The fact that there is an utter discordance between the practice of architecture and modern machinery; the novel means afforded to architects are a source of embarrassment to them, not the occasion of inventions and adaptations deduced from new principles.

-Eugene-Emmanuel Viollet-le-Duc, Lectures on Architecture, 1881

How can designers embrace new modes of production? What opportunities are there for architects in the authorship of the building process—in addition to design? This studio will speculate on the role and potentials of advanced manufacturing and prefabrication in architecture. The vehicle for this scholarship will be the design of a new field station for the study of plant ecology and the facilitation of research on ecosystem and biological community preservation.

**Studio Structure:**

The semester is structured by two problems that dovetail together. The first problem will require students to design an open air observation pavilion. Emphasis will be placed on the detail as a driver for architectural design. At this stage, students will also engage in research investigating innovative fabrication strategies and techniques for delivering pre-fabricated components to a sensitive and remote site.

The second problem will be the design of a new field station for research by visiting scientists. Each student will be responsible for choosing the site for their field station. This facility will include a laboratory, educational seminar spaces, and overnight accommodation and amenities for up to 12 visitors. In addition to the design of the field station, students will be responsible for determining and representing, through a variety of media, the fabrication strategy for the field station’s deployment. The studio will make extensive use of models and physical prototypes, at a full range of scales, including full-scale 1:1 details.