



**THE UNIVERSITY
OF BRITISH COLUMBIA**

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Faculty of Science
Okanagan Campus

**Earth and Environmental
Sciences**

**Graduate Student
Handbook**

2025–2026

This handbook provides essential information & guidance for students in the Earth and Environmental Sciences Graduate Program.

Please don't hesitate to reach out to your supervisor, graduate program coordinator or graduate program assistant within your department for assistance.

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1. Contacts within the Department of Earth and Environmental Sciences

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Department Head (pro tem) Kevin Hanna	FIP 246	250-807-8564	kevin.hanna@ubc.ca
EESC Dept. Admin Assistant Christa Nyarko Osei	FIP 322	250-807-9529	eegs.okanagan@ubc.ca
Laboratory Program Manager Saoirse MacKinnon	FIP 237	250-807-8405	saoirse.mackinnon@ubc.ca
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UBC Campus Security Non-emergency	ADM 101	250-807-9236	security.dispatch@ubc.ca
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2. Student Responsibilities at UBC

Upon registering, a student has initiated a contract with the University and is bound by the following declaration:

“I hereby accept and submit myself to the statutes, rules and regulations, and ordinances (including bylaws, codes, and policies) of The University of British Columbia, and of the faculty or faculties in which I am registered, and to any amendments thereto which may be made while I am a student of the University, and I promise to observe the same.”

The student declaration is important, as it imposes obligations on students and affects rights and privileges, including property rights. By agreeing to become a student, you make the declaration above and agree to be bound by it.

Each student is required to provide the information necessary for the University record and to keep Enrolment Services informed of changes in name and contact information.

Students are required to learn the statutes, rules and regulations, and ordinances (including bylaws, codes, and policies) and to any amendments thereto applicable at the University. For more information, please see the [Index of Board of Governors Policies](#) and [Senate Policies](#).

For further information, the Graduate Policy and Procedure Manual prepared by the UBC Okanagan’s College of Graduate Studies can be found at <https://gradstudies.ok.ubc.ca/policies-procedures/student-responsibilities/>

3. The Role of the Supervisor

The critical relationship between a research graduate student and their supervisor should always be **academic and professional, with an emphasis on a mutually open, committed, and respectful relationship**. The supervisor should act as both an academic mentor, with an emphasis on guidance, instruction, and encouragement of scholarship and research, and as an evaluator of the student’s performance. A fundamental duty of the supervisor is to impart to the student the skills necessary to plan and conduct original research.

Specifically, the supervisor should:

- Work with the student to establish a realistic timetable for the completion of the various requirements of the program of study;
- Discuss with the student and establish mutual expectations for the student’s vacation time (students are entitled to three weeks of vacation during each twelve month academic year);
- Develop a relationship with the student conducive to research and intellectual growth;
- Guide and mentor the student concerning the research ethics approval process and concerning the intellectual property issues around their thesis or dissertation research;
- Guide the student in the pursuit of knowledge and provide constructive criticism in support of the highest standards of research and professional development;
- Mentor the student in areas such as, but not limited to, the development of appropriate professional skills, funding applications, networking, assistance with publications, and career development.

The College of Graduate Studies has developed a [Checklist of Expectations for Graduate Student and Supervisor](#) to define the expectations and responsibilities of the graduate student and the supervisor. Additional information related to the Graduate Policy and Procedure Manual prepared by the UBC Okanagan's College of Graduate Studies can be found at <https://gradstudies.ok.ubc.ca/policies-procedures/supervisors/#item2>.

4. Scholarships & Financial Support

At UBC, full-time graduate students are supported financially to ensure they can dedicate the most time to their research. For the Earth and Environmental Sciences Graduate Program, the following minimums apply:

MSc – no minimum stated, but typically exceeding \$22,000 per year

PhD - \$25,000 per year

The amount for these stipends is calculated on an annual basis, and will come from different sources such as scholarships, awards, teaching assistantships (TA), and research assistantships (RA). The distribution is different for each student, as it depends on criteria like excellence, nationality, field of research, etc.

It is possible to receive more than these values if you accumulate scholarships and awards. If you cannot secure scholarships, then the combination of your TA and RA amounts will be adjusted by UBC to ensure your funding meets the program's promised level.

