



Michigan Tech

2025 DESIGN EXPO

Student Information Session
3/20/25

enterprise program



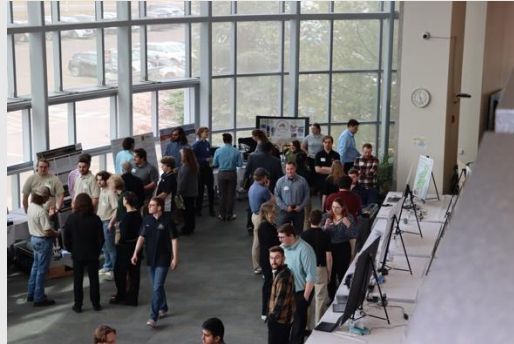
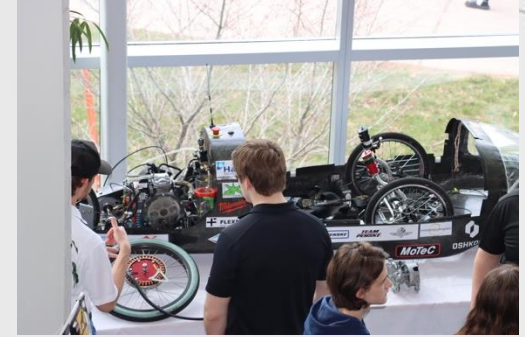
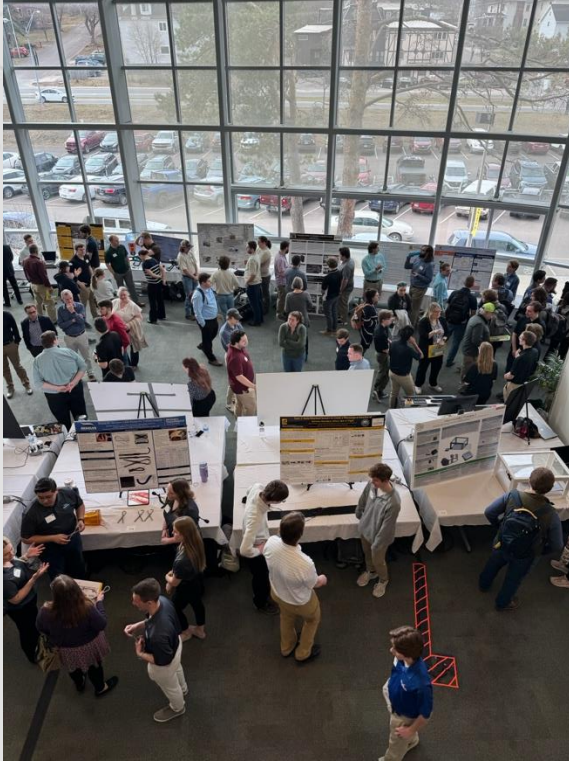
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Agenda for today

1. Design Expo Schedule
2. What to expect on the day of the Design Expo
3. The video presentation
4. Posters/Visual aids at the table
5. Design Expo Awards
6. Q&A

Design Expo 2024





Thank you for registering for the 2025 Design Expo

What is Design Expo:

Design Expo features student design projects from throughout Michigan Tech, including Senior (Capstone) Design classes, Enterprise Program teams, Fundamentals of Engineering class projects, and various projects from other departments around campus.

