

# 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	Sebastiaan Alfredo de Boer
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Studio		
Name / Theme	Complex Projects – Beirut Studio	
Main mentor	Dr. O. (Olindo) Caso	Architectural Design
Second mentor	Ir. H.L. (Hubert) van der Meel	Building Technology
Third mentor	Ir. M (Marija) Mateljan	Architectural Research
Argumentation of choice of the studio	Complex Projects offers a graduation studio where the complexity lies not in the design, but in all layers of the project. Beirut itself is an interesting city where social and economic challenges are waiting to be tackled from an architectural point of view.	

Graduation project	
Title of the graduation project	The Social Hub
Goal	
Location:	Beirut City Centre, Lebanon
The posed problem,	A severe lack of public space for leisure activities hampers the development of social cohesion and leads to a further dilution of Beirut's social and cultural quality. Together with the fragmentation of the city that started during the civil war, this has led to a further decline in socio-spatial development and contributed to a less cohesive society and city in Beirut.
research questions and	The failure to provide accessible and dynamic meeting places for a diverse range of ideas, memories and experiences is one of the most serious shortcomings of the rebuilt of Beirut.  Several studies have shown that leisure activities have a positive effect on political, economic and social situations. According to Spaaij (2013), sport in the framework of

	<p>leisure has the unique ability to transcend race, religion, gender and belief. There is also a popular perception that refers to sport as the 'social cement' that binds families, communities and neighbourhoods (Spaaij, 2013, p. 110).</p> <p>In other words, not only does leisure play an important role in the redevelopment of Beirut's socio-spatial development, but sport is in itself the dominant factor within this leisure framework.</p> <p>This leads to the research question:  <i>"How can a sports facility influence the socio- spatial development of Beirut's city centre?"</i></p> <p>To answer the research question, the following sub-questions are formulated:</p> <ul style="list-style-type: none"> <li>- "What types of sports can be used as social connectors in Beirut?"</li> <li>- "How can public spaces be integrated in and around the building?"</li> <li>- "How are sports and leisure experienced and influenced by culture in Beirut?"</li> <li>- "What are the relevant aspects of density to the different scales of Beirut's city centre?"</li> <li>- "What is the role of leisure within urban socio- spatial development?"</li> </ul>
<p>design assignment in which these result.</p>	<p>The goal of the research is to provide useful information for the design so that conceptual and plausible design choices can be made. The goal is to create products and knowledge that will help to meet the challenges of programming, spatial organizations, spatial ambitions, and location challenges. Not only are strategies for designing with sport and leisure in conjunction with public space important outcomes, but so is the incorporation of public space within the building.</p> <p>The research methods of desk study and case study analysis will be related to the overall design goal. The desk study will primarily provide information on the challenges of programming and spatial organization at the start of the design process. This will help to develop reasoned concepts. In addition to the knowledge gained from the literature, the analysis of the site and ambitions, as well as the analysis of the case studies, will aid in the further development of the concepts. It will also support in the creation of spatial ambitions, the creation of desired images, and even the materialization.</p>

In essence, the research will seek to gain a better understanding of how to design a sports facility in Beirut's city center, where sport and leisure will serve as a social connector for the city's residents. This study also aims to provide and develop knowledge on how to integrate public space within and around the sports facility. The ultimate goal is to establish a solid foundation for the entire design process. From concept to structure to final materialization.

## **Process**

### **Method description**

In order to be able to fill in the gap between the current-state level and the desired future-state level of knowledge, two types of research methods will be conducted. On the one hand, research will be based on literature study. The literature study focuses on the following (combination of) keywords: urban public space, socio-spatial development, sports and leisure, social cohesion, (de-)fragmentation. The aim of the literature study is to develop insight into the factors that play a role in the design for a sports and leisure facility that is part of the city and embedded in a densely populated area with different scales. By this research method, a design brief will be conducted.

On the other hand, research will be done via research-by-design. Analysing different case studies, will play an important role in order to understand how make certain design choices. Exploring the different materials by which a design is carried out — sketches, mapping, typologies, spatial programs, ambitions and even materialization — will provide new insights for design decisions and form the foundation in which design options are evaluated against explicit criteria from the design brief.

A third research method has a more objective nature but can be contributing too. Interviews with (former) residents, Beirut students, professors, and other experts can provide a different insight. After all, they are the most capable of indicating ways of thinking, cultural perceptions, and reflections during the research and design process.

### **Literature and general practical preference**

#### **Annotated bibliography:**

Haugbolle, S. (2006). Spatial Transformations in the Lebanese "Independence Intifada". *The Arab Studies Journal*, 14(2), 60-77.

*This article by Haugbolle, Professor of Middle Eastern Studies at St. Antony's College, looks at a detailed analysis of Lebanese spatial practices in downtown Beirut. The article argues that public space is essential for public contestation, validation, and consensus.*

Karizat, N. (2019). The Story of Public Space in Beirut's Geography of Power. *Nadia Karizat, dual Master in Health Informatics and Master in Urban and Regional Planning, examines the three most noticeable divisions in Beirut in her article. The article demonstrates how development and reconstruction since the civil war have transformed Beirut's minimal public space into "forbidden space".*

Roberts, K., & Kovacheva, S. (2017). Use of free time by young people, and social inclusion and exclusion in Lebanon. in South and East Mediterranean Countries, 87. *Ken Roberts and Siyka Kovacheva conducted research on the leisure participation of Lebanese youth. Their methods, main findings, and conclusions about the differences between Western and Lebanese leisure research are explained in this study.*

Spaaij, R. (2013). Sport, social cohesion and community building: Managing the nexus. In *Managing social issues*. Edward Elgar Publishing. *Ramón Spaaij, professor of sports sociology at the University of Amsterdam, addresses the question of what perceptions various organisations and actors in the field of sport and community development have about the respective responsibilities and relationships between the public, voluntary and private sectors.*

Viñoly, R., Blomberg, C., & Blanes, M. (2015). Challenges and Benefits of Integrating Public Space into Tall Buildings. *Global Interchanges: Resurgence of the Skyscraper*, 282-287.

