

Graduate Student
HANDBOOK
2025 – 2026



**Department of Earth Science &
Environmental Change**

UNIVERSITY OF ILLINOIS URBANA-CHAMPAIGN

RECENT CHANGES TO DEPT. OF EARTH SCIENCE & ENVIRONMENTAL CHANGE POLICY

The changes outlined below begin with the 2020-2021 academic year. Previous versions of the handbook are available on the Dept. of Earth Science & Environmental Change's website.

Department Policy Changes: If major changes in Department requirements occur, students may choose to fulfill either the requirements in effect when they began graduate study or the current requirements. Prior to major changes in policy, one or more meetings with the graduate students usually takes place to discuss the changes and their effects on current graduate students.

Policy Affected	Effective Date	Explanation / Notes
Formation of Dissertation Committees during the first semester	Spring 2021	Dissertation committees will be formed during the first term to provide early guidance and advice on the student's course of study.
The Chair of the Graduate Studies Committee will assign a member of the Dissertation Committee	Spring 2021	To ensure breadth in the graduate program, the Graduate Studies Chair will appoint a member to each dissertation committee who is outside of the student's primary research area.
Removal of the Qualifying Exam from the Ph.D. Program	Spring 2021	The Qualifying Exam has been removed from the Ph.D. program and replaced with greater dissertation committee involvement.
Timeline for Ph.D. examinations	Spring 2021	The Preliminary Exam has been moved to the 4 th semester of the Ph.D. program.
Timeline for Ph.D. Committee Meetings	Spring 2021	Prior to the Preliminary Exam, Dissertation Committees will meet every term. After a student passes their Preliminary Exam, Committees will meet at least once/year.
New forms have been added to guide M.S. and Ph.D. meetings and annual reviews.	Spring 2021	Three new forms have been introduced: 1. First committee meeting (pg. 45-46); 2. Annual review (pg. 47-48); 3. Third committee meeting (pg. 49).

All graduate students must also become familiar with:

The Graduate College Handbook of Policy and Requirements for Students

<http://www.grad.illinois.edu/gradhandbook>

The Grad College Handbook provides additional, detailed information on policies and regulations affecting all graduate students on campus, including degree requirements. If a Department of Earth Science & Environmental Change policy seems to conflict with a Graduate College policy, please bring this to the attention of Lana Holben immediately. Generally, Graduate College policy supersedes department policy.

PREFACE

PREFACE

The Department of Earth Science & Environmental Change currently offers four graduate degree programs: (1) a thesis Master's of Science, M.S., in Geology; (2) a non-thesis Master's of Science, M.S., in Geology; (3) Online M.S. in Environmental Geology; and (4) a Doctor of Philosophy, Ph.D., in Geology.

This Handbook is for both new and continuing students. In it you will find the Department's philosophy of graduate education, general information, program policies, and guidance on how to successfully complete your degree. Contact your advisor or a member of the Department's Graduate Studies Committee (GSC), if you have additional questions, comments, and/or suggestions.

Part 1 of this handbook provides general information, covers program goals, and discusses policies for the Department of Earth Science & Environmental Change's graduate programs.

Part 2 of this handbook contains details of the academic requirements and policies pertaining to the Department of Earth Science & Environmental Change's graduate programs.

Additional information about graduate programs at the University of Illinois at Urbana-Champaign can be found through the Graduate College online at:
<http://www.grad.illinois.edu>.

TABLE OF CONTENTS

Table of Contents

Part 1: GENERAL INFORMATION & POLICIES

Dept. of Earth Science & Environmental Change Graduate Programs Goals	8
Statement on Diversity, Equity, and Inclusion.....	9
Getting Oriented	10
Whom to ask and where to find it	10
For academic issues.....	10
Departmental Staff.....	10
SESE Business Office Staff:	11
When You Need Help With:	11
You Should See:.....	11
E-mail Policy	11
Academic Year	12
Registration and Student Status	12
Fall and spring, all students.....	13
Summer, new students	13
Summer, current students	13
International Students.....	13
Course Loads	13
Minimum Enrollment:	13
Maximum Enrollment:	13
Academic Leaves of Absence	13
Academic Standing	14
Good Standing.....	14
Probation.....	14
Dismissal.....	15
Advising and Responsibilities	16
Early in the program	16
The Initial Advisor's Roles.....	16
The Research Advisor's roles	16
The Ph.D. Dissertation Committee's roles.....	16
Student's Responsibilities.....	17
Annual review process for academic progress	17
First Year Annual Review for Ph.D. Program Students.....	17
Managing Conflict and Problem Solving	18
Academic conflict	18
Employment conflict	18
Grievances alleging discrimination.....	18

Capricious grading.....	18
University discipline system	19
Sexual misconduct.....	19
ESEC Ombudspeople.....	19
Departmental Petition Process	19
Important Reminders	20
Academic Integrity	20
Academic Misconduct	20
Additional information	21
Library.....	21
Departmental Colloquium.....	21
Current Research in Geoscience.....	21
Mail.....	21
The Wanless Room	21
Main office	21
Helpful Webpages:	22
 Part 2: DEGREE PROGRAM REQUIREMENTS	
Master of Science Requirements	24
The Standard Option	24
The Applied Geology Option.....	24
Milestones for Standard Master of Science options	24
Curriculum Requirements for Master’s of Science Geology, M.S.	25
Thesis Option.....	25
Other Requirements for Thesis Option M.S.	25
Not-Thesis Option	25
Other Requirements for Non-Thesis Option M.S.	25
Thesis Format	26
Thesis Readers.....	26
Procedures for Completing the M.S. Standard Option	26
Thesis Colloquium	26
Thesis Completion and Signing.....	27
Depositing your Thesis	27
Procedures for Completing the M.S. Applied Geology Option	27
Advisor Requirement.....	27
Written Report	27
Report Completion and Signing.....	28
Ph.D. Requirements	29
Milestones	29
Students entering with a Geoscience M.S. Degree	29
Students entering without a Geoscience M.S. Degree.....	29
Part-time Ph.D. Students.....	29
Curriculum Requirements for Doctorate of Philosophy, Ph.D.....	31

Entering with approved B.S. degree.....	31
Entering with approved M.S. degree.....	31
Other Ph.D. Requirements	31
Advisor and Dissertation Committee	32
Dissertation Committee Membership.....	32
First Committee Meeting	32
Second Committee Meeting.....	33
Third Committee Meeting	34
Fourth Committee Meeting – Preliminary Exam.....	34
Annual Meetings	34
Timeline for student committee meetings.....	35
Dissertation.....	35
Colloquium, Final Exam, and Completion.....	36
Colloquium	36
Final Exam	36
Signing	36
Examinations.....	37
Ph.D. Preliminary Examination	37
Scheduling	37
Objectives.....	38
Committee.....	38
Written Proposal	38
Exam format	39
Outcome of the exam.....	39
Ph.D. Final Examination.....	40
Scheduling	40
The Committee.....	40
Nature of the Exam	40
Outcome of the Exam.....	40

APPENDIX - ESEC FORMS

ESEC Graduate Student Petition Form, Pg. 1	43
ESEC Graduate Student Petition Form, Pg. 2	44
First Dissertation Committee Meeting Form, Pg. 1.....	45
First Dissertation Committee Meeting Form, Pg. 2.....	46
Annual Review Meeting Form, Pg. 1	47
Annual Review Meeting Form, Pg. 2	48
Third Dissertation Committee Meeting Form.....	49

PART 1

GENERAL INFORMATION & POLICIES

This handbook contains policies set forth by the Department of Earth Science & Environmental Change and the Graduate College at the University of Illinois at Urbana-Champaign and is current as of July 2025.

Previous versions of the Graduate Student Handbook are available on the Dept. of Earth Science & Environmental Change website. Students may choose to fulfill either the requirements in effect when they began their graduate studies or follow the current handbook requirements.

Dept. of Earth Science & Environmental Change Graduate Programs Goals

Our program aims to help students develop skills and acquire knowledge necessary for work as leaders in research, professional practice, and teaching in geoscience. The program centers on three complementary activities:

- 1. Independent research:** We strive to teach students how to formulate scientific problems, analyze data, make interpretations, and disseminate results. We expose students to examples of solid research and introduce them to methods for evaluating the research of others. As in most graduate programs, we emphasize work on research as the best means for developing skills of critical thinking and self-motivation.
- 2. Coursework:** We offer courses at the graduate and advanced undergraduate levels that efficiently communicate state-of-the-art information in geoscience. Our courses teach students to access and analyze current and classic geoscience literature, to think critically, and to develop skills in written and oral presentation.
- 3. Teaching:** Most students have the opportunity to serve as teaching assistants. We view TA's as apprenticeships in teaching, providing students with the opportunity to refine their own understanding of geoscience, and to organize and present information. Teaching also provides experience in public speaking and in developing teaching techniques. The TA experience helps all geoscientists, not just future teachers -- Presentation skills are also important in corporate and government settings.

