

# INTERESTED IN BECOMING ONE OF THE FIRST HIGH SCHOOL STUDENTS TO LEARN QUANTUM?

TO SIGN UP, PLEASE SUBMIT APPLICATION BELOW:

<https://forms.gle/gpxTPuQyqwe84eMN9>

For questions email or call: [quantum@the-cs.org](mailto:quantum@the-cs.org) - (323)790-9992

Prepare students for the jobs of tomorrow

# BE ONE OF THE FIRST HIGH SCHOOLS TO OFFER QUANTUM COMPUTING

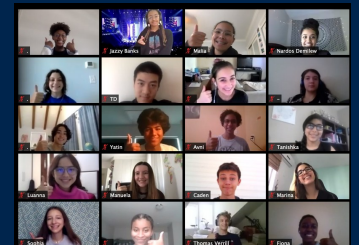


**Quantum computing will change the world as we know it. Yet no in-depth quantum education exists for K-12 students.**

In partnership with MIT's Center for Quantum Engineering, we're pioneering quantum education for K-12 students, **offering the first ever year-long quantum course for high school students.**

Beginning in Fall 2020, 5,000 students from around the globe will participate in this intensive, virtual course taught live by MIT and Oxford quantum researchers. Complete with weekly lectures and recitation sections led by TAs, students will be introduced to quantum mechanics, quantum computation, and quantum algorithms - topics most students don't learn until graduate school.

Thanks to our sponsors, we're able to offer this course to your high school students for **FREE.**



## BENEFITS



Be one of the first high schools in the world to offer quantum education



Increase college competitiveness



Real-world application to math, physics, and coding



Access to elite university professors and industry leaders



Additional training and support for educators wanting to learn quantum

## OUR PARTNERS



Massachusetts  
Institute of  
Technology

# COURSE DETAILS

The course runs from October 11, 2020 through May 16, 2021. There are breaks for winter and spring holidays. All course instruction is live and virtual. **Students must have foundational knowledge of trigonometry to participate.**

**Labs will be offered on Wednesdays, Thursdays and Saturday's, afterschool options between 3-6pm PST will be available.**

**Live lecture/lesson will be held on Sundays from 11am – 1pm.**

**Additional details on class times to follow.**

Each week, there will be:

**Lecture** - Each lecture is two-hours long: an hour of theory and an hour tutorial walking through practice problems. Lectures are live on Sundays at 11am PST, but recordings will be available for those unable to attend.

**Recitation section** - At the end of each lecture, students will receive a homework assignment, practice problems, or a lab to complete. Recitation sections are 1 hour long, in which a TA will go over the homework and answer questions. Section options will be available on Wednesdays, Thursdays and Saturdays.

Depending on students' aptitude, the weekly time commitment is between 5-7 hours. We will employ several online platforms so students can have questions answered throughout the week, including Piazza, Discord, and an online grading software.

**Note:** We are currently going through WASC accreditation, which would enable students to receive independent course credit if schools permit it. We will be able to notify participants of our accreditation status in early 2021.

## WHO WE ARE

### INSTRUCTORS

Francisca Vasconcelos



Amir Karamlou



### ADVISORS



Umesh Vazirani  
Berkeley  
UNIVERSITY OF CALIFORNIA



Clarice Aiello  
UCLA



Will Oliver  
MIT  
Massachusetts  
Institute of  
Technology



**Qubit by Qubit** is an initiative by The Coding School (TCS), an international tech education 501(c)(3) dedicated to empowering students through code. Since 2014, TCS has taught 5,000+ students in 40+ countries how to code. To learn more, visit our website: [www.codeconnects.org](http://www.codeconnects.org).