

# ASEE-GSW 2024

CANYON, TX

MARCH 10-12

### **LOCATION**

WEST TEXAS A&M UNIVERSITY

### PRESENTED BY

COLLEGE OF ENGINEERING





### **ASEE-GSW 2024**

HELD ON THE CAMPUS OF WEST TEXAS A&M UNIVERSITY IN CANYON, TEXAS

Day	Time	Details	Location
Sunday	6:00 - 8:00pm	Registration, Welcome Reception, and Panhandle Plains Historical Museum Tour	2503 4th Ave, Canyon, TX 79015
Monday	9:00 - 10:00am	Breakfast and coffee	College of Engineering Upstairs Foyer
	10:00am - 12:00pm	Breakout Sessions	
		Lunch	
	1:30 - 4:30pm	Breakout Sessions	
	6:00 - 8:00pm	Banquet & Poster Display	Fairly Club
Tuesday	8:30 - 9:00am	Breakfast and coffee	College of Engineering Upstairs Foyer
	9:00am - 12:30pm	Breakout Sessions	
	12:30 - 1:30pm	Lunch and GSW Section Meeting	
	1:30pm	Hike Palo Duro Canyon (Optional)	





Time			Title	Speaker
10:00 - 10:20	ECEDU	44758	Embedding Teamwork Skills in Mechanical Engineering Curriculum	Shadi Balawi
10:20 - 10:40	ECEDU	44708	iBMEntored Buddy Program for First-Year International BME Doctoral Students	Huiliang Wang
10:40 -11:00	ECEDU	44709	Welcome to the Evan & Eddie Show!: Conversations about career journeys	Mia K Markey
11 :00 - 11 :20	ECEDU	44710	The Impacts of Reflective Writing on Peer Evaluations in Engineering Design Courses	Adam Weaver
11 :20 - 11 :40	ECEDU	44749	Inclusive Assessment and SDGs	Kendra Lee Wallis
11 :40 - 12:00	ECEDU	44732	The JUMP into STEM - The Second Experience	Nelson Furno
12:00 - 12:20	ECEDU	44734	Twenty Years and Beyond of Engineering at West Texas A&M University	Kenneth R Leitch
12:30 - 1:30	BRI	EAK	LUNCH	
1:30 - 1:50	ECEDU	44760	From Conventional Wisdom to Evidence- Based Practice: Validation of Programmatic Design Decisions in Engineering Doctoral Education	Jennifer A Cross
1:50 - 2:10	ECEDU	44559	Community Cultural Wealth of Hispanic Engineering Students: A Study of Social Networks	Benjamin C. Flores
2:10 - 2:30	EŒDU	44731	Defining the Murky Middle for an Engineering Program	Pam Lockwood- Cooke

230 - 2:50	ECEDU	44772	An Effective Heuristic to Reduce Total Flowtime for Randomly - Strutured Flowshop Problems	Arun John Abraham
2:50 - 3:10			BREAK	
3:10- 3:30	COLLAB	44578	Global Experience in Undergraduate Engineering Programs at Texas Tech University	Nurcan Bae
3:30 - 3:50	COLLAB	44712	Engaging Industry in a Chemical Engineering Program at a Hispanic- serving Institution	Matthew Lucian Alexander
3:50- 4:10	COLLAB	44717	Bridging the Gap: A Mixed-Methods Study of Engineering Internships Through Surveys and Interviews	Abigail Nichole Lehto
4:10 - 4:30	COLLAB	44747	How Can Managed Retreat Solutions be Just, Fair, Economical, and Environmentally Sustainable?	Maria Dalton