Independence: A Critical Part of the Program

Independent thinking and conducting research form a central theme of our grad program. The grad program is as flexible as possible, so that students devise a plan of study that meets their individual needs.

Even though you have more independence than you did as an undergrad, you will still find yourself in need of advice. Don't hesitate to talk to your advisor, faculty members, fellow graduate students, and staff members. Others with more experience may be able to help you find the answers you need quickly.

Statement on Diversity, Equity, and Inclusion

You belong. At the University of Illinois, we support each other by embracing individuality and community. Through equal access and opportunity, the University of Illinois is empowering pioneering researchers, scholars, and leaders to thrive. Join us in creating a bold, diverse, and excellent future.

The Department of Earth Science & Environmental Change (ESEC) is firmly committed to promoting diversity, equity, and inclusion at all levels of our Department, School, and University. As outlined by ESEC's Diversity, Equity, Inclusion Committee, ESEC maintains three overarching goals:

- To recruit a diverse community at all levels: Undergraduate students, Graduate Students, Postdoctoral Scholars, Staff, and Faculty.
- To provide equity for all by removing structural barriers and fairly distributing resources and opportunities.
- To retain and promote a diverse community through inclusive practices that foster a culture that respects and values diversity of identity, background, and perspective.

Diversity

Who is in your community?

Having members from different backgrounds and identities brings unique perspectives to the table resulting in a more vibrant and creative organization.

Equity

What barriers are in their way?

Processes should be continually and consistently evaluated to remove systemic biases and structural barriers to promote fair practices, treatment, and opportunities for all.

Inclusion

Is everyone's voice heard?

Everyone should feel respected and valued, seeing a system that honors diversity of identity and perspective, and having the ability to influence decision making.

At the core of our commitment to a diverse, inclusive, and equitable department is creating an environment where people with different ethnic, racial, sexual, gender, and religious backgrounds can thrive. We further commit to maintaining an educational and research culture free from religious, ethnic, racial, sexual, and gender harassment and bias.

ESEC upholds and abides by campus policies on professional conduct, <https://provost.illinois.edu/faculty-affairs/faculty-resources/>, nondiscrimination policies, <https://cam.illinois.edu/policies/hr-48/>, the University of Illinois University Code of Conduct, https://www.ethics.uillinois.edu/compliance/university_code_of_conduct, and all state and federal harassment laws, <https://www.eeoc.gov/harassment>. Harassment includes offensive remarks about a person's religion, ability, sexuality, gender, ethnicity, and race as well as unwanted sexual advancements. Harassment creates an educational and work environment that is intimidating, hostile, and offensive to and violates the values of the Dept. of Earth Science & Environmental Change. Harassment of any kind is not tolerated and is contradictory to our department's values and culture.

ESEC is committed to creating an inclusive culture for all students, faculty, and staff and providing an environment that fosters success. When issues arise and we don't meet this standard, we are committed to acting to address concerns and make improvements.

Getting Oriented

Getting used to a new environment may seem a bit daunting at first. To help out, the Department of Earth Science & Environmental Change holds an orientation meeting at the beginning of the fall semester. All new graduate students are required to attend. If you must miss this meeting, please notify Lana Holben before the meeting. During the meeting, faculty members will introduce themselves and discuss their research programs, new students will introduce themselves, and share experiences.

Below is some essential information about the operation of ESEC.

Whom to ask and where to find it . . .

For academic issues

- 1) Your advisor or other members of your dissertation committee regarding specifics about courses recommended.
- 2) Lana Holben regarding course credit accumulations.
- 3) Members of the Graduate Studies Committee for petition issues.

Departmental Staff

Lana Holben (Assistant to the Head, 3028 NHB, holben@illinois.edu): In charge of many tasks of importance to graduate students. Helps with admissions, assistantships and fellowships, department and Graduate College funded awards, tracks curriculum requirements for each student, department and Graduate College policies and regulation pertaining to graduate students. Also assists with requests for master's and doctoral committee assignments, scheduling of oral exams, and assists with colloquium arrangements when a student is preparing for graduation.

Haley Sechan (Office Support Associate, 3086 NHB, haleykw2@illinois.edu): Keeping track of keys, office assignments, colloquium arrangements, audio-visual equipment, shipping, fax, copying, ordering/keeping office supplies, etc.

Trish Gregg (Associate Head, 3016 NHB, pgregg@illinois.edu): Organizing TA's and overseeing the operation of introductory geology laboratories.

Luke Falls (Information Technology Specialist, help@earth.illinois.edu): Providing computer support for the Department and computer security.

SESE Business Office Staff:

Denise Madden (Human Resource Associate, 3088 NHB, djmadden@illinois.edu): Human Resources, Payroll, & Telecommunications. Assists you regarding your I-9 and other forms necessary to set up your assistantships, any payroll questions, Visa applications and tracking, telecommunications coordinator.

MaryAlice Greer (Office Manager, 3088 NHB, ddgreer@illinois.edu): Purchasing, Property Assists with the purchase of items for research, also works with faculty to coordinate field trips.

Jodi McDuffee (Office Manager, 2042 NHB, jzielke2@illinois.edu): Travel, Reimbursements. Assists with travel arrangements & reimbursements when you receive a department-funded award for conference travel or research, and miscellaneous employee reimbursements.

Jake Keister (Communications Coordinator, 1048 NHB, jzielke2@illinois.edu): Publicizing your research and achievements, media relations, event promotions.

When You Need Help With:	You Should See:
Grad College petitions and forms, procedures, petitions, thesis procedures and formatting, questions regarding your curriculum requirements	Lana Holben 3028 NHB, holben@illinois.edu
Keys, copying, shipping, video, building repairs, thermostats, lights, copier repairs, air conditioning, ordering office supplies	Haley Sechan 3086 NHB, haleykw2@illinois.edu
Teaching assistantships	Trish Gregg 3016 NHB, pgregg@illinois.edu
Curriculum choices, courses, and registration	Advisor or Grad Studies Committee Chair

E-mail Policy

Following the Graduate College policy, the @illinois.edu email address should be used for all University related correspondence. The Department's support staff, faculty and Graduate Studies Committee chairs will send e-mails to your @illinois.edu address only.

Academic Year

There are several Dept. of Earth Science & Environmental Change milestones each academic year including committee meetings and exams. Below is a brief list of important events:

Fall Term

Mid-August: TA Training, New Graduate Student Orientation

August / September: Welcome & Welcome Back events

September - November: First and Third Committee Meetings

December: Fall Convocation

Spring Term

January: Schedule Exams and Annual Reviews

February: Prospective Graduate Student Event & SESE Research Review

January - April: Exams and Annual Reviews

May: Commencement Weekend

Please refer to the University of Illinois academic calendars for campus wide course registration dates and deadlines:

<https://registrar.illinois.edu/academic-calendars/>

Please refer to the Graduate College for deadlines specific to graduate degree programs.

<https://grad.illinois.edu/general/calendar/current>

Registration and Student Status

Students are expected to be enrolled for fall and spring semesters throughout their graduate program, and students must be admitted to the degree program and enrolled in the program for at least one term after admission, which could be spring, summer, or fall in order to graduate from the program. Fellowship recipients must be enrolled during the terms of their appointments. Students with assistantships for spring or fall must be enrolled during the term in which they are appointed.

The standard award period for an academic year fellowship is **August 16 to May 15**. The standard award period for a fall fellowship is August 16 to December 15; the standard award period for a spring fellowship is January 16 to May 15.

There are three academic terms in each academic year: fall, spring, and summer. Graduate-level courses are assigned 500-level course numbers. Graduate students can take a limited number of 400-level (senior undergraduate) courses for credit toward their degree.

Fall and spring, all students

In the fall and spring terms, students receiving assistantships must be registered for the semesters of appointment.

Summer, new students

Students admitted for summer term who receive assistantships must register for the summer term.

Summer, current students

If a student receives a summer assistantship (the period between May 16 and August 15), and the student was registered for the immediately preceding spring semester or has registered for the following fall semester, the campus policy does not require the student to register for the summer term.

Students must register online using the Self-Service registration system by the tenth day of instruction. **Students are responsible for registering, ensuring the accuracy of their schedules, and meeting campus deadlines.** Students who find errors in their schedules should immediately correct these errors. Corrections must be completed before the deadline for adding or dropping a course.

International Students

International students must register for full-time enrollment in every fall and spring term and must register by the tenth day of instruction to comply with Student Exchange and Visitor Information System (SEVIS) requirements. International students require the prior approval of International Student and Scholar Services to drop below full-time enrollment, and they should see the explanation of full-time status in Chapter 2.2 of the Grad College Handbook for more information.

