

UW–Madison

Interdisciplinary Professional Programs

2025 Technical Leadership Certificate Catalog



Interdisciplinary
Professional Programs
COLLEGE OF ENGINEERING
UNIVERSITY OF WISCONSIN-MADISON

go.wisc.edu/TLC2025Spring



BORN TO LEAD

Technical Leadership Certificate

course topics were developed with your success in mind, by consulting with hundreds of engineers from leading companies. The mix of courses and topics—taught by UW faculty and industry experts—are constantly updated and improved to meet the needs of our global partners.

LEAD WITH CONFIDENCE

COURSES DESIGNED TO:



Focus on applied learning



Strengthen technical teams



Enhance project management skills



Gain actionable knowledge you can apply to your career

Courses may be taken individually or as a path to earning your Technical Leadership Certificate

Immediate Impact

Make a difference in your work right away. What our participants had to say:

"I really liked the tools and resources that were taught in this class, that I can take back to my management team for implementation. The presenter did a good job of keeping the class moving and providing a safe environment for discussion. No one looked down on someone's view points or belittled anyone."

– Shelli Botts, Maintenance Planner/Scheduler at Little Blue Valley Sewer District (past attendee of Principles of Engineering Project Management)

"Very applicable. Very engaging. Good examples to start applying the principles right away."

– Matthew Medcalf, Product Design Engineer at Bradley Company (past attendee of Critical Conversations: Results-based Communication)

"I enjoyed the flow of the course. The content was structured incredibly well and presented in a very relevant way. In my experience with any course content, it always hits home the most when it is paired with real world experience. Trevor did this very well!"

– Eric Trzebiatowski, Director of Engineering at Pointe Precision, Inc. (past attendee of Effectively Managing Technical Teams)

"This addressed specific concerns I've had in my job and more importantly things I didn't consider. Trevor's experience is incredibly valuable for seeing those things."

– Gregory Karlovits, Civil Engineer/Statistical Hydrologist at US Army Corps of Engineers (past attendee of Leadership Beyond Your Team: Managing Up and Across)

"Great teaching with just enough break out activities to keep it entertaining. A lot of knowledge learned in only two days."

– Jim Konrardy, Assistant Manager Buildings and Grounds at Dubuque Community School District (past attendee of Mastering the Transition from Technical Expert to Leader)

"The instructor was excellent. The course was a wonderful blend of technical introduction/overview, with guidance on where interested parties could delve deeper, covering a broad range of analytics - including how to use the tools to drive discussions. Also, the organization/timing were superb. Best online course I've attended."

– David Winkler, Associate Project Engineer at DRS Naval Power Systems (past attendee of Data Analytics for Technical Leaders)

Real World Knowledge

We are proud to partner with our TLC instructors with decades of hands-on experience



Sara Kraemer, PhD
Consultant



Heather Smith
Director of Graduate Programs



Trevor Manning
Consultant



Susan Ottmann
Director of Professional Programs



Anthony Orzechowski
Director of R&D Data Analytics



Rob Stone, ME, PMP
Project Manager



Instructor Highlight

Shawn Belling

Shawn Belling is a technology executive, speaker, instructor, and author based in Madison, WI. Shawn has held executive and management roles in health tech, higher education, software, consulting, bio-pharma, manufacturing, and regulatory compliance sectors.

Shawn is a Lecturer in Interdisciplinary Professional Programs (InterPro) within the College of Engineering at UW-Madison. Shawn is also the Director of IT for Thermo Fisher Scientific's GMP Labs within the Clinical Research Group, responsible for laboratories in Middleton, WI and Athlone, Ireland. Areas of professional and academic practice include project and program management, agile practices, organizational change management, software and IT strategy and delivery, new product development and remote work.

In addition to over 30 years of technology and project leadership experience, Shawn teaches, speaks and consults for businesses, universities and professional organizations on various leadership and management topics and practices. Shawn released his books *Succeeding with Agile Hybrids* in November of 2020 and *Remotely Possible* in June of 2021.

Shawn is certified by PMI as a Project Management Professional and Agile Certified Practitioner and is also a Certified Scrum Professional and Registered Scrum at Scale Practitioner.

Shawn earned his Bachelor of Science from the University of Wisconsin - Whitewater and Master of Science in Project Management from UW - Platteville. Shawn earned a certificate in Organizational Change Leadership from UW-Platteville and Doctor of Education in Leadership at the University of the Cumberland.

Learn more and enroll at
go.wisc.edu/TLC2025Spring

Courses

Complete five of the participating courses to earn your certificate.

Principles of Engineering Project Management

April 1 – 4, 2025

Whether you are new to project management or have many years of experience, there's always room to improve. Learn how to effectively initiate, plan, execute, control and close out projects.

Critical Conversations: Results-Based Communication

February 17 – 20, 2025

October 1 – 2, 2025

To achieve good outcomes in the workplace, we need all stakeholders to have open, clear and honest conversations with their team, bosses, peers and customers. Often conversations go wrong through misunderstandings and perceptions of ulterior motives. People are often aware that their conversations are not achieving the results they want but do not have any specific tools to improve them.

Effectively Managing Technical Teams

February 24 – 28, 2025

October 6 – 8, 2025

Technical teams present many challenges for engineering managers. Team leaders must often give up some of their technical authority to focus on strategic management, operational planning and human resource management. They also need solid communications skills and

know how to represent the team across the organization and at a high level. In this hands-on course, you will learn strategic and operational planning tools to set goals, establish objectives and build defensible budgets from an instructor who has actually "walked the talk" of this course with his own experiences.

Leadership Beyond Your Team: Managing Up and Managing Across

March 3 – 6, 2025

September 29 – 30, 2025

Many management courses, including our own course: Managing Technical Teams, teach you how to deal with direct and indirect reports. To be successful, however, you also need to manage (or strongly influence) the behavior of those who are at your level or higher. But they may not understand your needs or may be indifferent to them. In this course, you will learn how to make yourself heard when you do not have direct authority, and how to change others' behavior to make them reliable partners in your programs and projects.

Organizational Agility in Digital Transformation: Designing and Leading Change

March 18 – 20, 2025

Industry 4.0 technologies present significant opportunities for enhancing production, efficiency, and value in manufacturing and operational environments. Learn successful strategies for not only on adopting these technologies but also on effectively supporting people and organizational processes during the transition and implementation phases, ensuring sustained competitiveness.

Data Analytics for Technical Leaders

February 17 – 20, 2025

Data analytics and data visualization are key techniques to drive more effective leadership decisions. In this course you will learn the fundamental topics of descriptive, causal, predictive, and prescriptive analytics. With hands-on exercises, you will learn the basics of data optimization and communicating with data.

Agile for Technical Teams: From Principles to Practice

April 22 – 23, 2025

Participants will learn Agile project and product management methodologies and approaches for practical application in their organizations.

Foundations of Artificial Intelligence and Machine Learning

April 1 – 3, 2025

Learn machine learning and artificial intelligence fundamentals for more effective technical management of project leveraging AI/ML technologies. Taught online in four sessions of four hours over two weeks for the busy decision maker.

Mastering the Transition from Technical Expert to Leader

May 13 – 14, 2025

Moving into a management role can be challenging, especially for those who have spent years completing technical work without direct reports or those who are new to the workforce. In this course, you'll develop the skills and knowledge to succeed as a manager through practical discussions of management and leadership fundamentals and tools that will aid in your transition. Classroom exercises along with a tactical action plan will allow you to immediately make a positive impact.