Date: April 15, 2025

Student Showcase

Time: 10 am - 2 pm

Location: The Van Pelt Opie Library & MUB Ballroom

Social Hour and Awards

Time: 2:30pm - 4:30pm

Location: Rozsa Center for Performing Arts



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Schedule of Events at Design Expo

Saturday, April 12, 2025 @ 11.59 PM

Deadline for video submissions

Monday, April 14, 2025

Virtual Student Showcase – Project videos go live

Time: 2:00 pm

Location: Design Expo Website

Tuesday, April 15, 2025

Student Showcase – In person interaction with judges

Time: 10 am - 2 pm

Location: The Van Pelt Opie Library & MUB Ballroom

Social Hour and Awards Ceremony

Time: 2:30 pm - 4:30 pm


Location: Rozsa Center for Performing Arts


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Design Expo Workshops

Design Expo Workshops conducted by the Van Pelt and Opie Library

 ~~March 13: Explain Your Project to Anybody~~

 ~~March 19: Posters, Images & Visualizations~~

 ~~March 27: Creating & Editing Videos~~

 ~~April 2: The Finishing Touches~~

[Register here](#)

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WHAT TO EXPECT ON THE DAY OF DESIGN EXPO

Set-up

Your team may begin setting up your booth as early as 8:45 am. Set up must be complete by 9:45 am (15 minutes before the start of Expo)

Kick-off

Design Expo will start at 10 am. To kick off the event, a short welcome will be delivered by the Design Expo committee. (About 20 minutes)

Attire

The dress code for Design Expo is business casual or business professional. Team-branded attire is acceptable. Sticker name tags will be provided.

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WHAT TO EXPECT ON THE DAY OF DESIGN EXPO

Student Showcase

The student showcase starts once the welcome ends and will last until 2 pm.

Table Location

Enterprise teams – East Reading room

Senior Design teams – Main Hall

Student projects and Engg fundamentals teams – MUB

Social Hour

Starting at 2:30 p.m., you are invited to a social hour at the Rozsa Center for the Performing Arts. There will be light refreshments, entertainment, and door prizes.

Awards Ceremony

At 3:30 p.m., we will begin the Design Expo Awards Ceremony, where student teams will be recognized, and more than \$3,000 in cash will be awarded.

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WHAT TO EXPECT ON THE DAY OF DESIGN EXPO

Judges

Your team will be assigned 3 - 5 judges. These judges will review your video and booth. Judges are not guaranteed to be content subject experts.

Michigan Tech Community

You can expect to see Michigan Tech students, faculty and staff, and campus administrators.

Campus Visitors

Due to the visibility of this event, you will likely see campus visitors from tours and the local community.

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WHAT TO EXPECT ON THE DAY OF DESIGN EXPO

Industry Sponsors and Alumni

Many sponsors, industry professionals, and alumni travel especially to serve as Design Expo judges and attendees.


Local K-12 Students

In partnership with Admissions and The Center for Educational Outreach, 8th graders from Houghton and Calumet schools have been invited to check out the Design Expo.

Families of Participating Teams

We invite your families to join in the Design Expo fun and celebration!

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Design Expo website - (Very) Helpful webpages

Design Expo Roadmap: From Registration to Event Day

Step by step walkthrough from project registration to day of the event

Design Expo Team Resources

All resources you need in one place

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THE VIDEO PRESENTATION

Start your videos early. Don't stress on the day videos are due

PLAN AHEAD

- Consider making a script
- Add images & videos, consider recording software early
- Consider lighting and record in a quiet space

VIDEO DURATION

Senior Design & Project Teams 4 mins or less Enterprise 7 mins or less

ACCESSIBILITY MATTERS

This means:

- Description of visuals
- Captions

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PROJECT SPONSOR CONSIDERATIONS

VIDEO SUBMISSIONS Due April 12, 2025, by 11.59PM

Be sure to consider:

- Confidential or proprietary information
- Intellectual property
- The use of your sponsor's name and logo
- Be sure to consider looking over your project agreement before finalizing your video

This will affect not only the current project but future projects, too

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SUBMISSION DUE DATE

Please submit your video, video concept, or presentation to your sponsor before you submit your final work for the Design Expo.

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Your team's video needs to consider technical content but need not do a deep dive into the technical aspects of your project.

Submit an MP4 file. Helps us with uploading to YouTube Design Expo channel



POSTER/VISUAL AID

(On the day of Design Expo)

Don't Panic or Overthink the Visual Aid

Get Creative:

Bring elements of your project. Some teams may be able to bring a piece or all of their project to display.

