Department of Electrical and Computer Engineering

TEXAS TECH UNIVERSITY
Edward E. Whitacre Jr.
College *of* Engineering

Fall 2025 Seminar Series

Seminar Title: ***Enabling Critical Infrastructure Security and Operational Efficiency via Private Cellular AI-enabled ISAC and SCADA IO processing***

Time: 3:00-3:50 PM, Monday, Sept 22, 2025

Location: ECE 101

Speaker:
Brenda Connor
Department of Electrical and Computer Engineering and the Critical Infrastructure Security Institute, TTU

Abstract:
Have you wondered which industries are seeking employees with your educational skills? Critical infrastructure e.g., Oil & Gas, Energy, Water/Wastewater, and Food production have cyber-physical systems with industrial control systems needing secure SCADA automation, protection from cyber physical threats, and/or coverage over large geographic spaces in rural and remote areas. Learn how the TTU Critical infrastructure Security Institute and Dr. Connor's research are targeting solutions for national security with dual use relevance for DOD.

Speaker Bio:
Dr. Brenda Connor has a dual appointment at Texas Tech University as Professor of Practice in the Department of Electrical and Computer Engineering and as Senior Technical Managing Director for the Critical Infrastructure Security Institute (CISI). CISI's mission is to advance the protection, resilience, and security posture of our nation's critical infrastructure systems by developing cutting-edge solutions to emerging security challenges through interdisciplinary research, innovative education, and strategic partnerships. Dr Connor joined TTU in Jan 2025 after a 30-year career with Ericsson and is focused on applied research to accelerate the critical infrastructure operator's business case to deploy a private cellular network. Her research areas include:

- Critical Infrastructure Security and Operational Efficiency via Private Cellular AI enabled Integrated Sensing and Communications (ISAC) and SCADA IO processing capability for national security with dual use relevance for DOD.
- NVIDIA based AI Model & Algorithms development and reuse.