

ENGINEERING DESIGN, MINOR

Requirements for a minor may be completed at any campus location offering the specified courses for the minor. Students may not change from a campus that offers their major to a campus that does not offer their major for the purpose of completing a minor.

Program Description

To address design responsibilities necessary for engineering graduates, the engineering design minor develops design skills in students through a series of core project-based design courses supplemented by general electives in their discipline or related field. Through team-based projects, students apply engineering design processes to address design opportunities, from exploration of the problem space through exploration of the solution space. By focusing on different elements of a design process (e.g., defining and exploring the problem vs. identifying, prototyping, and evaluating design solutions), but covering in totality, the minor's courses complement each other and provide students with a deeper understanding of engineering design. Specific areas of emphasis in this minor include problem framing, stakeholder engagement, human-centered design, rapid prototyping, prototyping to validate assumptions, systems-level design and professional communication. The tools and techniques developed in this minor should be broadly applicable to various engineering disciplines.

What is Engineering Design?

Engineering Design is based on the concept of integrating ideas, disciplines, people, and resources within engineering and beyond that are necessary to achieve optimal design solutions for products, systems, processes, and services.

You Might Like This Program If...

- You are interested in learning about new design methods.
- You would like to learn more about interdisciplinary applications of design such as sustainability, innovative design, design for human variability, global design, and affective design.
- You are interested in interdisciplinary integrated design involving two or more distinct fields of knowledge.
- You would like to develop a portfolio of your design projects.