



HUMAN CENTERED DESIGN SPECIALIZATION

Enhance your degree by applying **Mechanical Engineering** principles to solve problems in **human centered design**.

Students interested in **human centered design** can select a set of design-related courses to fulfill their math/science elective, technical electives, and liberal studies electives within the BSME degree program. In the Human Centered Design specialization, mechanical engineers will learn to approach and solve problems using design thinking techniques with a human centered focus. This specialization will give students the knowledge and skills to contribute meaningfully to interdisciplinary design teams in a wide range of application areas, all with the common thread of improving quality of life through design.

RECOMMENDED COURSES

Math and Science Elective (3 Credits)

- MATH/STAT 309 - Introduction to Probability and Mathematical Statistics I (3)

Technical Electives (12 credits)

- ME 449 - Redesign and Prototype Fabrication (3)
- ME 549 - Product Design (3)
- ISYE 348 - Introduction to Human Factors Engineering Laboratory (1)
- ISYE/PSYCH 349 - Introduction to Human Factors (3)
- ISYE/PSYCH 549 - Human Factors Engineering (3)
- ISYE 552 - Human Factors Engineering Design and Evaluation (3)
- DS 341 - Design Thinking for Transformation (3)
- DS/COMP SCI/ISYE 518 - Wearable Technology (3)
- DS/COMP SCI 579 - Virtual Reality (3)
- CNSR SCI 301 - Consumer Analytics (3)
- CNSR SCI 555 - Consumer Design Strategies & Evaluation (3)
- CNSR SCI 657 - Consumer Behavior (3)

Liberal Studies Electives (15 credits)

Depth & Breadth Required:

- DS/ANTHRO/ART HIST/HISTORY/LAND ARC 264 - Dimensions of Material Culture (4)
- CSCS 125 - Community and Social Change (3)
- ANTHRO 104 - Cultural Anthropology and Human Diversity (3)
- ANTHRO 300 - Cultural Anthropology: Theory and Ethnography (3)
- ANTHRO 415 - The Anthropological Study of Children & Youth (3)
- COM ARTS 200 - Introduction to Digital Communication (3)
- COM ARTS 260 - Communication and Human Behavior (3)
- COM ARTS 325 - Media and Human Behavior (3)
- CNSR SCI 360 - Sustainable and Socially Just Consumption (3)
- CNSR SCI/HDFS 465 - Families & Poverty (3)
- LIS 202 - Informational Divides and Differences in a Multicultural Society (3)
- LIS 351 - Introduction to Digital Information (3)
- SOC 351 - Introduction to Survey Methods for Social Research (3-4)

**Specializations are not formal, but rather a list of recommended tech elective courses and/or experiences to specialize in a certain area. Specializations do not appear on transcripts.*



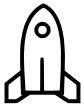
Mechanical Engineering
UNIVERSITY OF WISCONSIN-MADISON



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SUGGESTED EXTRACURRICULARS



- TEAM Lab
- UW Makerspace
- American Society of Mechanical Engineers (ASME)
- Game Design and Development
- Engineering, Business and Entrepreneurship
- Engineers for a Sustainable World
- Engineers without Borders
- Transcend UW
- Human Factors and Ergonomics Society
- Undergraduate Research

CAREER POSSIBILITIES



- Product Design
- Toy Design
- Medical and Scientific Device Design
- Car Design
- Furniture Design
- Package Design
- Game Design
- Service and System Design
- Materials Design
- Wearable Technology Design
- CAD Design
- Design Consulting
- Manufacturing
- Graduate Programs in Mechanical Engineering, Product Design, Industrial Design, Human Computer Interaction, Interaction Design, Business



If any questions arise or guidance is needed, please contact either Professor Kate Fu (kate.fu@wisc.edu) or Professor Mike Cheadle (mcheadle@wisc.edu) for assistance.

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