CHAIR’S WELCOME

I would like to take this opportunity to welcome you to the Department of Civil Engineering. We are a research intensive department with exciting and innovative research programs in key areas of civil engineering. Thanks to the high calibre of its internationally recognized faculty, its various research facilities and the superior quality of its students, the department has gained national and international recognition as a premier centre of learning, scholarship and innovation in several areas of civil and environmental engineering. To ensure the relevance of their research to real challenges faced by the civil engineering profession and by society at large, our faculty interact and collaborate closely with other universities, private industry and public agencies on issues of major concern and mutual interest. While we are committed to continuing education and training of engineering professionals, the department’s graduate studies are focussed principally on original research and scholarship. Students are guided and mentored by the faculty, but it is a fundamental tenet of our educational philosophy that they learn to think critically and pursue independent research. We adhere to the highest standards of academic integrity and ethical conduct in research and expect all our students to be guided by this ideal.

I am certain that you find your stay with us both academically rewarding and personally satisfying. If you need any assistance with respect to your graduate studies, please do not hesitate to contact your thesis supervisor, the graduate advisor, the graduate administrative assistant, or other faculty and staff in the department. Our friendly and highly skilled staff members are here to help you and to make your educational experience at McMaster enjoyable.

Best wishes for a happy and successful academic year.

Dr. Michael Tait, P.Eng., FCSCE
Professor and Chair
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Department of Civil Engineering Personnel

FACULTY

Dr. Brian W. Baetz
Professor, JHE-118
Design of sustainable communities.

Dr. Tracy Becker
Assistant Professor, JHE – 224
Base Isolation, Passive and Semi-active Structural Control, Performance-Based
Earthquake Engineering, Design Codes

Dr. Samir E. Chidiac
Professor Chair in Effective Design of Structures,
JHE-A414
Durability of structures; finite element analysis of heat, air, moisture and salt in porous
media; material science; service life modelling of concrete structure seismic evaluation
and upgrading of historic stone masonry.

Cameron Churchill
Assistant Professor and Director, Engineering and Society
JHE-233/A
Design of sustainable communities

Dr. Paulin Coulibaly
Professor, BSB-336
Water resources engineering; environmental data analysis and modelling; climate
trends/variability and water resources planning and management.

Dr. Sarah Dickson
Associate Professor, JHE-225,
Contaminant hydrogeology; transport, fate, and remediation of non-aqueous phase liquid
(NAPL) contaminants in groundwater.

Dr. Wael W. El-Dakhakhni
Professor, JHE-338
Martini, Mascarin and George Chair in Masonry Design
Behaviour of Masonry and Concrete Structures, Fibre Reinforced Polymers applications in
Civil Engineering, Seismic Rehabilitation and Retrofit, Structural Health Monitoring of
and Damage Detection in Composite Structures.

Dr. Peijun Guo
Professor, JHE-227
Geomechanics, geotechnical engineering and finite element applications.

Dr. Yiping Guo
Professor, JHE-226
Engineering hydrology and hydraulics, simulation and modelling of water resources
systems, uncertainty analysis and assessment.

Dr. Younggy Kim
Assistant Professor, JHE-334
Water/wastewater treatment processes, ion-exchange membrane systems,
and microbial fuel cells

Dr. Dimitrios Konstantinidis
Assistant Professor, JHE-336
Base Isolation and Structural Control; Seismic Performance of Nonstructural
Components, Equipment and Contents; Performance-Based Earthquake Engineering;
Structural Health Monitoring; Rocking Structures; Seismic Stability of Historical
Buildings and Monuments

Dr. Zoe (Zhong) Li
Assistant Professor, JHE-335
Reliability, vulnerability and risk of environmental infrastructure; hydrological risk
modeling and probabilistic forecasting; climate change impact assessment; environmental systems optimization.

Dr. Stan Pietruszczak  
Professor, JHE-228  
pietrusz@mcmaster.ca  
Structural and geotechnical materials – constitutive relations and finite element applications; biomechanics

Dr. A. Ghani Razaqpur  
Professor, JHE-230  
razaqpu@mcmaster.ca  
Reinforced and prestressed concrete, fibre reinforced polymer (FRP) applications in structures, advanced numerical modelling of structures, durability of concrete and reinforcement corrosion, design of structures against blast loads, bridge engineering.

Dr. Saiedeh Razavi  
Associate Professor, JHE-337  
razavi@mcmaster.ca  
Chair in Heavy Construction  
Sensing, automation and information technology for construction, infrastructure management, transportation

Dr. K. S. (Siva) Sivakumaran  
Professor, JHE-229  
siva@mcmaster.ca  
Advanced composite material structures, cold-formed steel structures, structural dynamics, finite element analysis.

Dr. Dieter F. E. Stolle  
Professor, JHE-303  
stolle@mcmaster.ca  
Applied mechanics; geotechnical engineering and finite element applications

Dr. Michael Tait  
Professor, JHE-301  
taitm@mcmaster.ca  
Joe Ng-JNE Consulting Chair in Design, Construction and Management of Infrastructure Renewal  
Structural dynamics, structural monitoring and control, retrofit/rehabilitation of structures

Dr. Lydell Wiebe  
Assistant Professor, JHE-333  
wiebel@mcmaster.ca  
Earthquake Engineering, structural dynamics, nonlinear dynamic modelling techniques, steel structures, self-centering systems

PROFESSORS EMERITUS

Dr. Robert G. Drysdale  
Professor Emeritus, JHE-119  
drysdale@mcmaster.ca  
Reinforced and prestressed concrete; building science; properties of masonry; design of masonry structures.

