

CSCE 745 Quantum

8/24/23

Course Homepage

<https://cse.sc.edu/~fenner/csce745>
my homepage

Topics: [Math prelims]

Representing data on a quantum computer
qubits

Quantum circuit model

Basic quantum algebras

Quantum Fourier Transform (QFT)

Shor's algo for factoring integers

Simulating quantum systems

Quantum machine learning

Quantum search

Quantum cryptography

Error correction

IBM Quantum Hub at NC State

Qiskit

Math needs

Linear Algebra

Probability

Complex numbers

Summations, inequalities, —
