

# Grupo MSH's Innovative Façade: Creating a Harmony of Environment and Aesthetics

[Grupo MSH](#) is an architectural innovator that blends functionality and aesthetics. Led by Arturo de la Fuente, the in-house team uses computational design to harmonize extreme functionality with delicate façade aesthetics, optimally addressing solar radiation and daylight intricacies.

Grupo MSH seamlessly integrates solar design principles to optimize energy usage, guided by computational analysis for window placement to balance daylight and solar heat gain. This success story highlights Grupo MSH's dedication to offering architectural solutions that balance functionality and visual appeal.



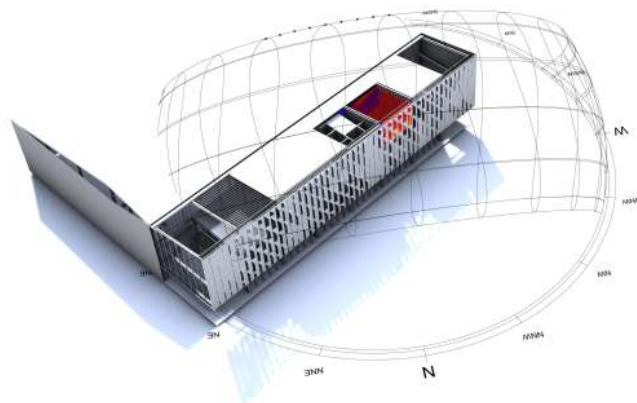
## GRUPO MSH

Based in Buenos Aires, Grupo MSH is an architectural powerhouse dedicated to creating cutting-edge façades and cladding solutions. They offer comprehensive services, including cooperation, design, engineering, fabrication, installation, and warranty support. Driven

by a commitment to excellence, Grupo MSH merges aesthetics with functionality.

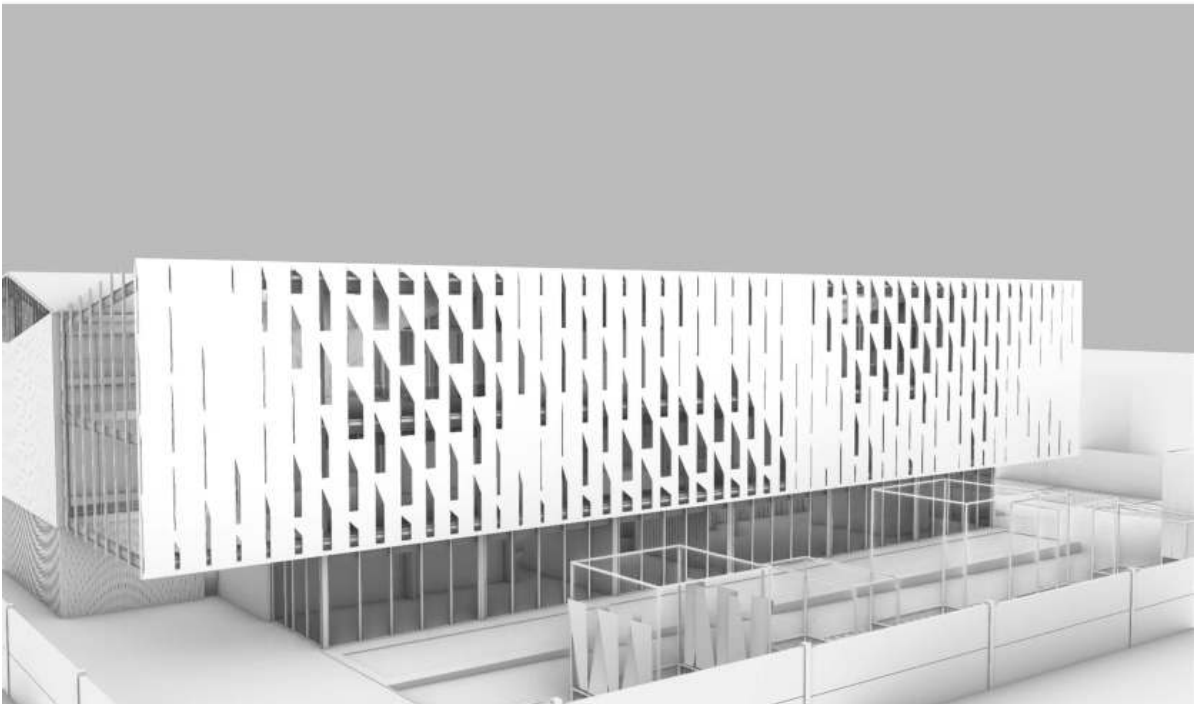
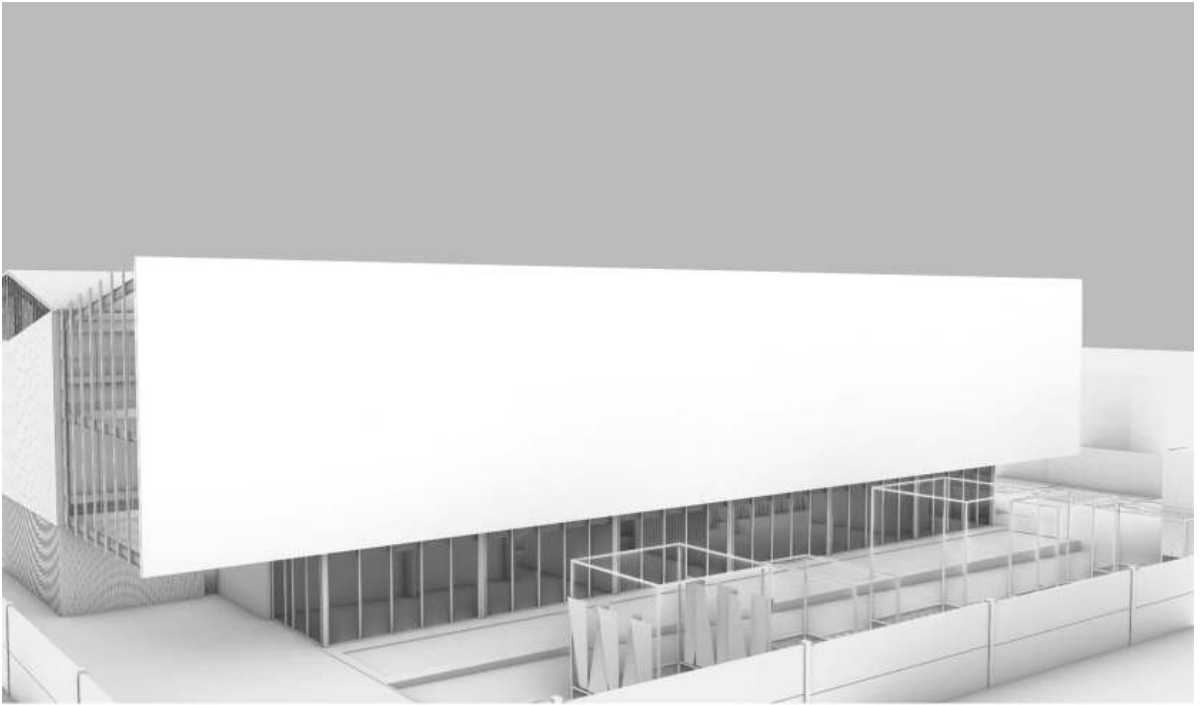
## **NAVIGATING THE CHALLENGES OF PARAMETRIC DESIGN**