In Canada, the expected completion times for a graduate degree is 2 years for a MSc, and 4 years for a PhD. Consequently, your funding is aligned with these timeframes; meaning that if you exceed the time allotted to your research, UBC is no longer required to support you financially.

4.1 Scholarships & Awards

You are encouraged to apply to scholarship and award opportunities for which you are eligible. This competitive process is a normal part of your academic life. It is important for two main reasons:

- (1) Learning to write persuasive research proposals is essential both in industry and academia.
- (2) For your CV of resume, scholarships are an objective stamp of your excellence.

There are four levels of scholarships: institutional, provincial, national, and international. The last three are "external": your application will compete with students from other universities. Sometimes, external scholarships may have quotas of institutional applicants, meaning the best candidates are selected by UBC to be sent at the next level. For "internal" scholarships, decisions are made at the institutional level, meaning the awards are only available for UBC students.

- **Institutional** (internal). Scholarships and awards are offered at the UBC level. The applicants are graduate students from different programs. They range from campus-level competitions to scholarships offered by private donors for selected disciplines. The College of Graduate Studies (CoGS), the Faculty of Science (FoS), or the Earth and Environmental Sciences program are responsible for recommending students for scholarships, fellowships and other awards. They base

their recommendations on a range of factors such as academic achievement, leadership and UBC involvement. Many opportunities will arise throughout the year for which you will need to submit an application. Information regarding internal awards issued by the Faculty of Science can be found here: [FoS Graduate Student Awards](#). Information regarding internal awards distributed by CoGS (campus-wide) can be found at [CoGS Award Opportunities](#).

- **External.** The main funding source for Earth and Environmental Sciences graduate students in Canada is the Natural Sciences and Engineering Research Council of Canada ([NSERC](#)), specifically through their Canada Graduate Scholarships (CGS) initiative. MSc students should apply for the **CGS-M** scholarship (deadline is usually around December 1), and PhD students should apply for the **CGS-D** scholarship (deadline is usually around October 15). NSERC scholarships are the most prestigious awards, because they are selected at the national level.
- **International.** This level of scholarships is often limited to PhD students, and most will involve a collaborative aspect with a research group in another country. CoGS will email you about these opportunities, but your research supervisor may be the best person to contact about those as they are often discipline-specific.

4.2 Graduate Teaching Assistantships (GTA)

TAs are hired as a salaried position for the duration of a semester, and inquiries should be primarily directed to the Laboratory Program Manager. A full-time TA is hired for 12 hours per week over 16 weeks for a total of 192 hours for a semester, inclusive of the final exam period. The total hours do not need to be evenly spread over the appointment (e.g., higher workload of marking after an exam). See section 4.4 for hiring details.

Teaching Assistant Positions are posted in March of every year on each department's website. These are British Columbia Government Employee Union (BCGEU) positions and applications are due by April 30th. Late applications can be accepted; however, they will be reviewed after the applications received prior to April 30th.

Teaching Assistants (TAs) are assigned in preparation of each semester. An unofficial offer email will be sent out, and once accepted, an official offer letter and hiring documents will follow. Note that the actual hiring is usually finalized in August (when the exact numbers of students in each class are known).

The Teaching Assistant Application Form for the Department of Earth and Environmental Sciences can be found on our Careers page under the Students section on Teaching Assistants. This link is updated each term. Please check back [here](#) for the latest version.

Salaries are updated yearly and follow the BCGEU [Collective Agreement](#) schedule of pay. Teaching Assistant positions are paid bi-monthly by direct deposit. TA pay is 80% Regular (taxable) and 20% Fellowship (non-taxable). Contracts span four months at a time: between September 1 to December 31 and/or January 1 to April 30. You are required to be available for the full period of the TA contract. Do not plan absences during the period of your contract until you have explicit clearance from your research supervisor and lab manager. If you are ill during the teaching term and are unable to attend your assigned lab, email your TA supervisor and lab manager as soon as possible.

