

POSTDOCTORAL POSITION IN Centre for Mathematics, Science and Technology Education

Duration: 18 months, subject to satisfactory performance review following the first three months

Start date: August 1, 2020 (start date may be negotiated with Centre Directors)

Citizenship restrictions: Canadian Citizen/Permanent Resident

Stipend: \$65,000 annually, plus supplemental health benefits. Additional \$4,000 travel research grant.

Based in the University of Alberta's Faculty of Education, the Centre for Mathematics, Science and Technology Education (CMASTE) is a long-standing educational research and development centre that specializes in the synthesis of research, knowledge translation and outreach. The purpose of the Centre is to promote research and development in mathematics, science and technology education in Canada and beyond, achieved through an academic collective at the University of Alberta who provide a broad range of stakeholder groups a uniquely favourable environment for productive and significant collaborative work.

CMASTE is inviting applications for a full-time, 18-month postdoctoral position for the project "Enhancing STEM Teaching in Higher Education through Research and Practice." The postdoctoral fellow will lead the project to enhance instructional capacity in new faculty members to deliver high-quality, learner-centred undergraduate instruction in the Faculty of Engineering. The project will produce online professional development modules focused on themes (e.g., professional vision, authentic assessment, inclusive and diverse classrooms) implemented through communities of practice. Research in the project will investigate fostering communities of scholars in teaching and learning for engineering education.

Leadership and project responsibilities could include:

- Manage the project from conceptualization of structure and content for the professional development modules to delivery through a pilot project.
- Coordinate with the Faculty of Engineering steering committee to ensure modules fit with graduate attributes and program mapping, as well as collect local examples of instruction through videos and interviews.
- Coordinate with CMASTE academic members to write content of modules.
- Liaise with the Faculty of Education's Professional Learning Unit to ensure that modules are in line with effective online delivery methods.
- Mentor graduate and undergraduate students within the project, as well as support engineering faculty in community leadership.
- Coordinate and cooperate with CMASTE staff to ensure project completion on time and within budget.

Research responsibilities could include:

- Determine research-based practices through literature review that respond to professional learning needs and current innovations in engineering education.
- Conduct program evaluation through pilot of modules.
- Design and implement a research component to examine participants' experiences of the program through collaborative research between Education and Engineering.

Qualified candidates will have completed a doctoral program (within the past five years) in a relevant discipline such as mathematics education, science education and/or technology education. They will have background in, or commitment to, teacher education or curriculum design and implementation. Teaching experience in K-12 and/or post-secondary in Canadian contexts is required; experience in engineering will be an asset. The successful candidate will demonstrate:

- Excellent academic record and a beginning record of publications and presentations.
- Experience with design principles for curriculum development and/or online course delivery.
- Understanding of professional learning models.
- Proficiency with technology tools like Microsoft Office and Google Suite.
- Flexibility to work remotely and face-to-face when needed.
- Collaborative skills and working as a team member.

To Apply: Applicants should submit to cmaste@ualberta.ca, with “Eng Ed Postdoc Application” in subject field, the following:

- A letter of interest for the position
- Curriculum vitae
- Proof of completion of PhD (awarded within 5 years prior to the proposed start date)
- A statement (1 - 2 pages) of research and teaching experience with curriculum studies in mathematics, science and/or technology education
- Two letters of reference to be sent directly from referees to cmaste@ualberta.ca (ask referees to include “Eng Ed Postdoc Reference” in the email subject field).

Closing date:

Review of applications will begin June 15, 2020 and will continue until the position is filled.

We thank all applicants for their interest; however, only those individuals selected for an interview will be contacted.

The University of Alberta is committed to an equitable, diverse, and inclusive workforce. We welcome applications from all qualified persons. We encourage women; First Nations, Métis and Inuit; members of visible minority groups; persons with disabilities; persons of any sexual orientation or gender identity and expression; and all those who may contribute to the further diversification of ideas and the University to apply.