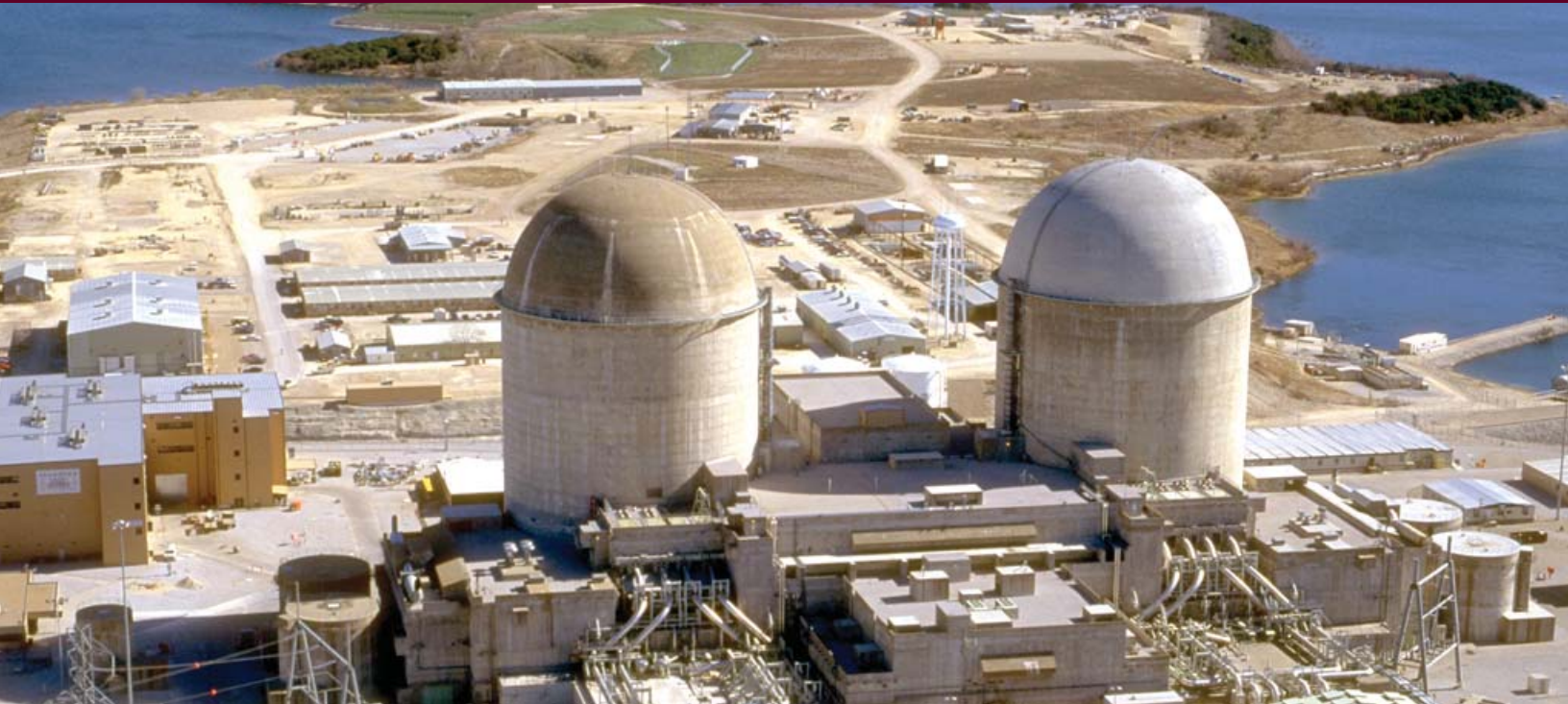


# NPI

NUCLEAR POWER INSTITUTE



## Roadmap to Operational Excellence

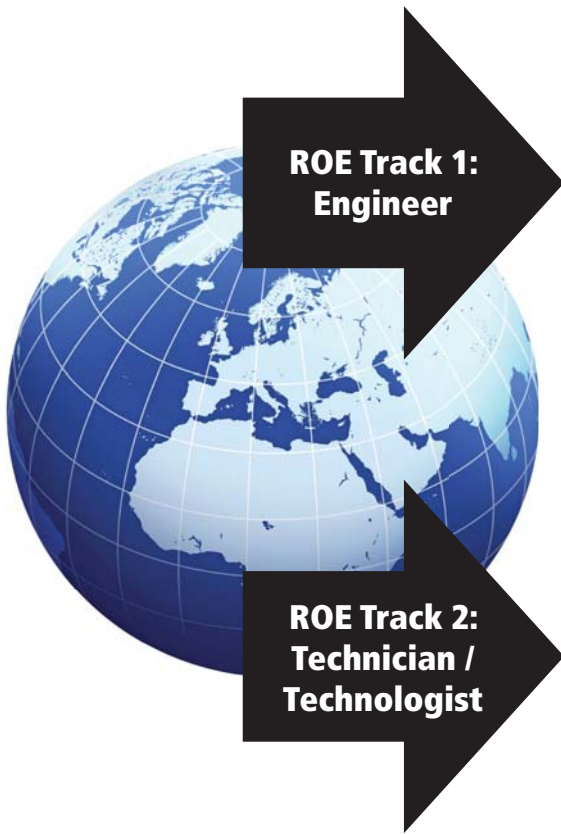
[www.nuclearpowerinstitute.org/roe](http://www.nuclearpowerinstitute.org/roe)



NUCLEAR ENGINEERING  
TEXAS A&M UNIVERSITY



TEXAS A&M ENGINEERING  
EXPERIMENT STATION



## Master of Engineering Degree in Nuclear Engineering

### Choose a degree track:

- Reactor & Systems Engineering
- Nuclear Training & Education
- Planning and Management
- Nuclear Safety, Security, & Safeguards
- Health Physics & Environmental Monitoring

**Year 1**  
Coursework at  
Texas A&M  
University

## Associate of Science Degree in Nuclear Power Techn

### Choose a degree track:

- Non-Licensed Nuclear Operators
- Instrumentation & Control
- Radiation Protection
- Electrical Systems

**Year 1**  
Coursework at  
Wharton County  
Junior College

# Roadmap to Operational Excellence

### The Challenge:

How to gain operational experience before starting a nuclear power plant in order to develop skilled personnel and to help make informed decisions about nuclear energy.

### The Solution:

The Roadmap to Operational Excellence (ROE).

A 2½ year program for engineers and technicians/technologists. ROE combines acknowledged academic programs in Texas, unique internships, and seven months of practical work experience at an operating nuclear power reactor.



Summer Internship  
at Texas A&M

Year 2  
Coursework at  
Texas A&M  
University

Nuclear Power Plant  
Internship:  
7-month Capstone  
Experience

Return to  
Home Country

Summer Internship  
at Texas A&M

Year 2  
Coursework at  
Wharton County  
Junior College

Nuclear Power Plant  
Internship:  
7-month Capstone  
Experience

## Track 1 Engineer

### Academic component:

Participants complete a non-thesis Master of Engineering degree in Nuclear Engineering (M.E.N.E.) at Texas A&M University, which has the largest nuclear engineering program in the United States and the only campus with two nuclear research reactors.

