



## Graduate Study in Design and Environmental Analysis

# Masters of Science in HUMAN ENVIRONMENT RELATIONS

Two-Year Graduate Program

## CONCENTRATION: Human Factors and Ergonomics

This concentration focuses on the application of Human Factors and Ergonomics to improve the ergonomic design and usability of hardware, software, and workplaces to enhance people's comfort, performance, and health. The program builds on the work of the Human Factors and Ergonomics Laboratory. Recent projects have focused on the effects of physical design on users' behavior, performance, and attitudes, including studies on the effects of workstation adjustability on user satisfaction; the ergonomic design of seating; new computer technologies and the impact of indoor environmental factors, such as indoor air quality, lighting and noise on the health and productivity of computer workers. Instruction includes team project work with real clients.

## CAREERS

Excellent career opportunities in human factors and ergonomics are available in the private sector, in government, and in educational institutions.

## M.S. REQUIREMENTS/SUGGESTED COURSEWORK

<b>DEA field courses required or recommended:</b>			
DEA 1110	Making a Difference By Design	<i>Recommended</i>	3 credits (audit)
DEA 1200	Art+Science: Sustainability, Multiculturalism, and Transdisciplinary	<i>Recommended</i>	3 credits (audit)
DEA 1500	Introduction to Environmental Psychology	<i>Recommended</i>	3 credits (audit)
DEA 7100	DEA Graduate Pro Seminar	<i>Required</i>	*1 credit (*each semester).
DEA 6200	Studies in Human-Environment Relations	<i>Required</i>	3 credits
DEA 6100	Studies in Design Thinking	<i>Required</i>	3 credits

<b>Required courses:</b>		
DEA 6510	Ergonomics and Anthropometrics	4 credits
DEA 6520	The Ambient Environment	4 credits
DEA 6560	Research Methods in Social Sciences	4 credits
DEA 6700	Applied Ergonomics Methods	4 credits
DEA 6760	Universal Design: Ergonomics and Accessibility	3 credits

<b>And at least ONE of the following courses:</b>		
DEA 6000	Directed Readings in Human Factors	4 credits
DEA 6010	Empirical Research in Human Factors	4 credits
DEA 6020	Supervised Fieldwork in Human Factors	4 credits

<b>At least ONE of the following COMBINATIONS of courses in statistics:</b>		
ILRST 5100	Statistical Methods for the Social Sciences I	4 credits
ILRST 5110	Statistical Methods for the Social Sciences II	4 credits
<b>OR</b>		
BTRY 6010	Statistical Methods I	4 credits
BTRY 6020	Statistical Methods II	4 credits
<b>OR</b>		
PSYCH 3500	Statistics and Research Design	4 credits
PSYCH 4720	Multiple Regression *	2 credits
PSYCH 4730	General Linear Model **	2 credits

<b>Thesis course:</b>		
DEA 8990	Master's Thesis	8-12 credits

<b>Summary of Curriculum</b>	<b>Number of Courses</b>	<b>Total Credits</b>
<b>Required DEA field courses</b>	3	10 (6 +1/ semester)
<b>Required Courses</b>	5	19
<b>Additional Course</b>	1	4
<b>Course Combinations</b>	2	8
<b>Courses in Minor</b>	1-3 as required	3-12
<b>Master's Thesis *</b>	1-2	8-12
<b>Total Courses: 13-16</b>		<b>Total Credits: 52-65</b>

\* Thesis credits are determined at the discretion of the thesis committee; the number of courses and credits listed merely indicate typical range.

**NOTE:** A minimum grade of B- is required for courses taken within the major.

\* SUGGESTED ALTERNATE - PAM 3100 - Multiple Regression Analysis

\*\* SUGGESTED ALTERNATE - BTRY 7180 - Generalized Linear Models