



2026

ENGINEERING TECHNOLOGY LEADERS INSTITUTE



New Orleans, Louisiana | February 2–3, 2026





WELCOME TO THE 2026 ENGINEERING TECHNOLOGY LEADERS INSTITUTE (ETLI)!

We are pleased to welcome you to New Orleans and to this year's **Engineering Technology Leaders Institute (ETLI)**, held **February 2–3, 2026**. This year, ETLI will be **co-located with the ASEE Conference for Industry and Education Collaboration (CIEC)**, scheduled for **February 2–6, 2026**. We are excited to invite you to participate in both complementary events as we highlight the best of engineering technology (ET) education, practice, research, and collaboration.

We come together at ETLI to strengthen our collective commitment to student success, program growth, industry relevance, and the advancement of ET as an indispensable component of the engineering landscape.

Last year's ETLI brought together leaders to share approaches and strategies that improved collaboration, strengthened student engagement pathways, and showcased innovation across ET programs. Building on that momentum, ETLI 2026 continues our mission to empower institutions and individuals to advocate for ET excellence, visibility, and identity across the nation.

This year's program offers rich opportunities for discussion and professional development. Workshops and sessions across both ETLI and CIEC will focus on current issues important to ET educators, including accreditation, licensure, industry partnerships, leadership development, applied research, teaching methodologies, and preparing the next generation of ET leaders. The co-location of ETLI and CIEC will provide expanded networking, broader collaboration, and shared learning experiences between education and industry professionals.

ETLI continues to be an engine for national action, mobilizing partnerships across academia, professional societies, and accreditation organizations to strengthen and promote engineering technology. We encourage you, as ET leaders, to take full advantage of the opportunities presented here—exchange ideas, form new relationships, and consider joining ET leadership efforts within ASEE.

We hope you enjoy the experience, and the exciting professional community gathered here. Thank you for being part of ETLI and CIEC 2026, and for your continued dedication to the advancement of engineering technology. We look forward to a productive and inspiring week in New Orleans!





SESSION DESCRIPTIONS

MONDAY, FEBRUARY 2, 2026

REGISTRATION/CHECK-IN

4:00pm–5:30pm | Iberville A

ENGINEERING TECHNOLOGY COUNCIL (ETC) RECEPTION

4:00pm–7:00pm

Engineering Technology Council (ETC) reception (hors d'oeuvres and cash bar) and board meeting—begins at 5:00pm (**Open to All Attendees**).

Digital twin game demonstration--**Microchip Mayhem**

“Microchip Mayhem is a fast-paced, multiplayer game where up to four players control robotic workers in a simulated microchip factory. Players collaborate to build complete robots by creating individual components: heads, bodies, arms, and bases. Each component requires processing through four specialized machines, mirroring the complex production steps of real-world chip manufacturing. The ultimate goal is to produce the most completed robots before time runs out.”

TUESDAY, FEBRUARY 3, 2026

REGISTRATION/CHECK-IN

8:00pm–12:00pm | Iberville A

BREAKFAST AND NETWORKING

8:00am – 9:00am

WELCOME

9:00am – 9:30am

ASEE President, Dr. Christi Patton Luks; ETC Chair, Dr. Keith Johnson

KEYNOTE

9:30am – 10:30am

Keynote Speaker: Dr. Brian Novoselich, ASEE CEO and Executive Director

BREAK

10:30am – 10:50am

SILICON PATHWAYS: VIRTUAL FAB FOR UPSKILLING AND RESKILLING

10:50am–11:50am

Eileen Smith, Director, and Michael Carney, Senior Experience Designer, E2i Creative Studio, University of Central Florida (UCF)

Engage to Innovate (E2i) Creative Studio at the University of Central Florida is developing an immersive, multi-level learning experience that introduces the tools and processes of microchip fabrication. The project centers on a contextually accurate digital twin of a semiconductor fabrication environment, designed as an exploratory platform for immersive, risk-free learning.

