



UNIVERSITY OF
CALGARY

Department of Civil Engineering

Graduate Student Handbook

Doctor of Philosophy (PhD) Program

Fall 2024

schulich.ucalgary.ca/civil

Welcome



Welcome to the PhD in Civil Engineering Program at the University of Calgary! We are very happy to welcome you as a member of our very select group of Civil Engineering researchers from around the world. Admission to our program is highly competitive. You should be very proud to be accepted into our family. You must also be aware that this is just the beginning of a challenging yet exciting journey. Over the next few years, you will have many learning experiences and challenges that will shape you as a leader in Civil Engineering research in Alberta, Canada, and

the world.

This handbook was prepared to help you understand the expectations we have from you, and outline the different kinds of support that are available to you. Please read it carefully – the better you understand these expectations and support, the higher your chances of succeeding.

I look forward to accompanying you in your journey.

-- Dr. Alex de Barros, Graduate Program Director, Department of Civil Engineering

Disclaimer

The Handbook is for graduate students of the Department of Civil Engineering at the University of Calgary. It is not intended to replace the latest University of Calgary's Graduate Studies Calendar. If a discrepancy exists between the information in this handbook and the University of Calgary Calendar, the information in the University Calendar will prevail. Students are bound by the regulations and policies of the Faculty of Graduate Studies (FGS). The FGS graduate student forms mentioned within this handbook can be found on the Faculty of Graduate Studies website.

Table of Contents

WELCOME	1
DISCLAIMER	3
TABLE OF CONTENTS	4
1 NEW STUDENTS	7
1.1 BEFORE ARRIVAL.....	7
1.2 ARRIVING IN CALGARY.....	7
1.3 AFTER ARRIVAL.....	7
1.3.1 Meet Your Supervisor	7
1.3.2 Obtain Your UNICARD.....	8
1.3.3 Bus Pass (U-Pass).....	8
1.3.4 Bank Accounts	8
1.3.5 Alberta Health Care	8
1.3.6 Social Insurance Number (SIN)	9
1.3.7 Submit Required Forms.....	9
1.3.8 Office, Lab and building access.....	10
1.3.9 Photocopy and Printing	10
1.3.10 Orientation	10
1.4 INTERNATIONAL STUDENTS.....	11
1.5 TUITION AND FEES.....	11
1.6 BEWARE OF ONLINE AND PHONE SCAMS!	11
2 BASIC RESPONSIBILITIES AND EXPECTATIONS	12
2.1 ANNUAL REGISTRATION.....	12
2.1.1 Annual Registration Process.....	12
2.1.2 Reactivating Registration	12
2.2 ANNUAL PROGRESS REPORT.....	12
2.2.1 Funded Students	12
2.3 APPEALS.....	12
2.4 MISCONDUCT.....	13
2.4.1 Academic Misconduct.....	13
2.4.2 Non-Academic Misconduct.....	13
2.5 RESPECT IN THE WORKPLACE	13
3 ACADEMIC REGULATIONS	15
3.1 GENERAL INFORMATION	15
3.2 COURSE REQUIREMENTS.....	15
<i>PhD students who hold a recognized MSc degree must take 2-6 graduate courses during their first year in the program (minimum 6 graduate courses for students without a recognized MSc degree). The course selection must be pre-approved by your supervisor.....</i>	<i>15</i>
3.2.1 Lab access and safety Training	15
3.3 STUDENT ACADEMIC STANDING	15
3.4 CANDIDACY OR PROGRAM EXTENSIONS	16
3.5 CONTRIBUTIONS.....	16

3.6	PROGRAM REQUIREMENTS	16
3.6.1	<i>PhD supervising committee</i>	17
3.6.2	<i>Candidacy</i>	18
3.6.3	<i>Thesis Proposal</i>	18
3.6.4	<i>Field of Study (FoS) Examination</i>	18
3.6.5	<i>Thesis Examination (Oral exam, thesis defense)</i>	18
4	SUPERVISION	19
4.1	SUPERVISORS	19
4.2	STUDENT-SUPERVISOR RELATIONSHIP	19
5	FEES, FUNDING, GRADUATE ASSISTANTSHIP	20
5.1	TUITION AND FEES.....	20
5.2	PAYING FEES	20
5.2.1	<i>Payment Options</i>	20
5.2.2	<i>Graduate Student Payment Plan</i>	20
5.3	SOURCES OF FUNDING.....	20
5.3.1	<i>SSE Minimum Funding Policy</i>	21
5.3.2	<i>Graduate Assistantship (Teaching/Non-teaching/Research)</i>	21
5.3.3	<i>Sessional Lectureship</i>	22
5.3.4	<i>Working as an International Student</i>	22
5.3.5	<i>Student Loans/Financial Aid</i>	22
5.4	TIMING OF PAYMENTS.....	22
6	SCHOLARSHIPS, AWARDS AND REGULATIONS.....	23
6.1	AWARDS AND SCHOLARSHIPS	23
6.1.1	<i>Graduate Awards</i>	23
6.1.2	<i>Program recommended awards</i>	23
6.1.3	<i>Enhancing your education</i>	23
6.2	STRATEGIES FOR A SUCCESSFUL SCHOLARSHIP AND AWARD APPLICATION	24
6.3	BURSARIES.....	24
7	FACILITIES AND SERVICES	25
7.1.1	<i>Facilities</i>	25
7.2	STORES AND EXPENSE CLAIMS	25
7.2.1	<i>Engineering Stores</i>	25
7.2.2	<i>Bookstore</i>	26
7.2.3	<i>Expense Claim</i>	26
7.3	GRADUATE STUDENT SERVICES	26
7.3.1	<i>Student Success Centre</i>	26
7.3.2	<i>Professional Development</i>	26
7.3.3	<i>Mental Health and Wellness</i>	27
7.4	CAMPUS RESOURCES FOR QUESTIONS	27
8	SOCIAL, PROFESSIONAL OPPORTUNITIES AND SAFETY	28
8.1	SAFETY ON CAMPUS	28
8.2	CIVIL ENGINEERING GRADUATE SOCIETY (CEGS).....	28
8.3	GRADUATE STUDENT ASSOCIATION (GSA).....	28