Course Loads

Minimum Enrollment:

The Dept. of Earth Science & Environmental Change requires all full-time students to be enrolled for a minimum of **12 credit hours** for fall and spring terms. All students should keep in mind that enrollment below a full-time course of study may jeopardize progress toward a degree, financial aid, fellowship, loan deferment, or the visa status of an international student.

Maximum Enrollment:

The maximum amount of credit in which a graduate student may enroll is 20 hours in fall and spring terms and 12 hours in the summer term.

Academic Leaves of Absence

The Graduate College outlines two categories for academic leaves of absence. Graduate students in degree-seeking programs are entitled to a total of two terms (fall and / or spring semesters) of academic leave in the course of a single degree program. Students must document their request for a leave and meet the eligibility requirements.

Personal academic leaves of absence may be requested for a variety of reasons, including but not limited to leave for health reasons, for personal reasons, for active military service, or to take care of dependents or family members.

Academic progress leaves of absence may be requested for instances of academic activity, such as study abroad when the student registers at another institution, or fieldwork when the student is not using university resources including faculty time, or receiving financial support paid through the university.

For additional information and rules regarding Academic Leaves of Absence, please refer to the Graduate College Handbook: <http://www.grad.illinois.edu/gradhandbook>

Academic Standing

Academic standing reflects a student's status with regard to maintaining satisfactory progress on all aspects of their degree program. If concerns arise regarding a student's progress or aptitude in a graduate program, the Dept. of Earth Science & Environmental Change aims to have a clear process to address those concerns in a positive way. It is vitally important for the student's protection that 1) the concerns are communicated clearly and, except in very rare cases, that 2) a period of time is given for the student to address the concerns. This time period, usually one semester, is known as a period of probation. Probation may arise from major concerns, such as a serious lack of progress, but may also be triggered by minor concerns such as a temporary drop in grade point average.

Good Standing

Good academic standing requires more than an acceptable cumulative and semester GPA. Graduate students must make satisfactory progress in all aspects of their program in order to continue as students and to graduate.

Minimum GPA

The Dept. of Earth Science & Environmental Change requires a student to maintain a minimum cumulative graduate GPA of 3.0. If the GPA falls below this minimum after 12 or more graduate hours of graded coursework, it must be raised to 3.0 or above after the completion of 12 additional graduate hours of graded coursework and must be maintained at or above the minimum thereafter. All graduate students must meet the minimum degree GPA specified by the degree program in order to have their degree certified and to graduate.

Probation

The probationary period provides time for a student to improve their academic standing with guidance from their advisor and reader (M.S. students) or committee (Ph.D. students). Students may be placed on probation due to the following situations including, but not limited to: not meeting the minimum program GPA requirements; failing to make satisfactory progress in their course work; failing to make satisfactory progress in their research; not satisfactorily completing program milestones; or failing their preliminary exam when a second chance has been granted.

Students have regular meetings and an Annual Review with their advisor and reader/committee to track their progress and determine if there are any issues impeding their advancement in their degree program. If a student has fallen behind in their coursework and research and is failing to meet program milestones, their committee may recommend to the Graduate Studies Committee that they be put on probation. Students may appeal this decision with the Graduate Studies Committee.

If a student is placed on probation, they will be alerted by the Department and/or Graduate College. The student should work closely with their advisor and reader/committee to develop a detailed plan for achieving and maintaining Good Standing. This may include more frequent reviews of progress by their committee and follow up meetings to evaluate their student status. The probationary period should be used as a chance for course correction and improvement.

Students may also be placed on probation automatically by the Graduate College if they exceed the Graduate College time limit to complete their M.S. or Ph.D. degree. As students reach this deadline, they should work with their advisor and reader/committee to make sure that they are making adequate progress and have a timeline for degree completion in place. Students who have exceeded the time limit to complete their master's degree or doctoral degree should work with their advisor and reader/ committee to petition the Graduate College to continue in their academic program.

Dismissal

Most graduate students who enter the graduate program complete their degrees. But in some cases, the program is not a good match for a student's goals, abilities, and/or motivation, and they leave without a degree or change their degree goal from Ph.D. to M.S. In those cases, it is best for both the student and the program that this decision is reached without unnecessary delay. If these decisions are deemed necessary, then they will be arrived at through the normal course of committee meetings and in consultation with a student's committee members, or in the case of an M.S. student, consultation with a student's advisor and reader. A graduate student placed on probation who fails to improve their academic standing by the end of the probationary period will receive a notice of dismissal from the Graduate College. In rare cases, such as lack of attendance or egregious ethical violations, a student may be dismissed from the program without a probationary period.

For more information regarding student academic standing please refer to the Graduate College Handbook: <http://www.grad.illinois.edu/gradhandbook>

Advising and Responsibilities

In many ways, graduate education is carried out as an apprenticeship, and the interaction between the grad student and the advisor is central to the mission of the Department.

Early in the program

Most students enter the program intending to work with one particular faculty member, while others consider multiple options in their first year. Students are assigned advisors when they arrive in the Department. In many cases, a student's initial advisor becomes his/her research advisor, but this does not need to be the case. We encourage students to interact with other faculty members in order to develop a breadth of research skills and interests, and to explore the range of research opportunities available in the Department. Each student works closely with the advisor to choose classes and to begin developing a research topic.

The Initial Advisor's Roles

- Advise the student in choosing a course of study.
- Assist in initiation of research projects.

Later in the program, the Research Advisor is responsible for monitoring the student's program of study. At least once a year, the Graduate Studies Committee (GSC) and the student's Dissertation Committee monitors a student's program to ensure that satisfactory progress toward a degree is being made.

The Research Advisor's roles

- Advise the student in choosing a course of study and completing the coursework requirements.
- Act as a mentor in the planning and execution of research projects.
- Educate the student as necessary to develop their understanding of how scientific research is carried out in a methodical and ethical manner.
- Facilitate the execution of research projects by providing access to equipment, field sites, or research funding.

The Ph.D. Dissertation Committee's roles

All Ph.D. students should work with their advisors soon after joining the Department to form a Dissertation Committee within their first term. The Dissertation Committee will provide research and career guidance throughout the course of a student's matriculation providing support and mentorship alongside the student's research advisor.

Student's Responsibilities

Students should be aware that they have new responsibilities that they may not have had as an undergraduate. One major goal of our program is to help students become independent thinkers and contributors, rather than followers, in the scientific community. Graduate students are afforded great flexibility in designing their coursework and in pursuing research topics, but this freedom comes with an important responsibility. Students must take charge of their education and are expected to contribute to the upkeep and improvement of the Department.

Annual review process for academic progress

Following the policy of the Graduate College, the Geology program will conduct an annual review of all currently enrolled graduate students during the spring term coinciding with an annual, spring term committee meeting. The purpose of the Annual Review is for students to work with their committee to evaluate their progress and to identify an ongoing pathway to professional success. The formal process of annual progress-tracking allows the student and their committee to meet to discuss their advancement towards degree and establish objectives for the coming year. The Annual Review ensures that students, their advisors, and their dissertation committees, or thesis readers for M.S. students, are held accountable for timely progress and for constructive feedback.

The annual review of Geology graduate degree candidates will be conducted by April 30th of the spring semester. The review will begin with a self-assessment carried out by the student. This and other written parts of the process are done online at: <https://my.atlas.illinois.edu>. Once the student has completed their self-assessment online form, their advisor will provide comments on the student's progress and the plan for the upcoming academic year.

Following Graduate College guidelines, which requires an in-person meeting between the student and their advisor, the student and their committee, or reader in the case of M.S. students, must meet in person to communicate and discuss the advisor's feedback. The student will work with their committee to schedule a meeting time (typically 1-hour in length) to discuss their progress. The meeting will include an oral presentation of up to 15 minutes in length by the student, outlining progress made during the past year, and research plans for the upcoming year.

If there is disagreement of opinion between the student and their committee or reader on the performance evaluation, proposed plan of action, or both, the Graduate Studies Committee Chair must be informed immediately by the committee. It is stressed that the primary purpose of this review is to provide feedback and discussion to assist the student in their progress towards graduation and other career goals.

First Year Annual Review for Ph.D. Program Students

The annual review for first year Ph.D. students is outlined below (pg. 32-33) and includes a particular emphasis on providing guidance to help students fill any potential knowledge gaps.

Managing Conflict and Problem Solving

Grievance Policies and Procedures are summarized below and are fully discussed the Graduate College Handbook: <http://www.grad.illinois.edu/gradhandbook>

The university has procedures to aid students experiencing conflict. Policies and procedures for conflict resolution are overseen by several offices on campus, including the Graduate College, the Office of the Dean of Students, International Student and Scholar Services, the Office of Access and Equity, and, in some cases, individual departments. The type of conflict will determine from which university office(s) the student should seek assistance.