TAs must complete Teaching Assistant Foundational Training through the Centre of Teaching & Learning. The program consists of 10 hours of paid training and is offered to all new-to-UBC undergraduate and graduate TA's. For dates and more information, please visit: [Teaching Assistant Foundational Training](#).

4.3 Graduate Research Assistantships (GRA)

Your supervisor may assign you a Graduate Research Assistant (GRA) position. These positions are not within the BCGEU guidelines; therefore, the salary is independent from the TA salary. These positions are paid bi-monthly. See section 4.4 for hiring details.

The source of funding for a GRA is from the research grants of your supervisor. Each grant will usually have different amounts or salary limits, according to the type of research it is supporting. Some grants have limited time windows, or some may prevent the student from taking on another source of funding (like TA), etc.

GRA's are highly variable in how they are attributed and, as such, your supervisor is the best person to get information from.

4.4 Hiring Information

If you are being hired as a RA or TA, here is a list of documents and steps required:

- Study Permit – For **international students** at UBC Okanagan, you need to have a Study Permit and present this original to the Department. **Your Study Permit must state 'May accept employment on or off campus if meeting eligibility criteria as per R186 (F), (V) or (W)'**.
- **Social Insurance Number (SIN)** – to be employed in Canada, you must have a SIN number. If you do not have a SIN, then take the required original proof of identity documents to [Service Canada](#). The original application/document must be brought to the Department.
- Canadian Bank Account and **Direct Deposit** – Payment from UBC Okanagan is provided via direct deposit to a Canadian bank or Credit Union account. Set up a Canadian bank or Credit Union account and request the 'direct deposit' form from your bank. You will get an additional form from the Department with your offer letter.

For additional questions regarding student employment, please consult the [Employee Handbook for Students](#).

5. Program Timelines, Requirements & Milestones

If you join the program at the MSc level, your priority should be to get your research project underway, and to complete your course requirements within the first year. It is common to simultaneously serve as TA, so rigorous time management is essential. With your courses completed, you can focus on research in the last year. Whereas PhD students do not have course requirements, it is possible to take courses to increase their knowledge in a new specialized field.

5.1 Program Durations

<i>Program</i>	<i>Components</i>	<i>Expected duration</i>
MSc	Coursework and Thesis	24 months
PhD	Dissertation	48 months

Students should account for 2 to 6 months of dissertation-writing time, depending on their degree and writing level. Consequently, careful planning of research project timelines is needed to ensure defense within two or four years. In other words, the effective lab research time for a MSc is ~1.5 years and, for a PhD, it is 3 years.

5.2 Program Standards

- Students must maintain a standing of >76% (B+) in all coursework.
- The supervisory committee will gauge student progress towards the thesis annually.
- Students must present a departmental seminar (EESC_O 560)
- PhD candidates must pass their Candidacy exam within 18 months of degree initiation, although students can apply for extension on this deadline under extenuating circumstances. If a student fails the Candidacy exam, they may retake the exam within 6 months, but a second failure will lead to termination in the program.

5.3 MSc Milestones & Requirements

1. Establish your **Supervisory Committee**. This committee consists of: your principal supervisor and at least 2 other professors who understand your research project. These Committee members will meet with you at least once per year for your Annual Progress Report. They will also be part of the evaluation committee at your thesis defence. Discuss with your supervisor to find appropriate members.
2. **Each semester** you must enroll in EESC_O 599 **Master's Thesis** for your research-based thesis – this course is necessary to give you Full-Time student status at UBC. This is important since many scholarships are only accessible for full time students.
3. Register and complete a minimum of **7 credits** of coursework consisting of one of EESC_O 502 - Environmetrics, EESC_O 512 - Applied Data Analysis in Geosciences or EESC_O 544 - Dynamic Modelling of Human and Environmental Systems (all 3 credits) and EESC_O 550 (3 credits) + the seminar course EESC_O 560 (1 credit).

Registering in these graduate courses can be done in September when you have met with your supervisor and discussed the options that will align best with your research project.

Graduate Special Topics courses are offered/created according to the interests of the incoming student cohort, and may not be advertised on the UBC registration portal. In terms of timeline, you should ideally aim to have completed all your courses within 12 months (the Seminar can be later).