8.4	INTERNATIONAL STUDENT SERVICES (ISS)	29
8.5	HUNTER HUB FOR ENTREPRENEURIAL THINKING	29
8.6	PEER HELPER PROGRAM	29
8.7	WOMEN IN SCIENCE AND ENGINEERING (WISE)	29
8.8	WOMEN IN ENGINEERING CYBERMENTOR	29
8.9	THE GRAD COLLEGE	29
8.10	PROFESSIONAL OPPORTUNITIES	30
8.10.1	APEGA	30
8.10.2	<i>Transformative Talent Internships</i>	30

1 NEW STUDENTS

1.1 Before Arrival

- ✓ Review the steps to start your program after receiving an offer of admission ([registration](#))
- ✓ If applicable, clear any conditions of admission in your online application. Instructions and guidelines can be found through your application portal ([MyUofC portal](#))
- ✓ Set up your UCalgary email and update your contact information in your Student Centre.
- ✓ Register as a Student at the University of Calgary
 - Get the information you need to register as a student at UofC. You will need your UCID (UofC ID number) which was sent along with your acceptance letter. At this time, you may also select your graduate courses. It is important to register for courses as soon as possible as they may fill up quickly. Talk your supervisor before finalizing the course selection or making any decisions regarding adding or dropping courses. The deadline for course changes is usually the same date as the tuition fee deadline for each semester.

1.2 Arriving in Calgary

Information and arrivals checklist: [arriving-in-Calgary](#)

1.3 After Arrival

You can visit the [Welcome Center](#) once you arrive at the University of Calgary. It is located on the fourth floor of the MacEwan Student Centre (MSC 275). The Welcome Centre has useful resources for new-to-Calgary students:

- ✓ Pick up your Welcome Bag
- ✓ Explore services and resources
- ✓ All new-to-Calgary students can use the UCalgary Welcome Centre for any off-campus housing inquiries

Below you will find a list of things you should do as soon as you arrive in Calgary.

1.3.1 Meet Your Supervisor

Contact your supervisor (via e-mail or phone) after arriving in Calgary and arrange a meeting with him/her at a suitable time. Your supervisor will welcome you, provide valuable information, and put you in touch with other graduate students in your department. Your supervisor should be the first point of contact for any issues you are having upon arrival.

1.3.2 Obtain Your UNICARD

Your UNICard is your multi-functional pass for the University of Calgary. In addition to being your Student ID it also:

- ✓ works as a debit card on campus
- ✓ is used for printing/photocopying credits
- ✓ can provide access to many rooms on campus (once granted access)
- ✓ Used for dining services in residence
- ✓ For more information see [Use-the-card](#)

You can get your Student ID card at the Campus Service Center, which is in the main lobby of international house. There can be a long line, so you should go early with your admission letter, which contains your UCID. You can submit your photo online the card can be printed for you before you arrive. Visit [Get-Your-Card](#) for more details. Remember to register as a student online first!

1.3.3 Bus Pass (UPass)

After you get your UNICARD, you can retrieve a mobile transit pass (UPass) which will give you unlimited access to Calgary Transit services. Follow the instructions on this site to retrieve your UPass ([UPass](#)).

1.3.4 Bank Accounts

There are several banks that you can get an account with. On campus, there are many automated teller machines (ATM) from an assortment of banks. A few ATMs are in the food court section of MacEwan Hall. You can use any ATM to get money; however, you may be charged a fee for not using an ATM that belongs to your bank.

To obtain a bank account or a credit card you need:

- ✓ Two pieces of government-issued ID (with photos, such as your passport or study permit)
- ✓ Your UCalgary Student ID card (UNICARD) to be eligible for special student plans
- ✓ You may need to make an appointment to open accounts, so it is best to make an appointment. You will get more info at the bank of your choice

For more information, check the [banking](#) website.

1.3.5 Alberta Health Care

The Alberta Health Care Insurance Plan (AHCIP) is a publicly administered and funded health care system that guarantees Albertans universal access to medical services. The AHCIP is a program administered by the Alberta Health and Wellness. Visit [AHCIP](#) to get familiar with Alberta's health care system and for general health services information.

To get an AHCIP, you will need to bring the following to an authorized registry agent:

- ✓ Government issued photo identification (such as your passport)
- ✓ Proof of legal entitlement in Canada (study permit)
- ✓ Proof of Alberta Residency (such as lease agreement, utility bills, etc.)

Click [here](#) to find a list of registry agents in Calgary.

If you need information about the Alberta Health Care Insurance Plan, including provincial health cards, provincial health premiums and provincial health care coverage, please contact Alberta Health and Wellness:

- ✓ 780.427.1432 (Dial 310.0000 first for toll free calling within Alberta)
- ✓ E-mail: health.ahcipmail@gov.ab.ca

1.3.6 Social Insurance Number (SIN)

All research students must apply for their SIN prior to the start of their research. The SIN is a nine-digit number that you need to study or work in Canada or to receive any funding of governmental benefits. For more information, visit [SIN](#).

To apply for your SIN, to obtain a confirmation of your SIN, or to amend your SIN record, simply gather all the required [original documents](#) and take them to the nearest [Service Canada office](#).

Before you go there, make sure you have the following documents with you:

- ✓ Passport
- ✓ Study permit
- ✓ University admission letter
- ✓ Support letter from the Department of Civil Engineering (with dates of employment and salary)
- ✓ [Enrolment Verification Letter](#)

1.3.7 Submit Required Forms

Complete and submit the following forms and documentation to the [Graduate Program Administrator](#) at Civil Engineering Graduate Student Office (ENE 231). The student forms are usually emailed to students by the Graduate Program Administrator.

