HEPS: Healthcare Engineering & Patient Safety
A Concentration for Industrial & Operations Engineering (IOE) Masters Students at The University of Michigan
“Why a HEPS Masters?”

One of the most critical challenges faced by our society is the need for effective, affordable, accessible healthcare. Industrial engineers can play a high-impact role by taking a systems-based approach to manage healthcare delivery. The Center for Healthcare Engineering and Patient Safety (CHEPS) provides unique training that prepares students to have immediate impact on these important problems. CHEPS brings together engineers, clinicians, and many others, leveraging The University of Michigan’s world-class College of Engineering, Medical School, School of Public Health, Nursing School, Business School, and more. HEPS students develop the technical, communication, and collaboration skills needed to be successful in addressing healthcare challenges.

“Through this experience and this team I have truly expanded intellectually, professionally, and personally, advancing forward with greater ability and confidence to improve the lives and environments around me.”
- Joe East, HEPS class of 2013

“Everyone knows each other and is willing to talk to each other and engage with each other. There’s just so much support in anything you want to do. And there’s autonomy. If you want the project to take a direction that you feel is best, that option is there. No one is telling you not to do it.”
- Vanessa Morales, HEPS class of 2014

“Being able to come into this world with knowledge of the lingo that everyone is using, being able to easily adjust in a healthcare setting, is definitely something HEPS prepared me for.”
- Spyros Potiris, HEPS class of 2013, Senior Process Improvement Analyst at Dana-Farber Cancer Institute

“He understood the language in advance; his technical skills are excellent; he’s very confident and independent. That gives me the confidence to assign him work and know that he can do it very well.”
- Sarah Kadish, Director Performance Measures and Improvement at Dana-Farber Cancer Institute

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HEPS Students...

Work closely with other students in engineering, medicine, nursing, and public health; faculty members; clinicians; and mentors.

Participate in monthly events for socializing and networking as well as learning about important topics in the healthcare industry.

Complete a year-long project solving real-world problems within a multi-disciplinary team of engineering and healthcare students and faculty.

Shadow physicians and other practitioners in the clinical environment, and work within the hospital setting.

Attend weekly seminars and discussions as well as presenting at national conferences and publishing in peer-reviewed journals.
Applying to HEPS

Application Materials
A one-to-two page statement of interest, explaining your background, your reasons for choosing an IOE masters, and your interests in healthcare.

A 1 - 3 minute video about who you are and why you want to join the concentration. This can be as simple as a video shot from your cell phone or computer camera, or a short PowerPoint presentation of your interests. Be creative!

A copy of your resume.

Where and When
You will need to apply to both the HEPS concentration and the IOE Masters program. HEPS applications will be accepted between March 1 and June 1 for September enrollment. Acceptance decisions will be made on a rolling basis after students have been accepted to the IOE Masters program.

HEPS application: http://cheps.engin.umich.edu/concentration-heps/
IOE application (check site for deadline): http://ioe.engin.umich.edu/MS.php

Contact Us
Email: cheps-contact@umich.edu  Phone: (734) 763-0799  Web: http://cheps.engin.umich.edu/

Center Director: James P. Bagian, MD, PE, Chief Patient Safety and Systems Innovation Officer, UMHS, and Professor of Practice of IOE

Center Associate Director: Amy E. M. Cohn, PhD, Thurnau Professor and Associate Professor of IOE

Program Manager: Joseph M. DeRosier, PE, CSP

Administrative Assistant: Gene Kim

Center for Healthcare Engineering and Patient Safety
1075 Beal Avenue, 3245 SI North
Ann Arbor, Michigan 48109-2112