This approach provides learners and trainers with a customizable Fab environment while establishing a scalable foundation for workforce development. By supporting competency growth across related industries, the platform contributes to economic growth initiatives and helps ensure long-term competitiveness within the US semiconductor sector.

LUNCH AND ABET UPDATE

12:00pm–2:00pm

An overview of the ABET organizational structure will be provided. Updates from the ABET Engineering Technology Accreditation Commission (ETAC)—including the newly revised ETAC naming requirements—will be shared, and questions will be addressed.



NSF ATE GRANT OPPORTUNITIES

2:00pm–2:50pm

Greg Kepner, Principal Investigator, NavigATE Project, Hillsborough College, Florida

Mel Cossette, Former Executive Director and Principal Investigator for the ATE Project

The National Science Foundation Advanced Technological Education (NSF ATE) program has grant funding available to support two-year technician education programs, faculty professional development, career pathways, curriculum and educational materials development, outreach activities, internships, equipment, and more. Attendees will learn about the NSF ATE solicitation, resources, grant writing strategies, and proposal mentoring opportunities to develop or improve technician programs.

A DATA-DRIVEN APPROACH TO UNDERSTANDING STUDENTS AS THEY COMPLETE AN ENGINEERING DEGREE

3:00pm–3:50pm

Michael Davis, Dean, Mathematics, Sciences, Technologies, and Business, Northern Virginia Community College (NOVA), Virginia

In Fall 2025, NOVA was awarded a planning grant from the National Science Foundation in the Improving Undergraduate STEM Education: Revolutionizing Engineering Departments (IUSE:RED) program. This planning grant has three objectives:

- Determine the engineering identity of NOVA students
- Critically analyze academic leadership and resource allocation
- Study the transfer behaviors of NOVA engineering students

In partnership with an engineering education researcher from Virginia Tech, NOVA will seek to assess the overall quality of the engineering program at a large, multi-campus community college.

NOVA has roughly 3,800 students who have identified

themselves as engineering majors, yet the total annual enrollment in engineering courses is under 2,000 students. The hypothesis is that a large number of students are stuck taking prerequisite courses, and may feel that they are not making adequate progress to become an engineer. We will use a mixture of survey instruments and focus groups to understand the ways in which students in these prerequisite courses and students in engineering classes cultivate professional identities while they are at NOVA.

NOVA has five comprehensive campuses operating as one college, serving more than 57,000 students throughout Northern Virginia. We will explore the ways in which resources and academic leadership are distributed throughout the college, and the degree to which they meet the needs of students.

Despite having statewide transfer agreements with universities, NOVA has not determined how and when students transfer. NOVA will make use of the National Student Clearinghouse and internal data to learn how students navigate a complicated transfer process.

THRIVING, NOT JUST SURVIVING: ADDRESSING STUDENT MENTAL HEALTH

4:15pm–5:00pm

Gerarda Shields, Senior Associate Vice President of Student Life and Dean of Students, Manhattan University, New York

During the 2020–21 school year, more than 60 percent of college students met the criteria for at least one mental health problem, according to the Healthy Minds Study, which collects data from 373 campuses nationwide (Lipson, S. K., et al., *Journal of Affective Disorders*, Vol. 306, 2022). Anxiety and depression are among the top concerns, with student cases becoming more complex to address. How can faculty and academic affairs work in partnership with campus student support services, such as mental health counselors, to promote a student body that can thrive and not merely survive? This presentation will include discussions with participants on leveraging services available on their campuses in addition to outside resources.



SPEAKERS

SILICON PATHWAYS: VIRTUAL FAB FOR UPSKILLING AND RESKILLING



Dr. Brian J. Novoselich is the CEO and Executive Director of the American Society for Engineering Education (ASEE), having recently retired from the US Army after 30 years of active-duty service.

