NC STATE Engineering

NC State Presenters at ASEE 2026

Annual Conference & Exposition - Charlotte, NC

Program guide compiled from NC State-affiliated sessions and presentations

36 Sessions | **42** NC State Presentations | **25** Divisions Represented

Sunday, June 21

1:00 PM - 3:30 PM | **E-220F** | Charlotte Convention Center

Sunday Workshop

- **Building AI-Informed Communication Pathways: A Practical Framework for Scaffolded Instruction from First-Year to Capstone**
  Kirsti Cole [NC State], Olgha Qaqish [NC State], Aimee Allard [NC State]

Monday, June 22

9:15 AM - 10:45 AM | Exhibit Hall BC - Lower Level | Charlotte Convention Center

Biological and Agricultural Engineering Division (BAE) Poster Session

Biological and Agricultural Engineering Division (BAE)

- **Using Gamification and Aquaponics to Enhance STEM Engagement and Sustainability Awareness**
  Linda Hargrove [NC State]

9:15 AM - 10:45 AM | Exhibit Hall BC - Lower Level | Charlotte Convention Center

Educational Research and Methods Division (ERM) Poster Session

Educational Research and Methods Division (ERM)

- **Elevating Engineering Education through Adaptive Learning: Building an Interconnected Spine of Courses and Faculty Readiness Models**
  Amirhossein Ghasemi [UNC Charlotte], Katherine Saul [NC State], Paul Akangah [North Carolina A&T State University], Robert Keynton [UNC Charlotte], Kiran Budhrani [UNC Charlotte], Elise Demeter [UNC Charlotte]
- **Systematic Review of Mentored Engineering Undergraduate Research Experiences** (UREs)
  Toluwalase Salako [NC State]

9:15 AM - 10:45 AM | Exhibit Hall BC - Lower Level | Charlotte Convention Center

Electrical and Computer Engineering Division (ECE) Poster Session

Electrical and Computer Engineering Division (ECE)

- **WIP: Tracking Conceptual Growth and Misconceptions to Inform Instruction - A Pre/Post Study in Signals and Systems**
  Eesha Atif [NC State], Laura Bottomley [NC State]

9:15 AM - 10:45 AM | Exhibit Hall BC - Lower Level | Charlotte Convention Center

Faculty Development Division (FDD) Poster Session

Faculty Development Division (FDD)

- **Assessing and Advancing Engineering Faculty Mentoring Competencies**
  Meredith McDevitt [NC State]

9:15 AM - 10:45 AM | Exhibit Hall BC - Lower Level | Charlotte Convention Center

GSD Work-in-Progress Poster Session

Graduate Studies Division (GSD)

- **WIP: Designing a Program for Convergent Research in Artificial Intelligence and Agriculture**
  Catherine Brawner [Research Triangle Educational Consultants], Kimberly Bourne [NC State], Terri Long [NC State]

11:00 AM - 12:30 PM | W-201C | Charlotte Convention Center

College Industry Partnerships Division (CIP) Technical Session 1

College Industry Partnerships Division (CIP)

- **NC State Rural Works!**
  Matthew Stimpson [NC State], Jerome Lavelle [NC State], Anna Mangum [NC State]

11:00 AM - 12:30 PM | W-206B | Charlotte Convention Center

Student Challenges and Belonging

Chemical Engineering Division (ChED)

Moderators: Betul Bilgin, Gautom Das

- **Expanding Access to Engineering: A Compilation of Chemical Engineering Outreach Programs and Resources**
  Taryn Bayles [University of Pittsburgh], Joanne Beckwith Maddock [Carnegie Mellon University], Betul Bilgin [University of Illinois at Chicago], Neha Raikar [University of Maryland Baltimore County], Amanda Malefyt [Trine University], Leah Granger [NC State]
- **Promoting Classroom Community and Belonging Using Instructor Trivia by Faculty of Various Experience Levels**
  Leah Granger [NC State], Matthew Cooper [NC State], Donald Visco [The University of Akron], Alexandra Easley [NC State]

11:00 AM - 12:30 PM | E-212B | Charlotte Convention Center

Systems Engineering Division (SYS) Technical Session 1

Systems Engineering Division (SYS)

Moderators: Shamsnaz Bhada

- **Bridging Reinforcement Learning Theory and Practice in Systems Engineering Education Through Simulation Environment Design**
  Lingxiang Yun [UNC Charlotte], Srijana Raut [UNC Charlotte], Simon Hsiang [NC State]

11:00 AM - 12:30 PM | Crown Ballroom - Upper Level | Charlotte Convention Center
Distinguished Panel
Special Engineering Deans Council (EDC)

