An NSF-Supported Enriched Doctoral Training Program at The University of Texas at Dallas

“Team Training Mathematical Scientists Through Industrial Collaborations”

What can you do with a Mathematical Sciences PhD?

The EDT project at UT Dallas supplements students’ PhD training in Applied Mathematics or Statistics with an interdisciplinary research project posed by one of our external partners.

**EDT student trainees:**

- **Collaborate** with a team of students, math&stat faculty, & an external partner;
- **Participate** in the entire life cycle of an industrial research problem;
- Are well positioned to continue research on the project in a summer internship;
- **Gain experience** leading to rewarding employment opportunities;
- Develop their confidence by attacking applied research problems;
- **Communicate** within research teams and to wider audiences.

Students whose PhD thesis research is in any subfield of the Mathematical Sciences are encouraged to apply to the EDT program.

All projects involve computational modeling, mathematical theory, and applied probability or statistical analysis.

**Sample Projects:**

- Uncertainty quantification for oil and gas recovery
- Infectious disease forecasting
- Tomography for cancer radiotherapy treatment
- Multisensor tracking of moving targets
- Modeling of plasma processing systems

**External Partner Organizations**

- Johns Hopkins Applied Physics Laboratory
- Lawrence Berkeley National Laboratory
- Parkland Center for Clinical Innovations
- Pioneer Natural Resources
- Sandia National Laboratories
- UT Southwestern Medical Center
- RTI International

**CONTACT US**

EDT student trainees must be U.S. citizens, nationals, or permanent residents seeking a PhD degree in the Department of Mathematical Sciences at UT Dallas.

For more information:

- [http://www.utdallas.edu/EDT](http://www.utdallas.edu/EDT)
- Email Dr. Sue Minkoff (sminkoff@utdallas.edu)

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![Electron flux in a plasma used to study etching processes for semiconductor devices](image-url)