QUANTUM PROGRAMMING CORE
QUANTUM COMPUTING WITH D-WAVE

Expand your knowledge of quantum computing by learning how to build quantum applications!

Quantum Programming Core is a one-week online course led by D-Wave experts. With this course, you can accelerate quantum application development, receive expert training and mentorship, connect with our Leap community, and gain new ideas and skills while differentiating yourself in the marketplace.

Details

This online course runs for one week, with optional live instructor office hours offered each day. If needed, learners have an additional one-week grace period to complete assignments. It requires a time commitment of about 30 hours. The course materials include recorded presentations, quizzes, assignments, and live office hours with a D-Wave instructor.

Objectives

After successfully completing this course, learners will be able to:

- **Break down an optimization problem into distinct objectives and constraints.**
- **Formulate real-world optimization problems as quadratic models.**
- **Write an Ocean program to run on D-Wave's quantum computer and hybrid solvers.**
- **Examine different problems in your area of interest for suitability for D-Wave's products.**

Prerequisites

There are no formal prerequisite courses you must complete before starting this training. However, to comfortably complete the course in one week, we recommend having the following knowledge:

- **Intermediate Python programming experience**
- **Comfort working with equations and graphs**
- **Familiarity with matrix operations**

If you do not feel confident in your math or Python skills, we recommend you complete the Foundations for Quantum Programming course prior to starting this training.

"A great balance between quantum theory, industry examples and coding practice...taught by knowledgeable and responsive instructors! Overall I'd strongly recommend this course."

Ready to skill up for the future today?

Visit our course catalog to view the upcoming training schedule and register!

D-Wave's robust, hands-on training will enable you to immediately put theory into practice with real-world quantum applications.

At a Glance: Quantum Programming Core

DURATION:
1 week
(with additional "grace period" week, if needed)

LEVEL:
Intermediate

MODALITY:
Online

PREREQUISITES:
Intermediate Python programming skills, comfort working with math equations and graphs, and familiarity with matrix operations.

INTENDED AUDIENCE:
Technical roles and anyone who wants to learn the basics of quantum programming using D-Wave technology.

SIGN UP FOR QUANTUM PROGRAMMING CORE TODAY!