Academic conflict

Academic conflict may be addressed through informal processes or through a formal grievance process. It is recommended that students first explore the option of informally resolving an academic conflict. A student who believes they have an academic grievance can schedule a discussion with a Dept. of Geology Ombudsperson and/or their advisor as a great first step for managing a conflict and finding solutions. Alternative options include a senior faculty member, Graduate Studies Committee Chair, or department head.

Employment conflict

Most conflicts between a supervisor and a student can be prevented if the student is given a clear description of responsibilities and expectation for performance and if the student receives regular supervision and evaluation. When a serious conflict between an assistant and a supervisor occurs, reasonable attempts should be made to resolve the conflict informally. If there is a conflict between a supervisor and an assistant that cannot be resolved by informal means, additional resources for students experiencing employment-related conflict include the following:

- Dept. of Earth Science & Environmental Change Ombudsperson
- the Policy and Procedures for Addressing Discrimination and Harassment at the University of Illinois at Urbana-Champaign,
- the Agreement by and between The Board of Trustees of the University of Illinois and the Graduate Employees' Organization (GEO) (for graduate assistants that are covered); and
- the Illinois Human Resources Office.

Grievances alleging discrimination

See Article 1, Part 1 of the Student Code (<https://studentcode.illinois.edu>) for information on grievances alleging discrimination. Students may also reach out to the Office for Access and Equity or the Title IX Office for additional support.

Capricious grading

See section 3-107 of the Student Code (<https://studentcode.illinois.edu>) for information on capricious grading and the departmental procedures for investigating capricious grading complaints.

University discipline system

See section 1-301 of the Student Code (<https://studentcode.illinois.edu>) for an outline of the jurisdiction of the university discipline system. The Subcommittee on Graduate Student Conduct of the Senate Committee on Student Discipline has the right to impose sanctions including, but not limited to dismissal, suspension, conduct probation, censure, and reprimand.

Sexual misconduct

The University of Illinois prohibits and will not tolerate sex discrimination, sexual harassment, or other sexual misconduct of or by students, employees, or others in its education programs and activities, including admissions and employment, and will act to provide appropriate remedies when such conduct is discovered. Please see the University of Illinois System Statement on Sex Discrimination, Sexual Harassment and Other Sexual Misconduct at:

<https://go.uillinois.edu/SexualMisconductStatement>

<https://cam.illinois.edu/policies/hr-79r/>

ESEC Ombudspeople

The Dept. of Earth Science & Environmental Change ombudspeople are available to meet with graduate students by appointment. Please email any of the ombudspeople below to set up a meeting.

Alison Anders, amanders@illinois.edu

Jessica Conroy, jconro@illinois.edu

Departmental Petition Process

Deviations from policies are allowed under appropriate circumstances, upon approval of a student's petition by the student's advisor, and the Graduate Studies Committee or by the Dean of the Graduate College as appropriate. The departmental grad student petition must be completed by the student, and the student must have their advisor complete the advisor portion before submitting it to Lana Holben for review by the Grad Studies Committee.

It is strongly advised that a student file a petition before a deviation from policies occurs.

The petition request should be made to Lana Holben within the semester of the policy deadline if requesting an extension. Petitions should only be filed for "exceptional cases". Situations needing a departmental petition may include, but are not limited to, delays in program milestones due to family or medical leave, extensive field programs or travel.

The Petition Form can be found in the Appendix on pg. 43-44.

Important Reminders

Students are responsible for their own registration and for ensuring the accuracy of their schedules. Students can check their registration online and print their schedules as needed. Students who find errors in their schedules should immediately correct these errors. The student is responsible for tracking their progress towards curriculum requirements and confirming with Lana Holben, their advisor or the chair of the graduate studies committee.

The Graduate College provides announcements concerning academic deadlines, fellowship opportunities, and workshops each week through GradLinks. These email announcements and departmental emails are sent to your University of Illinois email address, @illinois.edu.

In addition to departmental policies, graduate students are expected to be familiar with and follow Graduate College policies. All Graduate College policies can be found in the Graduate College Handbook on the Graduate College web site at:

<http://www.grad.illinois.edu/gradhandbook>

Academic Integrity

Responsible academic integrity and professional conduct are important for maintaining the high quality of research and education at the University of Illinois Urbana-Champaign (UIUC). The UIUC official statement can be found on the Academic Human Resources web site at:

<https://humanresources.illinois.edu/employees/policies/>

In addition, the School of Earth, Society, and Environment requires a Responsible Conduct of Research Training to be completed each year. Graduate students should also be aware of the policies regarding academic integrity and intellectual property on Graduate College Handbook for Students, Faculty and Staff at:

<http://www.grad.illinois.edu/gradhandbook>

Academic Misconduct

Please be sure that you understand university policy concerning plagiarism and cheating. If you have any questions, talk to your advisor or to the Chair of the Graduate Studies Committee. The most common mistakes that students make involve using inadequately referenced source material in a report or thesis (e.g., direct quotes must be bounded by quotation marks and must be attributed to their source; concepts and paraphrases must also be attributed to their source), or using completed problem sets by others to help you finish your own problem set.

It is expected that all graduate students in the Dept. of Earth Science & Environmental Change will read and adhere to the University of Illinois and Graduate College campus policies.

Additional information

Library

Geology's virtual library can be found at: <http://www.library.illinois.edu/gex/>
Our assigned librarian is: Mary Schlembach, Chemistry and Physical Sciences Librarian, Grainger Library. You can contact her at: schlemba@illinois.edu or phone 217-333-3158

Departmental Colloquium

Regularly held on Thursday afternoons when the campus is in session. The lecture begins at 3:30 in a campus classroom as assigned each semester and with a reception at NHB afterwards. Graduate students are required to attend colloquia, and participate in the "Current Research in Geoscience" course (GEOL 591). Graduate students are in charge of the reception. The current colloquium schedule can be found on the department webpage: <https://esec.illinois.edu/>

Current Research in Geoscience

All graduate students must register for and attend the Geology 591 seminar course under the rubric 30405, "Geology 591". Petition to be excused from the course is strongly discouraged but may be considered for the final semester prior to earning a Ph.D. degree or under special circumstances.

Mail

U.S. Mail and Campus mail are sorted by Departmental staff and distributed to your mailbox in the mailroom (3081 NHB). To decrease the work load on the staff, please avoid having personal mail and packages sent to the Department.

The complete address for the Department used for campus mail is:

(your name)
Dept. of Earth Science & Environmental Change, UIUC
3081 Natural History Bldg., MC-102
Urbana, IL 61801

The Wanless Room

Room 4047 NHB is a conference room that seats 14 people. Reservations are made by contacting Haley Sechan (haleykw2@illinois.edu). The room is named after Prof. Harold Wanless, a distinguished member of the faculty who taught sedimentary geology in the 1950s and 1960s.

Main office

Room 3028 NHB – Lana Holben's office.

Helpful Webpages:

Dept. of Earth Science & Environmental Change	http://www.esec.illinois.edu/
Check your own course schedule and Financial responsibility	https://uiucgrad.askadmissions.net/vip/
College of Liberal Arts & Sciences	https://las.illinois.edu
Courses, Schedules & Requirements	http://catalog.illinois.edu/
Counseling Center	https://counselingcenter.illinois.edu
Forms Used for Graduate Students	http://www.grad.illinois.edu/forms
Graduate College	http://www.grad.illinois.edu
Graduate Employee's Organization	https://www.uiucgeo.org
Illinois Library	https://www.library.illinois.edu
Illinois State Geological Survey	https://isgs.illinois.edu
Illinois State Water Survey	https://www.isws.illinois.edu
International Student & Scholar Services	https://isss.illinois.edu
McKinley Health Center	https://www.mckinley.illinois.edu
Office of Inclusion & Intercultural Relations	https://oiir.illinois.edu
Office of Access and Equity	https://oe.illinois.edu
Student Code	https://studentcode.illinois.edu
Student Health Insurance	http://si.uiuc.edu
Tuition and Fee Rates	http://www.registrar.illinois.edu/financial/tuition.html
University Code of Conduct	https://www.ethics.illinois.edu/compliance/university_code_of_conduct

PART 2

DEGREE PROGRAM REQUIREMENTS

This section contains degree program requirements set forth by the Department of Earth Science & Environmental Change and the Graduate College at the University of Illinois at Urbana-Champaign and is current as of May 2021.

Previous versions of the Graduate Student Handbook are available on the Dept. of Earth Science & Environmental Change website. Students may choose to fulfill either the requirements in effect when they began their graduate studies or follow the current handbook requirements.

Master of Science Requirements

The Master of Science Degrees are designed to give students a solid background in geology, skills that can be applied in geology-related industry or teaching, experience in research and, in most cases, experience in teaching.