- **Distinguished Panel: Stewardship and Leadership**
  Christine Grant [NC State], Maria Mayorga [NC State] Other Panelists

---

1:30 PM - 3:00 PM | E-212A | Charlotte Convention Center
Aerospace Division (AERO) Technical Session 2: Teaching Methods and Student Learning
Aerospace Division (AERO)
Moderators: Leonardo Bueno, Shantanu Gupta

- **Accelerated Education: An Assessment of Students' Performance in Fast-Paced Engineering Courses**
  Felix Ewere [NC State], Joel Ducoste [NC State]

1:30 PM - 3:00 PM | Hilton - Carolina North - 3rd Floor | Hilton
Electrical and Computer Engineering Division (ECE) Technical Session 3
Electrical and Computer Engineering Division (ECE)

- **From Sensors to AI: A Faculty View of a Project-Based Wearable Course in ECE**
  Peiran Wang [NC State], Edgar Lobaton [NC State], Laura Bottomley [NC State], Mayur Sanap [NC State]

1:30 PM - 3:00 PM | E-216A | Charlotte Convention Center
Electrical and Computer Engineering Division (ECE) Technical Session 4
Electrical and Computer Engineering Division (ECE)
Moderators: Bill Siever, Shruti Singh

- **AI as a Constrained Guide: Measuring Knowledge Transfer in a Graduate Engineering Course**
  Edgar Lobaton [NC State], Mayur Sanap [NC State], Ishita Pai Raikar [NC State], Carine Marette [Indiana University-Bloomington], Md Halim Mondol [NC State]

1:30 PM - 3:00 PM | W-201D | Charlotte Convention Center
Industrial Engineering Division (IED) Technical Session 1: Projects, Mentoring, and Student Success
Industrial Engineering Division (IED)
Moderators: Joan Martinez

- **Beyond the Project: What Shapes Student Learning in Engineering Senior Design?**
  Corey Kiassat, PhD, MBA, PE [NC State]

1:30 PM - 3:00 PM | Westin - Independence - 2nd Floor | Westin

Mechanical Engineering (MECH) Session 16: Professional Development and Workforce Readiness
Mechanical Engineering Division (MECH)
Moderators: Hope Weiss, Jenn Campbell

- **Enhancing Professional Skills through Literature Reviews in Automotive Engineering**
  Mary Zadeh [NC State]

3:15 PM - 4:45 PM | W-201C | Charlotte Convention Center
A Deep Dive into Failure and Assessment
Educational Research and Methods Division (ERM)
Moderators: Mitchell Gerhardt, Radheshyam Tewari

- **An Adaptive, Improvement-Oriented Evaluation Suite for Undergraduate Research Experiences: A Reflective Case Study from an Engineering Research Center**
  Micaha Dean Hughes [NC State], Lindsey McGowen [NC State]

3:15 PM - 4:45 PM | E-220A | Charlotte Convention Center
Computers in Education (CoED): Learning, Engagement & Inclusion (3 of 9) -- M508A
Computers in Education Division (COED)
Moderators: Brian Fiegel

- **When GenAI Arrived, Forum Participation Fell: Reshaping Help-Seeking in Introductory Computing Courses**
  Lina Battestilli [NC State], Sarah Heckman [NC State], Matthew Zahn [NC State], Anurata Prabha Hridi [NC State]

3:15 PM - 4:45 PM | W-209C | Charlotte Convention Center
Pre-College Engineering Education Division (PCEE) Technical Session 5: Community, Family, and Partnership-Based STEM Learning
Pre-College Engineering Education Division (PCEE)
Moderators: Jennifer Love

- **A Community-Engaged Model for Rural STEM Education: Lessons Learned from the Development and Implementation of a STEM-focused Engineering Design Program for Rural Middle Schools (Evaluation)**
  Tameshia Baldwin [NC State], Latricia Townsend [NC State], Micaha Dean Hughes [NC State], Aaron Arenas [NC State]

3:15 PM - 4:45 PM | Westin - Sharon - 2nd Floor | Westin
Student Division (STDT) Technical Session 3
Student Division (STDT)
Moderators: Chika Winnifred Agha, Fatemah Shehab

- **State of Engineering Education Departments (SEED): Perceptions of Engineering Education Departments Across Different College Ecosystems**
  Kalene Thomas [NC State], Gimantha Perera [University of South Carolina, Upstate], Laura Bottomley [NC State], Karen Chen [NC State]

Tuesday, June 23

9:15 AM - 10:45 AM | W-201C | Charlotte Convention Center

Electrical and Computer Engineering Division (ECE) Technical Session 15

Electrical and Computer Engineering Division (ECE)

