Modularity and Kit of Parts thinking, as examined in this course is inclusive of two critical attributes of good design. First, the ability to use modularity as a tool to make useful and beautiful spaces and products, second how prefabricated Kit of Parts elements may facilitate economy, ease of construction, reconfiguration and/or portability.

The dual concepts of modularity and kit of parts construction are intrinsic to contemporary design theory and practice. We will begin by studying modular systems that have had a strong influence on modern design theory including the Japanese Ken and Corbusier’s Modular. and compare these to systems and products invented by other modern designers including Frank Lloyd Wright, Jean Prouve, and Fritz Haller. Next we will examine how the use of standardized modules and parts have changed the way designers approach construction/fabrication and whether kit of parts assemblies have fostered new thinking about composition. The class will read, analyze, and discuss recent publications by Kieran Timberlake and others and students will examine case-studies of buildings and building components. Topics covered in the course include but are not limited to:

- Scale, shape and size in modular planning
- How modules “fit” together in use
- Kit of Parts construction: “open source” kits made of readily available elements and “closed” kits made of custom elements
- Mass customization and the opportunity to create variation and change in buildings and products through modular or kit of parts design
- Transportation, disassembly and reuse or reconfiguration as design influences

This course includes limited lectures, readings, class discussions/presentation and three exercises: 1) hands-on construction and experimentation of a simple modular element based on Frank Lloyd Wright’s textile blocks 2) case-study research and presentation of a modular building system or product and 3) the opportunity to apply kit of parts thinking to past or present studio work through the detailed design of space or element that can be disassembled and reconfigured.