The following information pertains to the two in-person Master of Science degree programs. Information about the Online Graduate Programs in Environmental Geology can be found on the ESEC webpage. The in-person M.S. programs include either the “standard” (or thesis) option or the “applied geology” (or non-thesis) option. The non-thesis option is intended as a terminal degree for students preparing for professional work in environmental and engineering geology or in applied geophysics and who have already been admitted to the program. We do not currently accept new students for the non-thesis master’s degree.

The Standard Option

The Standard Option awards the degree of M.S. in Geology. This option requires the completion of a thesis. It is the most commonly used option, and is designed for students who will pursue geological careers in research or industry, or who plan to continue graduate study toward a Ph.D. Most oil companies, for example, prefer to hire students who have completed a thesis, because of the valuable experience that students gain by doing thesis research. This option is designed to be completed in about two years, though students who enter the program with a sparse background in geology may need additional time.

The Applied Geology Option

The Applied Geology Option also awards the degree of M.S. in Geology. It is designed for students who plan to enter an area of applied geoscience (e.g., engineering geology, hydrogeology, applied geophysics, environmental geology). This option can be completed in about 1.5 years by students who enter the department with no deficiencies, but generally will take 2 years. Students pursuing this degree option do not write traditional theses. As many employers expect M.S. recipients to have completed a thesis, this option is not commonly used.

Milestones for Standard Master of Science options

Milestone	Normal Progress	Limit
Select research advisor	End of 1 st semester	End of 2 nd semester
Complete background coursework	End of 3 rd semester	End of 4 th semester
Thesis Colloquium	4 th semester	6 th semester
Thesis Completion	4 th semester	6 th semester

Most full semester courses count as 4 hours for grad students. 4 hours of credit is roughly equivalent to 10 hours of work per week.

Curriculum Requirements for Master's of Science Geology, M.S.

Thesis Option

Formal Coursework (24 min). Hours must be at the 400-level or greater and approved for graduate credit. Reading courses or independent study are not formal courses.	24
GEOL 599 Thesis Research (8 max applied toward degree)	8
Total Hours	32

Other Requirements for Thesis Option M.S.

Minimum Hours Overall Required Within ESEC*	12
Minimum 500-level Hours Required Overall*	12
Enrollment in GEOL 591 Current Research in Geoscience Required Each Term**	
Each student must present a colloquium on the thesis research	Yes
Thesis Deposit Required	Yes

*GEOL 591 and GEOL 599 do not count towards this requirement.

**Enrollment in GEOL 591 is required every term up to 12 hours.

Not-Thesis Option

Formal Coursework (32 min). Hours must be at the 400-level or greater and approved for graduate credit. Reading courses or independent study are not formal courses.	32
Research/Project Hours (4 min applied toward degree)	4
Total Hours	40

Other Requirements for Non-Thesis Option M.S.

Minimum Hours Overall Required Within ESEC*	12
Minimum 500-level Hours Required Overall*	12
Enrollment in GEOL 591 Current Research in Geoscience Required Each Term**	
Requires a written report	Yes

*GEOL 591 and GEOL 599 do not count towards this requirement.

**Enrollment in GEOL 591 is required every term up to 12 hours.

All students must maintain a minimum grade point average (GPA) of 3.0 (A = 4.0). If the GPA falls below this minimum after 12 or more graduate hours of graded coursework, it must be raised to 3.0 or above after the completion of 12 additional graduate hours of graded coursework and must be maintained at or above the minimum thereafter. See the Programs of Study site for full coursework requirements: <https://catalog.illinois.edu/graduate/las/geology-ms/>

Thesis Format

The M.S. thesis can either be in the "traditional format" (a multi-chapter document that is typically 40 to 100 pages long, including figures) or in the "publication format" (a manuscript ready for submission to a quality peer-review journal). All theses should follow format guidelines provided by the Graduate College on their website.

As a rough guide, a thesis should describe an original research project carried out under the supervision of the thesis advisor. It should include:

- Definition of an original scientific problem
- Collection of data
- Interpretation of results
- Clear written presentation of results and interpretation, with clear figures

Thesis Readers

- A thesis must be approved by two readers -- your advisor and one other reader (called the "second reader") of your choice. Your advisor must be a member of the graduate faculty in the Dept. of Earth Science & Environmental Change. The second reader may be another graduate faculty member in the Department, or may be an adjunct member of the faculty, or may be a member of another department in the University. Both readers must approve and sign the thesis in order for it to be officially accepted.
- Students may have a third, optional reader from a relevant campus unit (e.g., the ISGS or another department) or from off campus. The third reader can help advise the work, and may sign the thesis, but does not vote on its acceptability.
- Students should choose their second reader (and third readers, if desired) during their first year to participate in their Annual Review, which will take place during the spring term.
- Students are encouraged to show both your advisor and the other reader(s) chapters of your thesis as you proceed, so there are no surprises.

Procedures for Completing the M.S. Standard Option

Thesis Colloquium

When you have completed your research to the point where you can communicate the important conclusions, you must schedule a thesis colloquium (do this with Lana Holben). The thesis colloquium lasts for 30 to 50 minutes, during which you make an oral presentation describing your thesis work, your results, and your interpretation to your fellow students and interested faculty. The thesis colloquium must be presented during a spring or fall semester while classes are in session and scheduled prior to the last two weeks of the instruction.

Students should generally plan to give their thesis colloquium during the academic year. In rare cases when a student must present the colloquium during the summer session, they must petition the Graduate Studies Committee (a departmental petition) for approval. In general, the thesis colloquium comes after your advisor and second reader have read the thesis. But if the thesis will not be completed until the summer, and the advisor approves, the student may present the thesis colloquium in the spring before the writing is complete.

Thesis Completion and Signing

After you complete your oral presentation (in many cases, immediately afterward), you must meet with your advisor and your second reader, preferably at the same time. If your oral presentation occurs significantly before you complete the written thesis, the meeting will be delayed until the written thesis is complete. During this meeting, the readers will discuss any remaining questions about the research, and point out any final changes in the thesis that need to be made. If there are no changes needed, they will sign the ***thesis form*** (available on the Graduate College website). This signifies acceptance of the thesis. They may, alternatively, request that you make some changes, and can delay signing until you have made the corrections. Finally, you must obtain the signature of the Department Head on the thesis form. To do this, please bring your form to Lana Holben so that she can have it signed and retain a copy for your student file.

Depositing your Thesis

The University requires that the thesis meet certain format criteria. You formally complete the requirements for the degree when you deposit your thesis at the Graduate College. See the Graduate College website for instructions and a Thesis Checklist for Master's Students. You will need to send Lana Holben a pdf version of your thesis, so that a format check can be done.

Procedures for Completing the M.S. Applied Geology Option

The Applied Geology Option is intended as a terminal degree for students training for professional work in environmental and engineering geology, and applied geophysics. After completion of this option, admission to the Ph.D. program can only be obtained by reapplying for admission. Students with strong backgrounds (e.g., graduates from the geology, environmental, and geophysics undergraduate options in Geology at UIUC) may be able to complete this option in one academic year plus one summer session, but generally it will take two years. Students in this option may do their research projects with staff from the ISGS.

Students must declare their intent to pursue the non-thesis option at least one semester prior to completing degree requirements. Approval of the Department Head is required.

Advisor Requirement

The student's program must be developed with the academic advisor and approved by the advisor and the Graduate Studies Committee. The advisor is responsible for monitoring the student's program and ensuring that all degree requirements have been satisfied.

Written Report

The written report for the Applied Geology Option is not as involved as a thesis, but must demonstrate the student's ability to work independently, communicate scientific ideas, and present a polished written product. The report must be read by the advisor and a second reader (the second reader may be from the Geology Department or from a relevant campus unit, e.g., the ISGS or the Civil Engineering Dept.). The student must keep both readers informed of progress throughout the project.

PART 2 – DEGREE PROGRAM REQUIREMENTS

Reports are generally between 20 and 40 pages in length, including figures. The report may be:

- A case study with well supported conclusions
- A "report to management" with supported recommendations
- A description of the student's research in a thesis format ("mini-thesis")

The report must represent an original piece of work. Rehashed term papers from courses are not acceptable. As always, good scientific writing practices should be followed.

Report Completion and Signing

Upon completion of the report, and after the readers have had an opportunity to read the report, the student must make a 20 to 30-minute oral presentation of the report to the two readers. This presentation can be open to the department at the option of the student. This presentation will be followed by a meeting with readers. If, at this time, the readers consider the report to be acceptable, they will sign the departmental signature sheet (obtained from Lana Holben). The readers may, alternatively, require corrections before signing, or they may reject the report. Once the report has been signed by the two readers, the student must then obtain the signature of the Department Head. The signed copy must be deposited with Lana Holben who will place the report in the department's files. Upon deposit of the report, the requirements for the Applied Geology Option are complete.

