

Introduction to Quantum Circuits (LFQ103x)

This course discusses the basics of quantum computing. You will gain an understanding of the technology landscape—the present state and the future potential of quantum computing. You will also learn how to create quantum circuits for various quantum algorithms and be able to interact with quantum hardware using IBM Q Visual Composer.

Duration: 1 Day

Prerequisites for this course

There are no requirements for this course.

Outline for this course

Chapter 1 – Motivation for Quantum Computing

Chapter 2 – Understanding Superposition and Measurement in Quantum Mechanics

Chapter 3 – Understanding Qubits in More Detail

Chapter 4 – Quantum Entanglement and Bell's Theorem

Chapter 5 – Introduction to Quantum Gates and Circuits

Chapter 6 – Hands-on Lab on IBM Q Experience Visual Composer

Chapter 7 – Deutsch Algorithm