

# Senior Design Colloquium



Michigan Technological University  
Civil, Environmental, and  
Geospatial Engineering

FRIDAY, APRIL 28, 2023  
8 am - 12:30 PM | GLRC 202

The Civil, Environmental, and Geospatial Engineering Department is pleased to invite the University community to attend the spring 2023 senior design team presentations. This semester students have undertaken a wide range of projects to fulfill the Department's senior design requirement.

8:00  
AM

## Flood Mitigation via Tunnel for Segment 3 of I-75 Modernization

### Construction Design

- Steele Fortress, Jon Maag, Eric Ottevaere, Eddie Rybowiak

### Transportation Design

- Dylan Ferron, Katie McInnis, Grant Pietila, Nigel Soler

### Geotechnical Design

- Isaac Fong, Noah Koball, Josh Plante, Connor Rammler, Kevin Wengrzyn,

### Structural Design

- Spencer Archer, Sydney Bryant, Alex Coulter, Sam Gordon, Colin Vander Beek

### Water and Environmental Design

- Henry Campbell, Andrew Ellstrom, Riley Goerge, John Upham

Dr. Zhen Liu (Zoom: <https://michigantech.zoom.us/j/8481374323>)

9:30  
AM

## Superpave Mix Design of Recycled Asphalt Materials

### Using Soybean Based Materials for Clare County

- Morgan Coolidge, Joshua King, Emma Meitler

### Using Waste Engine Oil

- AJ Clarey, Jacob Cleaver, Alli Hummel, Kira Olson

## Road Design and Improvement in Clare County

- Megan Brinker, Connor Dykehouse, Robon Edwards

## Design Asphalt Pavement on Old Concrete Pavement in Saginaw County

- Zachery Collin, Evan Geronimi, Simon Peter, Jacob VanDrie

## Road Network Design and Improvement in Dickinson County

- Joslynn Brown, Bradley Getlinger, Samuel Hoekwater, Lance Hoezee

Dr. Zhanping You (Zoom: <https://michigantech.zoom.us/my/zhanpingyou>)

11:00  
AM

## Anaerobic Digestion System Design for Mezcal Production Wastes

- Braeden Beutz, Luke Cook, Emma Doyal, Kathryn Peterson

## KBIC Hatchery Well #6 Location/Design & Pipe Network

- Emily Bergstrom, Robert Davies, John Myaard

## Process System Design of Biobeneficiation Plant

- Molly Greene, Kelsie Kaufman, Nathan Kraft, Kendra Lachcik

## Structural Design and Construction Plan of Biobeneficiation Plant

- Bill Barnhart, Keira Houston, Kenny Marx, Brennan Pike, Joe Roell

## Rural Mexico Water Distillation & Distribution System Design

- Rachel Anguish, Zachary Deur, Casey Lambert, Rachael Ritter, Drew Yesmunt

Dr. Nathan Manser (Zoom: <https://michigantech.zoom.us/j/3836961131>)