Ph.D. Requirements

Milestones

Students entering with a Geoscience M.S. Degree

The following table applies to full-time students entering with a Geoscience M.S. degree. Students entering with a Geoscience MS degree are expected to progress more quickly in the first two years of the program than students entering without a Geoscience MS Degree.

Semesters are defined as Spring or Fall. The summer term is not counted.

Milestone	Normal Progress	Limit**
Select research advisor	Beginning of 1 st semester	
Form Dissertation Committee	Beginning of 1 st semester	End of 1 st semester
Complete background coursework	End of 3rd semester	End of 4th semester
Preliminary Exam**	4 th semester	4 th semester
Dissertation Colloquium	9 th semester	12 th semester
Dissertation Completed	9 th semester	12 th semester
Final Examination	9 th semester	12 th semester

Students entering without a Geoscience M.S. Degree

The following table applies to full-time students entering without a Geoscience M.S. degree. Students entering with a Geoscience MS degree should progress more quickly in the first two years of the program.

Semesters are defined as Spring or Fall. The summer semester is not counted.

Milestone	Normal Progress	Limit**
Select research advisor	Beginning of 1 st semester	End of 4 th semester
Form Dissertation Committee	Beginning of 1 st semester	End of 1 st semester
Complete background coursework	End of 3rd semester	End of 4th semester
Preliminary Exam*	4 th semester	4 th semester
Dissertation Colloquium	9 th semester	12 th semester
Dissertation Completed	9 th semester	12 th semester
Final Examination	9 th semester	12 th semester

Part-time Ph.D. Students

The following table applies to part-time Ph.D. students. Students entering with a Geoscience MS degree should progress more quickly in the first two years of the program.

PART 2 – DEGREE PROGRAM REQUIREMENTS

Semesters are defined as Spring or Fall. The summer semester is not counted.

Milestone	Normal Progress	Limit**
Select research advisor	End of 3 rd semester	
Form Dissertation Committee	3 rd semester	3 rd semester
Complete background coursework	5 th semester	6 th semester
Preliminary Exam*	6 th semester	6 th semester
Dissertation Colloquium	11 th semester	14 th semester
Dissertation Completed	11 th semester	14 th semester
Final Examination	11 th semester	14 th semester

*Students who are ready to take their Preliminary Exam in their 3rd semester are encouraged to take it then if they choose to do so.

Geology grants a student another opportunity to take their preliminary exam one additional time if a fail is given on their first attempt. The student will only be allowed to take the preliminary examination one additional time while working toward the completion of their degree.

A petition is not required for this re-take option, however it must be scheduled and completed within 6 months of the date of the first completed exam or by the end of the next semester. Petition for an extension beyond the 6 months for the re-take is strongly discouraged but will be considered under special circumstances.

A new committee must be appointed, and may, but does not have to, consist of the same members as the original committee.

**If the situation warrants, students may petition for additional time using the Petition Process outlined on pg. 19.

Curriculum Requirements for Doctorate of Philosophy, Ph.D.

A Ph.D. degree requires at least 96 hours of credit if entering the program with an approved B.S. degree and at least 64 hours of credit if entering the program with an approved M.S. degree. See the Programs of Study site for full coursework requirements:

<http://catalog.illinois.edu/graduate/las/geology-phd/>

Entering with approved B.S. degree

Formal Coursework (must include 4 hours of electives outside Geology). Hours must be at the 400-level or greater and approved for graduate credit. Reading courses or independent study are not considered to be formal courses.		24
GEOL 599	Thesis Research (48 min applied toward degree)	72
Total Hours		96

Entering with approved M.S. degree

Formal Coursework (must include 4 hours of electives outside Geology). Hours must be at the 400-level or greater and approved for graduate credit. Reading courses or independent study are not considered to be formal courses.		16
GEOL 599	Thesis Research (44 min applied toward degree)	48
Total Hours		64

Other Ph.D. Requirements

Other requirements may overlap.

Minimum Hours Overall Required Within ESEC*	9
Minimum 500-level Hours Required Overall*	12
Enrollment in GEOL 591 Current Research in Geoscience Required Each Term**	
Each student must present a colloquium on the dissertation research	
Preliminary Exam Required	Yes
Final Exam/Dissertation Defense Required	Yes
Dissertation Deposit Required	Yes
All students must maintain a minimum grade point average (GPA) of 3.0 (A = 4.0). If the GPA falls below this minimum after 12 or more graduate hours of graded coursework, it must be raised to 3.0 or above after the completion of 12 additional graduate hours of graded coursework and must be maintained at or above the minimum thereafter.	

*GEOL 591 and GEOL 599 do not count towards this requirement.

**Enrollment in GEOL 591 is required every term up to 12 hours.

Advisor and Dissertation Committee

All Ph.D. students should select a research advisor soon after joining the Department. Any student who has not identified an advisor by the end of their first academic year may be dropped from the graduate program.

All Ph.D. students should work with their advisors soon after joining the Department to form a Dissertation Committee. The Dissertation Committee will provide research and career guidance throughout the course of a student's matriculation. The Dissertation Committee can have a maximum of five members and must include four voting members, three of whom must be Graduate Faculty in the Department, and two of whom must be tenured. One Committee member will be assigned by the Chair of the Graduate Studies committee from outside of the student's area of specialization.

Dissertation Committee Membership

- Students work with their advisors to form their dissertation committee in their first term
- A committee can have a maximum of 5 committee members
- 4 committee members must be voting members
- 3 committee members must be Graduate Faculty in the Department
- 2 committee members must be Tenured
- 1 committee member is assigned by the Chair of the Graduate Studies committee from outside the student's area of specialization.
- Typically, the research advisor will chair the Dissertation Committee

Students are encouraged to give considerable thought and consult with their advisors when selecting their Dissertation committee Members. The Dissertation Committee will provide invaluable guidance and expertise throughout a student's program. Ideally, a minimally altered core committee will guide a student from their first term through their Ph.D. defense. However, changes in the Dissertation Committee membership are understandable and appropriate. The membership of the Dissertation Committee maybe updated throughout a student's matriculation if a student, their advisor, their committee, or the Graduate Studies Committee determine a need. This may include faculty needing to rotate off of a committee due to family leave, sabbatical, or retirement, and may also include the need to make space for additional members within a particular research area.

First Committee Meeting

Within the first two months of the first semester, all Ph.D. students should consult with their advisors and assemble their Dissertation Committee and schedule a First Semester Committee Meeting to meet with their Dissertation Committee during their first term. The purpose of this initial meeting is for the Committee to become acquainted with the student, their background, their research interests, and their career goals. Typically, students will hold their first committee meeting by the second month of their first term (e.g., October).

Guidelines for the First Committee Meeting are as follows:

1. The meeting should be informal and last no longer than one hour.

2. One week prior to the meeting, the student should assemble and distribute a full list of relevant courses that they have taken as an undergraduate and graduate student, as well as a list of currently enrolled courses.
3. The student should become aware of the Ph.D. program course requirements and be prepared to discuss potential courses.
4. The student should be prepared to discuss their career goals and research interests so that their committee can provide detailed guidance on their course of study.
5. Documentation of the meeting will be completed by the student and committee using the First Committee Meeting Form, found on pg. 45 - 46.

Second Committee Meeting

The second Committee meeting will typically take place during the beginning of the spring term of a Ph.D. student's first year coinciding with the Annual Review Process and will typically last 1-2 hours. The student should work with their committee to find a time to meet, prior to April 30th. Please do not put off your meeting to the end of April. Students are encouraged to work with their committee at the start of the semester to find a time to meet. We recommend that students schedule during the Wed 3-5p during weeks that do not have a faculty meeting; however, students should work with their committees to find a time that works best for everyone. Typically, Annual Review Meetings should be scheduled by the first week of classes and held during the first few weeks of the term if possible. Students should check with Lana Holben for additional information regarding scheduling.

Guidelines for the Second Committee meeting are as follows:

1. The Spring Term Annual Review Committee Meeting will begin with a self-assessment carried out by the student online at: <https://my.atlas.illinois.edu>.
2. Once the student has completed their self-assessment online form, their advisor will provide comments on the student's progress and the plan for the upcoming academic year.
3. The student should contact their committee members to schedule their meeting.
4. One week prior to the Annual Review Committee Meeting a student should provide the following to each committee member:
 - a. A summary of completed and anticipated courses
 - b. A copy of their self-assessment.
 - c. A copy of their Curriculum Vitae
5. The student should prepare a ~15-minute presentation on their progress during their first year including coursework completed and research efforts during Year 1. The student should also reiterate their primary research interests and career goals.
6. The Dissertation Committee should work with the student to evaluate their coursework and curriculum to determine if there are any critical knowledge gaps that need to be fulfilled and provide suggestions and guidance for the student's second year goals. The Committee may require the student to take specific courses or complete an independent study to fill perceived knowledge gaps.
7. One goal of the second committee should be a rough idea for the student's preliminary exam research proposal.
8. Documentation of the Annual Review Committee Meeting must be completed by the student and committee using the Dept. of Earth Science & Environmental Change Annual Evaluation Form, found on pg. 47-48, which will be included in the student's Annual Progress Report.

