Human Systems Engineering (Health Systems), MS

ESHSEHSMS

Program Description

Degree Awarded: MS Human Systems Engineering (Health Systems)
The MS program in human systems engineering with a concentration in health systems provides current and future managers with the technical expertise to lead efficient health care systems by identifying needs through system modeling, field research and analytics to improve existing health care systems. This concentration program also attunes students to perform research and develop innovative approaches to transform health care from reactive to proactive systems, which reflect National Institute of Health initiatives.

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 (6 credit hours)
BMI 605 Health Information Systems and Applications (3)
BMI 613 Workflow Analysis and Redesign in Health Systems Engineering (3)
BMI 616 Clinical Decision Support and Evidence-based Medicine (3)
HCD 502 Health Care Systems and Design (3)
HCD 570 Process Engineering (3)
HCD 575 Leadership and Professionalism (3)

**Electives and Research (0 - 9 credit hours)**

**Other Requirements (3 credit hours)**
HSE 525 Health and Human Systems Engineering (3)

**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 9 credit hours of electives and research coursework.

Other requirement course HSE 525 is required for all students, but in some situations may be substituted with academic unit approval.

**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, health, nutrition, psychology or a related field from a regionally accredited institution.

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: [https://globallaunch.asu.edu/learn-english/online-english/english-for-admission](https://globallaunch.asu.edu/learn-english/online-english/english-for-admission).

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](https://human-systems.asu.edu) | WANER 101
polygrad@asu.edu | 480-727-4723