

UW–Madison
Interdisciplinary Professional Programs
**2025 Technical Leadership
Certificate Catalog**



Interdisciplinary
Professional Programs
COLLEGE OF ENGINEERING
UNIVERSITY OF WISCONSIN-MADISON

go.wisc.edu/TLC2025Fall



LEAD WITH CONFIDENCE

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.

LEARN FROM THE BEST

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."

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

"There is a good balance of classroom instruction and hands-on group activities to drive a strong understanding of the tools and their implementation."

– Ben Mercer, Martin Engineering
(Past Attendee of Root Cause Analysis: Tools for Technical Applications)

"Useful and effective information, I have already successfully used the 3F model to plan a corrective action meeting. It worked brilliantly."

– Robert Clark, Engineering Manager, Particle Measuring Systems
(Past Attendee of Critical Conversations: Results-based Communication)

"Excellent tools and information that will help me to be a better manager."

– Hector Bencomo, Unit Manager, AVANGRID Central Maine Power
(Past Attendee of Coaching and Mentoring for Technical Leaders)

"Online courses can get dry when there is no student participation, and this class had a TON of student participation. I am an individual contributor with goals of transitioning to leadership at some point in my career, and I believe that this course was a great start for me to understanding how to 'master the transition!'"

– Jerrad Lopp, Validation Engineer, POLARIS
(Past Attendee of Mastering the Transition from Technical Expert to Leader)

"Super informative and provides an excellent foundation for probably one of the larger technological advances of the century."

– Mike Lashua, Manager – Substation Engineering, Madison Gas and Electric
(Past Attendee of Foundations of Artificial Intelligence and Machine Learning)

Real World Knowledge

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

Instructor Highlight



Trevor Manning

Instructor: *Critical Conversations: Results-based Communication, Leadership Beyond Your Team: Managing Up and Across, and Effectively Managing Technical Teams,*

Trevor Manning is an accomplished author, leadership consultant, and trainer with extensive international experience leading technical teams. He has held roles such as chief engineer, technical director, Chief Operating Officer, and board advisor.

With a diverse background spanning various companies including a large government-owned utility, a US-headquartered manufacturer, an international London headquartered start-up, and a privately owned telecommunications operator, Trevor offers valuable insights into real-world business operations.



Shawn Belling, PhD,
PMI-ACP, PMP, CSP, SS
Project Advisor,
UW-InterPro and FarWell



Raj Kamal, MS, MBA
Owner, Credens LLC



Kimberly Kleiman-Lee
Founder and CEO,
Kimberly Kleiman-Lee
& Co.



Anthony Orzechowski
Director of R&D
Data Analytics,
Abbott Diagnostics



Susan Ottmann, MS, BS
Director of Professional
Programs



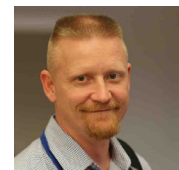
Heather Smith, MS, PMP
Director of Online
Graduate Programs



Rob Stone, MEd, PMP
Executive Director,
The Larsen Group



Jon Wellik,
EMBA, LSSBB
Program Director,
Technical Leadership



George Williams
CEO ReliabilityX

**Learn more and enroll at
go.wisc.edu/TLC2025Fall**

Courses

Complete five courses to earn your certificate.

NEW COURSE

Tools and Tactics to Recover Troubled Projects

June 17 – 18, 2025 | Madison, WI or Live Online

Often complex, technical development projects that are critical to others, or are essential products themselves, fall behind schedule. This course provides the tools and tactics needed to get these projects back on track.

NEW COURSE

Financial Analysis for Technical Professionals, Managers, and Planners

July 11 – August 22, 2025 | Online

The goal of this course is to provide technical professionals, managers and planners with foundational understanding and skills in financial analysis to support the development and planning for projects, products and services. Methods covered in this course are applicable to both – private industries and public / government service agencies.

NEW COURSE

Global Leadership for Technical Teams

August 19 – 20, 2025

Madison, WI or Live Online

A large and growing proportion of technology projects are global, with teams spread across many locations, time zones and cultures. This course will show the participant how to manage these organizations more effectively and efficiently.

Principles of Engineering Project Management

September 9 – 11, 2025 | Madison, WI

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.

Root Cause Analysis Tools for Technical Applications

September 17 – 18, 2025

Madison, WI or Live Online

This course will provide you with the skills to dig deep into a particular situation and to develop strong countermeasures and resolution plans to improve your operation, product, or system. Root cause analysis leads to elimination of repeat errors, improved efficiencies, enhanced quality products and services, and improved morale.

Leadership Beyond Your Team: Managing Up and Across

September 29 – 30, 2025

Madison, WI or Live Online

January 26 – 29, 2026 | Online

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.

Critical Conversations: Results-Based Communication

October 1 – 2, 2025 | Madison, WI or Live Online

February 2 – 5, 2026 | Online

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

October 6 – 8, 2025

Madison, WI or Live Online

January 19 – 23, 2026 | Online

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.

Coaching and Mentoring for Technical Leaders*

November 4 – 5, 2025 | Madison, WI

Learn how to coach, mentor, evaluate, and continuously improve the skills of potential leaders in your organization using the Situational Leadership II® (SLII®) system. You will improve internal communication, help others achieve their goals, coach others to be confident and self-directed, and demonstrate organizational leadership that values and honors differences.

Organizational Agility in Digital Transformation: Designing and Leading Change

November 10 – 12, 2025 | Online

Digital transformation offers unprecedented opportunities for manufacturing and organizations with operational or production environments to advance their production, efficiency, and value while remaining viable in a highly competitive marketplace.

To survive the market and technological changes companies face, senior leaders, through front-line leaders, must recognize the impact on people and processes, which drives business and organizational success. Believe it or not, the difference between viability and irrelevancy isn't just the technology but rather how well the people and organization are supported in the transition, implementation, and use of those technologies.

Agile for Technical Teams: From Principles to Practice

November 11 – 12, 2025 | Madison, WI

April 21 – 22, 2026 | Madison, WI

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

Mastering the Transition from Technical Expert to Leader

November 17 – 20, 2025 | Online

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.

Foundations of Artificial Intelligence and Machine Learning

December 2 – 11, 2025 | Live Online

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

Decisionmaking as a Competitive Advantage: Choosing by Advantages (CBA)

Date coming soon

Join our course to master a proven decisionmaking* process essential for professionals in capital-intensive manufacturing, facilities, and construction projects. Developed by Jim Suhr in 1981 and detailed in his influential works, CBA offers a structured five-phase approach to making sound decisions using both objective and subjective data. Participants will learn to discern decision contexts, effectively use data, and apply CBA methods through hands-on case studies. This course is designed for leaders, managers, engineers, and consultants, equipping them with practical skills to make better, more informed decisions, enhance collaboration, and drive continuous improvement in their organizations. Enhance your decision-making capabilities and achieve better outcomes in today's complex business environment.

*Please note that the term "decisionmaking" is used intentionally in accordance with the formal CBA methodology, which employs this non-traditional spelling.