4. Present a **departmental seminar**: EESC_O 560 The seminar course usually takes place in your third or fourth semester. Your goal is to teach the department about a literature topic at the forefront of your field. The topic can be related to, but cannot be exactly on, your research project.
5. Research, write, and defend your thesis. In some cases, publication of your research results will also ensue.

5.4 PhD Milestones & Requirements

- 1. Establish your **Supervisory Committee**. *See section 5.3 for details.*
- 2. **Each semester** you must enroll in EESC_0 599 **Doctoral Thesis** for your research-based thesis – this course is necessary to give you Full-Time student status at UBC. This is important since many scholarships are only accessible for full time students.

At the PhD level, coursework is only required at the discretion of the student’s supervisory committee, depending on previous course credits from prior MSc degree.

- 3. Pass the **Oral Candidacy Examination** that demonstrates breadth and depth of knowledge in one’s chosen field and specialization.
- 4. **Publish** your research results. Three first-author peer-reviewed publications are usually expected for a PhD candidate, although the number is field-dependent.
- 5. Complete your research, **write** your dissertation, and **defend** your work.

5.5 Timeline Overview

	MSc	PhD
Year 1	<ul style="list-style-type: none"> • Establish your Supervisory Committee • Complete coursework (2 x 3 cr) • Start your research • Present at conferences 	<ul style="list-style-type: none"> • Establish your Supervisory Committee • Start your research • Present at conferences
Year 2	<ul style="list-style-type: none"> • Present a seminar • Complete your research • Publish your research findings • Write and defend your MSc thesis 	<ul style="list-style-type: none"> • Pass your PhD Oral Candidacy Examination • Publish your research • Present at conferences
Year 3	—	<ul style="list-style-type: none"> • Publish your research • Present at conferences
Year 4	—	<ul style="list-style-type: none"> • Publish your research • Write and defend your PhD thesis

5.6 Forming your Supervisory Committee

Your supervisor and any co-supervisors are automatically members of this committee. Other committee members may be drawn from inside or outside the program in which the student is registered. The supervisory committee is responsible for the mentoring, supervisory and examination work on the student's thesis proposal, comprehensive exams, and dissertation.

To fully benefit from a supervisory committee, a student should:

- Ask the committee for advice and guidance on thesis or dissertation development and direction early in their program;
- Be in regular contact with their committee as research progresses and the thesis or dissertation develops;
- Ask for feedback on written materials from individual committee members;
- Request their supervisor call a full committee meeting at various stages in the development process.

5.7 MSc and Doctoral Students

The student's supervisory committee guides the student in planning their research and in preparing the thesis. Committee composition must conform to the following the guidelines:

- The committee must comprise at least three faculty members.
- For each supervisor/co-supervisor, there must be at least one committee member (ex. if there are three supervisors/co-supervisors, there must be at least three additional committee members).
- The committee may include faculty members from other graduate programs.
- The committee may include qualified non-faculty members or faculty external to UBC upon approval of the dean of the College of Graduate Studies. The graduate assistant submits this form and the proposed member's CV/resume is required.
- To reduce the risk of discontinuities in supervision, at least two members of the committee must be faculty members on the UBC Okanagan campus, including adjunct status.

5.8 Changes to Committee Members

It may be necessary for a student to change committee members during the program. Reasons for committee member changes include, but are not limited to: change of research area, sabbatical leave, retirement. If a change in committee members is required, the student should complete and submit the [Change of Student Supervisor Committee Member](#) paperwork.

6. Annual Progress Reports

The annual progress report records the current status of the degree program progress of a student, and it indicates further steps on a path to successful completion of the program.

The progress report is initiated by the student and completed by the supervisor, the graduate assistant and the graduate program coordinator. The completed and signed report must be submitted to the College of Graduate Studies by June 1st for each year of study.