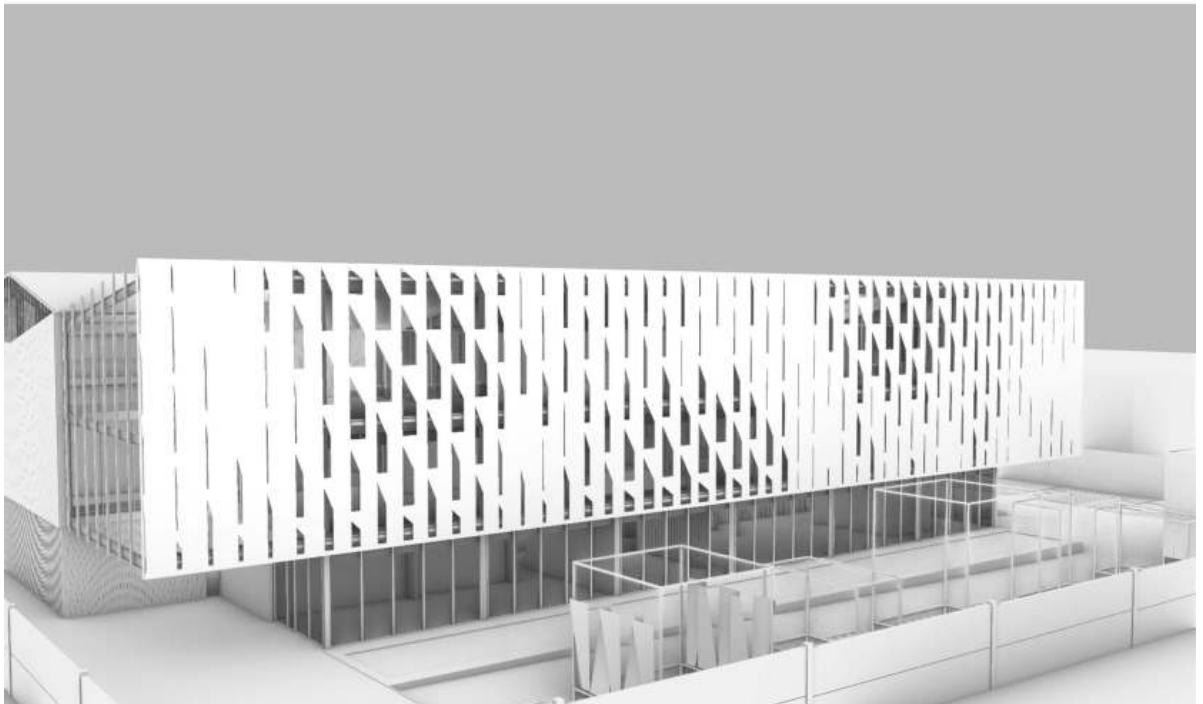
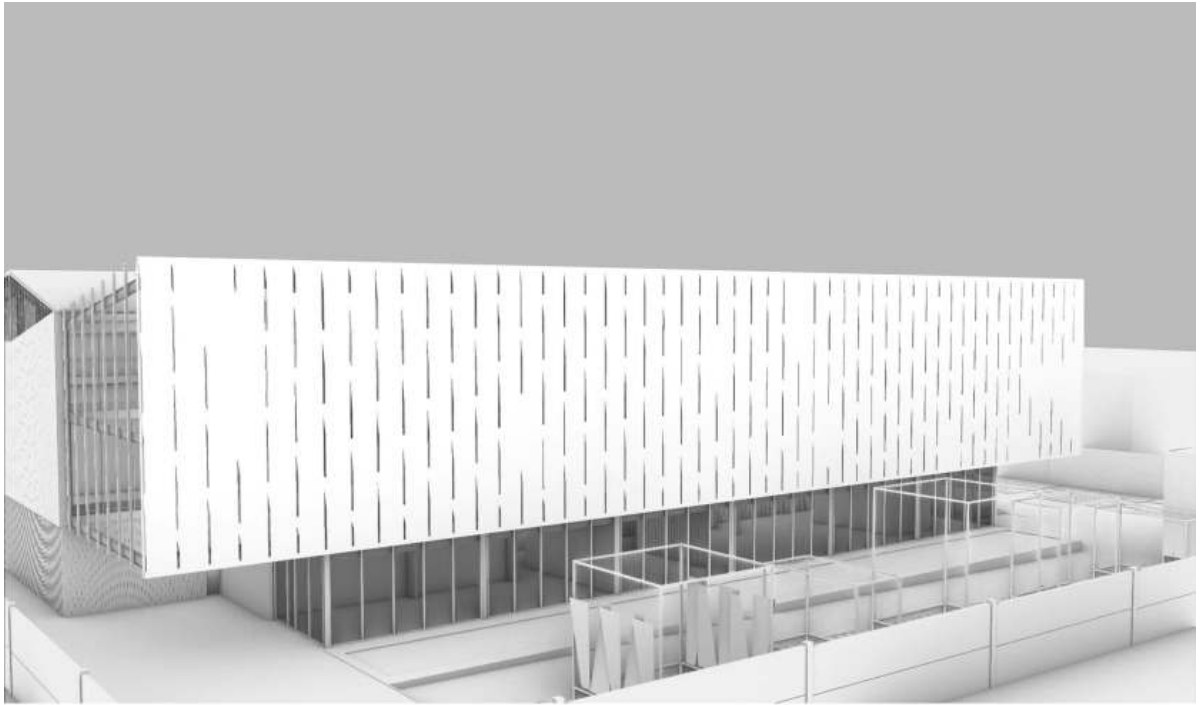
Arturo de la Fuente shares the intricate journey behind Grupo MSH's innovative endeavors that culminated in the remarkable façade of their new factory. The challenge was multifaceted, including integrating variables such as natural lighting, radiation, transparency, and desired illumination into a harmonious design that is responsive to each building section. Grasshopper is at the core of this achievement, empowering Grupo MSH's design team to transcend traditional constraints and materialize their concepts.

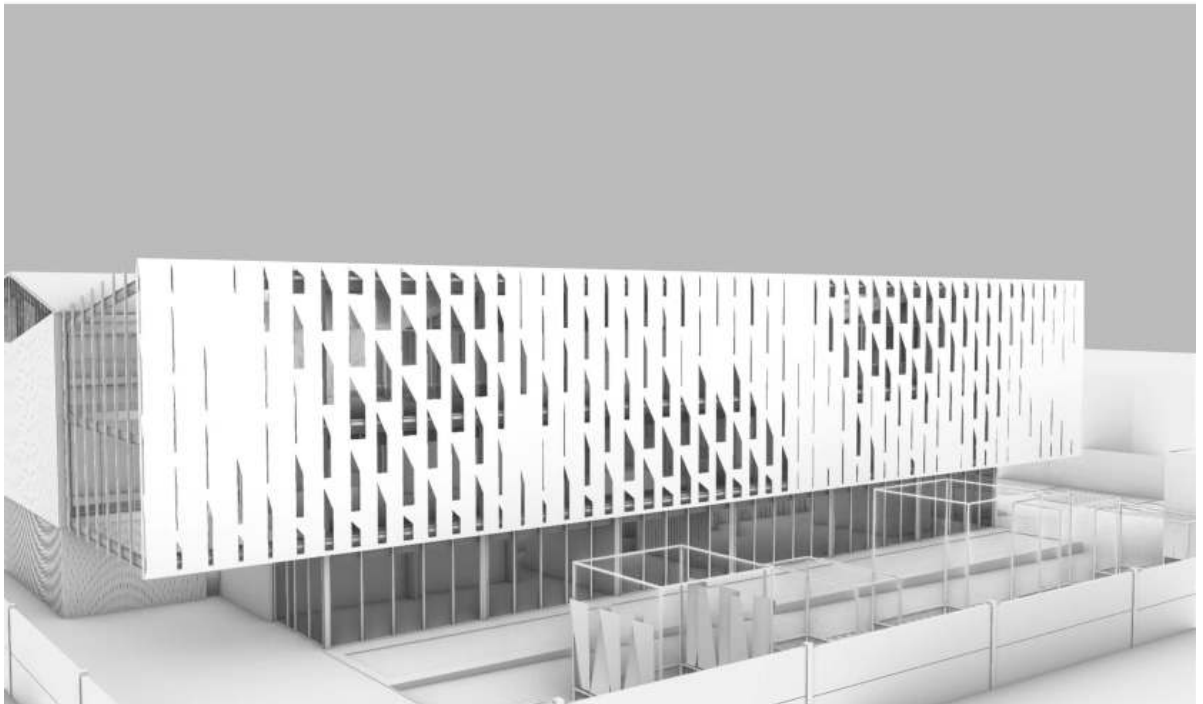
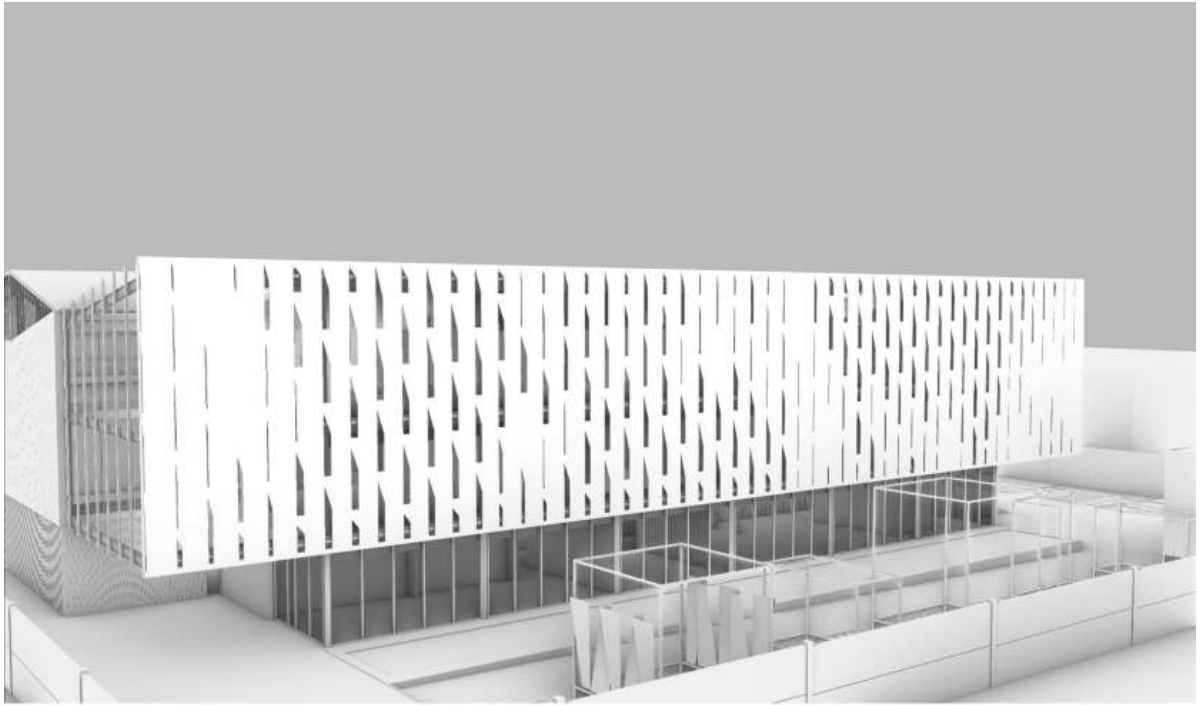