Third Committee Meeting

The third Committee meeting provides an important check point prior to the Preliminary Exam. It should take place during a student's third term and will typically last 1-2 hours. Ph.D. students may choose to take their Preliminary Exam in place of holding their third committee meeting.

Guidelines for the Third Committee meeting are as follows:

1. The student should contact their committee members to schedule their third committee meeting prior to the end of their third term, typically fall term of their second year.
2. The student should prepare a brief presentation, ~15 minutes, highlighting their research progress and ideas for their Preliminary Exam proposal.
3. The Dissertation Committee should work with the student to evaluate their anticipated prelim proposal and provide feedback and guidance.
4. One goal of the third committee meeting should be a rough idea for the student's preliminary exam research proposal.
5. Documentation of the Third Committee Meeting must be completed by the committee using the Third Dissertation Committee Meeting Form, found on pg. 49.

Fourth Committee Meeting – Preliminary Exam

The fourth committee meeting will typically take place during the spring term of a Ph.D. student's second year and is reserved for the student's Preliminary Exam. This meeting will also typically constitute the student's second year Annual Review. The meeting should follow the Preliminary Exam format as described in the Preliminary Exam section below (pg. 37). The Preliminary Exam Committee is made up of members of the Dissertation Committee, which has a maximum of five members, and must include four voting members, three of whom must be Graduate Faculty, two of which must be tenured, and one of whom is assigned by the Graduate Studies Committee Chair from outside of the student's area of specialty. The committee chair must be a member of the Graduate Faculty.

Upon completion of the Preliminary Exam, each Ph.D. student must have a research advisor and a dissertation committee. Typically, members of the Dissertation Committee continue to serve after the Preliminary Exam, but a new committee can be established if the student so desires. Additionally, after the Preliminary Exam, the faculty member assigned by the Graduate Studies Committee may rotate off, if they or the student would like, to make space for new member(s) from the student's primary field of study.

Documentation of the fourth committee meeting must be completed by the committee using the Graduate College Preliminary Exam Form and the Annual Review form, found on pg. 47-48.

Annual Meetings

Once a student has passed their Preliminary Exam they must meet at least once per year with their Dissertation Committee coinciding with the spring term Annual Review (deadline: April 30th) to discuss research progress including accomplishments, remaining tasks, and schedule for completion. This meeting will keep the Committee informed of the student's progress and provide the Committee with an opportunity to advise the student and ensure that satisfactory progress is made toward completion of the degree. Students are encouraged to work with their committee at the start of the semester to find a time to meet. Please do not put off your meeting to the end of April.

PART 2 – DEGREE PROGRAM REQUIREMENTS

Typically, Annual Review Meetings should be scheduled by the first week of term. Students should check with Lana Holben for additional information regarding scheduling.

Note: Students graduating on the May degree list do not need to complete the Annual Review Form.

Guidelines for the Annual Review Committee meeting are as follows:

1. The Spring Term Annual Review Committee Meeting will begin with a self-assessment carried out by the student online at: <https://my.atlas.illinois.edu>.
2. Once the student has completed their self-assessment online form, their advisor will provide comments on the student's progress and the plan for the upcoming academic year.
3. The student should contact their committee members to schedule their meeting.
4. One week prior to the Annual Review Committee Meeting a student should provide the following to each committee member:
 - a. A copy of their self-assessment.
 - b. A copy their Curriculum Vitae
5. The student should prepare a ~15-minute presentation on their progress and their timeline for completion.
6. Documentation of the Annual Review Committee Meeting must be completed by the student and committee using the Dept. of Earth Science & Environmental Change Annual Evaluation Form, found on pg. 47-48, which will be included in the student's Annual Progress Report.

Timeline for student committee meetings

This table represents a typical timeline for students beginning their program during the fall term. Students requiring additional time should work with their advisors and committees and follow the petition process (see pg. 19).

	Year 1	Year 2	Year 3	Year 4	Year 5*
Fall Term	First Committee Meeting	Third Committee Meeting	Optional Committee Meeting	Optional Committee Meeting	Optional Committee Meeting
Spring Term	Annual Review Committee Meeting	Fourth Committee Meeting / Prelim. Exam	Annual Review Committee Meeting	Annual Review Committee Meeting	Final Exam

** If a student requires additional years beyond year 5, the Annual Review and committee meetings schedule should continue.*

Dissertation

Each candidate must complete a dissertation. The dissertation may be in a "traditional format" (a multi-chapter document that is generally about 100 to 200 pages long), or in a "publication format" (2 or more manuscripts ready for submission to quality peer-review journals). Typically, progress on the dissertation follows the following steps:

- begin initial work to choose a topic

PART 2 – DEGREE PROGRAM REQUIREMENTS

- select an appropriate Dissertation Committee
- conduct research on chosen topic
- prepare for and take the Preliminary Exam
- hold annual review meetings with the Dissertation Committee
- write dissertation (it is best if Committee members see the chapters during the writing process)
- present the dissertation colloquium
- defend the dissertation in front of your Dissertation Committee (this is the "Final Exam")
- make corrections and obtain signatures on "thesis form"
- have the format of your dissertation approved (see Lana Holben)
- deposit thesis with the Graduate College

Students should work closely with their advisor throughout this process.

Colloquium, Final Exam, and Completion

Colloquium

A dissertation colloquium is presented before the dissertation is deposited. This is designed to improve your presentation skills, inform the entire Department of your work, and give you suggestions to improve your conclusions. You should present your research results in 30-50 minutes and answer questions from members of the university community in the audience. The research need not be fully complete, though you should have your conclusions established before the colloquium is prepared. Colloquia should be presented while classes are in session (summer colloquia may be allowed by petition). By Graduate College policy, the dissertation colloquium and final exam are open to the entire department and campus.

The student should schedule the Colloquium at least 3 weeks prior to the end of the semester of graduation or within the scheduling deadlines for the degree.

Final Exam

After the colloquium, the student must arrange the final exam to defend the dissertation. Sometimes this is referred to as a "Dissertation Defense". Please see the section on Final exam for further details.

Signing

Once you pass the Final Exam, have made any corrections required by the Committee, and have prepared the final copies, you must obtain signatures of all members of your Committee and the Department Head. These signatures must be affixed to the thesis form that you obtain from the Department Office. You must also arrange with Lana Holben to have a format check by the Graduate College. Upon approval by the Graduate College, you must deposit your dissertation with the Graduate College. When you have deposited your dissertation, you have officially completed all requirements for the Ph.D. degree. Congratulations!

Examinations

All Ph.D. students must take two exams. Together, these exams demonstrate a student's ability to conduct independent scientific research, including:

- Breadth of scientific knowledge beyond a specific field.
- The ability to define and defend a research proposal.
- Proficiency, at an advanced level, in a specialized field.
- Ability to develop, complete and defend a research project.

The exams, in the sequence that you take them, are:

1. **Preliminary Exam** A Graduate College requirement to test your ability to do dissertation research; this exam focuses on the viability of the dissertation project and on your ability to complete it. This exam must be taken by the end of the fourth semester. The student must have a research advisor who is willing to supervise their PhD research in order to take this exam.
2. **Final Exam** Sometimes referred to as a “Dissertation Defense”, the Final Exam is a Graduate College requirement to determine whether your dissertation is adequate and that you fully understand all aspects of the dissertation. There are two parts to this exam -- first, you present a dissertation colloquium to the Department, then you defend your dissertation in front of your thesis committee. The Final Exam is open to the campus.

Ph.D. Preliminary Examination

The Preliminary Examination section is organized as follows:

- Scheduling
- Objectives
- The Committee
- Written Proposal
- Exam Format
- Outcome

The Preliminary Examination is required by the Graduate College and defines the end of Stage II in the pursuit of the Ph.D. degree.

Scheduling

The Preliminary Exam should occur no later than the fourth semester of the Ph.D. program. A student may choose to take it earlier if they have a well-developed plan for their research program. A delay beyond the fourth semester may be allowed, through a petition, when circumstances warrant a delay.

Steps to follow:

- 1) The Preliminary Exam is typically proctored by the student's Dissertation Committee. The student chooses their Dissertation Committee with assistance from their research advisor

PART 2 – DEGREE PROGRAM REQUIREMENTS

during their first semester, and confirms their choices are willing to serve on their committee.