The process for completion of the annual progress report is as follows:

- The student completes their portion of the report, signs it, and submits it to their supervisor;
- The supervisor completes their portion of the report in consultation with the student and the supervisory committee;
- The supervisory committee, the supervisor, and the student meet to discuss the supervisor's comments. The student is made aware of the content of the report if they cannot be present at the meeting;
- The supervisor and student sign the report and submit it to the graduate program coordinator;
- The graduate program coordinator determines whether the progress of the student should be rated as satisfactory or not and marks the report accordingly. The coordinator may add comments, signs the report, and submits it to the College of Graduate Studies, with copies going to the student and into the student's file in the department or program. If the graduate program coordinator determines that the academic progress of the student is unsatisfactory, they will convene a meeting with the student and the supervisor to discuss their concerns.

7. Transferring from MSc to PhD

Exceptional MSc students can transfer to the PhD program after one year if they meet the following requirements:

- The student has completed one year of study in their master's program and applies for transfer prior to completing their second year of study;
- The student has met the coursework requirements for a master's degree in their program with a minimum 76% average;
- The student shows clear evidence of research ability;
- The transfer is supported by the supervisor and program coordinator.

A form must be completed in order to complete the transfer: [Transfer from Master's to Doctoral Graduate Program](#). For more information, please consult the [Graduate Policy and Procedure Manual](#).

8. PhD Comprehensive Exam for Admission to Candidacy

The purposes of the comprehensive examinations are:

1. To ensure that a doctoral student has a comprehensive understanding of the literature in their field(s) of study, including theories and methodologies;
2. To ensure that the student is fluent with past and current debates and anticipated future trajectories in this/these field(s);
3. To enable the student to develop and locate their own intellectual commitments within the debates of those fields;

4. To demonstrate scholarly breadth and depth of understanding that is wider than the specific topic of the student's research;
5. To prepare the student to convey their knowledge to both specialized and non-specialized audiences.

All doctoral students are required to successfully complete a comprehensive examination before being admitted to candidacy. The basic requirements for a doctoral student to be admitted to candidacy are:

- All required coursework is successfully completed. (MSc level)
- The comprehensive examination(s) is/have been passed.
- The dissertation proposal has been approved by the supervisory committee.

Students are normally expected to complete their comprehensive(s) within twenty-four (24) months from the date of initial registration. Students who are not admitted to candidacy within 36 months from the date of their initial registration must withdraw from their program. In exceptional circumstances, the dean of the College of Graduate Studies may grant an extension to this deadline.

As soon as a student has satisfied all requirements for candidacy, the graduate program must [recommend to the College of Graduate Studies that the student be admitted to candidacy](#).

9. Thesis Defence

9.1 MSc Thesis Defence

The Thesis Oral Examination is an examination approved by the College of Graduate Studies. Prior to the final defence, candidates must have fulfilled all coursework, examination, and language requirements of the degree program. It is the responsibility of the candidate's graduate program to ensure that all of these requirements have been met and that the candidate's language proficiency is sufficient for the examination to be conducted with full communication between the committee and the candidate. The Thesis Oral Examination is a public event at UBC Okanagan, and as such will be conducted in English.

The thesis oral examination process is initiated once the student's supervisor(s) and supervisory committee have deemed the thesis ready to proceed to defence. For all the criteria and scheduling details, please visit the [Program Requirements](#) page.

9.2 PhD Thesis, Oral Presentation, Defence

A student's doctoral dissertation is a substantial piece of scholarly work that contains a significant contribution of new knowledge to the field of study. It presents the results and an analysis of the student's original research, and should be significant enough to be publishable in the refereed literature.

The dissertation must have a coherent structure that provides a complete and systematic account of the student's scholarly work. It may incorporate work from submitted, accepted, or published journal articles, which may have co-authors. It may also include other scholarly artifacts such as creative writing, film and other audio, visual, and graphic representations, and application-oriented

documents such as policy briefs, curricula, business plans, computer and web tools, pages, and applications, etc., so long as they are also described and analyzed in a scholarly context. For full criteria and scheduling details, please visit: [8.0 Program Requirements \(ubc.ca\)](#)

The dissertation should reflect the student's ability to do the following:

- Critically analyze the relevant literature;
- Use and describe in detail the appropriate methodology for the scholarly work undertaken;
- Conduct research and present findings that result in a significant and original contribution to knowledge;
- Verify knowledge claims and sources meticulously;
- Locate the work of the dissertation and its findings within the broader field or discipline;
- Communicate the scholarly work and analysis effectively.