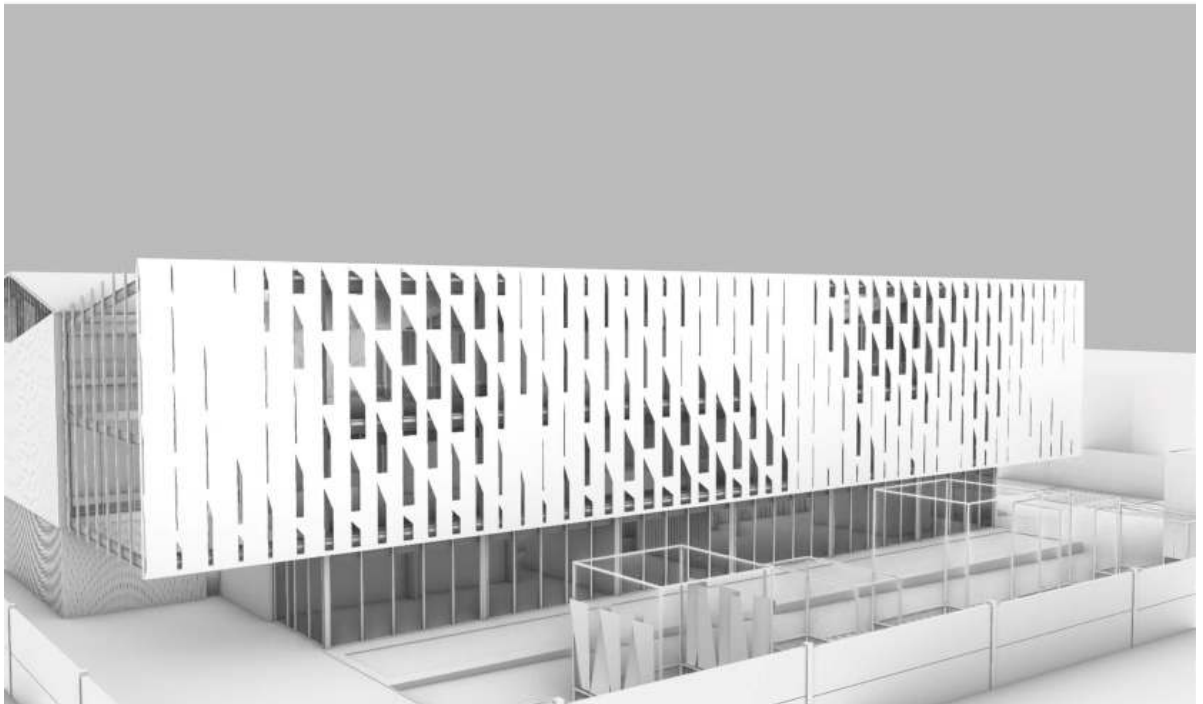
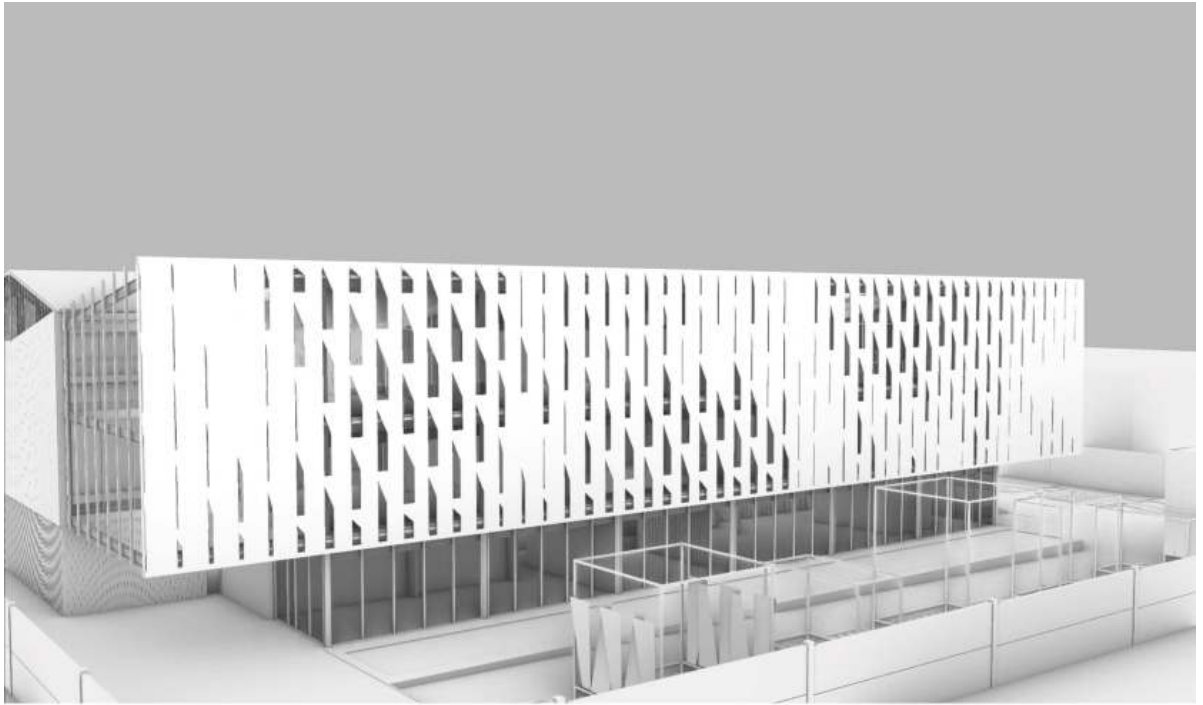
## **USING DATA TO ACHIEVE ENVIRONMENTAL BALANCE**

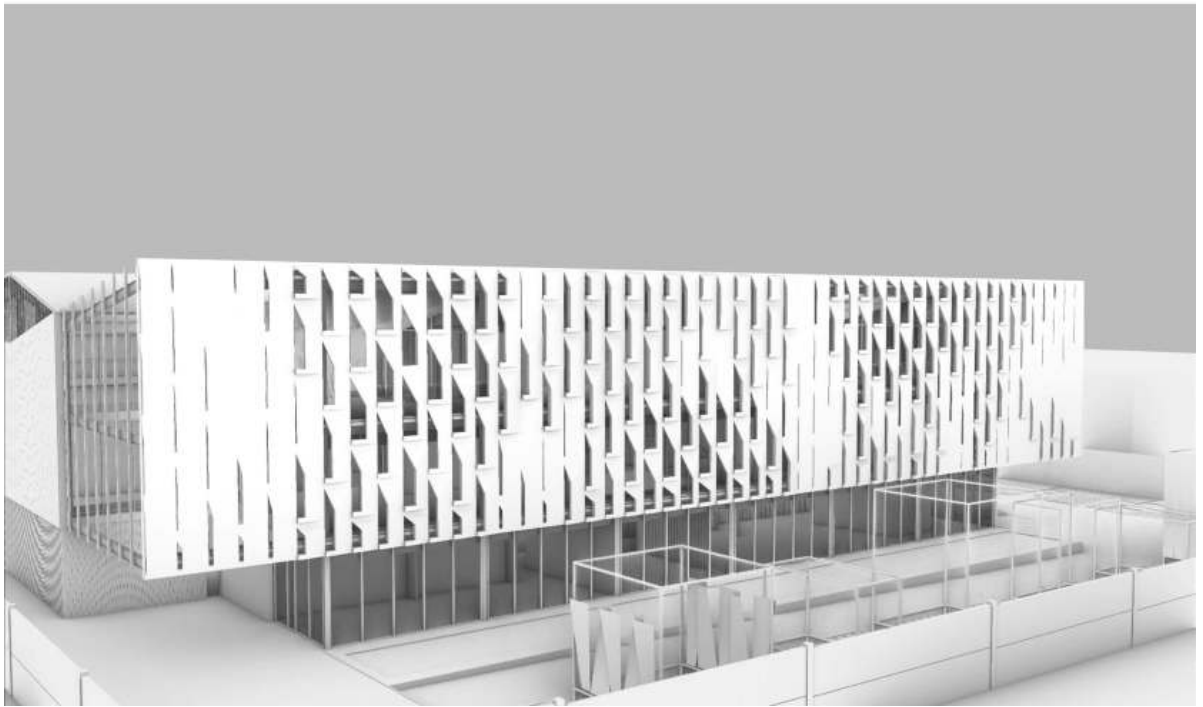
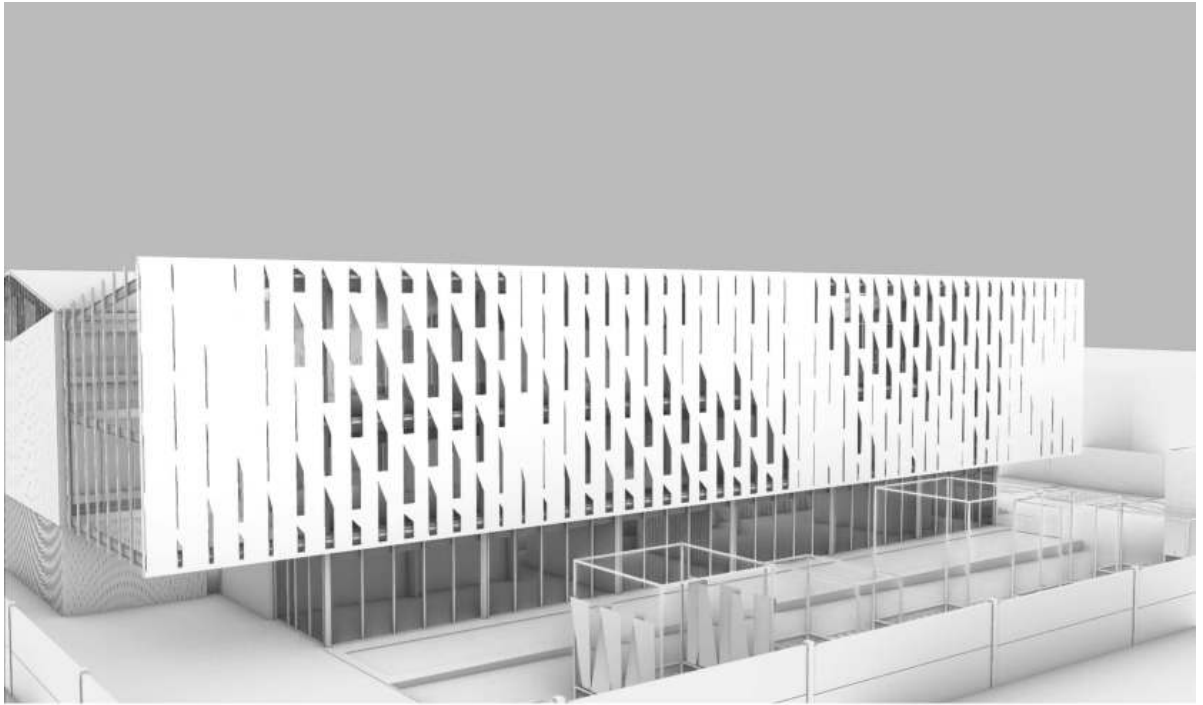
The team used Ladybug and data visualization to refine and validate design choices based on the relationship between light and geometry. Ladybug facilitated precise analysis of solar radiation and daylight conditions, enabling data-driven insights to ensure optimal performance and visual impact. The team's iterative journey achieved a design that balances computational precision and artistic expression while seamlessly harmonizing visual allure with environmental responsiveness.

