscapes Sub question 3 Methods to answer this question: • Literature review: Ecosystem Degradation in Chengdu Green Belt Zone • Literature Review: Understand the principles of building a circular food system • Document analysis: Chengdu Green Belt Planning, Chengdu Agriculture Planning • City-scale Mapping: Foodscapes of long-distance food flow • Pattern Language: Summarize the foodscapes in a long-distance food system • Assessment: long-distance foodscape's potential/ necessity to transform into recycled food landscapes • Case study: Bangkok urban farm network, Copenhagen Finger Planning and Evaluation Literature Outcomes: • Vision map: a circular food system at the green belt zone, including the size of the site, the land transition, and the resources flow.(Macro scale) • Patterns that propose spatial strategies: Circular food strategies can be applied in the green belt. (Meso
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	scale) - Strategies Timeline: Selection of priority strategies and locations according to the level of pressure from urban planning systems and the severity of the problem. (Macro and Meso scale) Sub question 4 Methods to answer this question: - Case study: Urban Village Inclusive Renewal Project (Nantou Ancient Village, Shenzhen), Circular Food Practices in Traditional Chinese Villages and Urban Areas - Field Trip: Observe current recycling practices in urban villages, such as composting with rice water Outcomes: - Patterns that propose spatial strategies: Strategies that can be applied in the urban village to recognize and reuse the value of informal food sectors. (Meso scale) - Design Test: Select 2-3 urban villages to test the design(Micro scale) Sub question 5 Methods to answer this question: - Interview: Stakeholders (Planners, Green belt developers, Real estate developers, migrant workers, and neighborhood residents) attitudes towards the transition. - Stakeholder analysis: Analyze stakeholder relationships through perspectives gathered in interviews Outcomes: - Patterns that propose policy strategies: Planning procedures for migrant worker participation, Policy recommendation
[This should be formulated in such a way that the graduation project can answer these questions. The definition of the problem has to be significant to a clearly defined area of research and design.]	
Process	
Method description	



The methods used under each sub-question and the corresponding outcomes have been answered in the last question.

This figure shows the methodology flow

Literature and general practical references

Arrival City

Saunders, D. (2012). *Arrival City: How the Largest Migration in History Is Reshaping Our World*. Vintage.

Urban Regeneration

Chen, W., Ye, C., & Liu, Y. (2023). From the arrival cities to affordable cities in China: Seeing through the practices of rural migrants' participation in Guangzhou's urban village regeneration. *Habitat International*, 138, 102872. <https://doi.org/10.1016/j.habitatint.2023.102872>

Cottino, P., Domante, D., & Franchina, A. (2022). Urban Regeneration: An "Incremental Circularity" perspective. In *The Geojournal library* (pp. 255–266). https://doi.org/10.1007/978-3-030-78536-9_16

Well-being

Cardoso, R., Sobhani, A., & Meijers, E. (2021b). The cities we need: Towards an urbanism guided by human needs satisfaction. *Urban Studies*, 59(13), 2638–2659. <https://doi.org/10.1177/00420980211045571>

Max-Neef, M. (1989). Human scale development conception application and further reflections. <http://ci.nii.ac.jp/ncid/BA17184047>

Veenhoven, R. (2000). The Four Qualities of Life. *Journal of Happiness Studies*, 1(1), 1–39. <https://doi.org/10.1023/a:1010072010360>

Circular development

Veenhoven, R. (2000). The Four Qualities of Life. *Journal of Happiness Studies*, 1(1), 1–39. <https://doi.org/10.1023/a:1010072010360>

Cottino, P., Domante, D., & Franchina, A. (2022). Urban Regeneration: An "Incremental Circularity" perspective. In *The Geojournal library* (pp. 255–266). https://doi.org/10.1007/978-3-030-78536-9_16

Korsunova, A., Halme, M., Kourula, A., Levänen, J., & Lima-Toivanen, M. (2022). Necessity-driven circular economy in low-income contexts: How informal sector practices retain value for circularity. *Global Environmental Change*, 76, 102573. <https://doi.org/10.1016/j.gloenvcha.2022.102573>

Williams, J. (2019). Circular cities. *Urban Studies*, 56(13), 2746–2762. <https://doi.org/10.1177/0042098018806133>

Spatial Justice

Fainstein, S. S. (2010). *The Just City*.

Rocco, R. (2023). What's Spatial Justice. Centre for the Just City. Available from <https://just-city.org/about/spatial-justice/>

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)?

My graduation project deeply investigates urbanism, an essential discipline that bridges architecture and public policy, reflecting the multifaceted nature of urban challenges. It examines the significant role of urban governance in shaping and being shaped by spatial development, focusing on the dynamic interplay between policy, spatial planning, and the experiences of urban dwellers, particularly marginalized rural migrant workers.

The project highlighted the consequences of exclusionary decision-making systems, as exemplified by China's dual urban-rural household registration policy. This system tends to exclude rural migrants and deprive them of the urban services and rights to which they are entitled, as evidenced by their displacement as "tenants" in urban renewal projects. This insight, derived from a detailed study of policy documents and urban planning frameworks, reveals that the voices of rural migrants are systematically ignored.

At the same time, the project recognizes the potential of bottom-up influences on public policy, as illustrated by grass-roots initiatives such as Chengdu's decision to allow street food vendors during a pandemic. This exemplifies how local practices can reshape urban policy and space, suggesting more inclusive approaches to urban planning. By collecting and analyzing these practices in the informal food sector of urban villages, the project aims to recognize and capitalize on their spatial use and value in the urban food system. This approach advocates for a policy shift that recognizes these informal sectors and aims for a more just spatial distribution at the level of urban planning.

In conclusion, my graduation project aligns with the objectives of the Complex City Studio, emphasizing the need for institutional reform and understanding the intricate relationship between policy and spatial development.

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

The scientific significance of this project is data-driven decision-making to address sustainable and equitable urban development. Notably, a substantial research gap exists regarding Chengdu's informal food system, with Nanjing being the only city with a systematic understanding of this sector. This project employs extensive statistical, geographical, and field survey data to establish a comprehensive understanding of Chengdu's informal food sector, informing future urban renewal decisions and ensuring the protection of vulnerable groups.

Adopting a multi-scale perspective, the project transcends traditional urban village-focused studies, zooming out to a city scale. It situates urban greenway planning as a context for urban village renewal, aiming for a more equitable

resource distribution for renewal. This broader view seeks to integrate urban villages into the larger urban system, facilitating a more inclusive and comprehensive urban development strategy.

The exploration of circular food system strategies introduces sustainable development considerations into urban village spatial renewal, filling a significant research gap. This approach not only addresses environmental concerns but also fosters a sustainable urban ecosystem, contributing to the resilience and vitality of urban communities.

From a social perspective, the project advocates for inclusiveness and public participation in planning, directly challenging the exclusivity in the current planning system. The project advocates for policies and accessibility that ensure that the voices and needs of disadvantaged groups are not only heard but also central to the planning process.