Focus on Visual Data:

Grab video and images now. While testing, building, and modeling your projects now, try to take videos and pictures in real time.

Engage the Conversation:

Get comfortable talking about your work. Your focus should be more on a conversation with attendees than on them reading a poster and then asking questions.

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JUDGING PROCESS

Part 1 – Video review

Video review will begin on Monday, April 14.

Judges will receive a ballot from RocketJudge, and link to your project video

Judges view the video and form an initial opinion of your project

Part 2 - In-person interaction and Q&A

Q&A judging will be in-person on the day of Design Expo (April 15).

You will have the same judges assigned to your video and Q&A session.

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Judging Criteria

ENTERPRISE TEAMS

JUDGING CRITERIA - ENTERPRISE TEAMS				
Criteria	Description	Weight	Score (1-10)	Total Weighted score
Enterprise Introduction and Projects	<ul style="list-style-type: none"> Does the team provide a proper introduction of their Enterprise and the associated projects? Are the projects providing real-world learning opportunities? Is there evidence of learning and growth across projects? 	20%		
Problem-Solving Approach & Critical Thinking	<ul style="list-style-type: none"> Across the different projects, does the team demonstrate strong problem-solving skills, analytical thinking, and critical thinking approaches? Have they applied research, data, or industry insights effectively? How effectively do they analyze problems and design a structured approach to solving it? Do they explore multiple solutions, evaluate trade-offs, and apply logical reasoning? Have they demonstrated creativity and innovative thinking in their approach? 	20%		
Teamwork & Collaboration	<ul style="list-style-type: none"> Is there clear collaboration and contribution from all members across different projects? Have they successfully integrated multiple disciplines (e.g., engineering, computing, business, design)? Do they build on each other's expertise and leverage any interdisciplinary strengths? Is there evidence of teamwork in their problem-solving process? 	15%		
Real-World Relevance & Feasibility	<ul style="list-style-type: none"> Do the projects address meaningful problems with potential real-world applications? Have the solutions been well-researched, practical, and feasible? Are they scalable or implementable? Has the team considered real-world implementation, scalability, or potential barriers? If applicable, is the prototype/model well-executed and supported by data or testing? 	15%		
Communication & Explanation Clarity	<ul style="list-style-type: none"> Can the team clearly articulate the objectives, solutions, and impact of each project? Is their presentation well-organized, engaging, and easy to understand? Do they use visuals, demonstrations, or storytelling effectively to enhance understanding? Are they able to answer questions effectively, adapt explanations based on the audience, and defend their decisions with logical reasoning? Are they open to constructive criticism and able to defend their decisions with logical reasoning? 	30%		
Qualitative Feedback				
Strengths of the Project:				
Areas for Improvement:				
Overall Impression & Final Remarks:				

SENIOR DESIGN TEAMS

JUDGING CRITERIA - SENIOR DESIGN TEAMS				
Criteria	Description	Weight	Score (1-10)	Total Weighted score
Problem Identification & Understanding	<ul style="list-style-type: none"> How well does the team define and frame the problem? Do they clearly explain why this problem matters, who it affects, and what the consequences are if it remains unsolved? Does the team demonstrate strong research, data, or real-world insights to justify the problem's significance? 	20%		
Problem-Solving Approach & Critical Thinking	<ul style="list-style-type: none"> How effectively does the team analyze the problem and design a structured approach to solving it? Do they explore multiple solutions, evaluate trade-offs, and apply logical reasoning? Have they demonstrated creativity and innovative thinking in their approach? 	20%		
Teamwork & Collaboration	<ul style="list-style-type: none"> Does the team work well together, with clear roles, contributions, and effective collaboration? Do they build on each other's expertise and leverage interdisciplinary strengths? Is there evidence of teamwork in their problem-solving process? 	15%		
Project Execution & Feasibility	<ul style="list-style-type: none"> Is the proposed solution well-researched, practical, and feasible? Has the team considered real-world implementation, scalability, or potential barriers? If applicable, is the prototype/model well-executed and supported by data or testing? 	15%		
Communication & Explanation Clarity	<ul style="list-style-type: none"> Can the team clearly articulate the objectives, solutions, and impact of each project? Is their presentation well-organized, engaging, and easy to understand? Do they use visuals, demonstrations, or storytelling effectively to enhance understanding? Are they able to answer questions effectively, adapt explanations based on the audience, and defend their decisions with logical reasoning? Are they open to constructive criticism and able to defend their decisions with logical reasoning? 	30%		
Qualitative Feedback				
Strengths of the Project:				
Areas for Improvement:				
Overall Impression & Final Remarks:				