Dr. Ahmed Ghobarah  
Professor Emeritus, JHE-119  
ghobara@mcmaster.ca  
Dynamic analysis of structures and earthquake engineering. Rehabilitation of structures and seismic upgrade of existing structures using advanced composites.

Dr. F. L. Hall  
Professor Emeritus

Dr. Arthur C. Heidebrecht  
Professor Emeritus  
heidebr@mcmaster.ca  
Earthquake engineering and structural dynamics; seismic analysis of buildings and nuclear power plant structures; seismic qualification of equipment in nuclear power plants.

Dr. Robert M. Korol  
Professor Emeritus, JHE-116  
korol@mcmaster.ca  
Plastic theory of metal structures; inelastic buckling; limit analysis; environmental assessment and life cycle analysis methodologies.
Dr. Alan A. Smith  
Professor Emeritus  
Water Resources  
alan@alanasmith.com

Dr. Ioannis K. Tsanis  
Professor Emeritus, JHE-143  
Hydraulics, air-water interaction, lake hydrodynamics, diffusion and dispersion of pollutants.  
tsanis@mcmaster.ca

Dr. W. K. Tso  
Professor Emeritus, JHE-117  
Dynamic stability of structures; earthquake engineering; high-rise building design and analysis.  
tstownc@mcmaster.ca

Dr. John C. Wilson  
Professor Emeritus, JHE-119  
Structural dynamics and earthquake engineering, bridge engineering  
jcwilson@mcmaster.ca

TECHNICIANS

Paul Heerema  
Technician, ADL-105, Ext. 22031  
heeremp@mcmaster.ca

Peter Koudys  
Technician, JHE-113, Ext. 24839  
pkoudys@mcmaster.ca

Monica Han  
Technician, JHE-223/A, Ext. 27074  
hanm7@mcmaster.ca

Kent Wheeler  
ADL Supervisor and Innovative Experiential Learning Coordinator, ADL-105, Ext. 22031  
wheelek@mcmaster.ca

ADMINISTRATIVE STAFF

Joanne Gadawski  
Administrator, JHE–301/A, Ext. 24746  
gadawsj@mcmaster.ca

Sarah Sullivan  
Administrative Assistant - Graduate, JHE-301, Ext. 24287  
sullivsb@mcmaster.ca

Tonya Antonecchia  
Administrative Assistant - Undergraduate, JHE-301, Ext. 24315  
tantonec@mcmaster.ca

ADJUNCT PROFESSORS

Dr. Z. Adeel  
Professor (Adjunct)  
(United Nations University – International Network on Water, Environmental and Health (UNU – INWEH)  
adeelz@inweh.unu.edu

Dr. Mark Bomberg  
Professor (Adjunct)

Dr. J. J. Emery  
Professor (Adjunct), Shiloh Canconstruct Ltd  
shilohcanconstruct@gmail.com

Dr. Jon K. Galsworthy  
Associate Professor (Adjunct)  
Jon.Galsworthy@rwdi.com

Dr. Brian Karney  
Professor (Adjunct), University of Toronto  
karney@ecf.utoronto.ca

Dr. Waleed Mekky  
Assistant Professor (Adjunct)  
Waleed.mekky@amec.com

Dr. Syed Moin  
Assistant Professor (Adjunct), (Manager, Geomatics & Systems, Inland Waters Directorate, Environment Canada)

Dr. Laila Raki  
Professor (Adjunct), Institute for Research in Construction, NRC

Dr. Spencer Snowling  
Professor (Adjunct), Hydromantis, INC

INDUSTRY PROFESSOR

Dr. Mohammed Attalla  
Professor (Adjunct), McMaster University  
attalla@mcmaster.ca
<table>
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<tr>
<th><strong>Other Websites of Interest</strong></th>
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<tr>
<td>Civil Eng. Undergraduate Course Schedule</td>
<td>Available within the Mosaic “Class Search” function.</td>
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<tr>
<td>Civil Eng. Graduate Course Schedule</td>
<td><a href="http://www.eng.mcmaster.ca/civil/GradCourseOfferings.pdf">http://www.eng.mcmaster.ca/civil/GradCourseOfferings.pdf</a></td>
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<tr>
<td>Human Rights and Equity Services</td>
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<td>International Student Services</td>
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| Parking and Transit Services | Parking: [http://parking.mcmaster.ca/](http://parking.mcmaster.ca/)  
Office of Sustainability – Alternative Transportation: [http://www.mcmaster.ca/sustainability/alternative_transportation.html](http://www.mcmaster.ca/sustainability/alternative_transportation.html) |
| Setting up your McMaster Email Address | [http://www.mcmaster.ca/uts/students/gettingstarted/activateMACID.html](http://www.mcmaster.ca/uts/students/gettingstarted/activateMACID.html) |
| Student Wellness Centre | [http://wellness.mcmaster.ca/](http://wellness.mcmaster.ca/) |
| SWHAT (Students Walk Home Attended Team) | [http://www.msumcmaster.ca/swhat.htm](http://www.msumcmaster.ca/swhat.htm) |
Graduate Course Requirements

Graduate Career Planning: As of September 1, 2015 all new graduate students in Masters or Doctoral programs within the Department of Civil Engineering and the Faculty of Engineering, are required to complete a career planning exercise within their first academic year (September to August). Students must produce a report before the end of their first year. The report should be no more than two pages and must be submitted to the department's graduate advisor before the end of August in their first year. For students who start their programs in May or January their career plan must be submitted by the end of their first 12 months in the program. In preparation for writing this career planning exercise, students will be contacted by the Engineering Career Services Dept. for career counseling sessions.

