

Built Ecologies: BIO-mimetic design

Biomimicry is an emerging discipline that studies nature's best ideas and imitates or simulates these designs and processes to solve human problems. Buildings are complex products, developed out of an incredible amount of time, labor, material resources, and financial resources. In addition, buildings operate and consume large amounts of energy, water and maintenance in order to shelter humans comfortably. Nature has found ways to provide for itself with minimal investment of resource. This graduate interdisciplinary class brings together biology and architecture to investigate biomimicry. Design students will work collaboratively to evaluate organisms' response to environmental factors and apply these lessons to the design of built systems that respond passively to their environments. Potential outcomes of this collaboration might entail solutions that can absorb, transmit and store energy; harvest, reuse and restore their own water and waste; and foster increased human health and wellbeing in built environments.

