NSPE-WI™ WISCONSIN SOCIETY OF PROFESSIONAL ENGINEERS

2026 NSPE – WI Virtual Discovery Conference

"Is America Regaining Technological Dominance?"

March 17 – April 23

No.	Engineering Discipline	Date	Time (CST)	PDH	Speaker	Presentation Title
1a	Ethics	Tuesday March 17	12:00 – 1:30 PM	1.5	Rebecca Bowman, Esq., PE, D.F.E.	Ethics and the Abuse of "or Equivalent"
1b	Technology in America	Thursday March 19	12:00 – 1:00 PM	1.0	Julia Harrod, P.E., F. NSPE	The PEs Role in Regaining Technological Dominance
2a	Military Technology	Tuesday March 24	12:00 – 1:00 PM	1.0	Tom Egstad	115th Fighter Wing: Safety and Mission Capability
2b	Data Centers	Thursday March 26	12:00 – 1:00 PM	1.0	Robert LaCosta and Joshua Kreutzberger	Implementing the Development of Hyperscale Data Centers
3a	Education	Tuesday March 31	12:00 – 1:00 PM	1.0	Professor Po-Shen Loh	Building a More Thoughtful Society
3b	Civil	Thursday April 2	12:00 – 1:30 PM	1.5	Matt A. Mettemeyer, PE	Challenges and Solutions at the UW-Madison Engineering Drive Utility Relocation Project

Total PDH's 7.0

Please circle PDH hour noting course you attended along with initial under. Conference organizers recommend that in addition to this brochure , retain any session handouts or personal notes. DSPS rules indicate that they can request this information to confirm attendance and content of PDH sessions in case of audit.

By my signature, I attest that I attended the above circled PDH hour marked sessions in their entirety and qualify for the PDH's assigned.

Printed Name: _____ Total PDH's Earned for Sessions Attended _____

Signature: _____

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No.	Engineering Discipline	Date	Time (CST)	PDH	Speaker	Presentation Title
4a	Civil	Tuesday April 7	12:00 – 1:30 PM	1.5	Meghann Reidner, PE, SE and Peter Weatherer, PE	Structural Design of the UW-Madison Phillip A. Levy Engineering Center
4b	Safety Engineering	Thursday April 9	12:00 – 1:00 PM	1.0	Gretchen Bockenhauer	Highway Construction Safety
5a	Transportation Technology	Tuesday April 14	12:00 – 1:00 PM	1.0	Tom Roadcap	Brightline Florida: Design and Construction of a Higher-Speed Railroad
5b	Energy	Wednesday April 15	12:00 – 1:00 PM	1.0	Paul Wilson	Present Status of Nuclear Energy in Wisconsin, the US, and Other Countries
5c	Artificial Intelligence	Thursday April 16	12:00 – 1:00 PM	1.0	Dr. Richard Lukas, WI Rep Nate Gustafson, and Dr. Caitlin Grady	Artificial Intelligence Panel Discussion
6a	Bio-Medical	Tuesday April 21	12:00 – 1:00 PM	1.0	Dr. Brian Schmit	Engineering the Next Generation of Treadmill-Based Gait Rehabilitation
6b	Ethics	Thursday April 23	12:00 – 1:30 PM	1.5	Rebecca Bowman, Esq., PE, D.F.E.	Ethics and a Culture of Safety

Total PDH's 8.0

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NSPE-WI

Virtual Session No. 1a

(1.5 PDH)

Tuesday, March 17, 2026 12:00 – 1:30 PM CST

Speaker: Rebecca Bowman, Esq., PE, D.F.E.
Representing: Rebecca A Bowman, Esq., PE
Topic: Ethics and the Abuse of "or Equivalent"

In most jurisdictions, "acceptable equivalents" are evaluated by the local plan reviewer, who may have only minimal training and may or may not be a professional engineer. However, when residential construction is turned over to a homeowner, the signature and seal of the professional design engineer are relied by both the local plan reviewer and the homeowner seeking assurance that the substitute for the specified system is, in fact, equivalent. An equivalent must not only do everything that the specified element can do. An equivalent must also do everything that the application needs. That requires three analyses. This session will explore all three and why the burden of offering an equivalent is enormous.

