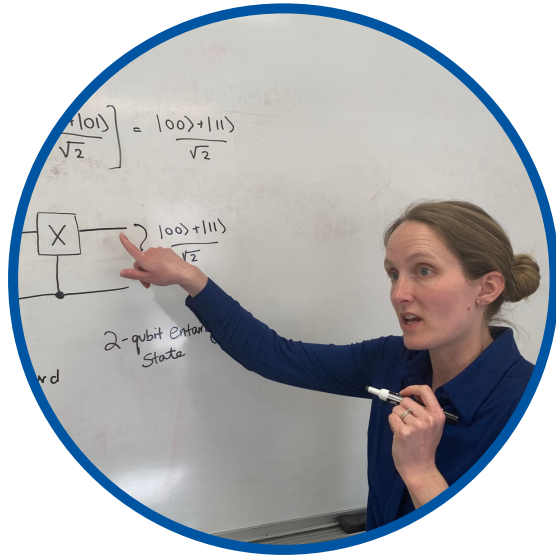


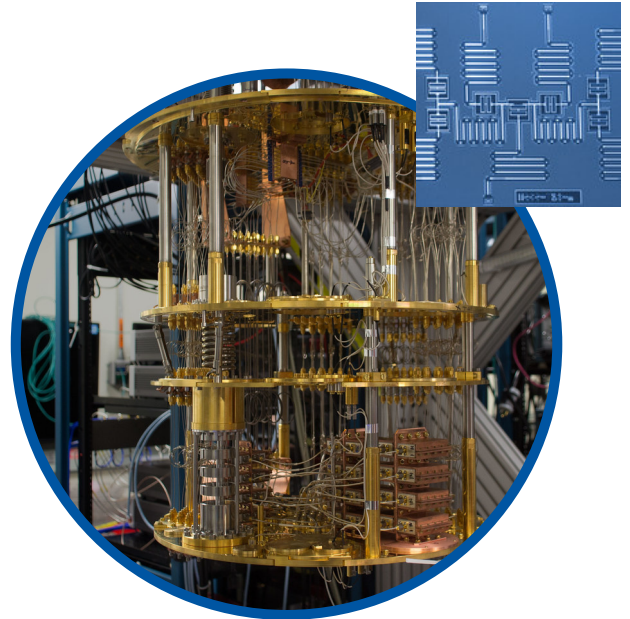
MASTER OF SCIENCE QUANTUM TECHNOLOGY

Earn your MS in QT from San José State University, a joint degree by Physics and Electrical Engineering in the quantum industry hub in Silicon Valley.



HIGHLIGHTS

- Interdisciplinary and first of its kind in the U.S.
- Funded graduate fellowships and student exchange with Colorado School of Mines
- Partnering with Lawrence Livermore National Laboratory and others for hands-on experiences



Wondering what kind of jobs you can get with a MS QT degree?

The Quantum Economic Development Consortium lists hundreds of open industry positions in quantum software and hardware, many at the Bachelor's and Master's level:

<https://quantumconsortium.org/quantum-jobs>



WHY MS QT AT SJSU?

- Explore the growing field of Quantum Information Science and Engineering (QISE).
- Engage in an interdisciplinary program with a curriculum developed by diverse faculty and with different careers paths in mind.
- Gain hands-on and specialized experience in quantum computation, quantum sensing, quantum communication, quantum hardware, and the corresponding electronic controls.

Quantum Technology is a cross-disciplinary program at the intersection of quantum physics, electrical engineering, and computer science. QT students apply fundamental principles of quantum theory to formulate and solve technical problems related to how information is processed and transmitted.

PROGRAM ENTRY REQUIREMENTS

- BS in a STEM discipline
- GPA of 3.0 or above
- Experience with mechanics, linear algebra, electricity and magnetism, & computer programming is preferred.

COURSEWORK

CORE COURSES

- PHYS 161 Fundamentals of Quantum Information
- EE 274 Quantum Computing Architectures
- PHYS 250 Quantum Programming
- PHYS 253 Quantum Many-Body Physics

GRADUATE WRITING (PICK 1)

- PHYS 200W Research & Communication in Physics
- EE 295 Technical Writing - Engineering Ethics
- PHYS 220E Graduate Optics Lab

ELECTIVES (PICK 4)

- EE 225 Introduction to Quantum Computing
- EE 226 Cryogenic Nanoelectronics
- PHYS 240 Computational Physics
- PHYS 208 Introduction to Electro-Optics
- PHYS 275 Solid State Physics
- And many more ...

Work with award-winning and innovative faculty who are dedicated mentors.

Hilary Hurst

Condensed matter theory, many-body atomic physics including quantum feedback control, topological phases and dissipative quantum systems



Hiu-Yung Wong

Quantum computing noise modeling, cryogenic semiconductors and circuits, quantum algorithms, machine learning



Ehsan Khatami

Computational condensed matter physics, strongly-correlated electronic systems, machine learning



Kassahun Betre

High-energy theory, quantum gravity



Christopher Smallwood

Experimental optics and materials spectroscopy.

Curious to learn more? Contact Us!

For information about MS QT at SJSU, contact program director Dr. Hilary Hurst at quantum@sjsu.edu.

Wondering about graduate school at SJSU? Contact the College of Graduate Studies:
explore-gradstudies@sjsu.edu

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