

# PH.D. IN ENVIRONMENTAL HEALTH, OCCUPATIONAL ERGONOMICS AND SAFETY SPECIALIZATION

The Ph.D. specialization in Occupational Ergonomics and Safety is based on a multidisciplinary group of faculty and courses aimed at enhancing the workplace in terms of safety, process and product quality, and the quality of work life. The foundation of the program is driven by the utilization of a systems approach in human-centered design and in the most current safety theories and practice. The program integrates a multidisciplinary approach from psychology, engineering, the health sciences and safety to better understand and optimize human well-being and overall system performance in the workplace.

The Ph.D. program has the flexibility for students to pursue research related to ergonomics and safety from approaches in psychology, engineering, the health sciences and occupational epidemiology. Graduates from the Ph.D. program are typically employed in leadership positions in the field of occupational safety and health. Many of our doctoral level graduates are professors at universities, program managers and directors at multinational companies, researchers at private and public organizations, as well as managing consultants in industry.

## Requirements Effective Fall 2019

Code	Title	Credits
<b>Core Courses</b>		
DM 575	Human Factors in Design	3
ERHS 520	Environmental and Occupational Health Issues	3
ERHS 526	Industrial Hygiene	3
ERHS 527	Industrial Hygiene Laboratory	1
ERHS 528	Occupational Safety	3
ERHS 532	Epidemiologic Methods	3
ERHS 540	Principles of Ergonomics	3
ERHS 541	Ergonomics in Product and Process Design	3
ERHS 637	Environment, Safety, and Health Management	3
ERHS 679	Occ Env Health Interdisciplinary Symposium - Field Practicum	2
PSY 792D	Advanced Seminar: Occupational Health Psychology	3
<b>Additional and Supporting Coursework</b>		
ERHS 535	R Programming for Research	3
ERHS 536	Advanced Occupational Health	3
ERHS 642	Applied Logistic Regression	3
ERHS 784	Supervised College Teaching	2
ERHS 787	Internship	3
ERHS 795B	Independent Study: Occupational and Environmental Health	1
ERHS 799	Dissertation	12

PSY 692D	Seminar: Spectrum of Professions Protecting and Promoting Worker Health	1
STAT 511A	Design and Data Analysis for Researchers I: R Software	4
STAT 512	Design and Data Analysis for Researchers II	4
<b>Select a minimum of 6 credits from the following electives:</b>		<b>6</b>
ERHS 636	Industrial Hygiene Control Methods	
ERHS 640	Advanced Epidemiology	
ERHS 656	Occupational Noise Control	
ERHS 658	Environmental/Occupational Epidemiology	
HES 530	Clinical Biomechanics	
HES 531	Muscle and Joint Mechanics	
IE 517/PSY 517	Perspectives in Global Health	
PSY 600J	Advanced Psychology: Health Psychology	
PSY 600L	Advanced Psychology: Human Performance, Motor and Intellectual Capacities	

Program Total Credits: 72

A minimum of 72 credits are required to complete this program.