- ✓ Social Insurance Number (SIN) needs to be uploaded into your [MyUofC portal](#) (MSc and PhD students only)
- ✓ Payroll Direct Deposit information needs to be entered into your [MyUofC portal](#) to ensure you get paid to the correct bank account (funded students only).
- ✓ Academic Conduct Agreement
- ✓ [Student-supervisor checklist](#)
- ✓ [Intellectual property awareness](#) (MSc and PhD students only)
- ✓ [Tax forms](#) (TD1 and TD2 for funded students only)

- ✓ Citizenship documents
- ✓ Citizens: N/A
- ✓ Permanent Residents: PR Card
- ✓ International: Study Permit

1.3.8 Office, Lab and building access

- ✓ Access to rooms and labs* are provided by either keys or granting access with your UNICard. Both are provided by the staff in the main office (ENE 231)
- ✓ Funded graduate students are assigned a desk and provided keys (key numbers are subject to change), access codes or granted access using their UNICard by the staff in the main office (ENE 231) or access codes according to their requirements:
 - Desk keys – lock the overhead cabinet and the included file cabinet
 - Office key or access code
 - Key 35AA – ENF building access (East and West outer doors to stairwells 101Y and 140Y)
 - Upon request, your UNICard can be granted access to:
 - Both computer labs (ENF 316 and ENF 320)
 - Graduate Student Lounge (ENG 211)
 - F-Block laboratory, access from E-Block Basement*
 - Calgary Center for Innovative Technology (CCIT) Structural Laboratory (CCIT 041) *

*There are additional requirements for lab access. See section 3.2.1 for more information.

1.3.9 Photocopy and Printing

Printing services is available to graduate students via specified printers located around campus or the [Campus print shop](#). Follow these [instructions](#) to print from a university managed or personal computer or device on a cost-per-use basis. Funds for printing can be added to your [UNICard my account](#).

1.3.10 Orientation

Register for and attend the graduate student orientation organized by the University of Calgary for useful and relevant information to get you started on campus and in your program. You should receive an invite to your UCalgary email address. You can visit the [Graduate student orientation](#) website at anytime.

In addition to the orientation events organized by the University of Calgary, the Civil Engineering Graduate Society (CEGS) organizes two orientation events specifically for graduate students in the Department of Civil Engineering. Typically, there is one orientation at the beginning of the fall and winter terms. You should receive an email invite from the Civil Engineering Graduate Society (CEGS) to register. If you have questions or concerns, contact CEGS at cegs@ucalgary.ca

Campus map: The [interactive room finder](#) is a great tool to find rooms on campus.

1.4 International Students

International students are encouraged to visit the [International Student Services \(ISS\)](#) website for information such as immigration information, resources, ISS programs and advising. Additionally, it is recommended international students register for an [international student orientation](#).

1.5 Tuition and Fees

Please check the [tuition and fee](#) webpage to find updated information about annual tuition and general fees for thesis-based and course-based graduate students. Refer to the [Academic Schedule](#) for payment deadlines.

Graduate students may also apply for a [graduate student payment plan](#) to distribute the fee payments over a specified period of time.

1.6 Beware of Online and Phone Scams!

Over the past few years, a significant number of scammers from all over the world have targeted Canada, with students – both domestic and international – being among the main targets. Falling for an online scam can be costly, frustrating, and very damaging to you in many ways.

To avoid becoming a victim of a scam, remember the golden rule of written communication: **you never know with absolute certainty who is on the other side of an email, chat, or text message**. If you receive an email or message that sounds strange to you, talk to someone you know about it before you reply or click on the links provided.

If the suspicious message or email comes from your supervisor, confirm their request with them in person. If they are not available to meet in person, attempt to communicate with them through a different media – e.g. if the message came by phone text, send your supervisor an email asking to confirm the request. Your supervisor will never ask you to do anything secret or that involves financial transactions without talking to you in person.

Scammers may also attempt to contact you by phone posing as an authority demanding that you return their call immediately under threat of severe punishment if you do not comply. Common scams include automated messages purporting to be from Canada Immigration Services, the Police, Canada Revenue Agency, and your bank. Again, if you receive one of these calls, do not panic – talk to a friend or someone at the University to verify the authenticity of the call.

More information about scams can be found on <https://it.ucalgary.ca/it-security/phishing-social-engineering>.

2 BASIC RESPONSIBILITIES AND EXPECTATIONS

2.1 Annual Registration

2.1.1 Annual Registration Process

It is the graduate student's responsibility to register annually for a twelve-month period. All PhD students are expected to register as full-time students. Permission to register as a part-time student must be approved by the supervisor, Graduate Program Director and the Faculty of Graduate Studies. Annual registration is required for continuous standing in the program. Failure to register by the registration deadline will result in automatic withdrawal from the program and Faculty of Graduate Studies.

2.1.2 Reactivating Registration

A graduate student who fails to register by the registration deadline, but wishes to continue in the program, may reactivate their registration by paying a reactivation fee and completing a manual registration form. This manual registration must occur within four months of the registration deadline.

2.2 Annual Progress Report

All thesis-based graduate students are expected to maintain adequate progress and must submit an annual progress report by the department deadline. Annual progress reports are completed online through the Student Centre. Supervisors access the annual progress report through their Faculty Centre. The annual progress report will be reviewed by the supervisor and then submitted to the Graduate Program Director for review before submission to the Faculty of Graduate Studies. If the annual progress report is deemed unsatisfactory by the Supervisor or Graduate Program Director, the student may be required to withdraw from the program. Check the [APR](#) website for more information.

2.2.1 Funded Students

Students who hold a scholarship provided through the Schulich School of Engineering's minimum funding policy are required to develop their thesis on a topic determined by the supervisor in accordance with the terms of reference of the funding source. Failure to comply with this requirement will lead to termination of funding.

2.3 Appeals

It is recognized that instances arise when a graduate student may wish to challenge University decisions about grades or academic policy. When a dispute arises, every effort should be made to resolve the issue informally rather than a formal appeal. If a formal appeal is necessary, the graduate student must follow the Appeals Procedure outlined in the Appeals section of the Graduate Calendar.