M.A.Sc. Degree: Candidates will be required to complete satisfactorily the equivalent of at least two full courses, of which at least one must be from within the Department of Civil Engineering at McMaster University. Please note that the additional course work may be prescribed if deemed necessary by the candidate’s research supervisor. In addition to the above course requirements, all full-time Master’s candidates must attend and participate in the Department of Civil Engineering Graduate Student Seminar Day for the first 6 terms (24 month) of study. A dissertation must be presented which will embody the results of an original investigation; the dissertation is to be defended in an oral examination. This program is intended mainly for full-time candidates but may be taken on a part-time basis.

M. Eng. Degree: Candidates will be required to complete satisfactorily the equivalent of at least three full courses, of which at least 1.5 must be from within the Department of Civil Engineering at McMaster University. Additional course work may be prescribed if deemed necessary by the candidate’s project supervisor. In addition to the above course requirements, all full-time Master’s candidates must attend and participate in the Department of Civil Engineering Graduate Student Seminar Day for the first 6 terms (24 month) of study. A report must be presented on a project which demonstrates ability to carry out independent study and reach a satisfactory conclusion. The report must be approved by the department and presented orally to the department. This program is primarily intended for part-time M. Eng. Candidates, but may be taken by full-time students.

Ph.D. Degree: Candidates will be required to complete satisfactorily the equivalent of at least two full courses in addition to the course requirements for an M.A.Sc. degree, of which at least one must be from within the Department of Civil Engineering at McMaster University. Additional course work may be prescribed if deemed necessary by the candidate’s research supervisor. In addition to the above course requirements, all full-time Ph.D. candidates must attend and participate in the Department of Civil Engineering Graduate Student Seminar Day for the first 12 terms (48 month) of study. The Ph.D. candidate will be evaluated by the Ph.D. Supervisory Committee after two academic terms in the Ph.D. Program. This will be based on an evaluation of the candidate's ability to think, intellectual background, and general calibre as a doctoral student. The candidate must also pass a Comprehensive Examination which has 2 parts. Part 1 is normally taken within the first year and Part 2 is normally taken in the second year of the doctoral program. The purpose of this examination is to test the candidate's acquisition of knowledge and maturity of approach to problems in the major field of study, as well as in appropriately chosen cognate subject areas. The detailed regulations governing these
examinations may be obtained from the Department. Part-time doctoral studies are permissible. Graduate students will also be required to present seminars related to their research topics.
Courses
All required courses must be consistent with the content within the areas of research outlined by the department in the School of Graduate Studies Calendar. Courses outside the seven academic departments of Engineering are generally not eligible for use towards graduate degree requirements. There are some courses within Science or Health Science that may be acceptable, but only with the approval of the department and supervisory committee. Courses in SEP are not acceptable towards a degree requirement. Professional skills and other complementary type courses like EDU 750 (Principles and Practices of University Teaching) will not be counted as required courses by SGS at the time of degree completion.

If your supervisor requires you to take a course outside of the established list, which may have a technical merit to your area of research discipline, approval must be granted by the department. Please see Sarah Sullivan, Administrative Assistant – Graduate Program for details on how to request approval.

The Department offers quarter courses (6 weeks), identified by a pound (#) sign, and half courses (12 weeks), identified by an asterisk (*), at the 700-level. The quarter courses are designed to permit students to acquire a greater breadth of advanced level knowledge than would be possible where selections are limited to full or half courses. In addition, specialized advanced level material is made available to permit in-depth studies of particular subject areas. Students are also encouraged to include minor areas of study in addition to their major area.

600-level half courses are offered for graduate credit, and are also available to senior undergraduate students. In accordance with the School of Graduate Studies regulations, M. Eng. students will not normally be permitted to take more than one full 600-level course, and M.A.Sc. and Ph.D. students will not normally be permitted to take more than a half course at the 600 level.

Course Registration
Each term there is a deadline for registration and change in course registration (drop/add). Students adding a course after the appropriate deadline will not receive academic credit for that course. Also, students dropping a course after the deadline will receive a failing grade in that course. The extra course designation should only be used when you clearly intend for the course in question not to count for graduate degree credit. Students wishing to drop/add extra courses must do so in accordance with the School of Graduate Studies deadlines.

Deadlines for such drop/adds are detailed on School of Graduate Studies website at http://graduate.mcmaster.ca/current-students/graduate-calendar.html. Students are to register for their courses through MOSAIC. All students must meet with their supervisors, and complete and submit a Department of Civil Engineering Graduate Course Registration Worksheet before registering for courses online. This worksheet does not register your for your courses; it simply assures the department that you have met with your supervisor to plan your course of study. Any student who needs to make...
changes to his/her course selections after these deadlines will need to obtain a “Petition for Special Consideration to the Committee on Graduate Admissions and Study” from the Graduate Administrative Assistant.