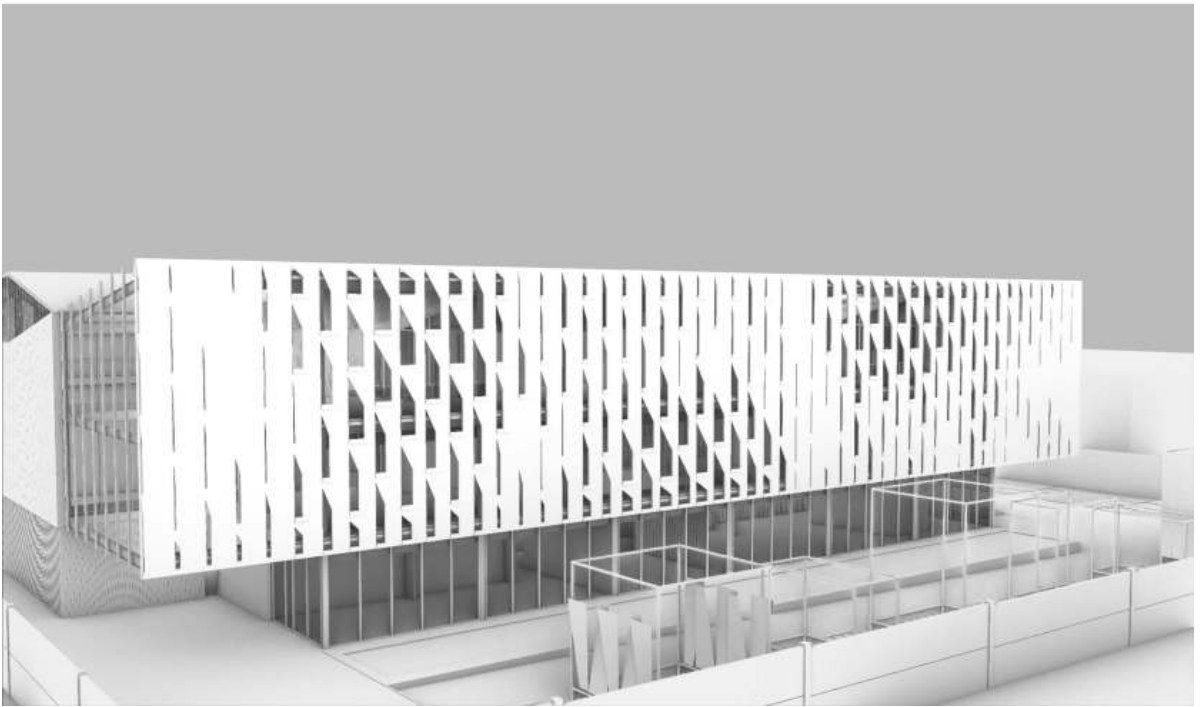
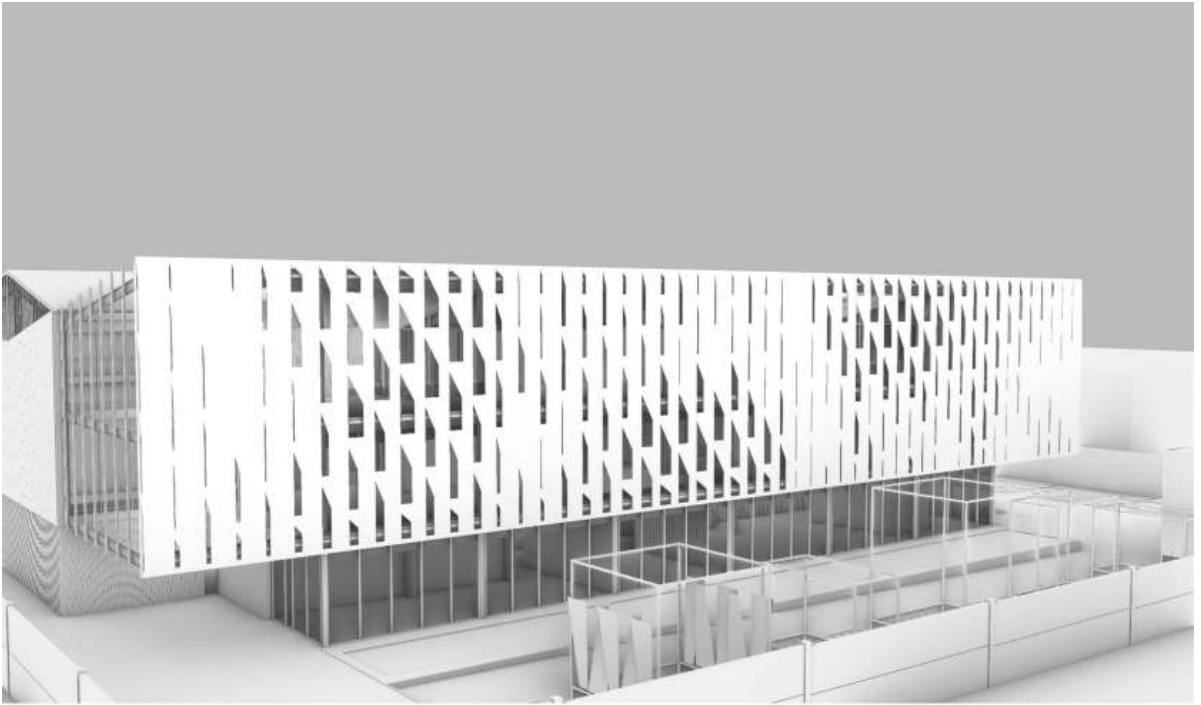


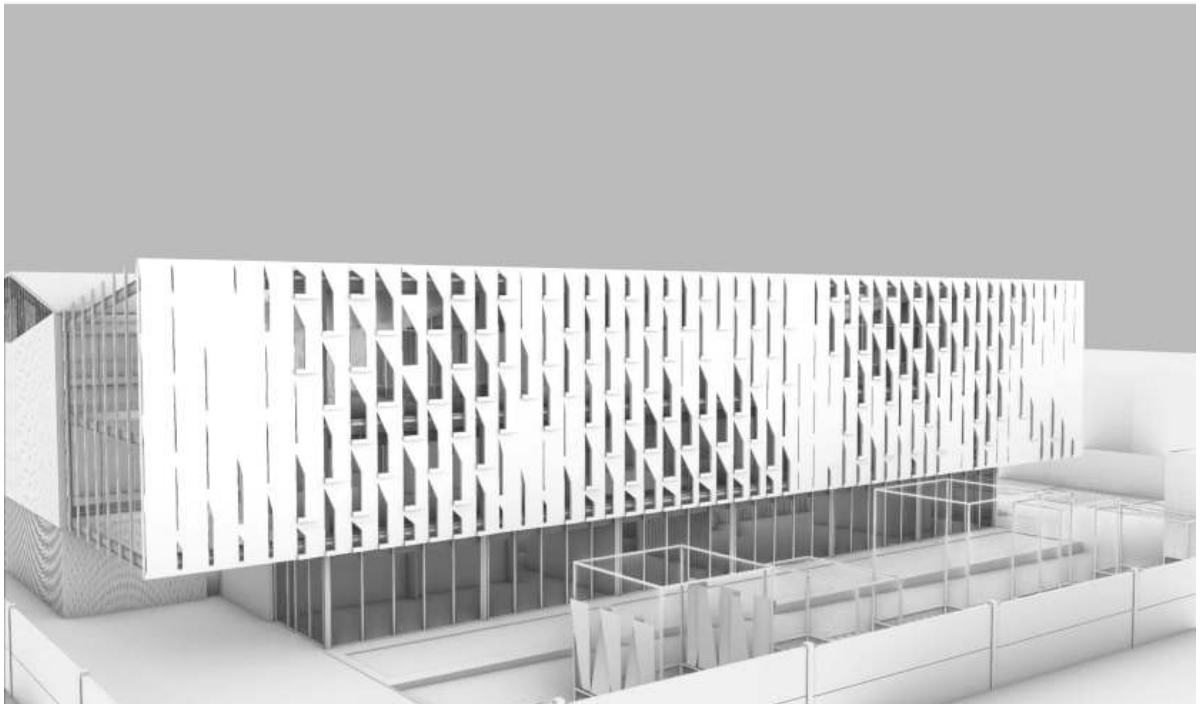
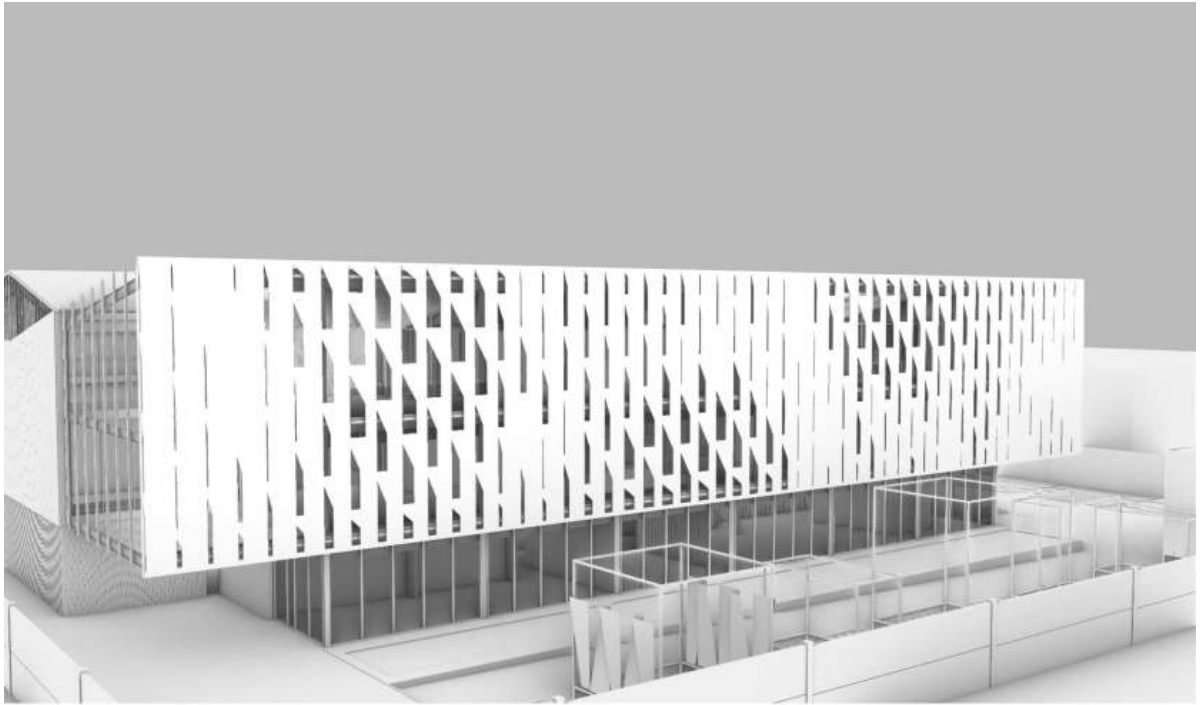


