



**THE OHIO STATE UNIVERSITY**  
COLLEGE OF ENGINEERING

# ME Capstone Design II: Humanitarian Projects

## MECHENG 4904.02

**Credit Hours:**

2.50

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**Course Levels:**

Undergraduate (1000-5000 level)

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**Course Components:**

Lecture

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**Course Description:**

Second course of 2-semester senior capstone series. Complete work on humanitarian project. Emphasis on detailed design, prototype, evaluation, and documentation.

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**Prerequisites and Co-requisites:**

Prereq: 4904.01, and enrollment as MechEng-BS student (No ME pre-majors can enroll in this course); or permission of instructor.

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**Course Goals / Objectives:**

- Develop detailed drawings for humanitarian project
  - Fabricate final design
  - Test final design and interpret data
  - Prepare a detailed design report on final product
  - Prepare a user's manual on final design
  - Deliver an oral presentation explaining the project
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**Course Topics:**

- Solid modeling and tolerancing applied to humanitarian projects
  - Fabrication resources and techniques
  - Experiment design and data interpretation
  - Examples of engineering analysis for design
  - Expectations for professional written and oral reports
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**Designation:**

Required