Virtual Session No. 1b

(1.0 PDH)

Thursday, March 19, 2026 12:00 – 1:00 PM CST

Speaker: Julia Harrod, P.E., F. NSPE
Representing: NSPE and MWM DesignGroup
Topic: The PEs Role in Regaining Technological Dominance

This talk highlights how PE licensure, modern engineering education, and NSPE advocacy can help the US regain technological dominance. At a time when technology is transforming how we design, build, and protect communities, it is important that we are vigilant in maintaining the ethical and quality standards required to protect public health, safety, and welfare.

Virtual Session No. 2a

(1.0 PDH)

Tuesday, March 24, 2026 12:00 – 1:00 PM CST

Speaker: Tom Egstad
Representing: 115th Fighter Wing, WI Air National Guard
Topic: 115th Fighter Wing: Safety and Mission Capability

The five-year roadmap for converting from the F-16 Fighting Falcon to the F-35 Lightning II. Discussion about Occupational, Safety, and Explosive Safety Disciplines found at the Truax Field. Current mission operations and capabilities at the 115th Fighter, Truax Field – and what the F-35 brings to the fight.

Virtual Session No. 2b

(1.0 PDH)

Thursday, March 26, 2026 12:00 – 1:00 PM CST

Speaker: Robert LaCosta and Joshua Kreutzberger
Representing: QTS Data Systems
Topic: Implementing the Development of Hyperscale Data Centers

QTS Data Systems designs, builds, and operates large-scale, mission-critical data center campuses that support cloud computing, AI workloads, and enterprise IT infrastructure. The company delivers highly reliable facilities with redundant power, advanced cooling systems, and robust network connectivity, enabling customers to deploy and scale critical digital systems with high availability, security, and operational resilience.

Virtual Session No. 3a

(1.0 PDH)

Tuesday, March 31, 2026 12:00 – 1:00 PM CST

Speaker: Professor Po-Shen Loh
Representing:
Topic: A More Thought Full Society

Centuries ago, humanity survived on Earth through a strong collaborative spirit. Today, people are increasingly consumed by entertaining themselves on their phones, entranced by a philosophy which seeks to acquire as much for oneself as possible, in exchange for as little effort as possible. The explosion of AI threatens to accelerate this collapse of society, as it becomes increasingly possible to fully satisfy oneself without any human interaction whatsoever. At the same time, AI's increasing capabilities are blocking more and more people out of work.

The speaker will share his observations, gathered from traveling to 100+ cities and giving hundreds of talks per year, about the state of the situation. He will also share his predictions on what will happen, and his advice on what kinds of very-human attributes will be critical to thrive. He will compare what he sees in America against the landscape he sees elsewhere in the world.

Crucially, this talk will not just be doom-and-gloom. Society-scale problems look overwhelming, but there is an area (close to mathematics) which solves such problems: game theory. The speaker has a history of inventing incentive-aligned solutions to large scale problems. He will discuss the construction behind his latest educational invention: a mutually beneficial cooperation between high schoolers who are kind and mathematically clever, and professional actors, teaming up to simultaneously teach creative problem solving to others, all working together to inspire and build a more thought-full world.

Virtual Session No. 3b

(1.5 PDH)

Thursday, April 2, 2026 12:00 – 1:30 PM CST

Speaker: Matt Mettemeyer, P.E.
Representing: Shive-Hattery Architecture and Engineering
Topic: Challenges and Solutions at the UW-Madison Engineering Drive Utility Relocation Project

Presentation will provide a general overview of the project to relocate all the utilities in the Engineering Mall to make room for the new College of Engineering Building. The majority of the discussion will focus on the challenges the design team had to overcome including constraints placed on the project by the stakeholders, limited working space, significant pedestrian and vehicular traffic complications, maintaining active utilities, competing with adjacent construction projects, and accounting for unknowns. Presentation will conclude with some construction photos and a report on the status.

