This materials intensive studio will operate counter to a traditional design studio. This studio will not be starting with a given program or site. Our point of departure will be a rigorous study of materials, means and methods of construction and the potential impact this knowledge has on the means and methods of design. Through case studies, readings, and small design projects, students will investigate how material systems can be integrated to define architecture. Students will develop a catalog of building component systems and details which can be integrated into a whole by the end of the term. Design projects will focus on specific performative aspects of the building systems such as structural, environmental and economic. Students will be expected to communicate and test their design intentions through various means of simulation and representation including performative analyses, digital modelling and physical mock-ups.