Engineering, Design, and Society

Degrees

- Master of Science in Humanitarian Engineering and Science (Thesis and Non-Thesis options)
- Graduate Certificate in Humanitarian Engineering and Science

Program Description

The mission of the Department of Engineering, Design, and Society (EDS) is to engage in research, education, and outreach that inspires and empowers engineers and applied scientists to become innovative and impactful leaders in socio-technical design, problem definition, and problem solution. Our graduates are prepared to address the challenges of attaining a thriving, sustainable global society. Humanitarian Engineering and Science (HES) is a set of graduate program offerings within EDS.

HES connects students with a passion for contributing to social and environmental problem solving to Mines faculty who lead the field of applying engineering to pressing social, environmental, and community challenges. Integrating engineering with social sciences and design, HES offers courses that teach students how to work with the communities they seek to serve by co-creating solutions that promote justice, responsibility, and sustainability. HES serves students who have diverse career goals spanning NGOs, government agencies and research groups, start-ups, and established companies. Seminar-style courses offered by EDS, along with selected technical courses offered by other academic units across campus, provide students a balance of breadth and depth in applying engineering to social, environmental, and community challenges.

Information on the Humanitarian Engineering degree programs can be found in the Interdisciplinary Programs section of the catalog.

Department Leadership

Dean Nieusma, Department Head
Chelsea Salinas, Assistant Department Head

Professors

Juan Lucena, Humanitarian Engineering Director of Undergraduate Programs and Outreach
Kevin Moore, Executive Director of Humanitarian Engineering

Associate Professors

Jessica Smith, Humanitarian Engineering Director of Graduate Programs and Research

Assistant Professor

Elizabeth Reddy

Teaching Professors

Alina Handorean

Carrie McClelland, Director of Grandey First-Year Honors Experience

Teaching Associate Professors

Yosef Allam, Director of Cornerstone Design@Mines
Leslie Light
Mirna Mattijk

Teaching Assistant Professors

Marie Stettler Kleine
Lauren Shumaker, Director of Thorson First-Year Honors Experience

Staff

Monica Kurtz, Stakeholder Relations Manager
Julia Roos, Associate Director of Humanitarian Engineering
Kimberly Walker, Department Manager