**Note:** Any change in a student's program requires the approval of the student's Supervisor, Chair, or the Graduate Student Advisor.

Please go to Enrolment Notes: An Overview for Grad Students on the School of Graduate Studies website for instructions on how to register for a course.
The following information is offered to assist incoming graduate students in establishing their programmes of study and research.

**Programme Counselling:** The Graduate Student Advisor is Dr. Dieter Stolle, located in JHE 303. Dr. Stolle will advise students on the design of programmes of study and will be available to answer questions concerning general graduate student issues. The Graduate Administrative Assistant, Sarah Sullivan, will be available in JHE 301 to assist with registration and general orientation.

During the period from September 3 to 11, 2016 students should discuss course content and research interests with appropriate faculty members so that study programmes can be developed which best suit the student's particular area of interest. All course descriptions are available in the Graduate Calendar, and a list of those offered by the department this year can be found on our website at [http://www.eng.mcmaster.ca/civil/currentstudents.htm](http://www.eng.mcmaster.ca/civil/currentstudents.htm)

**Courses:** Graduate courses will commence in the week beginning September 5, 2016. ALL students should register in their chosen courses, and indicate if they are working on their research, thesis/project for Terms I and II via MOSIAC by September 30, 2016. You **must** meet with your supervisor to discuss which courses you should register for and complete the Department of Civil Engineering Course Selection Worksheet **PRIOR TO** registering on MOSAIC. Completed worksheets are to be returned to Sarah Sullivan, Graduate Administrative Assistant by no later than September 26, 2016. Please note, for record keeping purposes, all of your courses for the entire year must be entered.

Students should note that certain courses available for graduate credit are offered concurrently with undergraduate courses. These are designated as 600-level in the Graduate Calendar and 400-level courses in the Undergraduate Calendar. Since all undergraduate classes commence on **September 6th**, graduate students contemplating registration in such a course(s) should try to attend the first lectures in that week. Timetable and room schedule details are available from the Departmental office. Similarly, it should be noted that students taking graduate classes outside of the department (e.g. in Chemical Engineering) should ensure that their enrolment intentions are made known to the appropriate department. The most effective liaison is by personal contact with the course instructor.
ADMINISTRATIVE INFORMATION

Payment of Scholarships and Teaching Assistantships:

Employment income from TA assignments will be paid bi-weekly by direct deposit to the employee, based on when the student is scheduled to work. TA payments are normally in term 1 (September to December, 2016) and/or term 2 (January – April, 2017). For more information about when you are scheduled to work, please refer to your employment contract.

Research scholarships paid by Supervisors from a research grant will be paid via lump sum directly to the student via direct deposit, unless otherwise specified by your supervisor.

All other scholarships will be disbursed to the student in lump sum instalments via direct deposit at the beginning of each term.

For more specific information about student accounts, timing of payments and payment schedule for the 2016/17 academic year, please refer to the following links:

http://graduate.mcmaster.ca/images/Payment_Information_2015_-_2016.pdf


http://graduate.mcmaster.ca/images/Payment_schedule2.pdf

Should you have questions concerning your monthly payment, please contact our Administrator, Joanne Gadawaski, at ext. 24746 (E-mail: gadawsj@mcmaster.ca).

It is important for you to recognize that the Departmental Scholarship support does not extend beyond the first 20 months of a Master's programme. Only under very special circumstances are exceptions made to this policy. For the Ph.D. programme the funding period is 48 months.

Attendance of Full-time Graduate Students: As indicated in the School of Graduate Studies 2016-2017 Calendar, Section 2.5.6. Vacations: “Full-time graduate students are expected to be on campus for all three terms of the university year, as specified in Section 1.3. In addition to statutory holidays (see Sessional Dates) and the weeklong closing of the University from late December until early January, normal vacation entitlement is two weeks of vacation during the year, to be scheduled by mutual agreement with the research supervisor and the employment supervisor. An exception to this allotment requires approval from the supervisor or in their absence a member of the supervisory committee.”

Section 1.3 Responsibilities of Graduate Students to the University - School of Graduate Studies 2016-2017 Calendar: “Full-time students are obliged to be on campus, except for vacation periods or authorized off-campus status, for all three terms of the university year. Vacation entitlement is discussed in Section 2.5.6. Any absence of one week or longer from campus, which is not part of the student’s vacation entitlement requires the supervisor’s approval in writing. If the absence exceeds two weeks, the approval of the department chair is also required. In accordance with government
regulations (see Section 2.5.2) students who will be absent from campus for more than four weeks in any one term require not only permission from the Department but also that of the appropriate Associate Dean of Graduate Studies and must submit a petition for special consideration. Note that this permission is needed even for field work or study elsewhere in the world, in order to allow the University to comply with the regulation requiring that a written explanation for such absences be lodged in the Graduate School office. Students may arrange, through the Department and the Associate Dean of Graduate Studies, to be “full-time off-campus” for periods of up to a year. In cases of unauthorized absence the student will be deemed to have withdrawn voluntarily from graduate study and will have to petition for readmission. No guarantee of readmission or of renewal of financial arrangements can be made.”

