

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	Sam Knuif
Student number	5638100

Studio		
Name / Theme	A Matter of Scale – Methods of Analysis and Imagination	
Main mentor	Klaske Havik	Architecture
Second mentor	Pierre Jennen	Building Technology
Third mentor	Eric Crevels	Architectural Research
Argumentation of choice of the studio	<p>Before having to choose the graduation studio, I heard a lot of positive stories about the MSc1 and MSc2 studios from Methods of Analysis and Imagination from Roos Scholten, one of my friends. I joined one of her exhibitions and she showed me the products she made for the courses. That is when my interest in the Methods Chair started to develop. When we had to choose our graduation studio, I visited multiple information sessions of the different studios. A Matter of Scale was the studio that triggered me the most. Looking at the design task from a different point of view, the way how they arrange the tutoring sessions and the idea of having to formulate your own design assignment seemed very exciting. And of course the location, Tallinn, Estonia, played a role in my decision for the studio. I had never been to one of the Baltic states before, and as a real globe-trotter, I thought it would be very challenging for me to come up with a design that soothed the needs of an environment and a culture that I never experienced before.</p>	

Graduation project	
Title of the graduation project	<p>Designing with Ruins</p> <p>An exploration of how an architectural intervention can be made to create an event venue and music school while preserving the ruins of the Pirita Convent</p>
Goal	
Location:	<p>The project site is the Pirita Convent, a former monastery from the Medieval era in the far east of Tallinn, bordering the Pirita River and close to the harbor. While currently in ruins, it is occasionally used as an event venue. This occurs mostly during the summer months since it requires a temporary construction in the winter to be able to use the venue.</p>
The posed problem,	<p>The Pirita area is missing a place where individuals can connect through cultural experiences, all year round. By enhancing the event venue, making it resistant to the extreme weather conditions of Estonia, and incorporating a music school, this location can transform into a vital community center, preserving Estonia's rich musical history, and promoting local pride, while improving the economy.</p>
research questions and	<p>"How can an intervention revitalize and repurpose the historical ruin of a monastery to a public function while enhancing its architectural elements and ensuring its preservation?"</p>
design assignment in which these result.	<p>The idea is to develop an architectural structure that is detachable from the ruins to prevent any damage and aims to enable year-round use of the event venue, considering Estonia's climate, and additionally integrate a music school that is open to everyone, serving as an inclusive community hub.</p>

Process

Method description

Since the ruins of the Pirita Convent is such a sensitive location to build at, careful and detailed research on designing with ruins will be necessary, to find a perfect balance between the ruins and the contemporary addition and to guarantee the preservation of the historical elements. A thorough literature review will be conducted to provide a solid foundation of knowledge for this research. Moreover, reference projects specifically selected for this study by the student or the mentors will be analyzed, in such a way that the essence of the design can be understood and particular elements that contribute to this design concept can be applied to the graduation project. The focus hereby will lay on the various design themes. First and most important is how the old ruins meet the new architectural intervention, what does this connection look like? Is it visible, or invisible, does the new construction stand inside of the ruins, or on the outside? These questions will be answered through the precedent studies and by applying the different options to scale models, to determine what option suits the Pirita Convent the best. Another big topic is light, how does the light shine into the church and the newly added buildings at the brothers' and sisters' quarter? The way the light shines into the corridors around the enclosed courtyards is an important design concept for a monastery, a game of light and shadow that is being played inside these corridors. Again, this will be done by creating small scale models with which can be experimented with the different possibilities for the openings in the facades and roofs. Using modeling programs like SketchUp can also be an added value for these light studies. Besides, the combination, or maybe separation, between the outside and inside is an important factor for the design. The Pirita Convent used to be quite a closed monastery, with few openings in the facades that faced the road and a division inside the church of visitors and inhabitants of the monastery. By analyzing reference projects and shuffling around with scale models, the maximum openness and minimum density of the new architectural intervention can be discovered while the essence of a monastery is being maintained. The precedents can also be used to discover whether a specific part of the ruin of a monastery is important to preserve, because it might be of great significance to the appearance of the monastery. Lastly, precedent studies can also be used to improve the layout of the event venue and music school, to enhance the human circulation within the building.