Moderators: Juan Alvarez, Yuzhang Zang

- **AR/VR for Enhancing Conceptual Understanding and Learning in Electromagnetics**
  Meghan Manfra [NC State], David S. Ricketts [NC State], Michael Prelaske [NC State], Arman Afsari [NC State]

9:15 AM - 10:45 AM | E-221AB | Charlotte Convention Center

Engineering Libraries Division (ELD) Technical Session 2

Engineering Libraries Division (ELD)

Moderators: Allyson Wood, Anamika Megwalu

- **Using a Library Immersive Classroom to Support Visual Literacy and Collaboration in Undergraduate STEM Students**
  Jenny Coffman [NC State], Lejla Biberić [NC State], Courtney Hewett [NC State]

9:15 AM - 10:45 AM | Westin - Brevard - 3rd Floor | Westin

Manufacturing Division (MFG) Technical Session 4: Curriculum Development in Manufacturing Education II

Manufacturing Division (MFG)

Moderators: Md Fashiar Rahman

- **A Risk-Free Approach to Validate Drone Flight Paths Using Computer Simulation and Reinforcement Learning**
  Md Fashiar Rahman [University of Texas at El Paso], Selim Molla [University of Texas at El Paso], Tzu-liang Tseng [University of Texas at El Paso], Richard Chiou [Drexel University], Md Abdul Quddus [NC State]

9:15 AM - 10:45 AM | W-202 | Charlotte Convention Center

Software Engineering Division (SWED) Technical Session 3

Software Engineering Division (SWED)

Moderators: Awatif Amin, Mirza Mohammad Maqbule Elahi

- **LLM Conversation Transcripts: Redefining Homework in the Age of Generative AI**
  Edward Gehringer [NC State], Prerak Manish Bhandari [NC State]

11:00 AM - 12:30 PM | Westin - Grand Ballroom D - 2nd Floor | Westin

Strategies for Hands-on Activities, Resources, and Engagement (SHARE) Demonstrations

Biomedical Engineering Division (BED)

Moderators: David O'Neill, Jennifer Leight

- **SHARE: An Experiment in Helping Students to Collaboratively Engineer with AI**
  Mike Wilkins [NC State], Cameron Taylor [UNC Chapel Hill]

- **SHARE: Homework Interviews in BME: Driving Deep Content Mastery and Fostering Professional Communication Skills**
  Amy Adkins [NC State]
- **SHARE: Speech Production Topics and Lab Exercises Add Engineering Content to a Physiology Class**
  Lianne Cartee [NC State]

1:30 PM - 3:00 PM | W-201D | Charlotte Convention Center
Materials Division (MATS) Technical Session 3
Materials Division (MATS)
Moderators: Eleanor Turaski, Lessa Grunenfelder

- **Connecting Materials Science to Industry: A Project-Based Approach to Enhancing Student Engagement and Learning**
  Sharon Thorne [NC State]

1:30 PM - 3:00 PM | W-207A | Charlotte Convention Center
Mechanical Engineering (MECH) Session 7: Manufacturing, Laboratories, and Hands-On Learning
Mechanical Engineering Division (MECH)
Moderators: Carmen Muller-Karger, Julie Mendez

- **WIP: Is it Possible to Have Individual Student Machining Projects at a Large State University?**
  Scott Kiefer [NC State], Stephen Wilkerson [York College of Pennsylvania]

1:30 PM - 3:00 PM | Westin - Sharon - 2nd Floor | Westin
Student Division (STDT) Technical Session 8
Student Division (STDT)
Moderators: Aaroh Swarup, Foeday Zinnah

- **WIP: Developing Entrepreneurial Mindset in a Makerspace Community of Practice**
  Anna Engelke [NC State], Sarah Glenn [UNC Chapel Hill], Neev Gupta [UNC Chapel Hill], Katerina Leedy [UNC Chapel Hill], Winni Opel [UNC Chapel Hill], Jonah Prober [UNC Chapel Hill]

3:15 PM - 4:45 PM | W-205C | Charlotte Convention Center
FDD Technical Session 2: Designing Meaningful Faculty Development
Faculty Development Division (FDD)

- **Assessing Improvements in Self-Efficacy and Sense of Belonging through an Engineering New Faculty Orientation Teaching Workshop**
  Megan Morin [NC State], Matthew Cooper [NC State], Joel Ducoste [NC State], Sarah Heckman [NC State]

3:15 PM - 4:45 PM | Westin - Grand Ballroom D - 2nd Floor | Westin
FPD: GIFTS Papers - Interactive Approaches to Foundational Engineering and Emerging Technologies
First-Year Programs Division (FPD)
Moderators: Kaitlin Mallouk, Unais Ali