**W.H.M.I.S. - Workplace Hazardous Materials Information System:** Provincial legislation requires that all people employed in a workplace where hazardous materials are used attend the W.H.M.I.S. training session. The training is **mandatory**, not optional, for all graduate students in our Department. If you have already had this training, please provide proof to Sarah Sullivan. The Environmental and Occupational Health Support Services office conducts training sessions in WHMIS on a regular basis; you will be contacted as soon as dates for these sessions have been established. These dates are posted on the EOHSS department website at [http://www.workingatmcmaster.ca/ehss/training/](http://www.workingatmcmaster.ca/ehss/training/).

**Degree Examination Regulations:** The M.A.Sc., M.Eng. and Ph.D. examination regulations are attached (Appendices A and B). Read these carefully to avoid problems, which can arise from lack of knowledge of these requirements.

**Ph.D. Defences & Submission of Ph.D. and M.A.Sc. Theses:** Information on how to write, defend and submit your Doctoral and Master’s theses can found at [http://graduate.mcmaster.ca/current-students/completing-your-degree](http://graduate.mcmaster.ca/current-students/completing-your-degree). If you have any questions regarding your Ph.D. defence or the submission of your e-thesis, you should contact the Thesis Coordinator at the School of Graduate Studies. The Coordinator’s email address is [gthesis@mcmaster.ca](mailto:gthesis@mcmaster.ca).


**Submission of M.Eng. Projects:** Once you have successfully presented your M.Eng. project and all corrections have made, required by your presentation committee, you must submit an electronic copy of your project to our department. This electronic copy must be in a PDF format. Submissions are to be emailed to our Graduate Secretary. Once this document is received, the appropriate paperwork indicating that you have successfully completed the degree requirements will be submitted to the School of Graduate Studies.

**Academic Dishonesty and Plagiarism:** Plagiarism and other forms of academic dishonesty are considered serious offences at McMaster, the commitment of which could result in imposition of severe penalties on the offender, including expulsion from the program. Therefore, it is essential that all students familiarize themselves with the University policies on this issue. We draw your attention to Appendix C, which further clarifies this matter.
DEPARTMENTAL ADMINISTRATIVE INFORMATION

**Departmental Photocopying:** The department has a photocopier in Room 302. To use this copier, you must first obtain a copying account code. Personal copying can be done on this machine at a rate of approximately $0.06 per page; a code can be obtained from the department office and copying is billed at the end of the semester. For further information regarding photocopying accounts, please contact Sarah Sullivan, Graduate Administrative Assistant.

**Computer Facilities:** Graduate students who need to use computers for their research will be provided access to a computer by their research supervisors. For larger scale computation, access can be gained to the SHARCNET supercomputer facilities at McMaster. All graduate students’ rooms are equipped with high-speed internet connections.

**Your McMaster Email Address:** As soon as you are issued your McMaster email address, please notify Sarah Sullivan. *All* email communication to students is done through your McMaster email account. *We do not* send emails to YAHOO, Hotmail or Gmail accounts.

**Convocating Students:** When you have completed all of the requirements for your degree and you are about to submit the final electronic copy of your thesis, revised as directed by your defence examining committee to the School of Graduate Studies, please see Sarah Sullivan to obtain our Departmental Exit Sign-Off sheet. Additionally, we will be happy to forward your mail via Canada Post for up to three months after you have left if you provide us with your forwarding address.
APPENDIX A

M.A.Sc. and M.Eng. Examination

Regulations

(A) M.A.Sc. RESEARCH THESIS

(B) M.Eng. PROJECT REPORT
A. RESEARCH THESIS

All M.A.Sc. (thesis) candidates are required to present a thesis, which embodies the results of an original research investigation. The following regulations apply to theses submitted in partial fulfillment of the M.A.Sc. degree requirements.

1. Examination Committee

Each M.A.Sc. candidate must successfully defend her/his thesis in an open oral examination before a committee appointed by the Department Chair. The committee shall be composed of at least three voting members (at least two from the Department), including the candidate's supervisor, and chaired by a non-voting member.

Proposed examination committee voting membership will be made known to each candidate, who has the right to express her/his own opinion concerning this membership to the Graduate Student Advisor. It is the responsibility of the supervisor to inform the candidate of the proposed voting membership of the examination committee.

2. Thesis Examination

It will be the responsibility of the candidate to submit the thesis to members of the examination committee a minimum of two (2) weeks prior to the tentative date of the oral defence.

In the event that a voting member indicates that gross deficiencies exist in the thesis, the examination committee chair will convene a meeting of the voting members to discuss the thesis at least two (2) days before the anticipated date of defence. The purpose of that meeting will be to recommend one of the following courses of action, based on a majority vote:

(a) that the thesis is not acceptable for defence in its present form, and return it to the candidate with explicit comments as to why it is not acceptable;

(b) that specific modifications in the thesis are required prior to formal defence, and direct the candidate to effect those changes; or

(c) that the thesis be formally defended with/without minor modifications.
3. **Seminar**

Each M.A.Sc. candidate must present a seminar on the completed research work. For M.A.Sc. thesis candidates, this seminar will normally be held on the day of the oral examination. Attendance at that seminar is open to all interested persons.

4. **Oral Defence**

The examining committee chair will convene an oral defence only after receiving from voting members written confirmation that the thesis is acceptable for defence. Formal presentation of the thesis work will normally not be required during an oral examination. **The examination will be open to all interested persons.**

5. **Examination Outcome**

A successful defence will include acceptance, by a majority of voting members, of the written thesis and of the oral defence. The outcome of the oral defence will be limited to one of the following, based on majority vote:

   (a) the oral defence and thesis are satisfactory; the candidate is passed;

   (b) either the thesis or the oral defence is unsatisfactory and the candidate is given an opportunity to be re-examined only once; or

   (c) the thesis and/or the oral defence is unsatisfactory; the candidate is failed.

