Course Description:
An advanced course on Design Innovation through rigorous Design Reasoning and Goal-directed Creative Thinking. Following the study of Theory of Design and Creative Process, Design Teleology and Functionality, and Design Reasoning and Evaluation, research on current state of the arts in building science and technology as well as design exercises under the current practice environment are conducted as a way of building up the foundation both for innovative design as well as for professional competency in current practice environment. To foster creativity further toward innovative future, this is followed by research-supported exploration for innovative design, aiming at opening up new possibilities for brighter future with design innovation, hopefully even leading to patentable inventions.

Course Objective:
To sharpen intellectual acumen and advance creative ability for design innovation through rigorous design reasoning, research, and design exercises.

Term Project:
The students will choose one of their favorite projects, including their own from previous studios, as the vehicle of inquiry for the Term Project, and 1) develop the design into “working drawings” as if it is going to be actually built, in much the same way as in professional practice, that is, through Design Development Phase and Construction Document Phase. The Project then continues with 2) Innovative Design Phase through the second half of the semester. Building upon the knowledge acquired through “design with the current state of the art” during the first half, the students will explore yet uncharted territory of potential innovation and, at the end, expected to arrive at Innovative Designs of the Future that can open up a better world for all.