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Design Expo Awards



Senior Design Awards

Based on Judging

First place - \$400

Second place - \$250

Third place - \$150

Honorable mentions (4) - \$100

Enterprise Awards

Based on Judging

First place - \$500

Second place - \$300

Third place - \$200

Honorable mentions (1) - \$100

Image Contest

**Based on photos submitted for
award consideration**

First place - \$100

Second place - \$100

Third place - \$50



Enterprise Program Awards

Student Awards Based on Nominations

Outstanding Leadership - \$100
Rookie Award - \$100
Innovative Solutions - \$100

Faculty/Staff Awards Based on Nominations

Outstanding Enterprise Advisor - \$100
Outstanding Sponsor - \$100
Behind the Scenes - \$100
Module Master - \$100

To be eligible, Enterprise students must apply by April 1st at 11:59 pm.

For more details and nominations:

<https://www.mtu.edu/enterprise/scholarships-awards/enterprise-awards/>



Design Expo Innovation Award Q&A

Lisa Casper, Associate Director Startup Capital Programs,
Office of Innovation and Commercialization
Mike Morley, Director , Technology Commercialization, OIC



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WHAT IS THE INNOVATION AWARD?

AN AWARD GIVEN FOR DEMONSTRATING THE MARKET POTENTIAL AND PRODUCT-MARKET FIT.

To be eligible you must be an enterprise or senior capstone team.

The deadline to apply by April 1st, 2025, at 11:50 pm.

<https://docs.google.com/forms/d/168sNXJebEhvWdXtm-xtg3BULzjPNLE08oYjffOGFo/preview>





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This year, OIC and Milwaukee Tool are co-Sponsoring prizes –

Prizes are Double from Previous years!

1st - \$500
2nd - \$300
3rd - \$200



Who is qualified to apply?

- ✓ Enterprise teams
- ✓ Senior Capstone teams
- ✓ your team developed

a new technology,
New Process,
or New System With Market Potential

- ✓ apply before 4/1/25

judges' rubric covers 5 areas:

- 1) The Problem –How are you addressing it with your Solution?
- 2) Who are your customers?
- 3) How is it **Unique from other solutions**?
- 4) What is the Value proposition to end-users? Why do they want/need your solution?
- 5) What is your defined plan to move forward?



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Champions of Organization Award

The second annual Champions of Organization Award, sponsored by CTech Manufacturing, will be given out to one of our Enterprise Teams. The award winner will receive a CTech Manufacturing rolling grill cart at the Design Expo awards!

Eligibility Criteria:

1. Must be an **Enterprise team** registered to participate in Design Expo 2025
2. Fill out the entry form and supply the necessary information - one per team (only).

All entries will be reviewed by CTech Manufacturing and their charitable foundation the Intelligent Future Foundation. Finalists will be interviewed at Design Expo.

All entries are due by **5.00 PM on April 1st.**

The winner will be announced at the Design Expo Awards Ceremony, and the cart will be made available to the winning team immediately!





Questions?

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Website

<https://www.mtu.edu/enterprise/involved/expo/registration/>