(Rev. 07.08.29)
MASTER OF ENGINEERING PROJECT REPORT GUIDELINES

All Master of Engineering (project) candidates are required to submit a project report. The report will be subject to examination by the department, and will embody the results of an approved study, which is intended to test the candidate's ability to carry out independent work and reach a satisfactory conclusion.

A project report normally constitutes a level of effort equivalent to three (3) one-term graduate courses or approximately equivalent to three (3) months' full-time effort.

The project topic will be approved by the candidate's supervisor and need not be original research. Project studies could incorporate the synthesis and application of existing information, involve pre-determined use of specified analytic techniques, or encompass a well-defined study approach. Consequently, the scope and/or depth of study would normally be significantly less than that required for thesis research. An annotated bibliography or other form of literature search would not be deemed satisfactory.

All project reports submitted for examination will be subject to the same standards as theses. The format and style will comply with the School of Graduate Studies guidelines for thesis preparation.

A list of some recent project reports, and the regulations governing the examination of Master of Engineering project reports are available from the department. Should the candidate desire clarification of any matter related to the project report, the Graduate Student Advisor should be contacted.

B. PROJECT REPORT

Project reports submitted in partial fulfillment of the Master of Engineering degree requirements will be examined in the following manner:

1. Examination Committee

   The project report will be examined by at least two faculty members of the Department, appointed by the Department Chair, including the candidate's supervisor. A third examining member will only be appointed when required to cast a determining vote for an examination outcome in 4 below.
2. **Project Report Examination**

The examination will consist of a detailed review of the project report by the examination committee. The examination committee may require an oral defence.

3. **Seminar**

Each M.Eng. candidate must present a seminar on their project topic. Attendance at that seminar is open to all interested persons.

4. **Examination Outcome**

A successful examination will include acceptance, by a majority of voting members, of the written project report. The outcome of the examination will be limited to one of the following:

   (a) the project is satisfactory; the candidate passes;
   
   (b) the project report is unsatisfactory and the candidate is given an opportunity to have the report re-examined only once; or
   
   (c) the project report is unsatisfactory; the candidate is failed.

(Rev. 07.08.29)
APPENDIX B

Ph.D. REGULATIONS

(see also current Graduate Studies Calendar)

(i) Ph.D. SUPERVISION AND RESPONSIBILITIES OF Ph.D. SUPERVISORY COMMITTEE

(ii) COMPREHENSIVE EXAMINATION REGULATIONS
Ph.D. SUPERVISION AND RESPONSIBILITIES OF Ph.D. SUPERVISORY COMMITTEE

Most of the procedures and regulations regarding supervision are described in the School of Graduate Studies Calendar. Please refer to Sections 2.7 Supervision (General), and Section 4.5 Supervision for PhD of the calendar.

In addition to the guidelines in the School of Graduate Studies Calendar, the department also requires an early assessment by the Ph.D. supervisory committee of a Ph.D. student in an explicit manner. The format of this assessment is exhibited in the attached assessment form and must be prepared within the first year of a student's program.

It is important not to confuse the early assessment by the Ph.D. supervisory committee with a formal examination. The members of a Ph.D. supervisory committee can ask relevant questions in the main area of a Ph.D. candidate's research as well as cognate subject areas and yet fully recognize that the candidate may not have acquired any level of maturity in the major area at this early stage. A Ph.D. supervisory committee may meet more than once to arrive at the required assessment.

A copy of the Ph.D. supervisory committee report form is also attached to the end of this appendix.

Please read the School of Graduate Studies Calendar for other relevant information and more specific information on Graduate Degrees offered in the Department of Civil Engineering. Further information can be obtained from the Graduate Student Advisor or Chair of the Department.

(Rev. 2015/09/01)
DEPARTMENT OF CIVIL ENGINEERING
Ph.D. Supervisory Committee Assessment of Ph.D. Student

Name of Ph.D. Student:
Area of Research:
Date of Enrollment in Ph.D. Programme:
Date of Assessment Submission:
Number of Ph.D. Supervisory Committee Meetings held to date:
Membership of Ph.D. Supervisory Committee:

<table>
<thead>
<tr>
<th>Ranking of Ph.D. Student</th>
<th>Satisfactory</th>
<th>Unacceptable</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intellectual background</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Initiative</td>
<td></td>
<td></td>
</tr>
<tr>
<td>General calibre as a doctoral student</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Academic performance</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Any Weaknesses observed! Please identify:

DECISION:

Should the student be allowed to continue in the Ph.D. program? Yes_____ No_____

ASSESSMENT:

__________________________

Signatures of the Ph.D. Supervisory Committee:

__________________________

__________________________

Student’s Signature

23
PhD SUPERVISORY COMMITTEE MEETING REPORT

to the School of Graduate Studies

Student ID#   0000000 First Name       Family Name

Program

Date student began PhD studies at McMaster: 

Date of last Supervisory Meeting: 

Date of This Meeting: 

This report must be returned to the School of Graduate Studies, at least once a year, for every Ph.D. student.