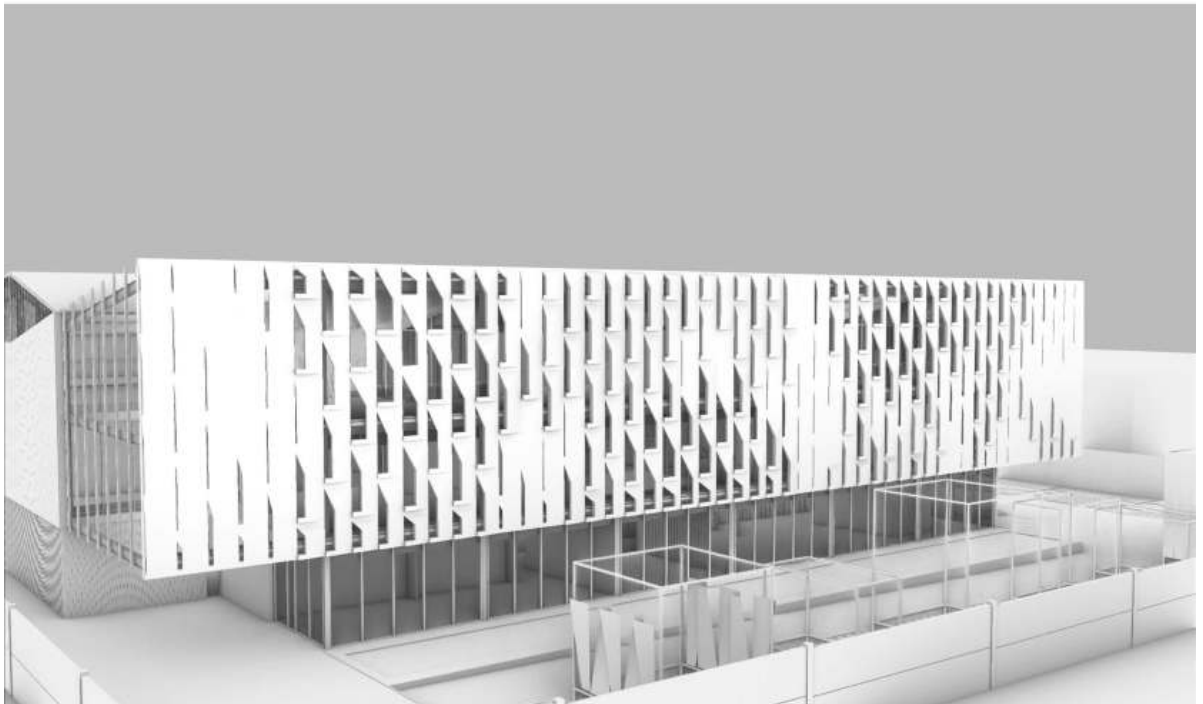
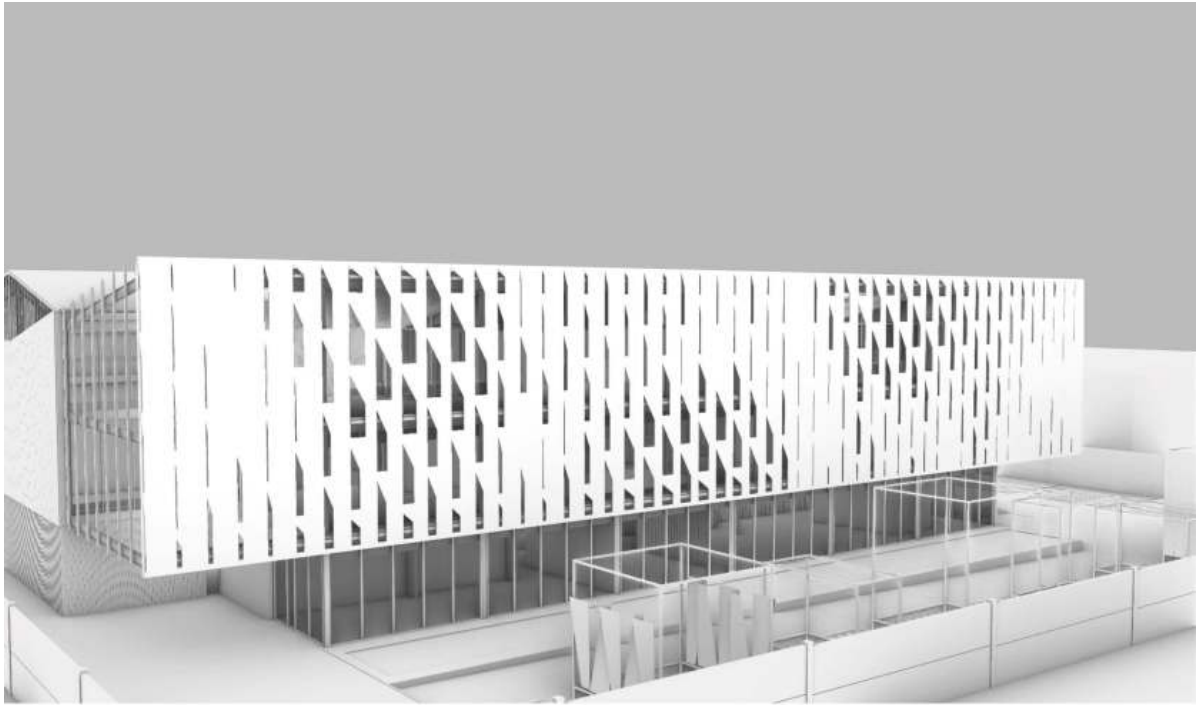


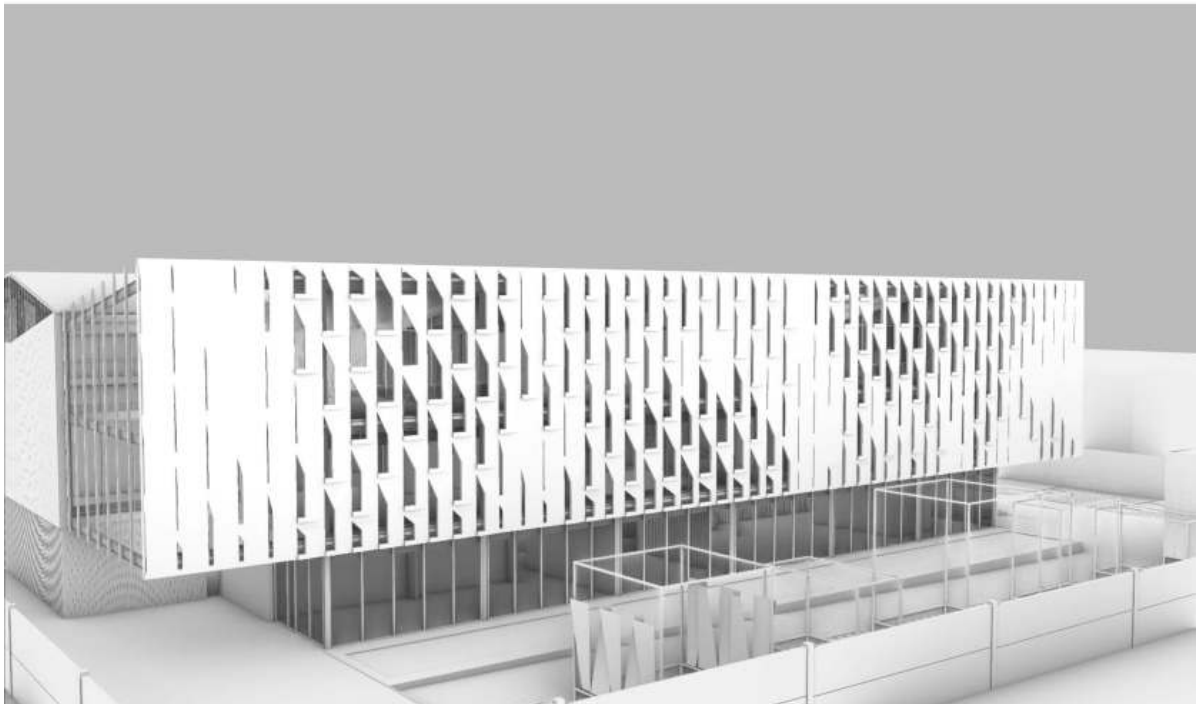
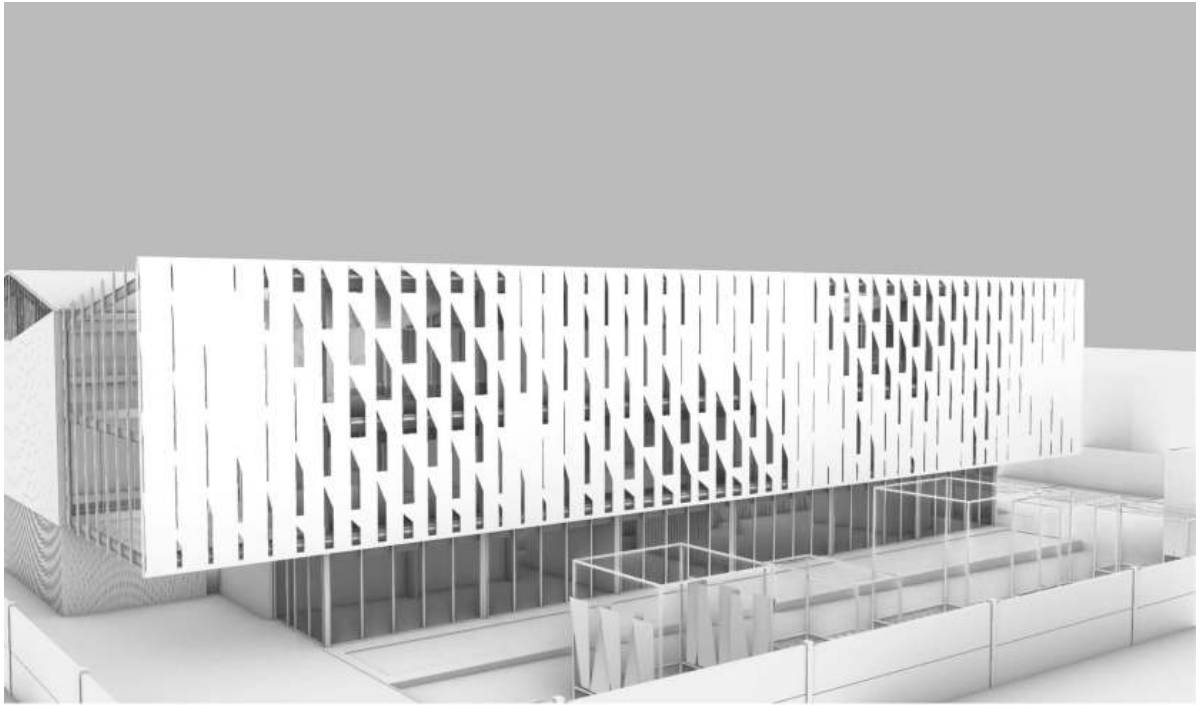


