

Texas Quantum Institute Secures NSF NRT Award: Q-CAT for Future Innovators

Texas Quantum Institute (TQI) is thrilled to announce that we have secured a **National Science Foundation Research Traineeship (NRT)** award for a new graduate training initiative titled ***Quantum Cross-platform Advanced Training (Q-CAT) for Future Innovators***.

Q-CAT will prepare a diverse cohort of graduate researchers to lead the next wave of quantum technologies—bridging **hardware, software, algorithms, and applications** across multiple quantum platforms. Trainees will participate in interdisciplinary coursework, hands-on research, professional development, and industry engagement.

Key Points at a Glance

- **Award:** NSF NRT – Q-CAT (Quantum Cross-platform Advanced Training)
- **Host:** Texas Quantum Institute (TQI)
- **Audience:** Prospective and current graduate students interested in quantum information science & engineering
- **How to be considered:** Apply first to a participating **graduate degree program** (e.g., **Electrical & Computer Engineering (ECE)** or **Physics**) and clearly **name the TQI faculty** you wish to work with in your application. After you are **admitted** to the graduate program, those faculty may **nominate you** for the NRT fellowship.

Important: There is **no separate application** to the NRT at the time of initial admission. Nominations are made **by TQI faculty after program admission**.

What Q-CAT Offers

Q-CAT complements your graduate degree with: - **Cross-platform training** spanning superconducting, photonic, trapped-ion, atomic, and emerging quantum systems - **Interdisciplinary curriculum** integrating physics, ECE, materials, and computer science. **Professional development** in research communication, ethics, entrepreneurship, and leadership - **Seminars, workshops, and industry engagement** with national labs and quantum companies. Specific fellowship terms (e.g., stipend, tuition support, and duration) are determined by the NRT award and university policies and will be communicated to nominees upon selection.

Participating Graduate Programs

You must apply to and be admitted by a graduate degree program to join TQI labs and be considered for Q-CAT nomination. Examples include: - **Electrical & Computer Engineering (ECE) , Physics, and Computer Science.**

If your background is in **Materials Science and Chemistry** we encourage you to contact prospective advisors to discuss fit.

Frequently Asked Questions (FAQ)

Is there a separate application to Q-CAT?

No. Apply to a graduate program first and name your intended TQI faculty. After admission, those faculty may nominate you to the NRT.

Do I need to secure an advisor before applying?

You should identify faculty of interest and describe the alignment in your application.

Are international students eligible?

Currently, this fellowship is open to U.S. citizens and permanent residents.
