Healthcare System Operations, Minor

The objective of the minor in healthcare system operations is to prepare students to apply industrial and systems engineering methods in healthcare applications. Distinct from other service industries, healthcare systems are characterized by extensive complexities driven by communication between and interdependencies among multiple actors, and the need to simultaneously address multiple competing objectives pertaining to economic, quality-driven, individual-driven, and population-driven goals. This minor will benefit students by highlighting the unique features of this industry and methods for addressing its unique challenges to engineer improvements to the design, operation, and management of healthcare systems.

Minor Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified.

Required Courses

At most, one course from the minor may be counted toward major requirements.

Code	Title	Hours
Required Courses		
IE 5617 and IE 5618	Lean Concepts and Applications and Recitation for IE 5617	4
IE 5400	Healthcare Systems Modeling and Analysis	4
or IE 3500	Introduction to Healthcare Systems Engineering	
PHTH 1260	The American Healthcare System	4
Electives		
Complete one of the following:		4
IE 5374	Special Topics in Industrial Engineering (System Dynamics in Healthcare)	
IE 5500	Systems Engineering in Public Programs	
IE 5640	Data Mining for Engineering Applications	
NRSG 5121	Epidemiology and Population Health	
PHTH 4511	Healthcare Management	
PHTH 5226	Management and Leadership in Public Health and Healthcare	
PHTH 5232	Evaluating Healthcare Quality	
SCHM 3315	Managing Healthcare Operations and Supply Chain	

GPA Requirement

2.000 GPA required in the minor