The Faculty of Graduate Studies (FGS) appeals procedures are intended for appeals initiated by students currently enrolled in a graduate program, or who have been in a graduate program, against decisions of the Dean of Graduate Studies, or their designate, regarding:

- ✓ A first failure on candidacy, or thesis defense
- ✓ Academic probation
- ✓ Other decisions of the Dean of Graduate Studies

For information regarding how to appeal FGS rulings, click [here](#).

Please go to the [Student Appeals Office](#), or contact appeals@ucalgary.ca for decisions regarding:

- ✓ Academic progression matters
- ✓ Academic and non-academic misconduct
- ✓ Matters related to grades

Student appeals of decisions of the Dean regarding supervision and the process for a candidacy component may be made to the Faculty of Graduate Studies Appeals Committee.

2.4 Misconduct

2.4.1 Academic Misconduct

A single offence of cheating, plagiarism, or other academic misconduct on academic work may lead to disciplinary probation or a student's suspension or expulsion from the program by the Faculty of Graduate Studies. For detailed information on academic misconduct please refer to the [Integrity and conduct](#) section of the University of Calgary Calendar or the [Student Academic Misconduct section of the Student Appeals office](#).

2.4.2 Non-Academic Misconduct

The Student Non-Academic Misconduct Policy is administered through Student Services - Student Conduct. The Student Conduct Office follows identified procedures to facilitate student learning and development, foster interpersonal competence, and support accountability and resolution in student conduct matters. This policy applies when a student is on university property as well as while acting as a representative of the University of Calgary off campus. For more information please visit [student conduct office](#) website.

2.5 Respect in the Workplace

The University of Calgary is committed to providing a workplace that respects and promotes human rights, personal dignity, and health and safety. A respectful workplace is one that is healthy, safe, supportive and values diversity. It is a place where students and employees are valued; communication is polite and courteous; people are treated with respect; conflict is addressed in a positive and respectful manner; and disrespectful behavior, harassment, bullying, and discrimination are not tolerated.

The University has developed a process for addressing workplace complaints that includes both a formal investigation process and more informal resolution options. For information about the processes, visit the [Respect in the Workplace Program](#) website. The program includes the related University of Calgary policies:

- ✓ [Code of Conduct](#)
- ✓ [Workplace Violence](#)
- ✓ [Harassment](#)
- ✓ [Sexual and Gender-based Violence](#)

3 ACADEMIC REGULATIONS

3.1 General information

This section summarizes the information about course requirements, supervisory committees and examination procedures for the PhD program offered by the Department of Civil Engineering, under the regulations set by the Faculty of Graduate Studies (FGS) and provided in the [University of Calgary Graduate Calendar](#). More program specific information can be found on the [Department of Civil Engineering website](#).

3.2 Course Requirements

PhD students who hold a recognized MSc degree must take 2-6 graduate courses during their first year in the program (minimum 6 graduate courses for students without a recognized MSc degree). The course selection must be pre-approved by your supervisor.

In addition to the course requirements above, all MSc students are required to successfully complete ENGG 601 and 603. These courses are offered in the Fall and Winter sessions and students are advised to complete the two courses in their first year of program.

3.2.1 Lab access and safety Training

All graduate students who require access to the Civil Engineering laboratories must first complete all of the requirements listed on [Laboratory Health and Safety Orientation and Training Record](#) and submit the signed form to the Civil Engineering Graduate Program Administrator and the Schulich School of [Engineering Technical Services Manager](#).

3.3 Student Academic Standing

Student academic standing is specified and updated in the latest Graduate Studies Calendar [section G.H.2](#).

Poor academic standing is defined by anyone, or combination, of the following conditions:

- ✓ A student receives a "C+" or lower in any one course.
- ✓ A student does not maintain an annual GPA of at least 3.00 calculated each year at the time of their registration anniversary.

A student who is in poor academic standing will normally be required to withdraw. The Graduate Program Director may recommend that the student stay in the program if, in the Director's opinion, the student provides sufficient evidence that they have experienced serious mitigating circumstances beyond their control. Students who believe that they fall into this category must discuss their situation with the Graduate Program Director at the earliest possible opportunity and no later than the end of the term when the situation arises. Employment-related issues will not normally be accepted as mitigating circumstances.

3.4 Candidacy or Program Extensions

Sometimes there are circumstances that prevent students from completing their program before the maximum time limit specified. If a student needs to extend their program to complete all degree requirements, a program extension may be granted by the Faculty of Graduate Studies based on a recommendation from the Graduate Program Director that specifies the grounds for the extension and provides a detailed schedule for the completion of the program. Complete and submit a [Request for Extension](#) form to begin the process.

Note: Graduate programs must take the service by GSA Executive members into consideration in assessing the student's progress in the annual progress report. On request, the Faculty of Graduate Studies will grant GSA Executive members extensions to time in program of up to one year per year in office.

3.5 Contributions

Contributions are a means of communicating your ideas, research, and progress. There will be several opportunities to produce contributions throughout your program. Each contribution is weighted differently when a student's research potential and productivity is assessed. The typical contributions you will have an opportunity to produce, listed in merit order are:

1. Peer Reviewed Journal Publications
2. Peer Reviewed Conference Proceedings
3. Theses
4. Conference Presentations
5. Peer Reviewed Conference Abstracts
6. Research Presentations
7. Presentations

Although there are no formal program requirements to produce contributions, they may be a condition of your funding. Furthermore, producing contributions benefits the student in many ways, including:

- ✓ Higher standing among other graduate students when competing for scholarships and awards
- ✓ Winning scholarships and awards help offset the costs of living, travel to conferences or other program activities, and university fees (see section 6.1)
- ✓ Help identify or validate your research contributions (if any)
- ✓ Practice for your oral examination and writing your thesis

3.6 Program Requirements

Details of the PhD program in civil engineering is found at the University of Calgary Civil Engineering website. The PhD program in Civil Engineering has the following course and thesis requirements:

- ✓ **Courses:** Topics may include bituminous materials, theory of transport demand modelling, biological processes for wastewater treatment and more. Additionally, the Graduate Studies Calendar requires
 - A minimum of 2 and a maximum of 6 courses beyond the master’s degree,
 - A minimum of 6 courses beyond the baccalaureate.
- ✓ **Professional Development Seminars:** Students take two professional development seminars on communication styles, presentation skills and more.
 - Engineering 601 and Engineering 603 in addition to the above-mentioned courses
- ✓ **Candidacy:** Complete the [candidacy requirements](#) which comprise of the following components:
 - A written literature review (LR),
 - A written thesis proposal (TP), and
 - Field of Study (FoS) examination.
- ✓ **Thesis:** Students will be required to submit and defend an original thesis.
 - A thesis related to advanced original engineering research.