Virtual Session No. 4a

(1.5 PDH)

Tuesday, April 7, 2026 12:00 – 1:30 PM CST

Speaker: Meghann Riedner, PE, SE and Peter Weatherer PE
Representing: GRAEF
Topic: Structural Design of the UW-Madison Phillip A. Levy Engineering Center

The new Phillip A. Levy Engineering Center at UW-Madison is a 395,000 GSF facility housing state-of-the-art research and instructional laboratories, academic classrooms and offices, industry partnership spaces, and active learning classrooms. This presentation will focus on the structural design of the north steel tower, featuring a 120-ft cantilevered, multi-story steel truss; and the south mass timber structure, which comprises glulam columns, beams and braced frames, and cross-laminated timber (CLT) floors and roof.

Virtual Session No. 4b

(1.0 PDH)

Thursday, April 9, 2026 12:00 – 1:00 PM CST

Speaker: Gretchen Bockenhauer
Representing: University of Wisconsin - Platteville
Topic: Highway Construction Safety

This session highlights the importance of safety in highway construction due to the significant number of roadway accidents that occur each year in Wisconsin. It will explore the key elements of an effective safety culture, including safety leadership, clear communication, proper use of PPE, flagging procedures and staging, safe work-zone setup, night-work considerations, working near live traffic, and equipment safety.

Virtual Session No. 5a

(1.0 PDH)

Thursday, April 14, 2026 12:00 – 1:00 PM CST

Speaker: Tom Roadcap
Representing: Brightline
Topic: Brightline Florida: Design and Construction of a Higher-Speed Railroad

The presentation will provide an overview of Brightline Florida and Brightline West, focusing on some of the unique technical challenges of the design and construction of the Brightline Florida program.

Virtual Session No. 5b

(1.0 PDH)

Wednesday, April 15, 2026 12:00 – 1:00 PM CST

Speaker: Paul Wilson
Representing: UW Madison Nuclear Engineering Department
Topic: Present Status of Nuclear Energy in Wisconsin, the US, and Other Countries

Talk will focus on the future of nuclear energy and where we need to go. Talk will also give a brief update on status of nuclear energy in Wisconsin and in the US/other countries.

Talk will also cover the challenges of nuclear power including waste and recent developments in storage and recycling of nuclear waste, locating power plants near large bodies of water for cooling, recent development of safe nuclear power in using smaller reactors and reshaping public opinion that nuclear power is safe.

Virtual Session No. 5c

(1.0 PDH)

Thursday, April 16, 2026 12:00 – 1:00 PM CST

Speaker: Dr. Caitlin Grady, Dr. Richard Lukas, and Representative Gustafson
Representing: George Washington University, Milwaukee School of Engineering, and WI State Assembly
Topic: AI Panel Discussion

Dr. Caitlin Grady from George Washington University, Dr. Richard Lukas from the Milwaukee School of Engineering, and Representative Gustafson of the Wisconsin state assembly will each give a 5- to 7-minute presentation on their work and experience, then answer attendee questions which were submitted in advance and which the panelists have seen in advance. If time permits, the floor will be opened for additional questions from the audience.

Virtual Session No. 6a

(1.0 PDH)

Tuesday, April 21, 2026 12:00 – 1:00 PM CST

Speaker: Dr. Brian D. Schmit
Representing: Joint Department of Biomedical Engineering, Marquette University and Medical College of Wisconsin
Topic: Engineering the Next Generation of Treadmill-Based Gait Rehabilitation

Traditional treadmills limit balance challenge, sensory realism, and exercise intensity. This talk highlights engineering solutions to these constraints, including multi-degree-of-freedom treadmill platforms, destabilizing force-field perturbations, and immersive virtual reality. These technologies enable controlled manipulation of mechanics, sensory input, and workload to advance gait rehabilitation for neurologic populations.

Virtual Session No. 6b

(1.5 PDH)

Thursday, April 23, 2026 **12:00 – 1:30 PM CST**

Speaker: Rebecca Bowman, Esq., PE, D.F.E.
Representing: Rebecca A Bowman, Esq., PE
Topic: Ethics and a Culture of Safety

Participants will closely examine engineers' commitment to public health, safety, and welfare and the critical role we play in protecting both internal and external "public." Participants will also explore the hazards of exemptions from licensure and how those exemptions endanger and devalue internal "public."