



SPRING 2019

SOFTBUILT: RESPONSIVE FIBER COMPOSITE ARCHITECTURES

ARCH 497 FELECIA DAVIS TUESDAY 6:00PM-9:00PM

Lightweight architecture made of fiber-composites where bearing is done through the surface of material itself cannot only reduce the weight of buildings but also offers opportunities for spatial innovation in architecture. Simply working with the textile patterning itself can change what that composite can do and respond to. In addition, building with soft materials opens up the possibility of incorporating through weaving, knitting or felting sensors and other **responsive** materials into the textile surface itself.

This course will offer participants the opportunity to experiment with various fiber composite processes such as layup fiberwinding and other methods. Participants in the course will explore responsive design through the integration of sensors [natural &/or electronic] and other materials into the composition of fabric.

Participants in this course will explore hands-on techniques for working with textiles for building that focus on ways to carry loading primarily through the skin, tissue or surface of the object. The course will be an opportunity to develop and experiment with fiber composites as integrated sensors to be used for furnishings, building components and other objects.