VIRGINIA TECH DEPARTMENT OF ELETRICAL AND COMPUTER ENGINEERING

SPRING SEMESTER 2025 ECE 4984 CRN 20951 (UNDERGRADS) ECE 5984 CRN 21662 (GRADS)

Quantum Engineering Laboratory

Unique laboratory course provides hands-on hardware implementation of quantum science and engineering concepts. The course provides the foundations for further study in quantum information engineering.

Course topics include

- Quantum Random Number Generation
- Quantum Communication Systems
- Quantum Cryptography Protocols
- Quantum Entanglement and Bell's Inequality
- Quantum Interferometry
- Quantum Tomography
- Quantum Sensing of Magnetic Fields





Course Info

- Lectures: MON and WED 11:00-11:50 AM
- Lab session: TUE or THU 5:00-7:30 PM

*Both lecture and lab sessions will be held in Kelly Hall. Details will be provided before the end of Fall Semester 2024.

Pre-requisites for undergraduates: linear algebra and matrices, complex numbers, and modern physics.

Further Inquiries ? Contact Professor Wayne Scales, wscales@vt.edu

