

# Michigan Bridge Week

March 18 - 20, 2025

Sheraton Ann Arbor Hotel

Ann Arbor, MI

Register now for Michigan Bridge Week 2025

## REGISTRATION:

### Day 1 – March 18th, 2025:

Early Bird Registration: \$120/person (in-person or virtual)  
Registration after Early Bird Deadline: \$144/person

### Day 2 – March 19th, 2025:

Early Bird Registration: \$120/person (in-person or virtual)  
Registration after Early Bird Deadline: \$144/person

### Day 3 – March 20th, 2025:

Early Bird Registration: \$80/person (in-person or virtual)  
Registration after Early Bird Deadline: \$96/person

**Early Bird Deadline:** March 9th, 2025

Registration is separate for each day of Michigan Bridge Week.

Please make sure to register for all days you wish to attend.

## LODGING:

Sheraton Ann Arbor Hotel  
3200 Boardwalk Dr, Ann Arbor, MI 48108, USA

A limited number of rooms are available at a reduced rate of  
**\$149 per night plus tax.**

Reservations can be made online [here](#) OR by calling  
888-236-2427 and saying you're attending 2025 MI Bridge Week.

Last day to book a room at these rates is  
Monday, March 3, 2025



### Policies:

*Fees:* The registration fee includes access to all technical sessions, materials, handouts and meals listed on the agenda; it does not include lodging.

*Continuing Education:* The Center for Technology & Training's continuing education policy is available [here](#).

*Accommodations:* Requests related to a disability or dietary need should be made by ten business days prior to the event to [ctt@mtu.edu](mailto:ctt@mtu.edu).

*Cancellations:* No-shows or cancellations within three business days prior to the conference will be charged the full registration fee. Substitutions will be accepted.

Michigan Tech is an EOE that provides equal opportunity for all, including protected veterans and individuals with disabilities.

# AGENDA

DAY 1 - MARCH 18, 2025

- 07:00 AM     **REGISTRATION & BREAKFAST BUFFET**
- 08:00 AM     **WELCOME**  
*Chris Gilbertson, PhD, PE - CTT*
- 08:05 AM     **MDOT UPDATE**  
*Beckie Curtis, PE - Michigan Department of Transportation*
- 08:40 AM     **LOCAL BRIDGE PROGRAM UPDATE**  
*Keith Cooper, PE - Michigan Department of Transportation*
- 09:00 AM     **FHWA UPDATE**  
*Ralph Pauly, PE - Federal Highway Administration*
- 09:25 AM     **TAMC UPDATE**  
*TAMC Bridge Committee*
- 09:45 AM     **Q&A SESSION WITH FHWA & MDOT**
- 10:00 AM     **BREAK**
- 10:15 AM     **QA/QC REVIEW UPDATE**  
*Al Halbeisen, PE - OHM*  
*Mario Quagliata, PE - Colliers Engineering*
- 10:45 AM     **STRATEGIES FOR MANAGING YOUR AGING CULVERTS**  
*Mike Halloran, PE - Michigan Department of Transportation*
- 11:15 AM     **NORMALIZATION OF DEVIANCE**  
*Gregg Freeby, PE*
- 12:00 PM     **LUNCH**
- 01:00 PM     **MDOT SPECIFICATIONS & PROTECTIVE COATINGS FOR BRIDGE PRESERVATION**  
*Tony Serdenes, PCS - GPI*  
*John Belcher, PE - Michigan Department of Transportation*
- 02:00 PM     **BIG ERICK'S BRIDGE – TIMBER BRIDGE TENSIONING**  
*Steve Wright, PE - UPEA*
- 03:00 PM     **BREAK**
- 03:15 PM     **NEW MACOMB COUNTY BRIDGES**  
*Eric Stone, PE - HNTB*  
*Christal Larkins, PE - HNTB*
- 04:00 PM     **MACKINAC BRIDGE**  
*Cole Cavalieri, PE - Michigan Department of Transportation*  
*Matthew Makarewicz, PE - Mackinac Bridge Authority*
- 04:45 PM     **CLOSING**
- 05:00 PM     **ADJOURN**

## Husky Time with Alumni & Friends

Join us Tuesday, March 18th at  
**5:00-6:30PM**  
in the Sheraton Ann Arbor Hotel  
Petit Ballroom.  
*All are welcome!*  
*NOT exclusive to MTU Alumni*  
*RSVP is not required.*



