Through the synergy and leveraging of resources and expertise at three minority serving institutions and two world class national laboratories, we will educate scientists and engineers in the underlying science of nuclear security and nonproliferation.

Vision of the CONsortium on Nuclear sECurity Technologies:

Through the synergy and leveraging of resources and expertise at three minority serving institutions and two world class national laboratories, we will educate scientists and engineers in the underlying science of nuclear security and nonproliferation.

Eligibility Requirements

- Minimum 3.0 GPA
- US Citizen or Permanent Resident
- Completed a Minimum of 48 Credit Hours

Application / Deadline

Applications will be accepted from November through February. Participant selection and mentor pairing will begin in March and continue until all positions are filled. Application forms can be found at utsa.edu/physics/connect. And should be submitted to NNSACONNECT@utsa.edu

Areas of Research

- Fuel Cycle Materials
  - Fabrication
  - Materials Property Determination
- Advanced Characterization and Forensics
  - Thermal Analysis
  - Optical photoacoustic spectroscopy
- Computational Modeling and Data Analytics
  - Big Data and Machine Learning
  - Uncertainty Quantification and Sensitivity Methods
  - Visual Analytics
- Detection Science

Research Experience for Undergraduates

Outline:

The objective of the CONNECT Undergraduate Research Experience is to provide students a multi-disciplinary environment to learn the science and technology enabling advancements in nuclear security. UTSA is recruiting high caliber undergraduate students from minority serving institutions across the country in their junior and senior years. Participants will be matched, depending on their interests, to laboratories of CONNECT faculty researchers, where they will receive mentorship from faculty, post-docs, graduate students and senior undergraduate students. The goal is to train students to think outside the box, to believe in the possibilities of their ideas, and to actualize those ideas by equipping them with the conceptual knowledge and hands-on skills useful to a career in nuclear science.