



We are delighted to announce the launch of our Summer 2022 Internship programme.

Summer Intern

Interns invited onto the programme will work closely with our team and gain experience in the development of scalable quantum computers based on silicon technology. This is a unique opportunity to work at the bleeding edge of technology development, developing new innovative circuits, devices and theoretical methods to tackle the engineering challenges of implementing a large scale quantum computer in silicon. Interns will gain research and industrial experience working with some of the brightest quantum engineers, IC engineers and quantum computing theoreticians in a cutting-edge research and development environment.

Project areas for the internships include:

- The design, validation and operation quantum devices based on silicon (CMOS) technology
- The design and test of the integrated circuits operating at deep-cryogenic temperatures (4 Kelvin and below)
- The development of novel silicon quantum processor architectures and applications, with a focus on quantum error correction and error mitigation

When

The internship will run for up to 12 weeks and take place in the period between 1st of June and 30th September 2022.

Where

Internships may be based at our London or Oxford sites, depending on the theme of the project and host team.

Who

We are looking for applicants who are curious, proactive, adaptable and have a passion for quantum technologies. Interns may be in the course of pursuing a Bachelor's, Master's or PhD-level degree in the fields of Electrical and Electronic Engineering, Physics, Computer Science or any relevant subjects. Strong applicants will have hands-on experience, and/or having attended taught courses, in some of the following areas:

- Analog / Digital IC Design
- Quantum information
- Semiconductor devices

Experience of working in a laboratory environment, programming (Python or Matlab), and strong mathematical and data analysis skills are all beneficial. Interns applying to work on theory should ideally have experience of using analytic techniques, and/or modelling on conventional computers, to explore the potential of NISQ or fault-tolerant quantum computers - such applicants would normally be pursuing (or have recently completed) a PhD-level degree.

How do we apply?

1. Please submit a CV, alongside details of 2 referees and a cover letter to detail why you want to work with us
2. Technical Interview with the relevant team (1 hour)
3. Values-based interview with the wider QMT team (30 minutes)

Application Deadline: 25th February 2022

