ARCH 498U
DIGITAL DESIGN DREAMS - DESIGNING WITH COMPUTERS
3 Credits
Prerequisite: Computer literacy (Arch 370 or permission)

Instructor
Ellen Yi-Luen Do

Course Description
A course on design research methods focusing on the integration and use of concepts and skills from computing and computational environments. Introduction to the form and computational description of designs. Introduction to research paradigms and their assumptions, with an emphasis on design inquiry. The formulation of questions and frameworks of description, representation, analysis, and interpretation. Seminar review of developments in computing applied to architecture and current major research issues. Students will engage in readings, discussions and individual development of design projects. Designed for students interested in exploring design computing ideas, or in preparation for a design computing thesis.

Course Objectives
This course is designed to achieve the following goals:

• To facilitate the development of analytical, critical and integrative thinking.

• To help students to initiation, planning, execution and presentation of design computing projects or research thesis.

• To help students improve their verbal and writing skills and the habit to do literature survey and case studies.

• To encourage the students to examine, discuss, question and debate issues of computing and information technology in design.

• To envision better design tools for the future, either by a vision proposal, programming software or hardware integration.

• To facilitate collaboration between fields of study, and interdisciplinary research.

Course Requirements
Completion of individual projects and reading of related literature.
Presentation, participation and discussion in class.

Course Evaluation
Presentation 33%
Participation 33%
Project 34%

Required Texts
Related readings according to individual projects
Numerous web-based information resources are also introduced.
http://courses.washington.edu/arch498u

Recommended Readings
"Analysing Design Activities"
"Research in Design Thinking"
"Electronic Design Studio"
"Computer Aided Architecture Design Futures"
"Design in Mind"
"Envisioning Information"
"Design Methods in Architecture"
"Precedents in Architecture"
"How to write a Thesis"