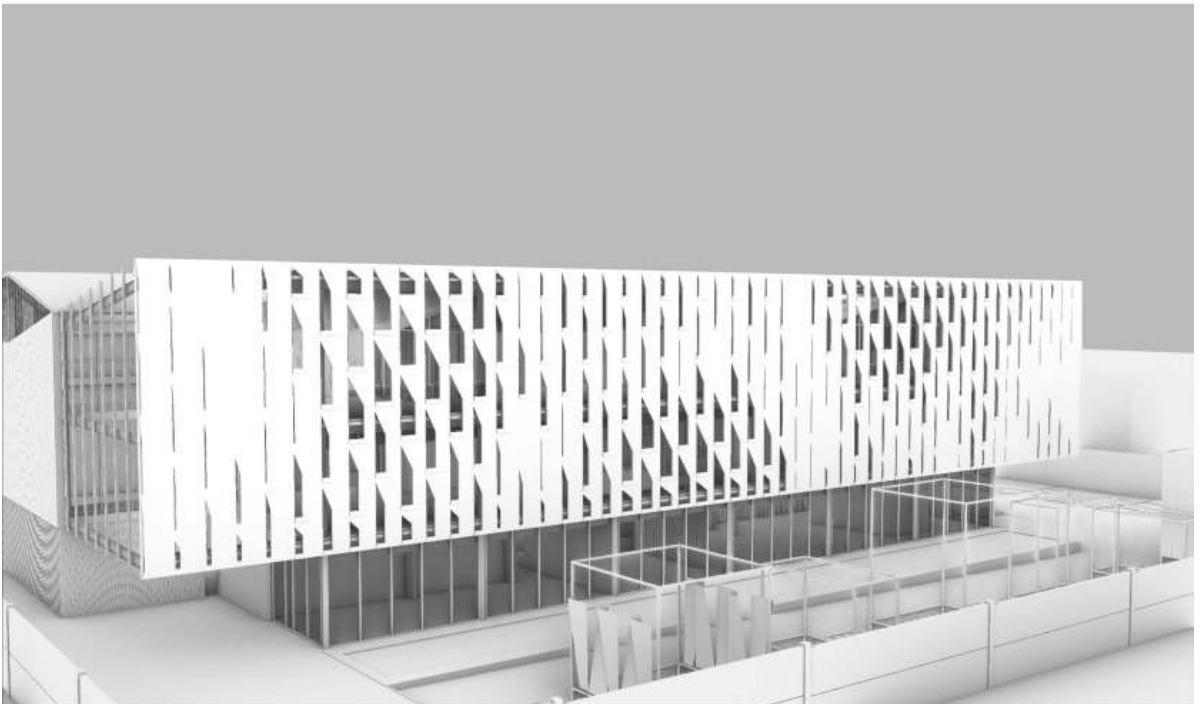
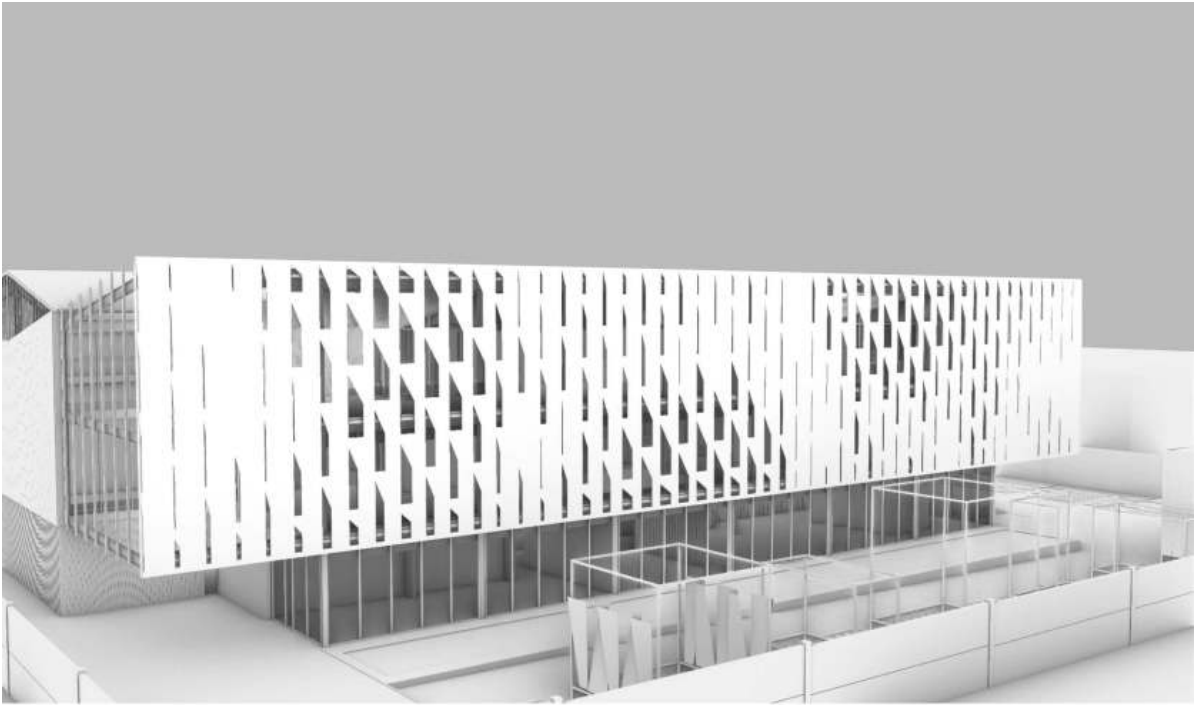