Time			Title	Speaker
10:00 - 10:20	INNOV	44774	Undergraduate Research at a Regional PUI	Kenneth Leitch
10:20 - 10:40	INNOV	44746	Development and Optimization of a JD-Printed Microfluidic Device with Enhanced Transparency for Bioimaging Applications	Ana Aviles Vargas
10:40 -11:00	INNOV	44759	Development of a Battery Powered Vehicle Model for Integration into Elementary School Science Curricula	David Yu
11:00 -11:20	INNOV	44762	Inferring the Relative Location of Assets utilizing Received Signal Strength Indicator Value of Existing Network Architecture	Daniel Garza
11:20 -11:40	INNOV	44770	Effects of Pores on 3D Printed Polymer in Tension	Ryan McGuire
11 :40 - 12:00	INNOV	44773	Utilizing Fundamental Concepts of Engineering Design and Theory to Teach Thermo-fluid Applications	Saman Aria

12:30 - 1:30	BREAK		LUNCH	
1:30 - 1:50	ECEDU	44598	Projects for Waste Reduction in an Intro to Engineering Course	Raj Desai
1:50 - 2:10	ECEDU	44735	Improving students' ability to generate solutions to engineering problems through observing nature	John Carrell
2:10 - 2:30	ECEDU	44756	Teaching concepts in STEM to two generations through senior capstone projects	Shadi Balawi

2:30 - 2:50	ECEDU	44761	Experiential Learning Utilizing Class and Lab Demos in a Material Science and Manufacturing Course	Shadi Balawi
2:50 -3:10			BREAK	
3:10 - 3:30	ECEDU	44601	Implementation of non-linear oscillators using analog computers for the study of chaotic oscillators	Hector Erives
3:30 - 3:50	ECEDU	44736	Engage to Retain: Active Learning at the Conclusion of Traditional Lectures	Amir Karimi
3:50 - 4:10	ECEDU	44745	Using Projects to Improve Student Engagement and Retention in a First-Year Engineering Course	Matthew Kuester
4:10 -4:30	ECEDU	44773	Revolutionizing Engineering Education: Bridging Theory with Practice through Microfluidics and Material Characterization	Saman Aria

### MONDAY - FAIRLY CLUB

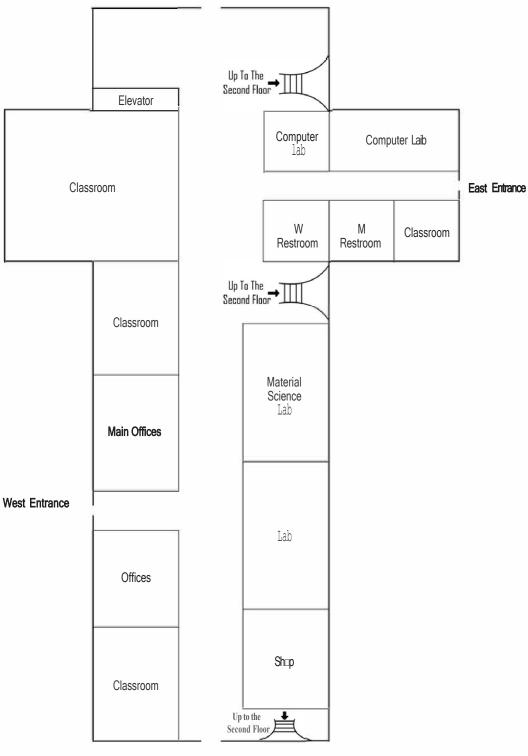
Time			Title	Speaker
6:00 - 8:00pm	POSTER	44741	Mitigating Energy Inefficiency: A Cost-Effective Approach to Cool Attic Spaces in Lower-Income Households in the Southeastern United States	Md Irfan Khan
	POSTER	44742	Incorporating Non-Destructive Inspection Technologies into Engineering Technology Curricula to Meet Industry Needs	Mathew Kuttolamadom
	POSTER	44743	Enhancing Engineering Education through Mentorship	Helen Elizabeth Geller
	POSTER	44775	Application of Engineering Design Principles to Design and Build Solid Propellant Analysis Machine	Saman Aria
	POSTER	44778	The Feasibility of Using WBE and GIS to Monitor COVID-19 in a Small Town or Rural Setting	Colin M Voiles
	POSTER	44757	Portable Hugs: A Wearable Deep Pressure Application Device for Sensory Overstimulation	Varsha Thomas
_	POSTER	44744	Characterization of Physiochemical Surface Properties in Neural Cell Fates	Denise Emily Pahang

