# Graduation Plan

Master of Science Architecture, Urbanism & Building Sciences

## **Graduation Plan: All tracks**

Submit your Graduation Plan to the Board of Examiners (<u>Examencommissie-BK@tudelft.nl</u>), 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	Margarita Ines Gancayco Barcia
Student number	5064902

Studio			
Name / Theme	[Name / theme of the studio]		
Main mentor	Prof. dr.ir. Hans Wamelink	Construction Management and Entrepreneurship Department of Management in the Built Environment	
Second mentor	Ir. Monique Arkesteijn MBA	Real Estate Management Department of Management in the Built Environment	
Argumentation of choice of the studio	NA		

Graduation project				
Title of the graduation project	Expanding Opportunities for Philippine architects through adapting business models that integrate (corporate) real estate management services used by Dutch architects   A qualitative comparative multi-case study approach			
Goal				
Location:		The Netherlands and The Philippines		
The posed problem		The vulnerable nature of the construction industry along with additional problems faced by developing countries paralyze the development of architecture practices in the Philippines.		
research questions and		<b>Main question:</b> How can architecture professional practices in the Philippines create future-proof business models through integrating real-estate management services?		

**Sub question 1:** What real-estate management services have Dutch architects integrated into their businesses?

**Sub question 2:** How did Dutch architects transition their original business models towards the integration of real-estate management services?

**Sub question 3:** How beneficial was this endeavor to their professional practice? **Sub question 4:** How can architecture professionals in the Philippines replicate the integration of real-estate management services into their existing business models?

design assignment in which these result.

N/A

(Taken from Abstract) The vulnerable nature of the construction industry along with additional problems faced by developing countries paralyze the development of architecture practices in the Philippines. There is a need to adjust traditional professional practices to create more opportunities for Architecture Engineering and Construction professionals. This research focuses on how architecture professional practices in the Philippines create future-proof business models by integrating real-estate management services. The study will create a framework for Philippine architects to expand their business opportunities through adapting practices and techniques used by Dutch architects. The researcher identifies the how incorporating CREM services into business models are beneficial by analysis and the creation of archetypes. A business model using the Business Model Canvas per archetype is created and tested in the Philippine market.

From the information the researcher has obtained at the moment, she was able to create 3 main categories of architecture-CREM companies using CREM activities mentioned in literature and searching for such activities in market research. The researcher hypothesizes that these 3 categories will serve as foundation of archetypes in which the operational portion of her research will revolve around.

#### **Process**

## **Method description**

The method used for this thesis is a comparative design using a multiple case-study approach in a cross-sectional manner. The researcher utilizes "representative or typical case" type. These cases must represent the broader type of architecture-CREM company that it belongs to. The researcher will use desk research and semi-structured interviews as the data collection method. Data analysis will be done through document analysis (internal & external documents from companies and government), thematic analysis using ATLAS.ti and triangulation method.

### Literature and general practical preference

#### Summary:

The literature review is broken down into 6 themes. **Nature of the Architecture Industry** identifies the current context and background of the industry, challenges, and future opportunities for architects. In **Philippine Architecture Industry**, an overview of the local AEC industry is discussed. **Architects as Creative Professionals: Values and Drivers** focuses on unique values that motivate an architects' businesses strategies and outlook. **The Business of Architecture** discusses theories and models of architectural business management. CREM is presented as a viable business extension and opportunity. In **Real Estate Management (REM)**, an overview, main definitions (CREM, REM and FM) are discussed and differentiated. The different activities under CREM are identified and defined. After which, the benefits of integrating REM/CREM into BMs of architects are discussed. In **Business Models**, the main framework which will be used for this study is identified and explained.

- Alharbi, M. (2013). *Architectural management: a strategic framework to achieve competitiveness*. https://repository.lboro.ac.uk/articles/thesis/Architectural\_management\_a\_strategic\_framework\_to\_achieve\_competitiveness/9456695
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- Bon, R. (1992). Corporate Real Estate Management. *Facilities*. https://doi.org/10.1108/EUM000000002218
- Bondare, S., Volkova, T., Bondars, E., & Barvika, S. (2018). Business Challenges in the Architecture Industry. *Architecture and Urban Planning*, *13*(1), 118–123. https://doi.org/10.1515/aup-2017-0017
- Bontekoning, B., Appel-Meulenbroek, R., Smeets, J., & Ramakers, Y. (2016). Explorative research into the significance of activities of the corporate real estate management organisation in different phases of the merger and acquisition process. *Corporate Real Estate Journal*.
- os-de Vos, M., Lieftink, B., Volker, L., & Wamelink, H. (2014a). International Collaboration and Partnering in the Supply Chain as Business Opportunities for architectural firms. In *Proceedings 30th Annual Association of Researchers in Construction Management Conference, ARCOM 2014*.
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Winch, G., & Schneider, E. (1993). The strategic management of architectural practice. *Construction Management and Economics*, *11*(6), 467–473. https://doi.org/10.1080/0144619930000052

Zott, C., & Amit, R. (2010). Business model design: An activity system perspective. *Long Range Planning*, 43(2–3), 216–226. https://doi.org/10.1016/j.lrp.2009.07.004

(For the complete set, Reference list of P2 Report)

## 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 research focuses on the development of architectural management and entrepreneurship for architectural firms through the integration of CREM. This topic is directly related to my track, Management in the Built Environment as it firstly discusses Real Estate Management. Theories and activities. Secondly, the architectural management portion is directly related to DCM, Management and Finance- all of which are core courses in the MBE track.

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

From a scientific perspective, this thesis contributes to the limited quantity of research on business management for architecture firms and the creative professional industry, architectural business models and the practical integration of CREM into architecture business models. This thesis serves as pioneering research done on the integration of CREM-Architecture services in South-East Asia, specifically the Philippines. Although not its prime focus, the thesis will provide insight on the growth and CREM industry in the Philippines. This study proves to be important to society as it focuses on the improvement of the AEC industry- both financially and professionally. The thesis is relevant to both Dutch and Filipino architects. For Dutch architects, it formalizes the integration of CREM and plots out the benefits and effects it has on architectural businesses. This can be used as a tool for other Dutch architects to decide if, how and what to expect if they purse the same path. Lastly, this is valuable for Philippine Architects as it introduces basic management principles, business model principles and new business opportunities towards the creation of a more lucrative practice