Please indicate if student is scholarship holder of  OGS  SSHRC  NSERC  Other (specify) 

The School of Graduate Studies Calendar states that the Comprehensive Examination for full-time students will normally have taken place between 12 and 20 months from commencement of PhD studies with an upper limit of 24 months.

Please complete Part A if comprehensive is complete since last committee meeting or Part B if comprehensive is still to be completed.

<table>
<thead>
<tr>
<th>Part</th>
<th>Comprehensive Examination requirement was completed on</th>
<th>Date:</th>
<th>Grade:</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td></td>
<td></td>
<td>(P+,P, or F)</td>
</tr>
</tbody>
</table>

Part B: The Comprehensive Examination is expected to be completed by 

<table>
<thead>
<tr>
<th>Date:</th>
</tr>
</thead>
</table>

Please justify an expected date of completion that exceeds 20 months in the program in the comments section.

With some qualifications, the Calendar (Section 2.7.2) states that supervisors should respond to a draft of the PhD thesis within two months. Providing comments on individual chapters will take place proportionately less time. Please answer the following only if draft research was submitted by the student during the year.

<table>
<thead>
<tr>
<th>Entire thesis draft</th>
<th>Response time</th>
</tr>
</thead>
<tbody>
<tr>
<td>Portions of thesis</td>
<td>Response time</td>
</tr>
<tr>
<td>Other Research Material</td>
<td>Response time</td>
</tr>
</tbody>
</table>

Does the committee think that this is satisfactory in light of the Calendar standard and the norms within the discipline?

Yes  No

Supervisor’s report

Part A: Progress

Progress made in accomplishing goals set out in last report (or toward meeting degree requirements since beginning the program if this is the first report):

(i.e., courses completed, comprehensive examination preparation/writing/oral defense, thesis proposal, research, chapters written/revised, conference presentations, publications).
### Part B Goals
Specific goals for the next interval of ____ months (attach an additional page if necessary):

<table>
<thead>
<tr>
<th>Anticipated date for the completion of degree requirements:</th>
<th>Date:</th>
</tr>
</thead>
</table>

### Part C Comments:

### Committee’s Report
Evaluation of overall progress since last report:

<table>
<thead>
<tr>
<th></th>
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<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Print Name</td>
<td>Email address (McMaster if available)</td>
<td>Rating</td>
<td>Signature</td>
<td></td>
</tr>
<tr>
<td>Supervisor</td>
<td>__________________________</td>
<td>__________________________</td>
<td>___</td>
<td>__________________________</td>
</tr>
<tr>
<td>2nd Member</td>
<td>__________________________</td>
<td>__________________________</td>
<td>___</td>
<td>__________________________</td>
</tr>
<tr>
<td>3rd Member</td>
<td>__________________________</td>
<td>__________________________</td>
<td>___</td>
<td>__________________________</td>
</tr>
<tr>
<td>4th Member</td>
<td>__________________________</td>
<td>__________________________</td>
<td>___</td>
<td>__________________________</td>
</tr>
</tbody>
</table>

*Where progress is deemed marginal or unsatisfactory, attach a detailed explanation of what must be accomplished over the next 6 months in order to remedy the situation.

This completed report has been seen by me.

Student's Signature: __________________________ Date: __________

Department Chair’s Signature: __________________________ Date: __________

The student may append additional comments. A student who thinks that s/he is receiving unsatisfactory supervision is urged to follow the recommended grievance procedure for the Department or Program and/or to contact the Department Graduate Advisor, Department/Program Chair, or the Associate Dean of Graduate Studies.

The student’s single page report on his/her progress **must** be appended to this page.
Student ID#  First Name  Family Name

TO BE COMPLETED BY THE STUDENT and SUBMITTED FOR THE COMMITTEE MEETING

Details of progress made since the last report (or toward meeting degree requirements since beginning the program if this is the first report), i.e., courses completed, comprehensive examination preparation/writing/oral defense, thesis proposal, research, chapters written/revised, conference presentations, publications:

Student signature:  
Date:  

Supervisory Committee Members: Initial below to affirm that you have read the student’s report on this page.

Supervisor:  Committee Member:  Committee Member:  Committee Member:  Committee Member:

Revised March 2007
Ph.D. COMPREHENSIVE EXAMINATION REGULATIONS

1. Purpose

The purpose of this examination is to test the candidate's acquisition of knowledge and maturity of approach to problems in the major field of study, as well as in appropriately chosen cognate subject areas. It is intended that this examination will also be used to test the candidate's competence and ability to conduct research in the chosen speciality.

2. Membership of the Ph.D. Examination Committee

The Ph.D. Examination Committee shall consist of a non-voting Committee Chair, and three voting members as follows: the supervisor, one representative from the candidate’s supervisory committee (this representation will be decided by the members of the supervisory committee), and one departmental representative who is not part of the candidate’s Supervisory Committee. The same committee shall apply to both Part A and Part B.

In case of a re-examination the provision of 6(c) shall also apply.

3. Chair of the Ph.D. Examination Committee

The position of the Examination Committee Chair shall be taken by rotation of the departmental faculty. The candidate’s supervisor(s), the Graduate Student Advisor or the Department Chair shall in no instance be the Ph.D. Examination Committee Chair.

The comprehensive exam will consist of two parts.

