



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. There is also an option to simultaneously complete the **Design Strategy Certificate** program, which provides undergraduate students from all majors with a **hands-on, interdisciplinary approach to problem solving for strategic change**. A student successfully fulfilling the Design Strategy Certificate requirements will have the notation "Design Strategy Certificate" added to their transcript.

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.*

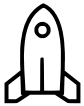




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SUGGESTED EXTRACURRICULARS



- 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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Mechanical Engineering
UNIVERSITY OF WISCONSIN-MADISON