

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	Chen YU
Student number	5323045

Studio		
Name / Theme	Interiors Buildings Cities: Future Bank	
Main mentor	Sam De Vocht	Architecture
Second mentor	Matthijs Klooster	Architectural engineering
Third mentor	Sereh Mandias	Architecture, research methods
Argumentation of choice of the studio	Bank building is a new typology that I've never deal with. I'm interested in the transformation and representation of the national institution in an economic and social context. Besides, the drawing style of this studio is recognizable and attractive for me.	

Graduation project	
Title of the graduation project	National Bank of Belgium
Goal	
Location:	Brussels, Belgium
The posed problem,	The National Bank of Belgium in the centre of Brussels will be transform from being a closed fortress and a partly industrial space to a knowledge centre. The main building complex will become the workplace of the bank's 1500 office-based staff. Design the right working environments for the diverse activities of the future bank will be the central to this project. What relations will the project define between people? How will the project foster a positive and engaged culture and a sense of wellbeing while avoiding creating unnecessary hierarchies? Besides the main goal to provide consolidated workspace for staff, the bank also aims to accommodate openness and invite the public to enter the world of the bank. With the ambition to adopt doughnut economic model, how will the bank become the agent of change, at the centre of a transformed economy?
research questions and	There are mainly two aspects of the research, workplace and social plinth. How will people work in the future bank? How will the project change the way people work in the Bank? How

	<p>to improve staff's satisfaction to the working environment? Meanwhile, the bank has the potential to take more responsibilities in terms of climate and public engagement. What kind of public functions should be created in the bank? How will the openness transform the ways in which the institution works? What's the new roles of the future bank?</p>
<p>design assignment in which these result.</p>	<p>The studio asks for the project for the transformation of the National Bank of Belgium. The project embodies two significant inspirations. The first one is to design workspace for the employees in an economic context. The office environment is not only the place where people type, talk, and think together, but also part of a network of governance and that engages with the EU, national government, the wider banking infrastructure, cities and citizens. The design of social plinth defines the bank as the agent of change, and locates the project in broader social, cultural, natural, or political context. It also takes into account the need of citizens, the future urban development, and the change in office typology. The project also responds to the 2050 Long-Term Strategy of the EU and the Good Food Plan of Brussels to create a sustainable and food self-sufficient building.</p>

Process

Method description

Precedent studies:

Understanding the past is fundamental to designing a future. The studio starts with research on the history and changing culture of office. Students working in pairs document 16 office buildings and 16 bank buildings in order to situate, understand, and compare these works. Each student is asked to visit and document an office space of their own choice, to understand what kind of working environment people actually work in and create for themselves. Other cases are also studied corresponding to individual research topics, including public engagement, food and urban vegetation, sustainability, etc.

Literature research:

The purpose of literature research is to study the basics of economic system, to examine the history and changing culture of office space, and to identify the factors that affects employees' productivity and satisfaction to the working environment. Further research on public space and urban vegetation needs to be down in the next steps.

Site research:

Understand the city, the site, and the bank building complex through a collective excursion and a tour guide in the bank. The patterns of the cultural network in the Brussels city became clear after walking alone the Rue Royale and visiting several important cultural facilities like the Bozar, the Ravenstein Gallery, the City Park, the Arts Mountain, and the Royal Library of Belgium. The research and documentation of the bank site is divided into four parts: the surrounding buildings, the surrounding environment, the exterior of the bank, and the interiors of the bank. CAD drawings, 3D models, and physical site models are made for a deeper understanding of the site and the complicated building.

Model making:

In groups of four, students make a model of a spatial fragment within the office precedents. The task is recreating the photograph as three dimensional digital and physical models, to understand the key moment in the offices, and to represent the spatial experience through the changing perspectives from image to model and then back to image. Model of the social plinth is made individually, to represent the idea that 'food activities as a tool to break boundaries and create gathering space'. Other model for representing and testing the idea of project are also made during the working process.

Literature and general practical preference

Literature:

- Clohessy, S., Walasek, L., & Meyer, C. (2019). Factors influencing employees' eating behaviours in the office-based workplace: A systematic review. *Obesity Reviews*, 20(12), 1771–1780. <https://doi.org/10.1111/obr.12920>
- Colenberg, S., Jylhä, T., & Arkesteijn, M. (2020). The relationship between interior office space and employee health and well-being – a literature review. *Building Research & Information*, 49(3), 352–366. <https://doi.org/10.1080/09613218.2019.1710098>
- Dovey, K. (1992). Corporate Towers and Symbolic Capital. *Environment and Planning B: Planning and Design*, 19(2), 173–188. <https://doi.org/10.1068/b190173>
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- Duru, M. (2017). *Diaspora, Food and Identity: Nigerian Migrants in Belgium* [E-book]. P.I.E-Peter Lang S.A., Editions Scientifiques Internationales.
- Haapakangas, A., Hallman, D. M., Mathiassen, S. E., & Jahncke, H. (2018). Self-rated productivity and employee well-being in activity-based offices: The role of environmental perceptions and workspace use. *Building and Environment*, 145, 115–124. <https://doi.org/10.1016/j.buildenv.2018.09.017>
- Haynes, B. P. (2007). Office productivity: a theoretical framework. *Journal of Corporate Real Estate*, 9(2), 97–110. <https://doi.org/10.1108/14630010710828108>
- Thomas, A., 2021a. *The Changing Workplace, or: The Political Economy of Flexibility*.
- Thomas, A., 2021b. *Bank Architecture (or: The Paradox of Visibility)*.
- Pevsner, N., 1979. Exchanges and banks. In: N. Pevsner, ed., *A History of Building Types*, reprint ed. Princeton: Princeton University Press.
- Kapur, D. (2006, August 17). *The "Knowledge" Bank*. https://www.cgdev.org/sites/default/files/archive/doc/books/rescuing/Kapur_Knowledge.pdf
- Knight, C., & Haslam, S. A. (2010). The relative merits of lean, enriched, and empowered offices: An experimental examination of the impact of workspace management strategies on well-being and productivity. *Journal of Experimental Psychology: Applied*, 16(2), 158–172. <https://doi.org/10.1037/a0019292>
- Ross, P. (2021, May 17). Typology: Offices. *Architectural Review*. <https://www.architectural-review.com/essays/typology/typology-offices>

Precedence:

Willis Faber Dumas Building, Ipswich, 1975, Foster + Partners

City Hall, the Hague, 1986, OMA

LoHal Library, Tilburg, 2019, CIVIC architects + Braaksma & Roos architectenbureau + Inside Outside + Mecanoo

SESC Pompéia Factory, São Paulo, 1977-1986, Lina Bo Bardi

Danish National Bank, Copenhagen, 1978, Arne Jacobsen

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 project will come up with not only a responsible national bank who cares about climate and sustainability, but also an extra meeting space for the citizens that integrates itself into the cultural network of Brussels and offers diverse urban experience. The project tackles different scales from urban to interiors, and aims to transform the way the bank works, and the relation between the bank and citizens.

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

Economic development and policy making increasingly focus on climate issues and sustainability. The Bank tackles these problems with economic measures in a bigger scale, and with the introduction of tangible things like vegetation and food in building scale. The project tries to engage the public by easily accessible activities and build connection between citizens and the bank.