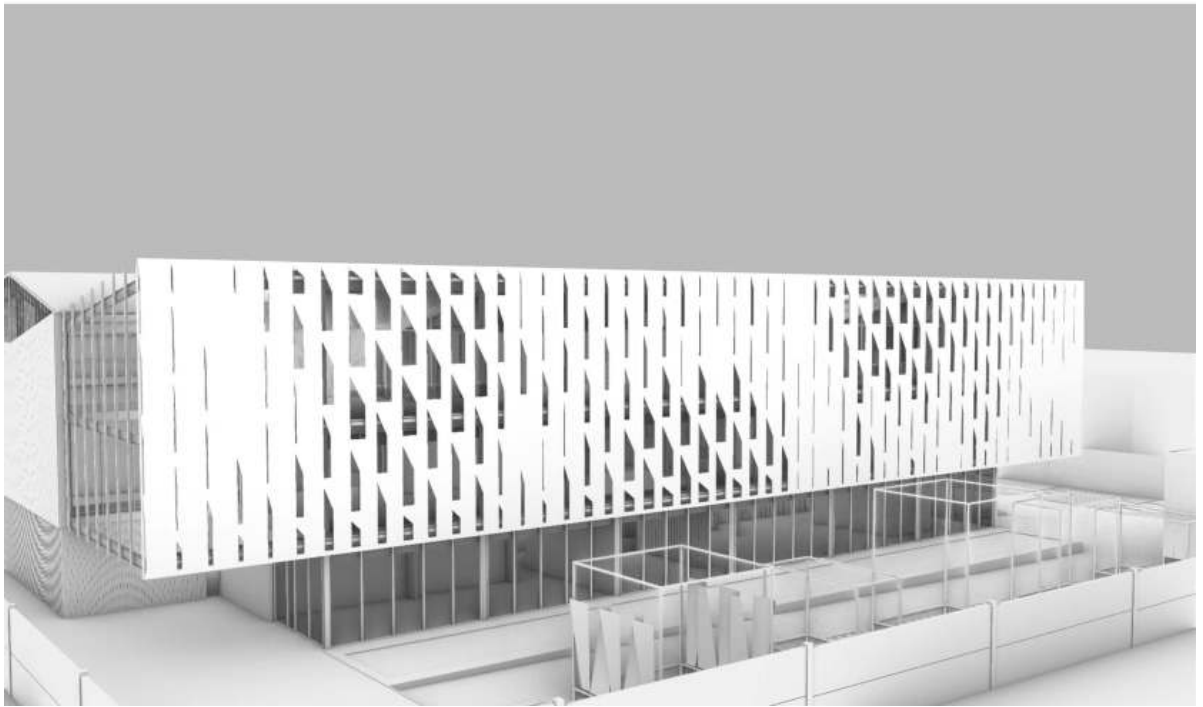
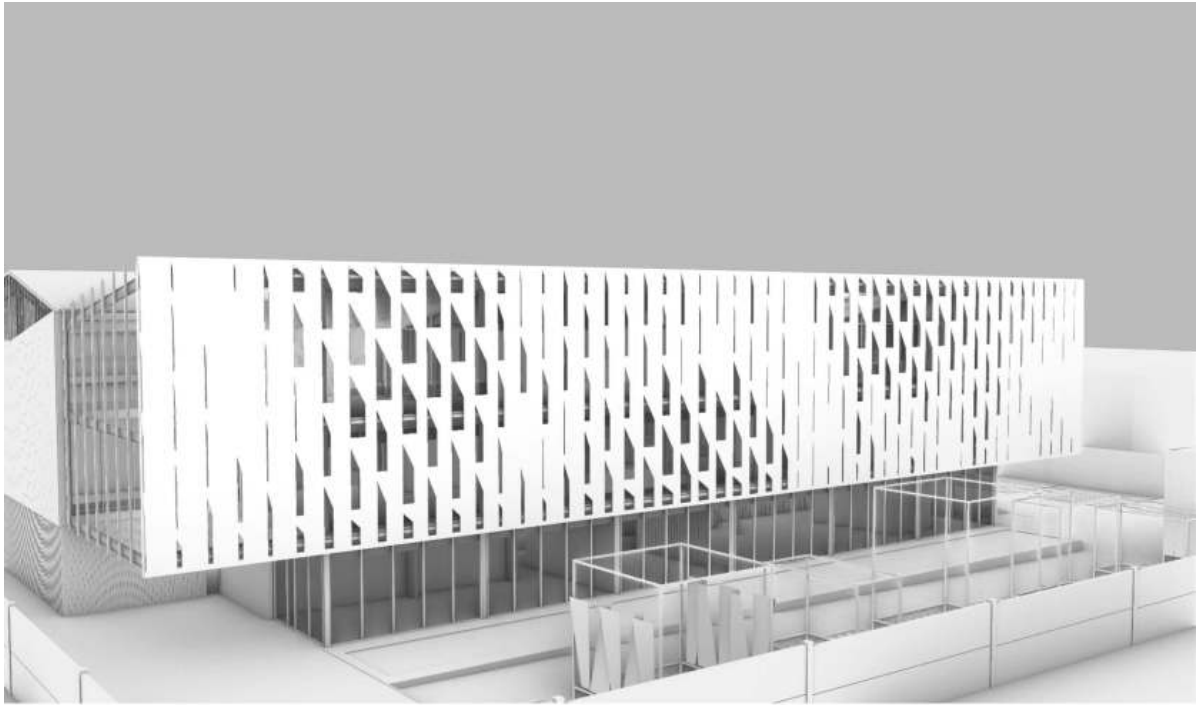


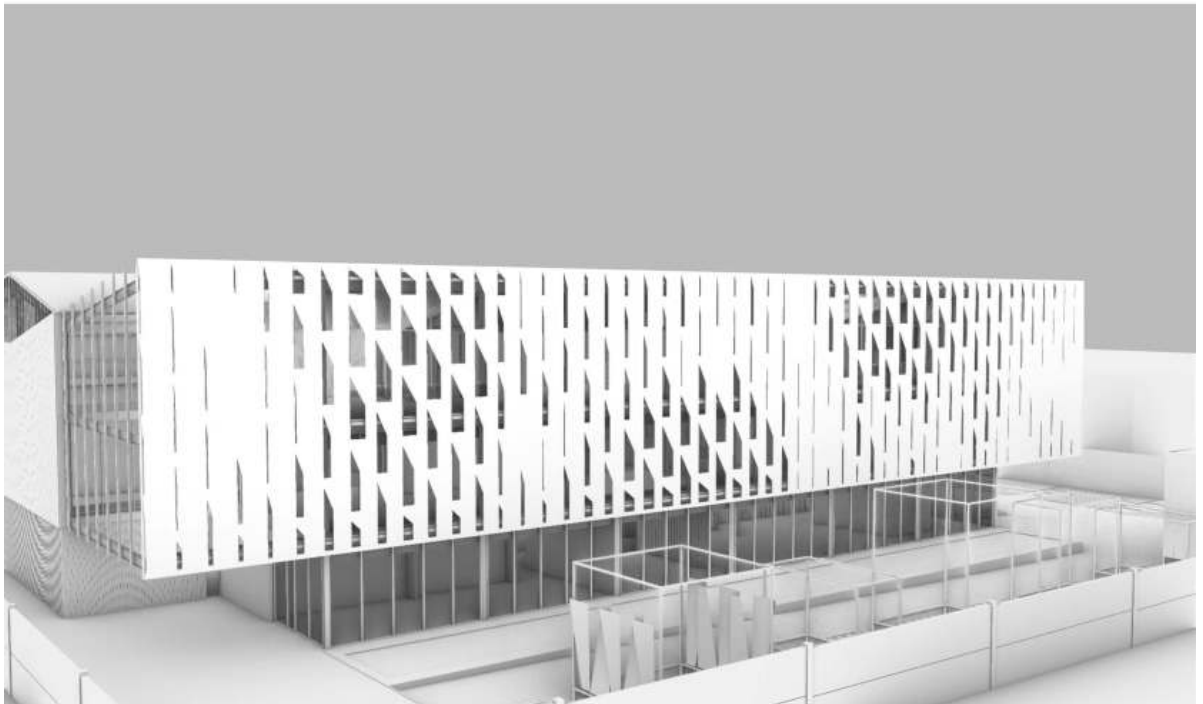
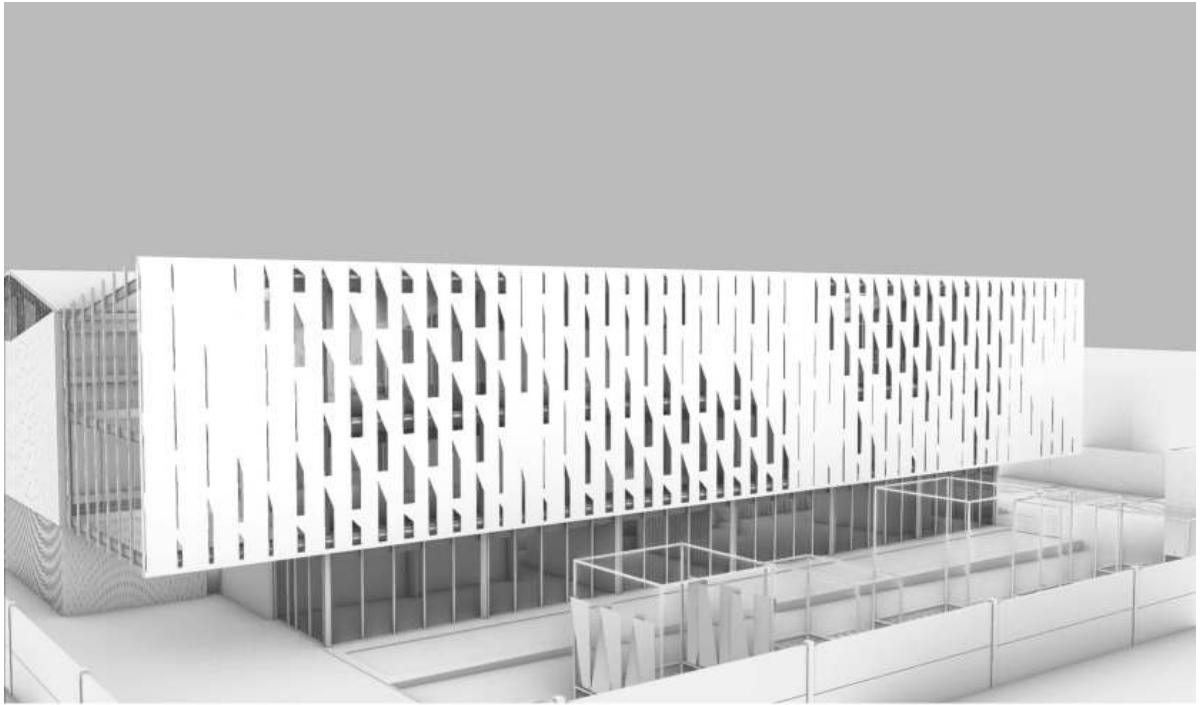


