New digital tools continually present alternative methods to visualize and understand space. Traditional modes of representation are and will most likely remain foundational aspects of the discipline of architecture. However, new means of communication allow for the exploration of alternative methods of working. In architecture the use of immersive environments afford new methods for designing, embodying and understanding space. Extended Realities (XR), from augmented to virtual, provide a new embodied relationship between the architect and the 'drawing'.

Augmented Tectonics introduces students to methods of visualization and virtual immersion of the built environment using extended realities (XR) through the Unity game engine and Spatial.io. Leveraging XR tools, this course will engage and evaluate the design of healthcare spaces. Students will develop research as the spatial liaisons bringing a specific and critical body of knowledge based on design thinking for the envisioning and shaping of select spaces within healthcare. The seminar will be completed in parallel to a course from the School of Nursing (Nursing 539 - Foundations of Quality Science and Performance Analytics). The objective is to foster interdisciplinary collaboration between students through a virtual medium as a way to question known methods and foster non-traditional outcomes for working in and designing co-creatively. The results of the work will contribute to research being undertaken as part of the M-Well project which aims to enhance patient-provider relationships and encourage sacred moments and effective communication in clinical care settings..

Over the course of the semester, students will gain a better understanding of spaces they are researching, the anthropometric relationships afforded by XR, and the potential novel approaches to spatial interaction through embodiment. All assignments and final projects will be done in groups of three. Each assignment will build on the previous and be compiled into a final project at the end of the semester.

This class is a hybrid format, meaning that the majority of the course will be held online with the exception of two inperson meetings.