Students in the PhD program need a supervisor and a supervisory committee. A co-supervisor is not required, but highly recommended. If the student does not consult the supervisor before selecting courses, departmental approval may be withheld.

Time limit

Students in the PhD program must complete all degree requirements within six registration years. Typically, students complete a PhD program in four to five years, however many students have completed their program outside of this time frame. See Section 3.4 if a program extension is required.

Full-time / part-time status

Students registered in the PhD program are considered full-time.

3.6.1 PhD supervising committee

Doctoral students require a supervisory committee, which should be appointed as soon as possible, but no later than three months after the appointment of the permanent supervisor.

The supervisory committee should be constituted by the supervisor in consultation with the student. It will normally consist of the supervisor and co-supervisor, if applicable, and two members. The composition must be approved by the Graduate Program Director.

The following conditions should be noted regarding the doctoral supervisory committee:

- ✓ Members may be external to the graduate student’s program.
- ✓ At least one of the members of the supervisory committee should have had supervisory experience at the doctoral level.

- ✓ Postdoctoral scholars are eligible to serve as committee members. A postdoctoral scholar whose supervisor is on the student's supervisory committee is not eligible to serve as a member of the examination committee. In this case, an additional member who is eligible to serve as an examiner must be included in the supervisory committee.
- ✓ Persons who are non-academic staff members of the University of Calgary may serve on the supervisory committee with the approval of the Dean of Graduate Studies.

The Department of Civil Engineering also expects PhD students to meet with their supervisory committee at least once a year to get feedback on their research,

3.6.2 Candidacy

Faculty of Graduate Studies Requirements

Admission to candidacy for the doctoral degree is a judgment by the faculty members in the graduate program that the student is prepared to successfully complete the requirements of the doctoral degree program. Candidacy requirements specified by the Faculty of Graduate studies can be found in [section K](#) of the Graduate Studies Calendar. Refer to the Candidacy regulations on the Civil Engineering [program requirements](#) website for additional requirements included in the calendar.

3.6.3 Thesis Proposal

A written thesis proposal is required as part of the PhD candidacy requirements in Civil Engineering. A list of requirements and guidelines are provided in section B.3 of the [Candidacy regulations](#).

3.6.4 Field of Study (FoS) Examination

The field of Study examination is the final component to complete the PhD candidacy requirements in Civil Engineering. Details on arranging, preparing and conduct of the exam, included members on the examination committee can be found in section B.4 of the [Candidacy regulations](#).

3.6.5 Thesis Examination (Oral exam, thesis defense)

The purpose of the thesis oral examination is not only to defend independently the thesis, but also to serve as confirmation of the student's knowledge of the research topic within the context of their field of study. Thesis regulations are specified in the following sources. Refer to these sources for information on scheduling the exam, composition of the exam committee, format of the exam and more.

- ✓ Faculty of Graduate Studies requirements for [Thesis Examinations](#)
- ✓ Program specific requirements (Schulich School of Engineering) in addition to FGS requirements are provided in section 10 of the [ENGG programs](#)
- ✓ All students must conform to the timelines set out in [Thesis and Thesis Examination Administrative processes](#).

4 SUPERVISION

4.1 Supervisors

All PhD graduate students have a supervisor identified prior to admission. Your supervisor is responsible for providing you with guidance on selection of courses and the research required for your thesis. In addition, if you are funded through a research grant/contract arranged by your supervisor, you are accountable to your supervisor for tasks and milestones set in said grant/contract. A co-supervisor may also be appointed by the Graduate Program Director upon written recommendation from the Supervisor and in agreement with the student.

When agreeing to supervise a graduate student, the supervisor is committed in terms of time and funding. The supervisor must be actively engaged in research and have an appropriate level and duration of financial support from external granting agencies or industrial contracts. It is the supervisor's responsibility to be familiar with graduate program policies and Faculty of Graduate Studies regulations.

The Graduate Program Director and the Department Head ensure that supervision will be provided for the probable period required for the student to complete the degree program. During absences, such as research and scholarship leave, the supervisor must ensure that interim supervision is provided for the graduate student(s).

All graduate students and their supervisors must complete the [Checklist of expectations for graduate student and supervisor form](#). The form must be reviewed and signed by the graduate student and supervisor before the completion within the first two months of their program. The signed form must be submitted to the Graduate Program Administrator for the student's academic file. For additional resources visit the [FGS supervision](#) website for Graduate students.

4.2 Student-Supervisor Relationship

Please refer to the [Best practices guide](#) provided by the Faculty of Graduate Studies to find some general practices and principles that will help develop a professional, amicable relationship with your supervisor, as well as prevent or resolve conflicts in the graduate student-supervisor relationship.

The Faculty of Graduate Studies provides [supervisor resources](#), containing [best practices](#) that can help ensure that the graduate student-supervisor relationship is productive and beneficial for everyone.

Only in exceptional circumstances, with substantial documentation, and when no other agreeable resolution can be found, will a change of supervisors be allowed.

If you are funded through a research grant/contract arranged by your supervisor, continuity of funding cannot be guaranteed when changing supervisors. The terms of your funding may also include IP clauses that prevent you from using the work you did prior to the change – in part or in whole – in your thesis after you change supervisors.

