Job Description

Job Title: CryptoWorks21 and Grad Program Coordinator
Department: Institute for Quantum Computing
Reports To: Assistant Director, Administration
Jobs Reporting: None
Salary Grade: USG 7
Effective Date: November 2018

Primary Purpose

The Graduate Program and Recruitment Coordinator supports, promotes, recruits, and sets goals for the Collaborative Graduate Program in Quantum Information and the CryptoWorks21 training program. Areas of responsibility include student recruitment, budget administration, preparing various reports and presentations, records maintenance, point of contact for 75+ graduate students and scholarship management.

The CryptoWorks21 is a supplementary training program, initially funded by NSERC CREATE, that will prepare HQP for a variety of leadership roles. The program prepares a new generation of researchers to create quantum-safe tools for the 21st century; fosters collaboration between young scientists and experts in quantum and cryptographic research; enables students to build relationships with cryptographic communities in academia, industry, and government; and encourages collaboration between students and partners in mathematics, computer science, physics and engineering. An application is underway to formalize this program as a Graduate Diploma in Quantum-Safe Cryptography.

Key Accountabilities

Overall Responsibilities
- Leads initiatives to support the academic graduate programs in Quantum Information and the CryptoWorks21 training program; consults with Program Directors on activities, issues, and developments related to the programs and on matters pertaining to the overall goals of the programs
- Execute a project plan to create a certificate in “quantum-safe” cryptography
- Support the CryptoWorks21 Management Team in the development and execution of: establishing and overseeing the working groups, coordinating events, developing and initiating a student recruitment strategy, measuring and maintaining performance indicators, securing funding, and recruiting industry/government mentors and collaborators

Recruitment and Program Experience
- Manages international and domestic student recruitment via print and electronic media
- Designs and maintains website to showcase the program, and inform prospective and current students, other stakeholders, and the general public about the Quantum Information Graduate Program and its activities
- Develops promotional materials, including posters and brochures, for student recruitment; advises on content and design, including the overall representation of the graduate program and CryptoWorks21
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- Coordinates IQC’s presence at domestic and international recruitment events; advises other IQC staff, GSO staff, and student volunteers on program’s unique features and strengths so they may also represent IQC at events
- Identifies strong applicants; invites and organizes visits for such applicants
- Organizes a welcome event each fall, where new and current students have an opportunity to meet each other, and learn about the different areas of research at IQC; includes presentations by faculty members and Program Director
- Organizes regular meetings with graduate students, to discuss issues and updates to the programs, and to obtain feedback on overall graduate student experiences; uses feedback to implement changes to the program where appropriate
- Develop and execute a recruitment plan for the CryptoWorks21 program, in conjunction with Management Team
- Launch “Cryptography in a Quantum World” seminar series
- Advise on web content for CryptoWorks21 website
- Manages mentorship programs for both the graduate program, and CryptoWorks21

Budget
- Develops and maintains graduate program and recruitment budget
- Develops and maintains scholarship budget
- Tracks spending on IQC funded RAs, TAs, scholarships, recruitment activities, and other graduate program related expenses
- Advise on CryptoWorks21 budget

Graduate and CryptoWorks21 Program Management
- Manages QIC course planning; schedules graduate course offerings and informs Scheduling Office of courses, times, and instructors in collaboration with each home unit; ensures that no conflicts arise between QIC courses, and between QIC courses and home unit core courses
- Assist HQP with developing and disseminating tools and demonstrations for QI and CryptoWorks-21 seminars, lectures and workshops
- Coordinates and drafts revisions as appropriate to course descriptions, program requirements, and other materials for the University On-line Graduate Calendar, in collaboration with each home unit
- Advises students with deadlines, changes, milestones, and requirements as they progress through their individual program
- Serves as liaison with other departments and educational institutions, graduate alumni and external contacts
- Coordinates any program changes or additions, usually requiring many levels of approval from departments, steering committee, faculties and SGRC
- Supervises student volunteers involved in recruiting events
- Co-ordinate short courses, quantum entrepreneurship course, customized workshops
- Develop and update terms of reference for all aspects of the graduate and CryptoWorks21 programs including the mentorship program, national and international visit opportunities, Management Team procedures, specialized professional skills training, and specialized technical skills training
- Prepare and follow through with several CryptoWorks21 project plans, ensuring all commitments made in the initial proposal are fulfilled