Michigan Technological University  
Civil, Environmental, and  
Geospatial Engineering

# AGENDA

DAY 2 - MARCH 19, 2025

Structural Design with UHPC Workshop

See Flyer on  
Next Page

07:00 AM	REGISTRATION & BREAKFAST BUFFET
08:00 AM	WELCOME & INTRODUCTION <i>David Garber, PhD, PE - Federal Highway Administration</i>
08:45 AM	UHPC BASICS & APPLICATIONS
09:20 AM	MATERIAL PROPERTIES & IDEALIZATIONS
10:00 AM	BREAK
10:15 AM	STRAIN-BASED DESIGN PRINCIPLES
11:25 AM	DESIGN PROCESS & PRELIMINARY DESIGN
12:00 PM	LUNCH
01:00 PM	DESIGN FOR SERVICE & FATIGUE LIMIT STATES
02:00 PM	DESIGN FOR FLEXURAL STRENGTH
02:45 PM	BREAK
03:00 PM	DESIGN FOR SHEAR
04:00 PM	ADDITIONAL DESIGN TOPICS
04:25 PM	CLOSEOUT & OPEN DISCUSSION
05:00 PM	ADJOURN

# AGENDA

DAY 3 - MARCH 20, 2025

08:00 AM	INTRODUCTION <i>Jacob Creisher, PE - Michigan Department of Transportation</i> <i>Tom Ranck - Michigan Department of Transportation</i>
08:05 AM	BRIDGE MAINTENANCE WORKSHOP <i>MDOT Staff</i> <p>The Bridge Maintenance Workshop will consist of current topics related to bridge maintenance. The intended audience is engineers and managers who desire to increase their understanding of maintenance options and the methods by which repairs are made. Past topics have included; fiberglass column jacket repair, deck patching, expansion joint replacement, box culvert repair, MMA polymer concrete for deck/joint repair, epoxy overlays, high load hits, and abutment repairs.</p>
12:00 PM	LUNCH/ADJOURN



# Structural Design with Ultra-High Performance Concrete

Source: FHWA

Ultra-high performance concrete (UHPC) offers enhanced mechanical and durability properties that make it an ideal material for use in the construction, repair, and preservation of our Nation's highway bridges. Research related to UHPC has been ongoing for the past few decades. Early widespread adoption of UHPC was for connections between prefabricated bridge elements, and the next phase of adoption focused on preservation and repair activities. Looking forward, the use of UHPC for primary structural members has emerged as a compelling application, and the release of the *AASHTO LRFD Guide Specification for Structural Design with Ultra-High Performance Concrete* is expected to allow designers to begin engaging UHPC.

The intent of this workshop and the accompanying manual is to provide background, context, and foundational knowledge to bridge owners and designers interested in using UHPC for structural applications. The workshop builds on a basic knowledge of reinforced and prestressed concrete bridge design to introduce and explain aspects of analysis and design unique for UHPC structural elements.

The workshop is being offered as a one-day, in-person workshop at no cost. Other delivery options may be considered as needed.



## CONTACT US TO LEARN MORE

David Garber, Ph.D., P.E.  
Sr. Structural Engineer Structures,  
Geotechnical, and Hydraulics Engineering  
Team Office of Innovation and Workforce  
Solutions Cell: (223) 278-3146  
[david.garber@dot.gov](mailto:david.garber@dot.gov)



## TARGET AUDIENCE

This workshop is targeted to structural engineers associated with the structural design of reinforced and prestressed concrete highway structure construction and rehabilitation projects. This may include:

- State transportation agency bridge construction/maintenance and materials engineers. Hosting state agencies are encouraged to invite their local agency and private sector partners.
- Federal Highway Administration Division Office Bridge/Area Engineers. Federal Lands Highway bridge design and construction engineers.



## LEARNING OUTCOMES

Upon completion of this training, participants will be able to:

- Identify when using UHPC will be advantageous.
- Analyze and design UHPC structural elements using the *AASHTO LRFD Guide Specifications for Structural Design with UHPC*.



## EXPECTATIONS

Attendees should bring a laptop with Excel installed and be ready to interact. There are several activities that allow for attendees to explore key concepts individually and in groups.