The Robert M. Buchan Department of Mining
JOB POSTING:
COURSE AUTHOR (BTECH PROGRAM)

Posting Date:  June 22, 2018  Closing Date:  July 6, 2018

The Bachelor of Mining Engineering Technology (BTech Mining) program, administered through the Faculty of Engineering and Applied Science (FEAS) at Queen’s University, invites applications from suitably qualified candidates for a Term Adjunct position supporting the development and/or delivery of the 4th year Capstone Project course in the new BTech Mining program.

Program Overview:
The BTech Mining program is a joint collaboration between Queen's University’s Robert M. Buchan Department of Mining and Northern College’s Haileybury School of Mines. The BTech Mining program is a degree completion program aimed at college-educated professionals looking to advance their knowledge and education. Designed for Engineering Technologists from any program and Mining Engineering Technician graduates, this program consists of customized bridging courses combined with two years of online university study, and two on-site field placements (located in Kingston and Timmins). Curriculum content is designed to provide students with fundamental depth of knowledge and background theory in the field of mining as well as relevant technical, managerial, and sustainability skills.

Further details of the program can be found at: http://btech.engineering.queensu.ca.

Course Development:

Academic staff at Queen’s are governed by a collective agreement between QUFA and the University which is posted at http://www.queensu.ca/facultyrelations/faculty-librarians-and-archivists/collective-agreement and at http://www.qufa.ca.

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While the BTech Mining program is an online degree, the Capstone Project is intended to serve as a summative course that focuses on the application of technical knowledge and design principles learnt throughout the program. Development of the Capstone Project will require the Course Author to review the BTech program’s curriculum, taking note of key elements learnt in the various courses, and develop a capstone project that allows the students to apply the tools and techniques studied while completing their degree in the context of a relevant design project. The Course Author will be responsible for developing the scope of the design project, and integrating key learning outcomes from the program into the project scope and deliverables.

While not considered part of the scope of this posting, it is worth noting that it is expected that the Course Instructor be actively involved with the students throughout the completion of the Capstone Project. Regular check-in’s, guidance and mentoring, and assessments of a student’s ability to apply the tools and technologies effectively will represent a significant portion of their overall assessment. As such, included in scope of development of the Capstone Project course should be the creation of online learning content to support these sorts of interactions.

In accordance with the QUFA Collective Agreement (Appendix S), candidates interested in course development act as subject matter experts, and work in collaboration with an Instructional Design Team that supports project management, course design and online pedagogical expertise.

The assigned course will be developed for an online learning format suitable for diverse students at the undergraduate level. During the pilot phase of the new BTech Mining program, enrollment is anticipated to be less than 20 students. This course does not require laboratory/practicum work.

**Key Responsibilities:**

**Administrative Service Responsibilities:**

- Establishes a course plan that identifies general course objectives/expectations, methods of assessment, mark breakdown, course resources and details of the components of each section/unit of the course including section/unit objectives;
- Prepares a curriculum submission, if required;
- Creates a template document for the course syllabus;
- Identifies when, and assists with, obtaining permission for the use of Intellectual Property for the course;
- Participates in the testing of online course components prior to the start of the course; and
- Achieves project timelines.

**Academic Responsibilities:**

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• Uses subject expertise and experience to ensure the course reflects a high level of scholarship in both the discipline and subject area;
• Designs an inclusive and effective online teaching course;
• Identifies and establishes achievable, measurable, and pedagogically sound learning outcomes and unit and lesson objectives;
• Develops appropriate assessments to measure learning outcomes;
• Prepares and reviews drafts of course materials and recommends other resources for reference;
• Ensures accuracy and appropriate rigor of course content;
• Identifies and/or develops appropriate lesson study materials including:
  o Required and recommended reading materials,
  o Concept expansion materials (text-based, graphic, and/or multi-media),
  o Student interactions (e.g. discussion groups; small study groups),
  o Self-check activities,
  o Synchronous learning activities,
  o Assignment questions,
  o Rubrics and answer keys,
• Includes any additional instructional resource materials required, consulting with University Copyright Advisory Office and / or Instructional Design Team regarding licensing agreements and clearance for use online; and
• Reviews completed course collaboration with the Instructional Design Team following its first offering and identifies changes, making revisions as needed before the next delivery of course.

Appointments Timeline:
The FEAS plans to start course development for the BTech Mining Program by July 16th, 2018 with a scheduled completion date of December 31st, 2018.

Qualifications:
Candidates interested in applying must have, at a minimum, a Bachelor’s degree in a related field. Preference will be given to candidates with industry experience in mine design, with a broad understanding of the application mining engineering theory. Consideration will be given to individuals with an equivalent combination of education and experience. Experience with learning technologies, and/or previous experience developing online learning activities, organizing resources, and designing effective learner assessments are considered to be assets.

Process:
For an application to be considered complete, candidates should submit a cover letter, a statement of technical expertise and/or teaching experience, a complete and current Curriculum Vitae, and any other relevant materials the individual wishes to submit for consideration such as a teaching dossier, etc.
It should be noted that the *Collective Agreement* sets minimum levels of remuneration for Term Adjuncts. However, compensation over and above the minimum may be determined based on market demand and level of relevant experience and expertise.

The University invites applications from all qualified individuals. Queen’s is committed to employment equity and diversity in the workplace and welcomes applications from women, visible minorities, Aboriginal peoples, persons with disabilities, and LGBTQ persons. All candidates are encouraged to apply; however, in accordance with Canadian Immigration requirements, Canadian citizens and Permanent Residents of Canada will be given priority.

To comply with Federal laws, the University is obliged to gather statistical information about how many applicants for each job vacancy are Canadian citizens / permanent residents of Canada. Applicants need not identify their country of origin or citizenship, however, all applications must include one of the following statements: “I am a Canadian citizen / permanent resident of Canada”; OR, “I am not a Canadian citizen / permanent resident of Canada”. Applications that do not include this information will be deemed incomplete.

The University will provide support in its recruitment processes to applicants with disabilities, including accommodation that takes into account an applicant’s accessibility needs. Candidates requiring accommodation during the recruitment process are asked to contact: Wanda Badger, wanda.badger@queensu.ca, Department Manager.

Applications must be submitted electronically (either as PDF or MS-Word files) to: wanda.badger@queensu.ca with the subject line “Term Adjunct Application for the BTech Program Capstone Project Course Development.

The deadline for submissions is July 6, 2018.
APPENDIX 1

MNTC 498 – Capstone Project

Course Summary
This is a summative course where students apply the learnings acquired throughout the program to a capstone design project. Special attention is given to resource estimation, the logistics around metal extraction and processing, and mine planning (which includes drilling and blasting, geomechanics and ground control, equipment selection, and various mechanical and electrical systems). Students will apply the tools and technologies studied throughout the program (including making use of the various software platforms) to the design of an open pit mine. Deliverables will include several interim reports, where students will be assessed on their progress, as well as a final technical report for presentation. Underlying their design project will be an emphasis on safety and effective communication, as well as applying proper project management skills.

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