Novoselich taught for over 16 years in the Department of Civil and Mechanical Engineering at the United States Military Academy at West Point, earning the academic rank of Professor of Engineering Education. He served in administrative positions such as Director of Strategic Plans and Assessment for the Superintendent, Director of Strategic Effects, and Director of West Point's Center for Innovation and Engineering. His Army career included operational and combat deployments to Bosnia, Kosovo, Iraq, and Afghanistan. Novoselich has served in various leadership roles within the ASEE Finance Committee, Mechanical Engineering Division, Engineering Leadership Development Division, and Military and Veterans Division. He is a licensed professional engineer in the Commonwealth of Virginia.

SILICON PATHWAYS: VIRTUAL FAB FOR UPSKILLING AND RESKILLING



Eileen Smith is Director of the E2i Creative Studio at University of Central Florida (UCF), with over 20 years of experience designing and evaluating interactive learning and performance systems. Since joining the UCF Institute for Simulation and Training in 2003, her work has focused on how emerging technologies influence context, performance, and long-term impact across diverse

audiences. At the E2i Creative Studio, she leads interdisciplinary research spanning first-responder situational awareness, patient perceptions of pain, quality of life for traumatic brain injury survivors, and sustainable living practices. Her projects have been supported by the National Science Foundation, National Institutes of Health, Department of Defense, Department of Homeland Security, and industry partners. Grounded in interpersonal communication and social-based theater, her work bridges human experience, technology, and measurable performance outcomes.



Michael Carney is Senior Experience Designer at the University of Central Florida (UCF) E2i Creative Studio and a veteran of immersive experience design, with over a decade of work in virtual, augmented, and mixed reality. He has designed and produced XR learning and visualization experiences at the

UCF Institute for Simulation and Training and previously served as a visualization consultant with Canon USA. His work focuses on applying immersive technologies to learning, training, and performance, translating complex concepts into effective, human-centered experiences. Through interdisciplinary collaboration, he supports research-driven applications of XR that bridge technology, storytelling, and measurable impact.

LUNCH AND ABET UPDATES



Dr. Ece Yaprak is Professor and Chair of the Engineering Technology Division in the College of Engineering at Wayne State University. She has been deeply involved in ABET accreditation for more than two decades, serving as a Program Evaluator, IEEE Committee on Engineering Technology Accreditation Activities Chair, IEEE/Engineering

Technology Accreditation Commission ABET Commissioner, and IEEE representative to the ABET Board of Delegates. She currently serves on the ABET Board of Directors as the Engineering Technology Area Director (2023–2026).



Yaprak also served as a Program Director in the National Science Foundation's Division of Undergraduate Education, where she led efforts in planning, budgeting, and strategic development in STEM education.



Dr. Keith V. Johnson serves as Vice President for Student Success and Chair of Engineering, Engineering Technology, Interior Architecture, and Surveying at East Tennessee State University, providing strategic leadership that supports academic excellence, workforce development, and regional engagement. Johnson's work focuses on strengthening STEM

and engineering technology education, expanding industry partnerships, and advancing student success initiatives. He has fostered collaboration between higher education, business, and community stakeholders to promote economic growth and educational access.

A dedicated mentor, scholar, and advocate for inclusive academic pathways, he has been deeply engaged with the American Society for Engineering Education (ASEE) and Accreditation Board for Engineering and Technology (ABET). Johnson has served in multiple ASEE leadership and service capacities, contributing to national conversations on engineering technology education, student success, diversity, and program development. He has worked to elevate engineering technology's visibility within ASEE, organizing professional activities, presenting scholarly work, mentoring emerging faculty, and supporting ASEE's mission.

With ABET, Johnson has played a vital role in advancing accreditation standards, continuous improvement, and program quality assurance in engineering technology disciplines, guiding academic programs through successful ABET accreditation processes and contributing to discussions on curriculum outcomes, assessment practices, and program sustainability.