## Track 2 Technician / Technologist

### Academic component:

Participants complete the Associate of Science degree in Nuclear Power Technology at Wharton County Junior College, recognized as one of the top programs of exceptional quality in the United States.

### Internship component:

Participants in tracks 1 & 2 complete a specialized internship with reactor laboratory sessions, tours of power reactors in Texas, exercises at the world renown Disaster City® on the campus of Texas A&M, and associated professional activities.

### Operational experience:

Participants in both tracks will spend seven months at an operating nuclear power plant working and interacting with plant professionals, taking part in the plant training programs, working on plant systems, and gaining exceptional practical operational experience.



## Eligibility

For Track 1, applicants must have a bachelor's degree in a relevant engineering or science field. Previous work experience is recommended.

For Track 2, it is recommended that applicants have a bachelor's degree in an engineering or science field along with some relevant work experience.

Students must pass background checks during the application process and throughout the program and be able to obtain unescorted access to a commercial nuclear power facility in the United States.

## Outcomes

The Roadmap to Operational Excellence provides an outstanding and unique path for a country to develop the skilled technical personnel to make informed decisions about nuclear energy and embark on a successful nuclear power program.

## Facilities & Partners

- Texas A&M Nuclear Science Center 1MW TRIGA Reactor
- Texas A&M Nuclear Engineering AGN Reactor
- Texas A&M Power Plant & Electrical Distribution
- TEEX Disaster City®
- Wharton County Junior College
- Texas State Technical College
- South Texas Project Electric Generating Station
- Comanche Peak Nuclear Power Plant



For further information, contact:

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