Literature and general practical references

Literature that has been used for the research plan and might be explored further:
Accardi, A. (2008). Architectures "on ruins" and ambiguous transparency: The glass in preservation and communication of archaeology. Palermo.
Böhme, H. (1989). Die Ästhetik der Ruinen. Göttingen.
Cooper, D. (2016). Should Ruins be Preserved?
Ginsberg, R. (2004). The Aesthetics of Ruins. Rodopi.
Kaljundi, L. (2007). The Pirita Convent in Estonian Historical Memory: Not Just in the Forest behind the Convent.
Martins, A., Cano, M., & Adell, E. (2019). Monastic Buildings: A Review About New Uses on Former Monasteries. The Portuguese Cistercian Case. Sevilla: IOP Publishing.

Methods of Analysis & Imagination. (2023). Syllabus. Retrieved from Brightspace: <https://brightspace.tudelft.nl/d2l/le/content/594336/Home>

Mine, T. (2013). Adaptive Re-use of Monuments: restoring religious buildings with different uses. *Journal of Cultural Heritage*.

Molski, P. (2020). *A Historic Ruin - interventions and their conditions*. Warsaw. Oxford Languages. (z.d.).

Raam, V., & Tamm, J. (2006). In *Pirita Convent (the history of the construction and reasearch)*. Tallinn: Eesti Entsüklopeediakirjastus.

Stanford, C. (2000). *On Preserving Our Ruins*. Oxford.

Wilczek, I. (2021). *The layers of history: New architecture interventions in castle ruins*. Opole.

Woodward, C. (2002). In *Ruins*. London: Vintage.

Zucker, P. (1961). *Ruins - An Aesthetic Hybrid*. Winter.

Precedents that have been looked at and will be analyzed in greater depth:

- Monastery ter Apel by Johannes Exner, Ter Apel, the Netherlands
- Predikheren City Library by KSA, Mechelen, Belgium
- Hedmark Museum by Sverre Fehn, Hamar, Norway
- Château de Koerich, Koerich, Luxemburg
- Museum of Castelvecchio by Carlo Scarpa, Verona, Italy
- Shelter for Roman Ruins by Peter Zumthor, Chur, Switzerland

Other interesting literature that has been or will be read:

- Rijksdienst voor het Cultureel Erfgoed (2013). *Een Toekomst voor Kloosters*.
- Rijksdienst voor het Cultureel Erfgoed (2011). *Een Toekomst voor Kerken*.
- Grafe, C. & Reiniets, T. (2022). *Umbaukultur: Für eine Architektur des Veränderens*.

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 studio topic, A Matter of Scale, focuses on architecture in relation to human proportions. The Pirita Convent, the location of the graduation project, lost its human scale, because of its enormous height of about 35 meters, the emptiness of the ruin and the low walls at the brothers' and sisters' quarters in proportion to the high facades of the church. Through experimenting with scale models on different scales, the human scale can be explored and brought back into the Pirita Convent. Besides, the studio covers the coastal zone of Tallinn, which functions as a chain of urban figures. The Pirita Convent is situated next to the Pirita River and stands close to the harbour area. The ruin forms an architectural landmark and can be seen from the sea because of its height, making this a suitable location to create a daring architectural intervention that gives the ruins "a face and a view towards the sea".

Moreover, the master Architecture encourages students to "develop creative and innovative building projects that use design as a means to deal with the technical, social and spatial challenges encountered in the built environment." This aim is answered by my graduation project, which focuses on repurposing a ruin into a social function. The technical challenges lie in connecting old and new, where creative and innovative solutions will emerge.

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

Through balancing adaptation against the necessity of preserving historic ruins, the research also adds to the conversation on preservation ethics. This has a broader impact for the further development of environmentally friendly approaches in adaptive reuse and architectural preservation. The study intends to provide theoretical insights and practical advice that might inform similar projects in the future, assuring the culturally appropriate and sustainable transformation of historical ruins into active public areas.