NSF ATE GRANT OPPORTUNITIES



Greg Kepner is Principal Investigator for the National Science Foundation Advanced Technological Education (NSF ATE) NavigATE Project and Co-PI for the Micro Nano Technology Education Center. He has served as PI of the Midwest Photonics Education Center, Co-PI for the National Center for Optics and

Photonics Education, and PI for two other NSF projects. Kepner was previously Chair of Advanced Manufacturing and a Robotics/Automation instructor at Indian Hills Community College (IHCC). He has an MEd in Higher Education from Iowa State University, a BA from Buena Vista University, and AA & AAS degrees from IHCC. He has industry experience in semiconductor manufacturing.



Mel Cossette is the former Executive Director and Principal Investigator for the ATE-funded project Online Instructional Resources for Material Science Technology Education and the National Resource Center for Materials Technology Education (MatEdU) housed at Edmonds College in Lynnwood, WA; and currently serves as a Co-PI for the

Micro Nano Technology Education Center (MNT-EC) housed at Pasadena City College; Co-PI on Project M2A2, a VR focused ATE project housed at Somerset Community College; and Co-PI on the NSF NavigATE project. She has 20+ years of experience in manufacturing education, has developed technician education and training programs for industry and educational institutions, serves on numerous committees and national boards and has worked in various industries prior to holding administrative position in the community and technical college system.

DATA-DRIVEN APPROACH TO UNDERSTANDING STUDENTS AS THEY COMPLETE AN ENGINEERING DEGREE



Dr. Michael (Mike) Davis has served community colleges for the past 20 years as a faculty member and administrator. He is the Dean for Math, Science, Technology, and Business at the Loudoun campus of Northern Virginia Community College, where he works to assure academic integrity in an array of programs. He is currently working on projects seeking to improve

college operations through strategic use of artificial intelligence (AI). Mike served as a Program Officer in the Division of Undergraduate Education (DUE) in the National Science Foundation's Directorate for STEM Education and was a Co-Lead Program Officer on the Hispanic-Serving Institutions (HSI) program. He was also one of the authors on the Improving Undergraduate STEM Education:



Innovation in Two-Year College STEM Education (IUSE:ITYC) program. He worked on several other programs including ATE, IUSE, S-STEM, and RETTL. His work on the Advanced Technological Education (ATE) program sought to pair the assets of community colleges with the needs of regional industries to grow the skilled technical workforce.



Lara Sharp is Dean of Science, Technology, Engineering, and Math at Springfield Technical Community College. She has a BS in Chemical Engineering from SUNY Buffalo, an MBA from UMass Amherst, and an MS in Industrial Engineering from the University of South Florida. She has worked as a process engineer, an education sales expert, and a high school chemistry and engineering teacher. Her higher education experience started in 2013 with Polk State College, working on a National Science Foundation grant about open entry, early exit competency-based engineering technology education, and a Department of Labor grant for machining education. In 2015, she took on the role of Program Director of Engineering, Manufacturing, and Building Arts at St. Petersburg College. She is deeply committed to the mission of the community college and the students it serves. Sharp is also active in the American Society for Engineering Education and serves on its Engineering Technology Council.

research cohorts, and early college initiatives.

Shields is a fellow of the American Society of Civil Engineers and has served the Society at the college, regional, and national levels on both academic and research-based committees. Prior to academia, she worked at Hardesty & Hanover, LLC, an engineering firm specializing in moveable bridges. Shields holds a BS and MS in civil engineering from Manhattan College, earned her doctorate in civil engineering from The City College of New York, and is a licensed professional engineer in New York and California.

THRIVING, NOT JUST SURVIVING: ADDRESSING STUDENT MENTAL HEALTH



Dr. Gerarda M. Shields, PE, is Senior Associate Vice President of Student Life and Dean of Students at Manhattan University. She works with the academic deans to ensure students are fully supported in their personal and professional development, coordinates the college's conduct cases, and oversees judicial investigations. Shields also leads

the Campus Assessment Resource and Education (CARE) team, and the Counseling Center, Health Services, and Center for Career Development are under her oversight.

Shields previously served as Dean of the School of Technology & Design at New York City College of Technology, part of the City University of New York. She propelled the college's mission with new degree programs, workforce development partnerships, undergraduate

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