



# Civil and Environmental Engineering Senior Design Colloquium

May 3, 2019

Presentations will be in Dow 641 and Dow 642  
8:00 AM - 12:00 PM

The Civil and Environmental Engineering Department is pleased to invite the University community to attend the spring 2019 senior design team presentations. This semester students have undertaken a wide range of interesting projects to fulfill the Department's design project requirement. Refreshments will be served.

## Dow 641

8:00 AM - 10:00 AM

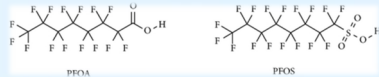
### Application of Granular Activated Carbon (GAC) Fixed-Bed Adsorption Process for the Removal of PFAS from Drinking Water

Advisors: Dr. David Hand and Dr. Eric Seagren

#### Development of a Design Protocol for Removal of PFAS from Potable Water Using AdDesignS

Team: *Rolander and Associates*

Heather Woodrum (PM), Robyn Holmes, Alan Labish, Amanda Singer



#### Design of GAC Sand Replacement System for Plainfield Township, MI, to Remove PFAS from Drinking Water Supply

Team: *JAKKE*

Katie Buchalski (PM), Kelly Bellant, Erika Jarchow, Jeff Lentz, Amber Strutz



#### Design of a Conventional GAC System for Plainfield Township, MI, to Remove PFAS from Drinking Water Supply

Team: *Superior Engineering*

Sarah Crouch (PM), Hailey Bondy, Lauren Kirkconnell, Emma Rife, Rob Sullivan



10:00 AM - 12:00 PM

### Engineering Responses to the 2018 Father's Day Flood

Advisor: Dr. David Watkins

#### Michigan Tech Campus Drainage Improvements

Team: *Keweenaw Drainage Consultants*

Magann Dykema (PM), Ibtisam Nawaz, Tyler Neering, Abbie Welch



#### Peepsock Creek Crossing Restoration

Team: *Peepsock Creek Design Team*

Adam Ross (PM), Kayla Bigelow, Cameron Koller, Greg Korinek, Karleigh Krieg



#### Ripley Culvert Replacement Project

Team: *The Ripley Effect*

Josh Eckert (PM), Leah DeSimpelare, Ashley Lingle, Charles Miller



## Dow 642

8:00 AM - 10:00 AM

### Project: I 69 Reconstruction East of Flint, MI

Advisors: Mr. Mike Dewyor, Dr. Melanie Watkins, Dani Booms (HNTB)

#### Road Reconstruction Design

Team: *JANS/JRD Road Design*

Amanda Bink (PM), Nate Baxter, Jian Ding, Sean Clarey

#### Bridge Reconstruction Design

Team: *CCMJ*

Jenna Davids (PM), Chris Blough, CJ Jensen, Marisa Kain



#### Drainage Design

Team: *Top Notch Consulting*

Carley Davids (PM), Jake Boecker, Pete Huber



#### Signage and Maintenance of Traffic

Team: *JMG*

Garth Bogart (PM), Jake Roberts, Malory Bendetti

10:00 AM - 12:00 PM

### Father's Day Flood Response: Redridge Dam & Houghton County Hazard Mitigation Plan Development

Advisor: Dr. Stan Vitton

#### Salmon Trout River Watershed Analysis

Michael Nowak (PM), Zachary Lynch, Chris Teahan



#### Steel Dam Analysis

Nick Cortes (PM), Julie Bouwens, Alexis Finch, Samuel Gaines, Matt Haapala, Gregory Naghtin



#### Liminga Rd. Embankment Stability Analysis

Emily Passmore (PM), Cole Conway, Alexandra Costanzo, Jake Kacynski, Justin Pavliscak

#### Houghton County Hazard Mitigation Plan Development

Leah Bectel (PM), Jacob Zrelak