Missouri University of Science and Technology
Human Factors Psychology Graduate Certificate
Offered by the Department of Psychological Science

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Overview

This certificate is designed to give students expertise in how people interact with engineered systems and devices. Students will increase their understanding of how to engage in human-centered design and better support interactions between humans and technology. This certificate will help advance multiple career paths including human-focused paths to better understand technology and technology-focused paths to better understand human perspective.

Students will gain expertise in understanding, predicting, and critically evaluating the interaction between human capabilities and characteristics and technology design and implementation, including the use of technology for communication, occupational health and safety standards, understanding and use of information systems, and using technology to connect to customers/the market.

Curriculum

Course requirements include the following:

Required
       PSYCH 5710 – Advanced Human Factors

And Any 3 of the Following (9 credit hours total)
       PSYCH 4720 – Psychology of Social Technology
       PSYCH 5740 – Occupational Health and Safety
       TCH COM 5530 – Usability Studies
       IS&T 5885 – Human-Computer Interaction and User Experience
       BUS 5150 – Customer Focus and Satisfaction

Admissions

This program is open to all persons holding a bachelor's, master's, or doctorate degree in psychology, business, or a related field, with a preferred minimum of one year of professional employment experience. Minimum undergraduate GPA is 3.0 is preferred. Students admitted to the Human Factors Psychology Certificate Program will have non-degree graduate status, however, they will earn graduate credit for the courses they complete. The certificate program can be partnered with other graduate degree programs at the University, but cannot be used as part of the admission process to enter into another graduate program.

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Human Factors Psychology Graduate Certificate Courses

PSYCH 5710: Advanced Human Factors
An in-depth review of the foundations of human factors, focusing on the interaction of people with various forms of technology in a variety of environments. Topics include research and evaluation methods, displays (e.g., visual, auditory), attention and information processing, decision making, motor skills, anthropometry, and biomechanics. (Offered both online and campus)

PSYCH 4720: Psychology of Social Technology
This course covers research, theory, and practice from psychology and other social science disciplines for understanding the use of, interactions with, and interactions through computers and other technology. This course introduces students to the psychological and social issues involving personal, work, and societal use of technology. (Offered both online and campus)

PSYCH 5740: Occupational Health and Safety
This course will cover the ethical, legislative, technical, behavioral and management aspects of health and safety practices in human resources. Topics include workplace safety, ergonomics, accident investigation, occupational stress, government regulatory agencies, employee assistance programs, wellness programs, and behavioral based safety. (Offered both online and campus)

TCH COM 5530: Usability Studies
Students in this course will study and apply methods used by technical communicators to evaluate usability. Students will study methods used to evaluate human interaction with communication tools and how to make those products more suitable for human use. (Offered both online and campus)

IS&T 5885: Human-Computer Interaction and User Experience
Introduction to the field of Human-Computer Interaction (HCI). Students examine issues and challenges related to the interaction between people and technology. The class explores the social and cognitive characteristics of people who use information systems. Students learn techniques for understanding user needs, interface prototyping & interface evaluation. (Offered both online and campus)

BUS 5150: Customer Focus and Satisfaction
Major emphasis is given to the concept of customer focus, with coverage of techniques for obtaining customer needs, measuring customer satisfaction, developing products and services to satisfy customers, and maximizing the benefits of customer feedback. A semester long HoQ project will be done. (Offered both online and campus)