- **Part A: Breadth and Depth of Knowledge**

  **Objective:** The objective of Part A is to test the candidate’s knowledge, both breadth and depth, of undergraduate material in the major field of study, with graduate level understanding and the ability to think independently.

  **Time:** Students shall take Part A within **12 months** of admission to the doctoral program. There shall be two sittings of Part A each year, in mid-April and early December. Students who begin in September shall write in April of the following calendar year, while students who begin in January or May shall write in December of the same calendar year.
Written part: This is an open-book/closed-door examination, with three questions in three selected subject areas for 4 hours. For each question, the candidate must demonstrate a graduate-level understanding of undergraduate material. The three subject areas shall be selected by the Examination Committee. These areas may be selected from the current list of courses available to undergraduate Civil Engineering students at McMaster, with the content of each area defined according to the most recent Course Outline on file with the Department. Alternatively, one or more subject areas may be defined by providing alternative Course Outlines or a list of suitable references, with the approval of the Examination Committee. The candidate shall be informed of the three subject areas at least two months prior to the exam. Without restricting the reference materials that candidates may choose to bring the examination, candidates shall be notified at least two months before the examination of any references that they are required to bring. The use of computers or communicating electronic devices during the examination is strictly prohibited, unless the Examination Committee agrees otherwise and notifies the student at least two months prior to the examination.

Oral part: The oral exam shall be conducted within one week following the written part. The candidate should provide a brief presentation (maximum of 15 minutes) of the answers to the three written questions, and then answer questions from the Committee members. To facilitate this, students shall be given a copy of the questions and the answers they provided.

The oral examination will mostly be based on the questions from the written part of the examination. Each examiner is to focus on the question that they have formulated themselves. Committee members can also ask questions for problems that were set by other members of the examination committee. However, the scope of the oral part may extend to examining the depth of knowledge in the candidate’s discipline area and possible deficiencies in the candidate’s academic background.

This part of the examination shall be conducted in two rounds consisting of 10-15 minutes of questions from each of the three Examination Committee members. The oral exam shall not exceed two hours in duration.

• Part B: Research Proposal and Oral Exam

Objective: The objective of Part B is to test the candidate’s competence and ability to conduct research in the chosen specialty.

Time: Within 6 months of passing Part A. and within 20 months of admission to the doctoral program, whichever is earlier.

Written part: The candidate shall submit a research proposal approved by the supervisory committee or the supervisor on behalf of the supervisory committee, up to a maximum of 25 pages in length. This page length does not include the cover page or references.
Oral part: The candidate will be required to present the research proposal in a summary fashion (approximately 20 minutes) to the committee, followed by questions directly related to the proposal and the candidate’s specific area of research. The oral part is an open examination and shall not exceed two hours in duration.

6. Outcome of the Examination

There shall only be three possible outcomes of the first Ph.D. Comprehensive Examination. The committee shall render one of the following decisions:

a. When there are two or more passing votes then the Committee rules that the candidate passed the examination. The Committee assesses the performance with a designation of ‘Pass’.

b. When there are two or more passing votes, then the committee rules that the candidate passed the examination, but may add conditions to this pass to correct any weaknesses detected (e.g., take a specific course).

c. When there are two or more “Unsatisfactory” votes there shall be a re-examination. For Part A, the re-examination shall be at the next sitting of the Part A Examinations. For Part B, the re-examination shall be within 3 months of the original examination and within 20 months of admission to the doctoral program, whichever is earlier. In the event of a re-examination, one new member shall be added to the original examination committee and three or more passing votes are required for the candidate to pass the examination. The Part A re-examination shall contain only three questions.

There shall only be three possible outcomes of a re-examination. The committee shall render one of the following decisions:

d. When there are three or more positive votes then the Committee rules that the candidate passed the examination. The Committee assesses the performance with a designation of ‘Pass’.

e. When there are three or more positive votes, then the committee rules that the candidate passed the examination, but may add conditions to this pass to correct any weaknesses detected (e.g., take a specific course).

f. When there are two or more “Unsatisfactory” votes the candidate will fail. The Committee assesses the performance with a designation of ‘Fail’. The candidate will be required to withdraw from the Ph.D. programme for a "Fail" in the re-examination of either Part A or Part B.

The Evaluation and Outcome of the Examination apply to both parts of the examination.

7. Notification of Outcome

The Chair of the Ph.D. Examination Committee shall verbally inform the candidate of the Committee’s decision based on one of the three possible outcomes above. That decision shall be conveyed to the candidate immediately after the
Committee has concluded discussion.

Formal written notification of the Committee ruling will be provided by the Graduate Student Advisor upon receipt of the Committee report.

(PHDCOMP.REG)
Revised October 2014
APPENDIX C

ACADEMIC INTEGRITY, APPEAL PROCEDURES AND ACADEMIC DISHONESTY EXPLANATIONS
ACADEMIC INTEGRITY, APPEAL PROCEDURES AND ACADEMIC DISHONESTY

EXPLANATIONS

All graduate students should be aware of McMaster’s policy regarding Academic Integrity, Codes of Conduct and Appeal procedures. Please refer to the Additional University Regulations Affecting Graduate Students Section 6 of the School of Graduate Studies Calendar.

Explanations of what Academic Dishonesty is can be found in the Academic Integrity Policy, Appendix A – April 10, 2013 Senate Secretariat website http://www.mcmaster.ca/policy/Students-AcademicStudies/AcademicIntegrity.pdf