### TUESDAY - ROOM 1

Time			Title	Speaker
9:00 - 9:20	ECEDU	44752	A Design Framework for Screenless User Interfaces	Christian Saeed Daftarian
9:20 - 9:40	ECEDU	44730	Uses and Misuses of Al-assisted writing in Engineering Reports	Randall D. Manteufel
9:40 -10:00	ECEDU	44733	Enhancing Educational Experiences: Integrating Unreal Engine Simulations in Laboratory Learning	Oscar Delgado
10:00 - 10:20	ECEDU	44748	Predictive Learning Models Based on Student Engagement on Engineering Education	Logan Michael Heck
10:20 - 10:40	ECEDU	44754	Demystifying Cybersecurity Experiential Learning for Operational Technologies (OT) and Industrial Control Systems (ICS)	Eman Hammad
10:40 -11:00			BREAK	
11:00 -11:20	ECEDU	44737	Understanding Faculty and Student perceptions of ChatGPT	Lance Leon Allen White
11:00 -11:20 11:20 -11:40	ECEDU	44737		
			Towards Models for Cybersecurity Summer Research Institutes for Undergraduate	Allen White
11:20 -11:40	ECEDU	44750	ChatGPT  Towards Models for Cybersecurity Summer Research Institutes for Undergraduate Engagement and Education  3D Shakespeare: A Transdisciplinary Activity to Enhance Real-World Learning Experience in	Allen White  Eman Hammad



### North Entrance



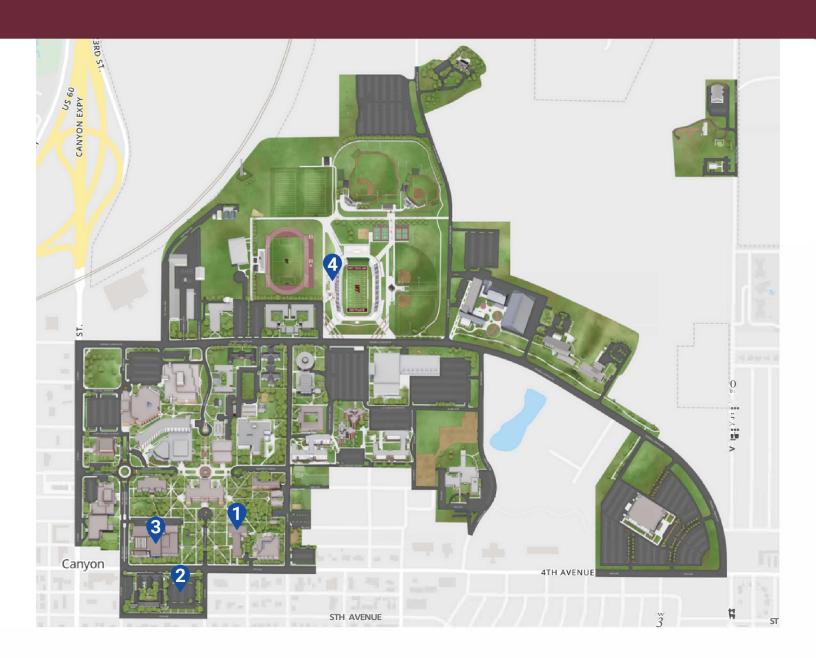
South Entrance



North Down to the First Floor Elevation Offices Offices W M Restroom Restroom Down to the First Floor Offices Design Lab .209/211 Graduate S:tudient Su1ite 208 Design Laib 206 207 Design Lab 205 204 Room I 203 R1oom 2 202 Down to the First Floor

South

# CAMPUS MAP



- 1 College of Engineering- 2513 4th Ave, Canyon, TX 79015
- 2 Parking 2400 4th Ave, Canyon, TX 79015
- 3 Panhandle-Plains Historical Museum 2503 4th Ave, Canyon, TX 79015
- 4 Fairly Club 2609 Russell Long Blvd, Canyon, TX 79015