Start here:

1. Light Quantum Mechanics by 3blue1brown and Minute Physics
    a. Great overview of quantum with amazing visuals!
2. MIT Quantum Computation - MIT OpenCourseWare
    a. This course provides an introduction to the theory and practice of quantum computation. Topics covered include: physics of information processing, quantum logic, quantum algorithms including Shor's factoring algorithm and Grover's search algorithm, quantum error correction, quantum communication, and cryptography.
3. Essence of Linear Algebra by 3blue1brown
    a. A key part to understanding quantum mechanics is linear algebra. This is a great place to start learning about linear algebra. Comes with great animations and visuals!

Detailed look into quantum computing and hardware:

1. Center for Quantum Networks: YouTube Channel
    a. This includes lectures on quantum physics, photonics, optics, and more from renowned professors all over the world!
2. Keysight Bootcamp: Superconducting Quantum Design Challenges
    a. Design challenges of superconducting quantum chips
    b. 5 Lessons
    c. 2 hrs 33 mins

WISER:

- WISER has a list of quantum lectures/ tutorials covering Quantum Computing, Sensing, Hardware, Communication, and Industry Applications
    - 32 videos, all free on Youtube

Qiskit Resources

Start Quantum Computing with From Here:

1. Web Resource:
    a. Qiskit YouTube
    The Qiskit YouTube offers engaging lectures, tips & tricks, tutorials, community updates, and access to exclusive Qiskit content.
    FEATURED:
        What is Quantum Computing Playlist
        2025 Qiskit Global Summer School Lectures Playlist
    b. IBM Quantum blog
    The IBM Quantum blog offers the latest news from IBM Quantum on algorithms, Qiskit, research, and systems.
2. Online Course - recommended
    a. Utility-scale quantum computing
    This event replay course consists of 14 lessons and labs developed and run by IBM Quantum® in collaboration with the University of Tokyo, from qubits to the utility paper reproduction.
    b. Understanding quantum information and computation I: Basics of quantum information
    c. Understanding quantum information and computation II: Fundamentals of quantum algorithms
    d. Understanding quantum information and computation III: General formulation of quantum information
    e. Quantum computing in practice
    f. Understanding quantum information and computation V: Foundations of quantum error correction

3. Badging Quiz: Basics of quantum information badge quiz

In-depth Qiskit resource per topic:

1. Quantum Machine Learning
    a. Course: Quantum machine learning
    b. Tutorial: Quantum Kernel Training
2. Optimization Tutorials

    a. Advanced techniques for QAOA
    b. Pauli Correlation Encoding to reduce Maxcut requirements
3. Algorithm for Applications (Chemistry, Quantum Simulations)
    a. Course: Quantum diagonalization algorithms
    b. Course: Variational algorithm design
    c. Tutorial: Ground-state energy estimation of the Heisenberg chain with VQE
    d. Tutorial: Sample-based quantum diagonalization of a chemistry Hamiltonian
    e. Tutorial: Sample-based Krylov quantum diagonalization of a fermionic lattice model
    f. Tutorial: Compilation methods for Hamiltonian simulation circuits
4. Fault Tolerant Algorithm Tutorials
    a. Shor's algorithm
    b. Grover's algorithm
5. Workload Optimization Tutorials
    a. Transpilation Optimizations with SABRE
    b. Compare transpiler settings
    c. Long-range entanglement with dynamic circuits
6. Error Mitigation Tutorials
    a. Utility-scale error mitigation with probabilistic error amplification
    b. Combine error mitigation options with the Estimator primitive
    c. Real-time benchmarking for qubit selection