5 FEES, FUNDING, GRADUATE ASSISTANTSHIP

5.1 Tuition and Fees

Graduate students pay program fees at the outset of the program, and continuing fees in later years. To calculate your tuition, see the [Graduate Tuition and General Fees](#) page in the Graduate Calendar. All students, domestic and international, pay the same general fees year-round. The page in the Graduate Calendar lists the services that are included and how the fees are calculated.

Refer to the following helpful websites for additional information fees and funding:

- ✓ [Financing grad school](#)
- ✓ [Fees and funding](#)

5.2 Paying Fees

Balance of fees must be paid or notice of financial assistance provided before the fee payment deadline for any term. Consult the [academic schedule](#) for fee payment deadline information.

Students whose fees are not paid by the term fee deadlines and who have not confirmed financial assistance will be charged interest on the outstanding balance. Students with an outstanding balance will have a hold placed on their record and services will be restricted. For more information on interest rates, refer to [late fees and payment issues](#).

5.2.1 Payment Options

Detailed information on how to pay your fees is available on the Office of the Registrar website [pay-your-fees](#). Students may pay their fees by online banking, international fund transfer, cheque, money order and bank draft. Cheque, debit, and bank drafts payments may be made in-person by visiting Enrolment Services.

5.2.2 Graduate Student Payment Plan

Graduate students who wish to spread their fee payments over a specified period may apply for a payment plan. A payment plan is available for graduate students who are receiving income from an approved funding source recognized by the University of Calgary. For detailed information on eligibility and how to apply for a payment plan, visit [graduate-student-payment-plan](#).

5.3 Sources of Funding

For thesis-based students, funding may come from a variety of sources. Sources of support include

- ✓ research grants/contracts awarded to supervisors
- ✓ teaching assistantships (TA)
- ✓ training programs
- ✓ scholarships and awards - by numerous local, regional, provincial, national, and international granting agencies.

If you were offered funding at admission, please refer to your admission letter for detailed conditions of your funding.

5.3.1 SSE Minimum Funding Policy

Minimum funding is provided to financially support graduate students while they complete their program. The SSE minimum funding policy pertains to full time MSc and PhD students registered in SSE and not MEng students. Refer to the funding policy on the civil engineering [program requirements](#) website.

5.3.2 Graduate Assistantship (Teaching/Non-teaching/Research)

There are three categories of appointment:

- ✓ **Teaching:** Students assists with the instructional responsibilities of the department.
- ✓ **Non-Teaching:** Student assists the department and/or a professor with non-teaching responsibilities.
- ✓ **Research:** Student performs research that is unrelated to his/her field of study and are paid from the research accounts held by the responsible faculty member.

Graduate Assistant (Teaching) positions will be assigned by the Graduate Program Director. Refer to [GAT and GANT compensation](#) for additional information.

No more than the equivalent of twelve hours of work per week may be required of graduate assistants. Regulations governing terms of employment for Graduate Assistantships (Teaching, Non-Teaching) are covered by the [GSA Collective Agreement](#). Please refer to the agreement for information on appointment periods, normal hours of work, contracts, training, leave and absence.

International students given a graduate assistantship (teaching, or non-teaching) must submit a copy of a valid study permit giving the student permission to work on campus before the start of the position. Payments for graduate assistantships are made through direct deposit. The earnings (teaching/non-teaching) are 50% taxable income, and 50% not subject to tax.

Graduate students who have a GAT position must complete a mandatory teaching assistant workshop offered by the Schulich School of Engineering prior to starting the position. The details of the workshop will be sent by the Graduate Program Administrator at the beginning of each semester.

Students can also join at one of two teaching assistant orientations at the Taylor Institute for Teaching and Learning, held every year the beginning of the Fall and Winter terms. For more information, refer to

the [Learning Module: Teaching Assistant Orientation](#). This orientation does not replace the mandatory teaching assistant workshop offered by the Schulich School of Engineering.

5.3.3 Sessional Lectureship

A graduate student may apply for a position as Sessional Instructor for teaching an undergraduate or graduate course. Regulations governing sessional lectureships are covered by the [Collective Agreement Between the Governors of the University of Calgary and the University of Calgary Faculty Association](#). Please contact the Department of Civil Engineering for further information and available positions. Payments are made through direct deposit. Sessional lectureships are considered income and thus, subject to tax.

5.3.4 Working as an International Student

[Working in Canada as a Student](#) is a useful link if you are interested in working on or off campus if you are international student. Refer to this website for eligibility, job search resources and limitations as an international student on a study visa.

5.3.5 Student Loans/Financial Aid

For information regarding financial aid and student loans, see [the student loan](#) website.

5.4 Timing of Payments

Funding is paid in two ways, as scholarship or as employment. Funding paid as scholarship is paid on the 25th of each month. Funding paid as employment is paid on the 10th and 25th of each month. Your funding package might include both types of payments.

6 SCHOLARSHIPS, AWARDS AND REGULATIONS

The Faculty of Graduate Studies administers a wide variety of awards for graduate students at the University of Calgary, funded from a variety of sources. Awards are competitive and based on merit, in addition to other criteria.

Most scholarships and awards, along with eligibility criteria and application, deadlines are available in the [graduate award database](#). You can also check the [award guide](#) for the competitions administered through the University of Calgary. The Faculty of Graduate Studies also sends a student newsletter ([GRADpost](#)) weekly through email to all graduate students, which introduces awards and scholarships. The [Graduate Student Association](#) has published useful tools to help find both financial assistance and awards (click button on left pane), including an award timeline.

It is important to read the eligibility requirements and follow the application instructions for each award you apply for.

6.1 Awards and Scholarships

6.1.1 Graduate Awards

Awards and Scholarships are available to provide financial assistance to Graduate Students. These awards are competitive and are awarded to the highest-ranked students. The most prestigious awards require pre-qualification steps before you can apply. All the information can be found on the FGS website [graduate awards](#). Application for most of these awards occurs the annual Graduate Awards Competition (GAC) via [MyUofC portal](#). The deadline is typically early February.

