



(2013)

<p>1.0 Degree Title Please specify the two degrees for concurrent degree programs</p> <input type="text" value="Doctor of Philosophy (Ph.D.)"/>	<p>2.0 Administering Faculty/Unit</p> <input type="text" value="Graduate and Postdoctoral Studies"/>
<p>1.1 Major (Legacy= Subject)(30-char. max.)</p> <input type="text" value="Materials Engineering"/>	<p>Offering Faculty/Department</p> <input type="text" value="Engineering / Mining and Materials Engineering"/>
<p>1.2 Concentration (Legacy = Concentration/Option) If applicable to Majors only (30 char. max.)</p> <input type="text"/>	<p>3.0 Effective Term of Implementation (Ex. Sept. 2004 = 200409) Term</p> <input type="text" value="201801"/>
<p>1.3 Minor (with Concentration, if Applicable) (30 char. max.)</p> <input type="text"/>	

4.0 Rationale and Admission Requirements for New Proposal

The Ph.D. Mining and Materials Engineering is being separated into two distinct programs, the Ph.D. Mining Engineering (program revision for the current Mining and Materials Engineering program submitted concurrently) and the Ph.D. Materials Engineering, for easier administration and to have degree names that are more representative of the disciplines. This program split is part of the recent strategic plan of the Department. Admission requirements for the new program are the same as for the current program.

5.0 Program Information  
Please check appropriate box(es)

<p>5.1 Program Type</p> <p>Bachelor's Program</p> <p>Master's</p> <p>M.Sc. (Applied) Program</p> <p>Dual Degree/Concurrent Program</p> <p>Certificate</p> <p>Diploma</p> <p>Graduate Certificate</p> <p>Graduate Diploma</p> <p><b>Ph.D. Program</b></p> <p>Doctorate Program (Other than Ph.D.)</p> <p>Private Program</p> <p>Off-Campus Program</p> <p>Distance Education Program (By Correspondence)</p> <p>Other (Please specify)</p>	<p>5.2 Category</p> <p>Faculty Program (FP)</p> <p>Major</p> <p>Joint Major</p> <p>Major Concentration (CON)</p> <p>Minor</p> <p>Minor Concentration (CON)</p> <p>Honours (HON)</p> <p>Joint Honours Component (HC)</p> <p>Internship/Co-op</p> <p><b>Thesis (T)</b></p> <p>Non-Thesis (N)</p> <p>Other</p> <p>Please specify</p> <input type="text"/>	<p>5.3 Level</p> <p>Undergraduate</p> <p>Dentistry/Law/Medicine</p> <p>Continuing Studies (Non-Credit)</p> <p>Collegial</p> <p>Masters &amp; Grad Dips &amp; Certs</p> <p><b>Doctorate</b></p> <p>Post-Graduate Medicine/Dentistry</p> <p>Graduate Qualifying</p> <p>Postdoctoral Fellows</p> <p>5.4 FQRSC (Research) Indicator (for GPS) <b>Yes</b> No</p>
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<p>6.0 Total Credits</p> <input type="text" value="0 credits"/>	<p>7.0 Consultation with Related Units</p> <p>Yes <b>No</b></p> <p>Financial Consult Yes <b>No</b></p> <p>Attach list of consultations. Please check boxes</p>
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**8.0 Program Description (Maximum 150 words)**

Please consult the Department for more information about the Ph.D.

**9.0 List of proposed program for the New Program/Major or Minor/Concentration.**

If new concentration (option) of existing Major/Minor (program), please attach a program layout (list of all courses) of existing Major/Minor.

Proposed program (list courses as follows: Subj Code/Crse Num, Title, Credit weight under the headings of: Required Courses, Complementary Courses, Elective Courses)

**Ph.D.; Materials Engineering**

A candidate for this degree must pass a minimum of two courses assigned by the Department. These are selected on the basis of the student's previous academic training and research interests. The candidate must also pass a safety training course in the first year of his/her Ph.D. registration. The candidate is required to participate in an appropriate Research Seminar course and is expected to take a preliminary examination within the first year of his/her Ph.D. registration.

The candidate must submit an acceptable thesis based upon successfully completed research and must satisfy the examiners in an oral examination of the thesis.

**Thesis**

A thesis for the doctoral degree must constitute original scholarship and must be a distinct contribution to knowledge. It must show familiarity with previous work in the field and must demonstrate ability to plan and carry out research, organize results, and defend the approach and conclusions in a scholarly manner. The research presented must meet current standards of the discipline; as well, the thesis must clearly demonstrate how the research advances knowledge in the field. Finally, the thesis must be written in compliance with norms for academic and scholarly expression and for publication in the public domain.

**Required Courses**

MIME 601 Engineering Laboratory Practice (0)  
 MIME 701 Ph.D. Thesis Research Proposal (0)  
 MIME 710 Ph.D. Foundation Course (3)  
 MIME 771 Research Seminar 2 (6)

In addition to the successful completion of the required courses above, students must complete 6 credits of courses at the 500-level or higher, approved by their supervisor.

## **Layout of existing – Doctor of Philosophy (Ph.D.) Mining and Materials Engineering**




### **Program Requirements**

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10.0 Approvals			
Routing Sequence	Name	Signature	Date
Department	Prof. George Demopoulos		March 24, 2017
Curric/Acad Committee	Prof. Laurent Mvdlarski		Mar. 27, 2017
Faculty 1	Prof. Laurent Mvdlarski		Mar. 27, 2017
Faculty 2			
Faculty 3			
CGPS			
SCTP			
APC			
Senate			

Submitted by		To be completed by ARR:
Name	Prof. Richard Chromik	
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Submission Date	March 1, 2017	