Scholarships and Funding
- Manages administration and budget of internal IQC scholarships, including: the Mike and Ophelia Lazaridis Fellowship ($20,000/student), the IQC Entrance Award ($5000/student), the IQC Achievement Award ($5000/student), the IQC David Johnston Award for Scientific Outreach ($2500/student), and any new scholarships that may arise
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- Manages CryptoWorks21 scholarships and awards, including the RBC Thesis Award and RBC Scholarship
- Advises faculty on student salaries, taking into account: program, internal and external scholarships, previous salary, tuition; must be familiar with all internal and external funding options
- Facilitates payment of all IQC funded RAs and TAs

**Exchanges**

- Manages exchanges; provides funding to outgoing students, prepares exchange agreements and exchange acceptances, ensures appropriate risk and waiver forms are completed; advises on Visa issues; prepares quarterly reports for UW finance
- Fund and facilitate short and long-term visits for the CryptoWorks21 program that will give HQP access to specialized courses, schools, workshops, facilities, mentorship and collaboration opportunities in Canada and abroad

**Required Qualifications**

**Education**
- University degree in business or equivalent combination of education and experience

**Experience**
- 3+ years of experience in administrative roles with increasing levels of responsibility, preferably in a university environment
- An understanding of academic research environments, in particular graduate studies
- Experience managing and planning data for analysis and statistics purposes
- Experience creating and editing websites

**Knowledge/Skills/Abilities**
- Proficiency with Quest and OnBase or similar systems
- Basic knowledge of HTML/generic web content management system
- Advanced MS Office knowledge
- SharePoint and FileMaker knowledge an asset
- Well-developed communication skills (oral and written) with the ability to respond with sensitivity to challenging situations.
- Strong organizational, problem solving, decision-making, and critical thinking skills
- Time management skills, ability to manage multiple priorities from different portfolios, with tight deadlines.
- Ability to work effectively and successful with diverse stakeholders, international students and people from a wide variety of backgrounds and cultures.
- Ability to work accurately while managing a high work load and multiple demands on time
- Demonstrated knowledge of graduate policies and procedures
- Demonstrated ability to handle confidential information with discretion and tact

**Nature and Scope**

- **Contacts**: Significant internal and external relationships for this position include:
  - Associate Dean of Graduate Studies, Administrative Assistants, Graduate Coordinators and Graduate Chairs for six departments within the Faculty of Science, Math and Engineering
  - Director of the Collaborative Graduate Studies Program in Quantum Information
  - Cybersecurity and Privacy Institute
  - Perimeter Institute for Theoretical Physics
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- Guelph Waterloo Physics Institute
- NSERC
- University of Calgary and University of Montreal
- CryptoWorks21 Program Committee, Program Director, Management team, Specialized Technical Skills Working Group and Specialized Professional Skills Working Group

- **Level of Responsibility:** The incumbent must possess good judgement, initiative and flexibility to adapt to competing tasks with minimal supervision, working with a high level of autonomy

- **Decision-Making Authority:** This position has specialized work with minimal supervision and establishes own priorities in accomplishing job duties. They are expected to make decisions to meet deadline criteria, advise current Graduate and CryptoWorks21 Directors, and establish short-term and long-term priorities and goals

- **Physical and Sensory Demands:** Minimal demands which are typical of an administrative position within an office environment

- **Working Environment:** This role involves minimal psychological risks resulting from unavoidable exposure to disagreeable or uncomfortable environmental situations. This role does involve dealing with a variety of tasks; frequent interruptions; there could be a need for a quick turnaround, which creates a demand on time and realignment of priorities.