6.1.2 Program recommended awards

In addition to these awards, each year the department of Civil engineering opens competitions for program recommended awards (PRA). A call to apply for these awards (including the terms of reference for each award and the application process) comes out in early April with an email from the GPA. The annual deadline is typically in early May. There is now an option to use the Annual GAC application for the PRAs. Contact the GPA for details.

6.1.3 Enhancing your education

SSE and University of Calgary offer other opportunities to fund activities that are not directly related to the student's thesis but are related to the student's professional or leadership development.

- ✓ [Professional Development Grant - GSA](#)
- ✓ [Schulich Student Activities Fund \(SSAF\) - SSE](#)

6.2 Strategies for a successful scholarship and award application

Your supervisor is the best person to help you prepare and succeed on scholarship and award competitions. Additionally, there are several resources available to set graduate students up for success such as workshops, webinars, presentations, and online-guides. The largest awards generally require the most lead-time to prepare and involve the most competitors, however success in the prestigious awards pave the way for success in future applications, significantly ease the financial burden while completing your program and success if you choose to pursue a career in academia.

- ✓ [Preparing your application](#)
- ✓ [Graduate Writing Workshops - My Grad Skills](#)

Reference letters

One aspect of applying for rewards which requires particular attention and lead-time are acquiring the reference letters. This step is often left until the last minute which reduces the quality of the reference letter and therefore the chances of success. The most successful applicants work on a continual basis to sculpt a reference letter to reflect the assessment criteria of the award. A good place to start is [writing a scholarship reference](#).

6.3 Bursaries

The following bursaries are offered:

- ✓ GSA bursary: The GSA Bursary is available for the Fall and Winter terms. These bursaries are meant to ease the financial strain faced by active GSA members.
- ✓ Emergency bursary: The Emergency Bursary is provided to assist graduate students in meeting an **emergency/temporary need** by bridging a financial gap that would otherwise impede the students' ability to complete their studies. These funds are provided by the University of Calgary through a Memorandum of Understanding with the GSA, and are processed and managed jointly by the GSA, Faculty of Graduate Studies, and Human Resources.

For detailed information and alternative resources, [Bursaries - Graduate Students' Association](#) website.

7 FACILITIES AND SERVICES

There are several facilities and services available on campus to support you while you complete your education.

7.1.1 Facilities

- ✓ [MacEwan Student Centre](#)
 - Food
 - Convenience stores
 - Medical and dental offices
 - New and used bookstores
 - On-campus banks
 - Additional student services
- ✓ [SSE Tech Support at Schulich School of Engineering](#) (has pre-requisites)
 - 3D Printing
 - 3D scanning
 - Lightboard studio
 - Truck booking
 - Technician assistance
- ✓ [Maker Multiplex](#) - ignite innovation, discovery, new ways of learning and problem solving
- ✓ [Zetta](#) – Engineering digital ecosystem
- ✓ [University of Calgary Libraries & Cultural Resources](#)
 - Resources for doing research, writing, finding information, and more
 - [Booking services](#) (workrooms, workshops, computer workstations, borrow technology...)
- ✓ [Taylor Institute for Teaching and Learning](#)
 - Resources to improve teaching methods and styles for teaching assistants.
- ✓ [Department of Civil Engineering main office](#)
 - Conference and classroom bookings within the department
- ✓ (Requires project code from your supervisor)

7.2 Stores and Expense Claims

7.2.1 Engineering Stores

You can get materials and supplies you need in your research project including stock of safety items (spill kits and materials, gloves, lab coats, respirators, etc.), chemicals, glassware, fittings, clamps, printer paper etc. from Engineering stores. You can also order lab coats from Engineering Stores. Shipping and receiving of equipment/samples using courier services is also offered. Details provided below:

Campus location: CNRL Engineering Complex, ENC 025
Phone: 403.220.4197

Fax: 403.284.1393

You will need a University of Calgary credit card for purchasing which can be provided by your supervisor.

7.2.2 Bookstore

Office supplies may be purchased from the [Bookstore](#) and claimed from your supervisor's research account through an expense claim form.

7.2.3 Expense Claim

Expenses related to your research project must be pre-approved by your supervisor and are eligible for reimbursement.

[Submit an Expense Claim](#) with the receipts to get reimbursed for purchases related to your research project. You may also submit the form with the receipts to the main Civil Engineering office (ENE 231). You will need a funding account and account number to complete the form, which must be provided by your supervisor.

7.3 Graduate Student Services

The Faculty of Graduate Studies offers a combination of academic support, professional development, and health services to help graduate students reach their full potential. Refer to [student services](#) website for a list of services offered. These services are useful and available to assist graduate students complete their program and navigate the associated challenges.

7.3.1 Student Success Centre

A variety of regular workshops are available to graduate students to help them improve their writing skills and provide them with tools to improve their academic performance. Academic specialists and graduate advisors offer support to facilitate students' smooth transition into new academic environments.

Detailed information on Student Success Centre and available services is available through [Student Success advising](#).

7.3.2 Professional Development

My GradSkills

My GradSkills is the one location for graduate students who are looking to gain transferable skills to become a better student, leader, communicator, and employee. If you are ready to start with my GradSkills, have a look at the [My GradSkills](#). This handy document maps out which workshops and resources are most valuable to you at different stages of your degree, helping you to become an expert, leader, innovator, and communicator.

Career Services

Career services prepares graduate students for “what is next” after they finish their program at the University of Calgary. Career services can help graduate students and alumni to embrace their full potential and connects employers with students. Regular workshops and events are hosted by Career Services for you to explore career option, meet with employers and broaden your professional networks.

You can get one-on-one advice with a Career Development Specialist or a Career Peer. They can help you explore your career path, strengthen your resume, CV, and cover letter, prepare for your interview, review your LinkedIn profile, and provide job search guidance.

For more information, check the [careers](#). You can also search and apply for job postings (summer, full-time, part-time, seasonal, co-op and internship) through the [elevate platform](#).

