



**48545/48745 Digital Fabrication**  
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Digital Fabrication is a project based seminar exploring the application of Computer Aided Manufacturing (CAM) in architecture. The course meets in the School of Architecture's Design Fabrication Lab (dFAB), which serves as a context to better understand the interconnected affordances of building materials, machine processes, and modeling software for design thinking. The course focuses on Transdimensional Fabrication, a manufacturing framework that forefronts design thinking across space and time. A growing array of approaches in contemporary architecture are motivated by this focus (e.g. flat pack, 4D printing, metamaterials, kinetic architecture, robotic origami, design for disassembly). We will investigate Transdimensional Fabrication concepts through three projects that explore translations between 2D → 3D, Space → Time, Assembly → Reconfiguration → Disassembly.

**Image Credits**

Stretchable origami robotic arm with omnidirectional bending and twisting, Ruike Renee Zhao, Assistant Professor Stanford University [<https://zhaolab.stanford.edu/publications/stretchable-origami-robotic-arm-omnidirectional-bending-and-twisting>].