## Master's Concentration in Healthcare Engineering and Patient Safety (HEPS)

One of the most critical challenges faced by our society is the need for effective, affordable, and accessible healthcare. Industrial engineers can play a high-impact role in achieving this through taking a systems-based approach to manage healthcare delivery. For IOE master's students who plan to use their degree to work in the healthcare industry, the University of Michigan Center for Healthcare Engineering and Patient Safety (CHEPS) offers a concentration that will uniquely position students for success.



Taking a break after presenting at the Healthcare Systems
Process Improvement
Conference in
Orlando, Florida

Group work during a Root Cause Anaylisis (RCA) training event led by CHEPS Director James Bagian and Program Manager Joseph DeRosier





Students with President Dr. Mark S. Schlissel after presenting to the President's Advisory Group

As a member of the CHEPS family you have the opportunity to collaborate with clinical investigators, faculty, and other students from across the University of Michigan to solve real clinical problems that affect real people. You will have, too, the opportunity to extend your learning journey beyond the classroom setting. At CHEPS you learn about inter-professional communication, team collaboration, and project management in addition to system optimization, process improvement, and improved decision-making techniques.

- Hanan Al-Awadhi, HEPS class of 2018

The HEPS concentration is a three semester program with its own requirements that is conducted while simultaneously fulfilling the IOE masters requirements. Students in the concentration:

- Work closely with other HEPS students as well as students of medicine, nursing, and public health; faculty members; clinicians; and healthcare industry mentors
- Attend monthly dinners for socializing, networking, and learning about important topics in the healthcare industry
- Complete a year-long project solving a real-world problem within a

- multi-disciplinary team of engineering and healthcare students and faculty
- Have opportunities to tour healthcare facilities and to shadow physicians and other practitioners within hospital and other clinical settings
- Get customized guidance from a faculty advisor to help select courses and shape their program