7.3.3 Mental Health and Wellness

Health and wellness are important parts of students’ academic success and personal life. Please visit the UCalgary website on [mental health](#) to retrieve more information about the resources and support available to all UCalgary students.

A list of on-campus and off-campus resources, services, and fees available to students is available below:

- ✓ [Keeping Mentally Healthy! Resources List](#)
- ✓ [Helpful on – and off – campus resources for UCalgary Graduate Students](#)

The [Student Wellness Services](#) is your on-campus resource for health and wellness support, with a wide range of service options. Visit us for medical and mental health care, as well as chiropractic and massage appointments with our team of professionals. to help graduate students cope and manage the student’s mental health to set them up for success in completing the program.

StudentCare also offer a range of services and resources for Mental health. You learn can more about their services by accessing their website at [talkitout](#).

7.4 Campus Resources for Questions

The Department of Civil Engineering is your first point of contact for questions and concerns related to your program and degree. To answer your questions about program requirements, courses, graduate student assistantships, etc., your Graduate Program Administrator and Graduate Program Director are your main contacts.

8 SOCIAL, PROFESSIONAL OPPORTUNITIES AND SAFETY

There are many social and professional opportunities on campus to develop your leadership and inter-personal skills. Most of these organizations provide useful services to support your academic success or quality of life as a graduate student. You can also participate in any one of these programs (Contact each program to learn how) which further develops your leadership skills. Leadership and inter-personal experience reflect well and improve the chances of success on scholarship applications and searching for a job.

8.1 Safety on Campus

Safety of Campus personnel is a top priority. The [Campus Security home](#) website outlines the measures and policies which are taken to help keep everyone safe. Some useful services for graduate students are:

- ✓ [Safewalk](#)
- ✓ [Know Your Campus Overview](#) List of services on campus
 - Help phones
 - Automated External Defibrillators
 - Stop the Bleed Program
- ✓ [UC Emergency Mobile](#)

8.2 Civil Engineering Graduate Society (CEGS)

The Civil Engineering Graduate Society (CEGS) is a society run by graduate students in the Department of Civil Engineering. CEGS has been in operation since 2008. Their mandate is to

- provide services and organize events aiming to offer vital information for graduate students.
- provide opportunities for students to network amongst themselves, as well as with faculty and industry members.
- ✓ collaborate with other departmental graduate associations to organize joint events, to pool resources, and to gain knowledge for the greater good of not just CEGS, but the UofC graduate student body in general.

Check [CEGS website](#) or [Facebook page](#) for more information about CEGS activities and events. Contact CEGS (CEGS@ucalgary.ca) to get involved!

8.3 Graduate Student Association (GSA)

The [Graduate Students Association](#) (GSA) of the University of Calgary was established in 1967 and has approximately 6,500 members including full and part-time master's and PhD students. GSA is a not-for-

profit organization governed by UofC graduate students. It is charged with the social, academic, and practical well-being and growth of graduate students on campus.

Make sure to check the GSA's website for events and discounted tickets throughout the year. In addition to events, you can get involved with the GSA through volunteering for GSA committees and/or events. Learn the details [here](#).

8.4 International Student Services (ISS)

Whether you are an international or a domestic student, you can get involved in one of the many interesting programs offered by the International Student Services Office. Build up your skills and work experience, while having lots of fun as part of our enthusiastic and dedicated team. Check the [ISS](#) website for more information on volunteer and mentorship opportunities.

8.5 Hunter Hub for Entrepreneurial Thinking

The [Hunter Hub](#) is for all undergraduate students, graduate students, student clubs, faculty, staff, post-doctoral scholars, alumni, and the wider innovation, social enterprise, and entrepreneurial communities. The Hunter Hub delivers and promotes programs that encourage entrepreneurial thinking and innovation across university. You can find upcoming programming and events in Hunter Hub Calendar.

8.6 Peer Helper Program

The [Peer Helper Program](#) provides students the opportunity to help implement initiatives and develop the Peer Helper Program. The various Peer Helper positions in the office post on social media and help create a Peer Helper community.

8.7 Women in Science and Engineering (WISE)

Women in Science and Engineering (WISE) is a University of Calgary student organization dedicated to supporting and encouraging women who are interested or engaged in science or engineering careers. WISE works towards fostering an academic environment where both female and male students can promote the participation of women in science and engineering. For more information about events and getting involved, refer to [WISE](#) website.

8.8 Women in Engineering Cybermentor

This program connects girls with women working in science, technology, engineering, and math (STEM). The [Cybermentor](#) program matches girls in grades 6 to 12 with female mentors. Weekly online chats reinforce their interests in science and engineering. Check.

8.9 The Grad College

Graduate Residential Colleges are communities of scholars existing within universities with, typically, the dual goals of providing an exceptional academic experience for their members and pursuing targeted

visions or goals as defined by the college. Both incoming and in-program graduate students and postdocs are eligible to apply to become a member of The Graduate College. All graduate, postdoctoral scholars and medical residents will receive Graduate College Scholarships with resident scholars living in Crowsnest Hall and non-resident scholars living elsewhere on campus or in the city, but maintaining full membership in The Graduate College, access to its facilities, and participation in its programs. For more information on The Graduate College and how to apply, refer to the [Grad College](#) website.

8.10 Professional opportunities

8.10.1 APEGA

The Association of Professional Engineers and Geoscientists of Alberta (APEGA) regulates the practices of engineering and geoscience in Alberta. You can apply for professional membership with APEGA Engineer-in-training or Professional Engineer if you have the minimum requirements. You can also apply to become a volunteer with APEGA. For more information, please refer to the [APEGA](#) website.

8.10.2 Transformative Talent Internships

Faculty of Graduate Studies [Transformative Talent Internships](#) are designed to give graduate students exposure to meaningful career opportunities to help bridge the gap between academia and the workplace. Transformative Talent Internships are skills internships. Graduate students in master's and PhD programs can participate in an internship that is related to the skills they are developing in their graduate study. The opportunity does not need to be connected to a graduate student's thesis research.