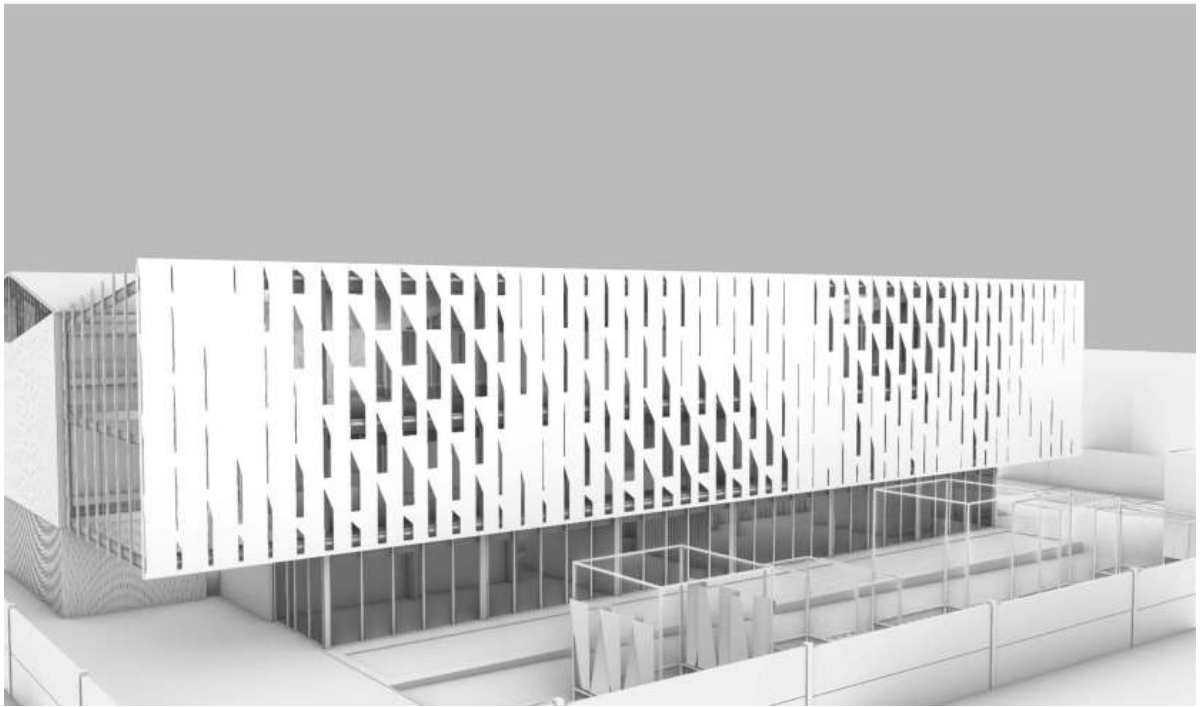
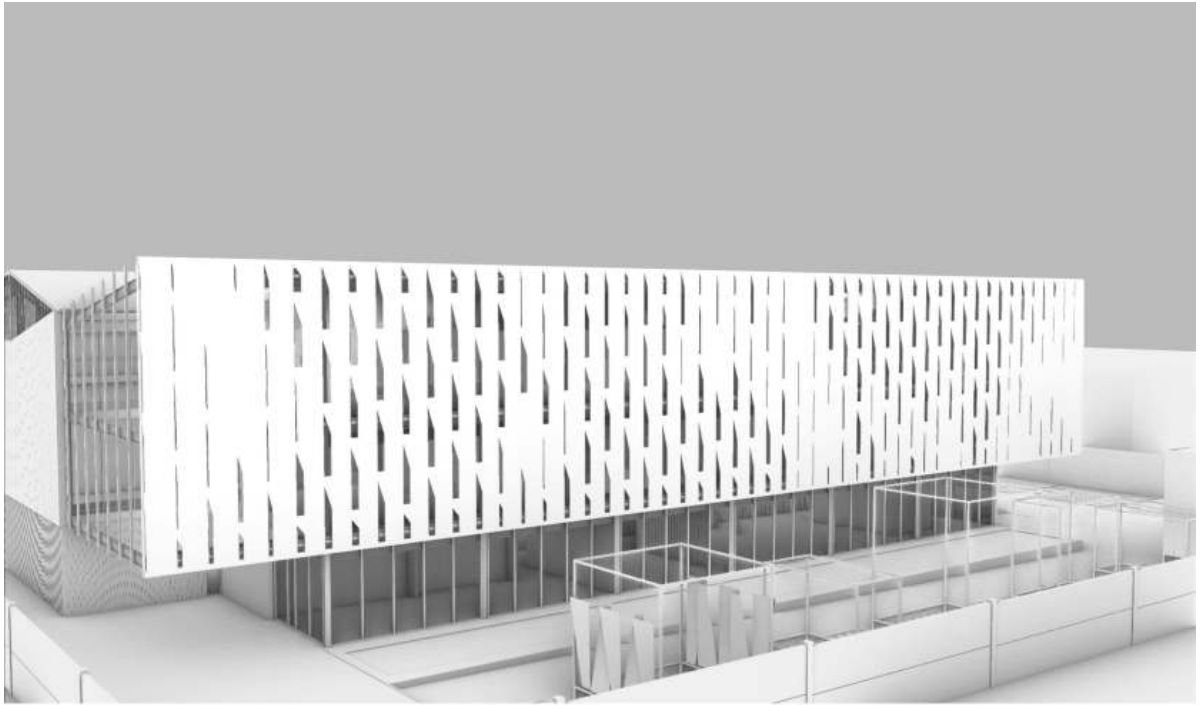


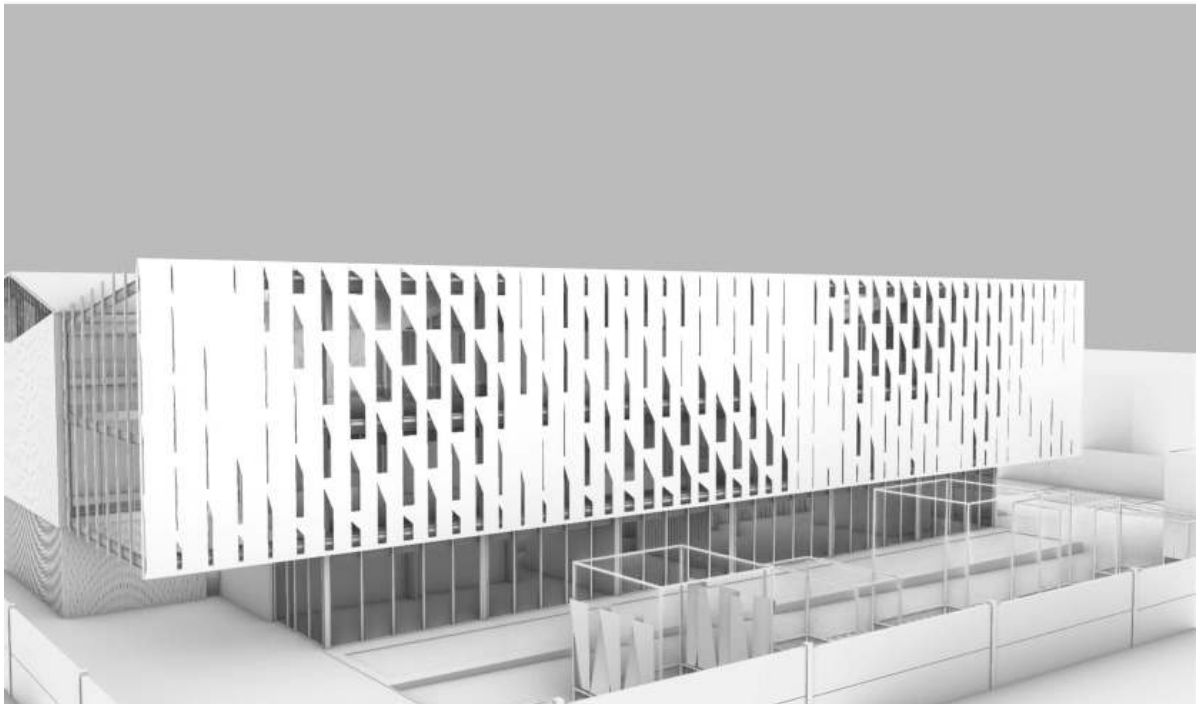
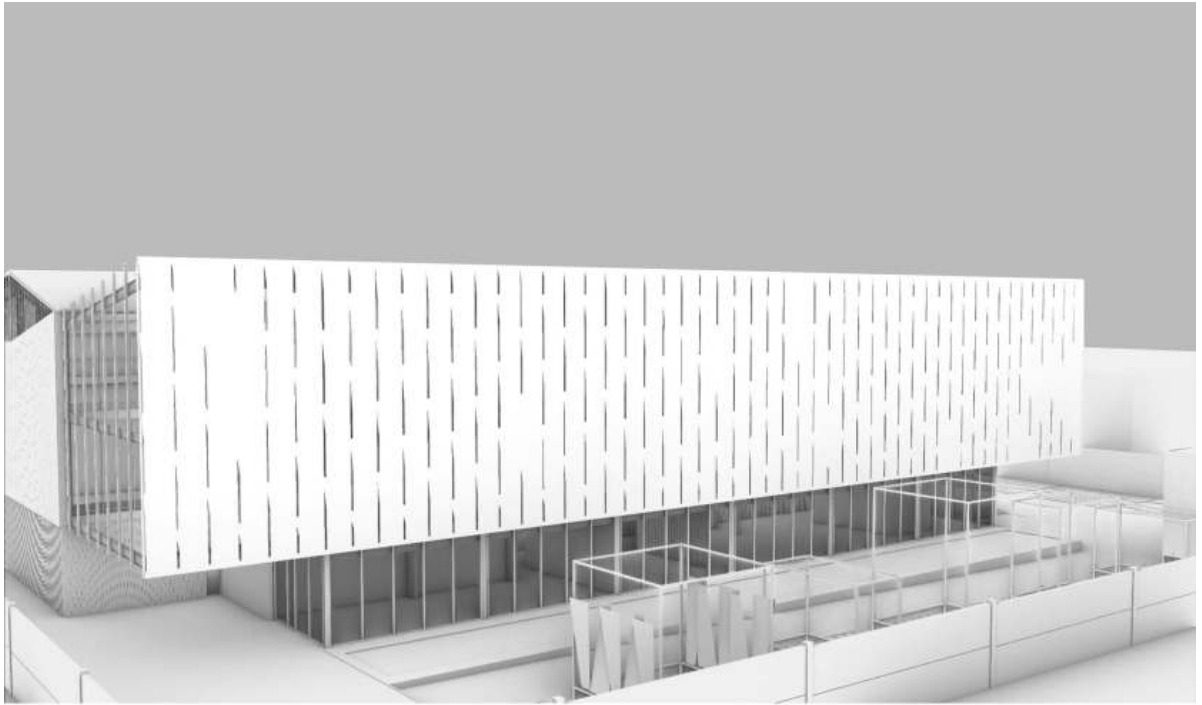












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# ACHIEVING VISION THROUGH IMPLEMENTATION

The project, initiated in 2022 and completed in the summer of 2023, reflects a journey of resilience and innovation. Despite the complexity of design and fabrication, streamlined coding and assembly processes facilitated remarkable speed during installation. This was a testament to the scale and practicality of the project.



## COLLABORATIVE SYNERGY FOR IMPACTFUL ARCHITECTURE

Arturo is extremely proud of the success of the façade and the unexpected nuances it has added to the architectural landscape. The façade's dynamic interaction with its surroundings, transforming under varying lighting conditions, is a testament to the team's dedication and inventiveness.



Grupo MSH's commitment to innovation and sustainability is reflected in the façade, which achieves harmony between design, technology, and the environment through parametric design and a skilled team. Grupo MSH's journey exemplifies creativity, technology, and form-function interplay in this narrative.