- **Generative AI Chatbots As a Structured Tool for Reflective Writing in First-Year Engineering Introductory Courses**
  Linda Hargrove [NC State], Julio Terán [NC State]

3:15 PM - 4:45 PM | W-210 | Charlotte Convention Center
How are we training students to use AI and other Technology? Preparing Students for Civil Engineering Industry
Civil Engineering Division (CIVIL)
Moderators: Audra Morse, Fethiye Ozis

- **(Case Study) Generative AI and the Future Engineering Workforce: Bridging Educational Gaps through Employer Insight and Data-Driven Analysis**
  Hana Long [NC State], Sarah Egan Warren [NC State]

3:15 PM - 4:45 PM | W-207A | Charlotte Convention Center
Teaching Practices and Course Design
Educational Research and Methods Division (ERM)
Moderators: Chan Aristella Lu, Olivia Ryan

- **Strategies for Managing and Engaging Students in Large Enrollment Engineering Courses**
  Peiran Wang [NC State], Cranos Williams [NC State], Laura Bottomley [NC State]

5:00 PM - 6:00 PM | Exhibit Hall BC - Lower Level | Charlotte Convention Center
NSF Grantees Poster Session I

- **Graduate Training in Translational Convergent Research - Harnessing AI and Data Science for Sustainable Agriculture (GRAD-AID for Ag) NSF-National Research Traineeship**
  Catherine E. Brawner [NC State], Kimberly Bourne [NC State], Terri Long [NC State]

Wednesday, June 24

8:00 AM - 9:30 AM | W-201B | Charlotte Convention Center
Engineering Ethics Division (ETHICS) Technical Session 5
Engineering Ethics Division (ETHICS)
Moderators: Charles Baukal, Ivana Krsteska

- **Revising the ASEE Code of Ethics: A Community Process**
  Rebecca Bates [Minnesota State University, Mankato], Andrew Brightman [Purdue University - West Lafayette (College of Engineering)], Angela Bielefeldt [University of Colorado Boulder], Sharon Jones [University of Washington], Joseph Herkert [NC State], Rosalyn Berne [University of Virginia], Jonathan Beever [University of Central Florida]

11:30 AM - 1:00 PM | W-208 | Charlotte Convention Center

Design in Engineering Education Division (DEED) Postcard Technical Session
Design in Engineering Education Division (DEED)
Moderators: Julian Lippmann, Russell Marzette

- **Work in Progress: Problem Statement Development for Design Projects**
  Ross Petrella [NC State]

11:30 AM - 1:00 PM | E-221AB | Charlotte Convention Center
Engineering Libraries Division (ELD) Technical Session 5
Engineering Libraries Division (ELD)
Moderators: Silvia Sheffield, Zachary Painter

- **Emerging Engineers: Designing an Event Series for Engineering Alumni to Share Advice with Current Students**
  Tyler Kroon [NC State], Alexa Carter [NC State]

2:00 PM - 3:30 PM | W-205D | Charlotte Convention Center
Multidisciplinary Engineering Division (MULTI) Technical Session 9: Laboratory and Community-based Learning
Multidisciplinary Engineering Division (MULTI)
Moderators: Junior Bennett, Shauna Adams

- **Work-in-Progress: From Composting to Community: Toward a Multidisciplinary Community of Practice Model for STEM Research and Leadership Self-Efficacy**
  Veronica Mbaneme [NC State], Olgha Qaqish [NC State], Chloe Hincher [NC State], Laurie Brummitt [NC State]

2:00 PM - 3:30 PM | E-215AB | Charlotte Convention Center
Pre-College Engineering Education Division (PCEE) Technical Session 16: Assessment, Documentation, and Evaluation in Pre-College Engineering Education
Pre-College Engineering Education Division (PCEE)
Moderators: Manuel Figueroa

- **Digital Engineering Notebooks for Supporting Engineering Discourse in Pre-College Engineering Education (Evaluation)**
  Erik Schettig [NC State], Marissa Franzen [NC State]

3:45 PM - 5:15 PM | W-202 | Charlotte Convention Center
Multidisciplinary Engineering Division (MULTI) Technical Session 10: Innovative Teaching in Multidisciplinary Education
Multidisciplinary Engineering Division (MULTI)
Moderators: Stephen Wilkerson

- **Drones, Data, and Artificial Intelligence: A Multidisciplinary Model for Experiential Learning in Agriculture (Work-in-Progress)**
  Stephen Wilkerson [York College of Pennsylvania], Scott Kiefer [NC State], Jason Smith [York College of Pennsylvania]
