Human Systems Engineering (Intelligent Systems), MS

ESHSEISMS

Program Description

Degree Awarded: MS Human Systems Engineering (Intelligent Systems)
The MS program in human systems engineering with a concentration in intelligent systems provides students with a deep understanding of the science of human performance and experience in the engineering of intelligent systems, robotics and autonomous systems industries.

Students in this program participate in courses focusing on methods and tools in applied cognitive science and foundations of human systems engineering, including uses of simulation and robotics, among other topics.

This concentration prepares students for facilitating the future of work when humans will work closely with heterogeneous technology in the military, space exploration, manufacturing, medicine and agriculture.

At a Glance

- College/School: Ira A. Fulton Schools of Engineering
- Location: Polytechnic campus

Degree Requirements
**Required Core (12 credit hours)**
HSE 520 Methods and Tools in Applied Cognitive Science (3)
HSE 530 Intermediate Statistics for Human Systems Engineering (3)
HSE 531 Data Analytics: Modeling Human Subjects Data (3)
HSE 542 Foundations of Human Systems Engineering (3)

**Concentration (9 credit hours)**

**Electives and Research (3 or 9 credit hours)**

**Culminating Experience (0 or 6 credit hours)**
HSE 593 Applied Project (6) or
HSE 599 Thesis (6) or
portfolio (0)

**Additional Curriculum Information**
For electives and research coursework, enrollment in HSE 592 Research for three credit hours is required for students completing a thesis and optional for students completing the applied project or portfolio culminating experience. Students in all culminating experience options should contact the academic unit for an approved electives list.

Students completing a portfolio for the culminating experience must complete nine credit hours of electives and research coursework.

**Admission Requirements**
Applicants must fulfill the requirements of both the Graduate College and the Ira A. Fulton Schools of Engineering.

Applicants are eligible to apply to the program if they have earned a bachelor's or master's degree in engineering, robotics engineering, mathematics or a related field from a regionally accredited institution. Students must have sufficient mathematics background for this concentration, including up to calculus III and linear algebra.

Applicants must have a minimum cumulative GPA of 3.00 (scale is 4.00 = "A") in the last 60 hours of their first bachelor's degree program, or applicants must have a minimum cumulative GPA of 3.00 (scale is 4.00 = "A") in an applicable master's degree program.

All applicants must submit:
1. graduate admission application and application fee
2. official transcripts
3. GRE scores
4. letter of intent
5. professional resume  
6. three letters of recommendation  
7. proof of English proficiency  

**Additional Application Information**  
An applicant whose native language is not English must provide proof of English proficiency regardless of current residency.  

Global Launch at ASU offers an online alternative to standardized testing for international students who are seeking admission to ASU but need proof of English proficiency:  

A GRE waiver may be requested if the applicant received a bachelor's degree in a related field from an accredited institution in the United States with a cumulative GPA of 3.00 or better. Applicants can also submit a GRE waiver request form if they have five years of full-time applicable professional experience. To request a waiver, applicants should email polygrad@asu.edu. An approved waiver does not guarantee admission.  

**Contact Information**  
Human Systems Engineering | WANER 101  
polygrad@asu.edu | 480-727-4723