FIRST CLASS MEETING WILL BE THURSDAY SEPT 10th 1:00-3:00PM IN 2104 A&AB (AUDITORIUM)

STRETCH | Technology embedded playscapes
This course focuses on the design and fabrication of dynamic, interactive textile-based structures as flexible, deformable, and reconfigurable systems, tailored for multi-sensory, tactile and spatial engagement. Textiles will be manufactured using the large-scale CNC knitting machine in the College of Architecture’s FabLab. The design of the structures and the means of interaction (sensing and feedback) will be developed in collaboration with the students from the EECS 481 Software Engineering course taught by Dr. David Chesney. This collaboration is supported by a University of Michigan TLTC grant for “Tactile Technologies in Play and Learning” which will focus on the development of structures and sensing technologies to address the physical, social and communication challenges for children with autism spectrum disorder (ASD). Experts and parents from various centers in Ann Arbor will provide stories and detailed information of their experiences with children on the autism spectrum. This information will serve as the backbone for technologies to be developed. Through an integrated workshop titled Mindfulness for Design, Play and Learning for Autism, concepts for mindfulness will be learned alongside hands-on play, under the guidance of expert therapists, with children who have autism. This will provide the critical understanding for how the technologies need to first embrace the highly specific strengths and interest of the children, in order to foster a level of engagement and focus where new skills can be introduced. Select projects will be given the opportunity through the grant to advance and implement their prototype in the winter semester within the local therapy centers involved in the project.
Previous work from this collaboration can be seen here: Social Sensory Surfaces Teaching/Research Project.