

2024 ASEE PreK-12 Engineering Education Teacher Conference

Session Descriptions are in this folder:  [Printable shareable agendas by gradeband](#)

7:30-8:30 Coffee, Snacks, and Registration in the Atrium at Maseeh College of Engineering & Computer Science

Classroom	1	2	3	4	5	6	7	8	Computer Lab
AM Session 1 8:30-10:00	Grades P-5 Design Thread Lunar Living: Integrating STEM through the Engineering Design Process (repeats in the afternoon) <i>University of Texas at El Paso</i> Room EB 92	Grades P-5 Social Thread Socially engaged engineering: Who benefits? Who is harmed? (repeats in the afternoon) <i>Museum of Science, Boston</i> Room EB 103	Grades 3-8 Design Thread Shining a spotlight on the "E" in STEM <i>Siemens Digital Industries Software</i> Room EB 93	Grades 6-8 Design Thread Invoking The Design Honeycomb - Connecting Your Existing Educational Activities to the Engineering Design Process <i>University at Buffalo, Purdue, and Penn State Behrend</i> Room EB 310	*Maseeh College FACULTY START* Room EB 102	Grades 6-12 Intro level Teams Focus STEM Solution Seekers: The Power of Thinking Like an Engineer and Working in Dynamic Teams <i>ASME (American Society of Mechanical Engineers)</i> Room EB 510	Grades 6-12 Sustainability Thread Where Does Your Cell Phone Come From? – Identifying Trade-offs Along the Supply Chain <i>UL Research Institutes</i> Room EB 315	Grades 9-12 Intro level Social Thread Engineering for US All (e4usa) and How "Us All" Includes You! <i>e4usa</i> Room EB 365	Grades 6-8 CS Thread Navigating the Real World with MATLAB--A Data Analysis Journey <i>MathWorks</i> Room EB 325
AM Session 2 10:10-11:40	Grades P-5 PAW Patrol for human-centered engineering <i>The College of New Jersey</i> Room EB 92	Grades 3-5 Invention Thread Empowering All Students through Invention Education: Supercharging STEM with Real World Problem Solving (repeats in the afternoon) <i>The Lemelson Foundation's InventEd Network</i> Room EB 93	Grades 3-8 Design Thread Take your students on a Mission to Mars! <i>Vivify STEM</i> Room EB 103		Grades 6-12 Intro level CS Thread Beyond the Screen - Empowering Middle and High School Teachers to Create Future Computer Science Pioneers <i>Ohio Northern University</i> Room EB 310	Grades 6-12 Social Thread Broadening the STEM Pool: Connecting STEM and our Communities <i>Purdue University</i> Room EB 315	Grades 6-12 Arts Integration Encouraging Curiosity and Creativity in STEM by Establishing Engineering as an Art Form <i>Purdue Polytechnic Institute (PPI), Purdue University</i> Room EB 510	Grades 9-12 Sustainability Thread Creative Engineering Design: Engaging Students in Equity- and Sustainability-Focused Engineering <i>University of Colorado Boulder</i> Room EB 365	Grades 6-8 CS Thread Engineering Design as an Avenue for Introducing Students to Machine Learning and AI <i>MathWorks</i> Room EB 325

Lunch Catered Lunch at Hoffman Hall

12:00-1:00 Keynote Speakers: InventEd Special Guest Lesly Rojas; and Christine Cunningham [Engineering is Elementary](#), [YES](#), & [Mus. of Science Boston](#)



Classroom	1	2	3	4	5	6	7	8
PM Session 1 1:20-2:50	Grades P-5 Design Thread Lunar Living: Integrating STEM through the Engineering Design Process <i>University of Texas at El Paso</i> Room 92	Grades P-5 Social Thread Socially engaged engineering: Who benefits? Who is harmed? <i>Museum of Science, Boston</i> Room 103	Grades 3-12 Sustainability Thread Designing and Utilizing Quality Engineering Activities to Engage Learners Through a Passive Solar House Design Challenge <i>University of Utah</i> Room 93	Grades 3-12 Tall Towers, Joints & Earthquakes: Using Design & Computational Thinking to Make Better Buildings Room EB 365		Grades 6-12 Water, Water Everywhere But Not A Drop To Drink! An 8th-grade science & engineering unit incorporating microelectronics <i>Purdue University</i> Room EB 315	Grades 9-12 Teams Focus Lego Bank - Explicitly Teaching the Nature of Engineering Through a Team Building Activity <i>Texas A&M University</i> Room EB 310	
PM Session 2 3:00-4:30	Grades 3-5 CANCELED → Invention Thread Empowering All Students through Invention Education: Supercharging STEM with Real World Problem Solving <i>The Lemelson Foundation's InventEd Network</i> Room 103 →	Grades P-5 NEW Sustainability Thread Systems and System Modeling: Where does your cell phone come from? Cookie Mining Activity <i>ULRI Xplorlabs</i> Room 103	Grades P-5 Sustainability Thread Teaching Sustainability Beyond the Engineering Classroom <i>University of Pittsburgh Johnstown</i> Room EB 92	(2 consecutive sessions) <i>City College of New York, CUNY</i>	*Maseeh College FACULTY END* Special guest, Jennifer Taylor, University of Colorado Boulder Room EB 102	Grades 6-12 Social Thread Using Storytelling to Introduce Cultural Diversity into STEM Classes <i>The Pennsylvania State University</i> Room EB 310	Grades 9-12 Elevator Pitches to Connect Content and Answer: 'Why must I take a class in ____?' Helping Students Transition from K-12 to Future Engineering Careers by Plugging the Leaky Pipeline <i>Ohio Northern University</i> Room EB 315	Grades 6-8 Adv. Level CS Thread Teaching Machine Learning with Comics <i>University of Oklahoma</i> Room EB 325

4:30-5:00 Optional PSU Tour, in the atrium. **Pick up your CEU Certificate and SCAN the QR CODE in the atrium at the end of the day for stipend submission.**

\$100

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