# HUMAN CENTERED DESIGN

# College of Human Ecology

Graduate Study in Design + Environmental Analysis

## **Master of Arts in DESIGN**

Two-Year Graduate Program

## **CONCENTRATION: Emerging Technology for Design**

**The MA in Emerging Technology for Design (ETD)** challenges students to consider innovative approaches to emerging technologies as creative and expressive media. Current study areas include, but are not limited to: design computing and cognition, architectural robotics, design process and design visualization using Virtual Reality (VR) and Augmented Reality (AR), advanced visualization technologies for environment-behavior simulation, generative and parametric design and fabrication, Building Information Modeling (BIM) and simulation, and human-computer interaction as related to emerging technology for design. The culmination of the degree is a design / research thesis project that contributes to design knowledge. Typically, this is manifested as a prototype (advancing or employing an emerging technology) along with the written thesis reporting its design process and evaluation.

### CAREERS

Students who complete the ETD concentration within the MA in Design will be well positioned for careers in industry, research institutes, and academic settings employing virtual reality, augmented reality and other technologies for UX design.

### **M.A. REQUIREMENTS/SUGGESTED COURSEWORK**

#### A. Required Core DEA Field Courses:

DEA 6100	Studies in Design Thinking	3 credits
DEA 6200	Studies in Human-Environment Relations	3 credits
DEA 7100	DEA Graduate Pro Seminar (1 credit / semester x 4 semesters)	4 credits

#### **B. Required Foundational Courses for Concentration:**

DEA 5520 Virtual Experience of Designed Environments	3 credits
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#### C. Research Methods: ONE (1) 3-4 credit (5000-level or higher) course

Various	Research Methods <sup>i</sup>	3-4 credits

#### D. Statistics: ONE (1) 3-4 credit (5000-level or higher) course

Various Statistics <sup>ii</sup> 3-4	3-4 credits

#### E. DEA Breadth: Choose THREE (3) of the following courses

Design Accountability: Evaluation of the Physical Environment	3 credits
Health and Healing Studio	4 credits
Workplace Strategy Studio	4 credits
Health Impact Assessment	3 credits
Future Body Craft	3 credits
Architectural Robotics	3 credits
Generative Design Studio	4 credits
Problem-Seeking through Programming	3 credits
Human Factors and Inclusive Design	3 credits
The Ambient Environment	3 credits
Environments and Health	3 credits
Poverty, Children and the Environment	3 credits
Applied Ergonomic Methods	3 credits
	Health and Healing Studio   Workplace Strategy Studio   Health Impact Assessment   Future Body Craft   Architectural Robotics   Generative Design Studio   Problem-Seeking through Programming   Human Factors and Inclusive Design   The Ambient Environment   Environments and Health   Poverty, Children and the Environment

#### F. Studio Courses:

DEA 5210	Interaction Design Studio	4 credits

#### G. Thesis Courses:

DEA 8990 Master's Thesis III 8-12 credits			DEA 8990	Master's Thesis <sup>iii</sup>	
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#### H. Minor Courses:

Various	Courses for minor varies: typically 2 or 3, 3-or 4-credit courses		6-12 credits
Summary of C	Curriculum	Number of Courses	Course Credits
A. Required DEA Field Courses		3 <sup>iv</sup>	10
B. Required Foundational Courses for Concentration		1	3
C. Research M	/lethods	1	3-4
D. Statistics		1	3-4
E. DEA Bread	th	3	9-12
F. Studio Cou	rses	1	4
G. Thesis Cou	Irses	1-2	8-12
H. Minor Field	Courses	3	6-12
		Total Courses: 14-15	Total Course Credits: 46-61

A list of grad-level methods courses can be found at: https://socialsciences.cornell.edu/methods-courses

"e.g: BTRY 6010, BTRY 7180, ILRST 5100, ILRST 6100, PSYCH 6750, HD 6750.

<sup>III</sup> Thesis credits determined at the discretion of thesis committee; the number of courses and credits listed merely indicate typical range.

<sup>iv</sup> Includes DEA 7100 as 1 course (but is required to be taken 4 times (1 credit each))

**NOTE:** A minimum grade of B- will be required for courses taken within the major. If a grade lower than a B- is received on a course taken within the major, the student will be required to retake the course.

Course offerings may change year to year. Consult the Courses of Study for current offerings.