*Architect Rafael Viñoly elaborates in this article, together with his partner Charles Blomberg and director Marcos Blanes, on the theme of integrating public space into tall buildings with the use of three worldwide examples. The article uses these case studies to explain the philosophy of tall buildings as public assets.*

### **Other literature:**

Austrian, Z., & Rosentraub, M. S. (2002).

Cities, sports, and economic change: A retrospective assessment. *Journal of urban affairs*, 24(5), 549-563.

Barghchi, M., Omar, D. B., & Aman, M. S. (2009). Sports facilities development and urban generation. *Journal of Social Sciences*, 5(4), 460-465.

Daumann, F., Heinze, R., Römmelt, B., & Wunderlich, A. (2015). An Active City Approach for Urban Development. *Journal of Urban Health*, 92(2), 217-229.

Davies, L. E. (2016). A wider role for sport: community sports hubs and urban regeneration. *Sport in society*, 19(10), 1537-1555.

Hindi, N. (2015). On the making of public spaces in Beirut.

Husqvarna. (2020). *Quantifying the greenness of global cities*. Retrieved from Husqvarna Urban Green Space Index: <https://www.hugsi.green/>

Institute for Housing and Urban Development Studies. (n.d.). *Urban Socio- Spatial Development*. Retrieved from IHS: <https://www.ihs.nl/en/themes-0/urban-socio-spatial-development>

Jennings, V., & Bamkole, O. (2019). The relationship between social cohesion and urban green space: *An avenue for health promotion*. *International journal of environmental research and public health*, 16(3), 452.

- Jihad, F., & Jacques, T. (2012). Bricolage planning: understanding planning in a fragmented city. Urban development. Rijeka, Croatia: *Intech Publications*, 93-126.
- Johnson, A. T., & Sack, A. (1996). Assessing the value of sports facilities: The importance of noneconomic factors. *Economic Development Quarterly*, 10(4), 369-381.
- Larkin, C. (2010). Remaking Beirut: Contesting memory, space, and the urban imaginary of Lebanese youth. *City & Community*, 9(4), 414-442.
- Levermore, R. (2008). Sport: a new engine of development?. *Progress in development studies*, 8(2), 183-190.
- Martin, W. H., & Mason, S. (2003). Leisure in three Middle Eastern countries. *World Leisure Journal*, 45(1), 35-44.
- Nassif, N. (2009). Sport policy in Lebanon, 1975 to 2004.
- Nassif, N., & Amara, M. (2015). Sport, policy and politics in Lebanon. *International journal of sport policy and politics*, 7(3), 443-455.
- Nazzal, M., & Chinder, S. (2018). Lebanon cities' public spaces. *International Journal for Crime, Justice and Social Democracy*, 3(1), 119-152.
- Sawalha, A. (2010). *Reconstructing Beirut: memory and space in a postwar Arab city*. University of Texas Press.
- Smith, A. (2010). The development of "sports-city" zones and their potential value as tourism resources for urban areas. *European Planning Studies*, 18(3), 385-410.
- Valle, D., & Kompier, V. (2013). Sport in the city. Research on the relation between sport and urban design. *Rotterdam: Creative Industries Fund. Research Paper*.

## 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 Beirut studio focuses on the redevelopment of the blast area and then on expansion strategies that can be applied to different areas of the city. Development strategies are drawn up between the different areas. Within these group strategies, all interventions are coordinated. Although the group strategy is leading, the graduation must be able to detach itself from this strategy and also be able to make a contribution to Beirut. In the case of the leisure centre, the focus will be on providing public space for the Beirutis to bring together residents from different neighbourhoods and draw them from the leisure centre to the original city centre.

Throughout this project, but also in the entire Complex Projects Beirut Studio, researching, analysing and designing in all aspects on all architectural scales is the common thread. Taking these different scales into account brings complexity. This complexity is also very present in Beirut. Dealing with this complexity is one of the biggest assets of the master programme. All in all are the graduation topic, studio topic and master programme inextricably linked.

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

The Social Hub is an attempt to come up with solutions to create places of social encounter, interaction and rebuilding a sense of identity for those who wish to do so in tense cities like Beirut. Beirutis do not have the same sense of identity that they had during the period of 'Paris of the East', although there is a strong desire for this.

This research aims to gain a deeper understanding of the common body of knowledge regarding design decisions in relation to a social basis. Sport can be seen as an effective intervention to build bridges between Beirutis in order to rebuild a common sense of identity. Therefore, this graduation project also aims to initiate a discussion on the relevance of sport as a social driver.

### Time planning

Week	Research	Design
3.1	site analyses	massing options
3.2	program analyses	programmatic options
3.3	analyses of the ambition	design options
3.4	analyses of the site vision	revise design vision
3.5	P2.5 presentation	P2.5 presentation
3.6	functional research	develop plans
3.7	reference research	develop plans
3.8	structure research	develop sections
3.9	reference research	develop sections
3.10	P3 presentation	P3 presentation
4.1	research on materials	developing materials
4.2	research on structural systems	developing façade
4.3	research on facades	developing façade
4.4		integrating individual work into the vision
4.5	P4 presentation	P4 presentation
4.6	finalizing research	finalizing design brief
4.7	finalizing research	finalizing design brief
4.8	finalizing research	finalizing design brief
4.9		
4.10	final P5 presentation	final P5 presentation