

MINOR IN QUANTUM SCIENCES AND TECHNOLOGY

In response to the explosion of research, development, investment, and employment opportunities in quantum information science taking place across academia, national labs, and private industry, the Georgia Tech School of Physics is now offering a new Minor in Quantum Sciences and Technology. The minor program is open to all Georgia Tech students, regardless of major, who are interested in learning more about:

- Quantum Information Theory
- Applications of Quantum Information to Measurement Science
- Quantum Materials
- Quantum Computation
- Quantum Algorithms
- Quantum Communication

or any other quantum science related topics. For students majoring in math, chemistry, computer science, electrical engineering, or math, this offers a great foundation in quantum physics and applications to quantum information science for those students interested in graduate study or employment in burgeoning quantum industries. For physics students, the minor provides a breadth of applied knowledge, again aimed at students looking to move into this rapidly growing, interdisciplinary field.

Code	Title	Credit Hours
PHYS 3143	Quantum Mechanics I	3
PHYS 4143	Quantum Mechanics II	3
Quantum Physics Elective		3
PHYS 4261	Atomic Physics	
PHYS 4262	Solid-state Physics	
PHYS 4263	Nuclei, Particles, and Fields	
PHYS/ECE 4751	Laser Theory and Applications	
PHYS/MATH 4782	Quantum Information and Quantum Computing	
PHYS 4260	Quantum Technologies	
Additional Electives		6
Any Quantum Physics elective from above (not taken)		
PHYS 4699	Undergraduate Research (Up to 3 credit hours)	
CHEM 3412	Physical Chemistry II	
CHEM 4452	Chemistry of the Solid State	
CHEM 4485	Computational Chemistry	
CS 3510/3511	Design and Analysis of Algorithms	
CS 4220	Programming Embedded Systems	
CS 4510	Automata and Complexity Theory	
CS 4550	Scientific Data Processing and Visualization	
ECE 3450	Semiconductor Devices	
ECE 3550	Feedback Control Systems	
MATH 3406A	Second Course in Linear Algebra	
MATH 4107	Introduction to Abstract Algebra I	

MATH 4108	Introduction to Abstract Algebra II	
MATH 4317	Analysis I	
MATH 4318	Analysis II	
Other courses approve by Minor Advisor		
Total Credit Hours		15