Premise: When Kisho Kurokawa’s Nakagin Capsule Tower was threatened for demolition in 2007, NYT critic Nicolai Ouroussoff argued: “The Capsule Tower is not only gorgeous architecture; it is the crystallization of a far-reaching cultural ideal.” Indeed, prefabricated modular housing has remained at the frontier of architectural innovations since the mid 20th century. The recent adAPT micro-unit housing competition in New York initiated by Michael Bloomberg testified its significance to the growing urban society in the age of climate change global. If this represents a trend, how can we capitalize this classical idea for new prototypes of architecture addressing the changing culture of contemporary urban dwelling?

Objectives: This research studio explores resolutions of three contradictions of modular architecture – on technical, urban, and social levels respectively. It aims to study the new possibilities of prefabricated modular housing with the late developments of construction technology and digital design, to connect modular building to its urban context in the infill development of urban centers, and to reconcile the standardized modularity with the increasing diversity and complexity characterized by contemporary urban living.

Methodology: You will start with precedent studies to understand the origin, development, and dilemma of modular architecture, its relation to the growing metropolis, and how this concept can be re-adapted to the current needs of urban living. Then each of you will design a prototype of modular living unit under 500 sq. feet, targeting the growing population of young professionals in large cities. The unit design should have an efficient interior layout and take into consideration advanced construction methods and new materials. Finally you will adopt this modular unit in the design of a housing complex in Center City Charlotte. Attentions are required on public spaces and urban context, as well as a building form characterized by modular construction.