

HEALTHCARE SYSTEMS ENGINEERING (CERT)

This program was approved for students entering the university in the Summer 2023–Spring 2024 catalog year. For more information about catalog year, go to Catalog Year Information (<http://catalog.louisville.edu/undergraduate/university-wide-unit-specific-policies/catalog-year/>).

Graduate Certificate in Healthcare Systems Engineering

Unit: Speed School of Engineering (<https://engineering.louisville.edu/>) (GS)

Department: Industrial Engineering (<https://engineering.louisville.edu/academics/departments/industrial/>)

Academic Plan Code(s): HSENCGR, HSENCGRO

Program Information

This program can be completed in a traditional classroom format or entirely online.

The graduate certificate in Healthcare Systems Engineering will provide a focused study of industrial engineering skills and methods as applied to healthcare delivery systems and processes. Students who complete the certificate program will acquire skills in healthcare engineering, quality of care, patient safety, health IT, clinician support, healthcare analytics, and data visualization. The certificate program offers the field of industrial engineering a focused program of study in the healthcare domain while also providing healthcare professionals an opportunity to acquire industrial engineering skills as applied to health care delivery and process improvement.

This is a nine credit hour certificate program.

Applicants are recommended to have completed a probability and statistics course. Students who do not have the expected background may be required to take a refresher course. Applicants should have an undergraduate degree in any field with a GPA of 2.75 or above (on a 4.00 scale). Only a transcript showing the undergraduate degree awarded is required for the application. Letters of reference or GRE scores will not be required.

Students whose native language is not English or whose degree is from a non-US accredited institution are required to demonstrate proficiency in the English language as specified by the admission policies of the Speed School of Engineering.

Certificate Requirements

A total of nine (9) credit hours are required.

Code	Title	Hours
IE 682	Quality of Care and Patient Safety	3
IE 684	Health IT and Clinician Support	3
IE 662	Predictive Analytics for Decision Making I	3
Minimum Total Hours		9