- 2) Student shares the names of those willing to sit on the committee with Lana Holben and the Graduate Studies Committee.
- 3) The Graduate Studies Chair assigns an additional faculty member outside of the student's primary research area to serve on the committee.
- 4) During their second or third committee meeting, the student will work with their committee members to determine the timing of their Preliminary Exam. The student will then poll their committee members with proposed dates of the exam and verify with Lana that the selected date does not conflict with any Departmental events.
- 5) The exam will be held in an NHB conference room, unless otherwise requested. It is the student's responsibility to ask office staff to reserve the room and any necessary audiovisual equipment for the exam.

Objectives

The objectives of the Preliminary Examination are to determine if:

- The student is prepared to carry out original research at the Ph.D. level.
- The topic and scope of the proposed dissertation are appropriate.
- The student can communicate clearly.

Committee

The Dissertation Committee proctors the preliminary exam. The committee is proposed by both the student and the research advisor in the student's first term and is approved by the Graduate Studies Committee. The Graduate Studies Committee Chair will appoint an additional faculty member to the committee from outside of the student's primary research area. The committee must be composed according to the following guidelines:

- The Committee can have a maximum of 5 members, including at least four voting members.
- The Chair of the Committee (research advisor) must be a member of the Graduate Faculty.
- At least 3 members of the Committee must be Graduate Faculty in the Department.
- At least 2 members of the Committee must be tenured.
- 1 member is assigned by the Graduate Studies Chair from outside of a student's primary research area.
- Up to 2 Committee members can be from outside of the Department.

Written Proposal

Prior to the exam, the student writes a proposal of 15 pages maximum in length, with 1.5-spacing, of dissertation research and must deliver the proposal to Committee members at least one week prior to the Exam. The proposal describes the scientific problem, review of previous work, research objectives, proposed methodology, and potential results, significance, and implications of the research. The prelim proposal is not a contract, it is a plan for your dissertation research and may evolve through time.

Format of the Proposal:

PART 2 – DEGREE PROGRAM REQUIREMENTS

- The body of the proposal will be a maximum of 15 pages in length, not including figures and tables. The figures, tables, summary, and references do not count toward the page limit. No appendices are permitted unless approved by all committee members.
- 12-point font, 1.5 spacing, 1” margins, and Times New Roman font should be used throughout the proposal except for figure captions, which can be single spaced.
- A one-page summary of the proposal, stating what research will be done, its significance and broader impacts will precede the body of the proposal. The summary should indicate the hypotheses to be tested, and how the proposed research will resolve the hypotheses.

Exam format

The Exam is oral in format. Questions by the Committee concern the research project(s) and, if appropriate, the student's background in relevant subjects. The Preliminary Exam focuses on the proposed research project(s) and the student's competency to undertake that particular project(s). A formal presentation (30 min. or less) is usually a part of the exam. The Exam generally lasts a maximum of three hours.

Outcome of the exam

The Committee decides among the following options, and the decision must be unanimous. If a unanimous decision cannot be reached, the matter is referred to the Graduate Studies Committee.

Pass

Minor revisions or remediations are often suggested by the Committee, and the student may be asked to demonstrate completion of these actions in future committee meetings.

Fail (with second chance)

The student is given one more opportunity, within six months, to take the exam. The Graduate College is informed of the failure and the Committee Chair will indicate that the student should be given a second examination. If the second exam results in a failure, the student must leave the Department without a Ph.D. degree at the end of the academic year.

A petition is not required for this re-take option, however it must be scheduled and completed within 6 months of the date of the first completed exam or by the end of the following semester. Petition for an extension for the re-take is strongly discouraged but will be considered under special circumstances.

Fail (final)

The Department notifies the Graduate College immediately and the student may not continue in the Ph.D. program beyond the end of the academic year.

Decision Deferred

If substantial changes are required in the research program, this option is used. The examining Committee must recommend changes and improvements, and the student must re-take the exam within six months or by the end of the following semester. Petition for an extension for the re-take is strongly discouraged but will be considered under special circumstances.

Ph.D. Final Examination

The Final Examination section is organized as follows:

- Scheduling
- The Committee
- Nature of the Exam
- Outcome of the Exam

The Final Exam, administered after completion of the dissertation, determines whether or not the dissertation and the student's defense of the research are of acceptable quality for the Ph.D. This is the "Final Oral Examination" required by the Graduate College.

The Final Examination is aimed at the following questions:

- Is the research at an appropriate level?
- Are the results original and significant?
- Is the dissertation well-written?

Scheduling

The student should schedule the Exam well in advance of the deadline to deposit their dissertation in the graduating term they desire. Lana Holben will help arrange the day and time. Communicate with Lana to reserve a room for the Colloquium and to assemble an information flyer that will be distributed to faculty and fellow students. Members of the Final Exam Committee must be given copies of the dissertation no later than ten days before the scheduled Final Exam. The Exam should be taken after the Dissertation Colloquium has been completed.

The Committee

The Committee is normally the same Dissertation Committee that has been mentoring the student throughout their matriculation, but if this group cannot be reconvened or there are extenuating circumstances, the Graduate Studies Chair and the advisor will establish a new Committee. The Committee must include four voting members, three must be Graduate Faculty members in the Department, and two must be tenured faculty. The Committee should include faculty from more than one area of specialization. The Chair must be on the Graduate Faculty. The Committee should have no more than five members.

Nature of the Exam

As the Committee members will have attended the dissertation colloquium, the Final Exam does not contain a formal oral presentation. The Exam consists of oral questioning by the Committee concerning the dissertation. The student should come prepared with illustrations, suitable for projecting on a screen, to aid discussions. The Exam generally lasts 3 hours, after which the student is excused temporarily while the Committee deliberates on the outcome of the Exam.

Outcome of the Exam

The Committee decides among the following options, and the decision must be unanimous. If a unanimous decision cannot be reached, the Committee Chair must confer with the Dean of the Graduate College.

PART 2 – DEGREE PROGRAM REQUIREMENTS

Pass

Each Committee member must indicate that the thesis has been read and approved.

Fail (with second chance)

The student is given one more opportunity, within six months or by the end of the following semester, to retake the Exam after completing additional research or writing, as recommended by the Committee.

The Graduate College is informed of the failure and the Committee Chair will indicate that the student should be given a second examination. A new committee must be appointed by the Graduate College. The new committee may, but does not have to, consist of the same members as the original committee.

If the second exam results in a failure, the student may not continue in the Ph.D. program of the Department.

Fail (final)

The Department notifies the Graduate College immediately and the student may not continue in the Ph.D. program of the Department.

Decision Deferred

If substantial changes are required in the dissertation, this option is used. The Examining Committee must recommend changes and improvements, and the student must retake the Exam within six months or by the end of the following semester.

APPENDIX

DEPT. OF GEOLOGY FORMS

This section contains degree program forms and petitions for the Dept. of Earth Science & Environmental Change at the University of Illinois at Urbana-Champaign and is current as of May 2021. Dept. of Geology forms and petitions can be found at:

<https://esec.illinois.edu/academics/graduate-program/graduate-student-resources>

Graduate College Forms can be found at:

<https://grad.illinois.edu/forms>

Previous versions of the Graduate Student Handbook are available on the ESEC website. Students may choose to fulfill either the requirements in effect when they began their graduate studies or follow the current handbook requirements.

ESEC Graduate Student Petition Form, Pg. 1

ESEC GRADUATE STUDENT PETITION

Students complete the petition in consultation with their advisor. The petition is used to request an exception to the Dept. of Earth Science & Environmental Change's policies, requirements, or deadlines. After the student and advisor have made their recommendations, the petition should be submitted to Lana Holben (3028 Natural History Building), who will forward it to the Graduate Studies Committee. Depending on the nature of the request, petitions for exceptions require different information or supporting documentation. Two basic themes should be included on any statement provided in these requests:

1. Clearly Identify the Issue
2. Provide Justification as to why you (the student) should be allowed an exception to this policy or deadline. This justification may include a timeline of events, medical documentation, supporting statement, or other as applicable.

Please provide complete and thorough explanation and documentation of the reasons for your request to ensure speedy consideration. Lack of information may result in delays or denials of the request. You may attach any necessary documentation to this petition.

UIN	E-MAIL ADDRESS	TODAY'S DATE

LAST NAME, FIRST NAME, MIDDLE INITIAL

DEGREE IN PROGRESS (MS/ PhD)	TERM OF ADMISSION	EXPECTED GRADUATION TERM

I am asking to be an exception to the following policy or deadline (please describe):

Please provide a complete explanation of why this exception should be considered:

STUDENT SIGNATURE	DATE

ESEC Graduate Student Petition Form, Pg. 2

UIN: _____ Student's Name: _____

INSTRUCTIONS FOR COMMENTS AND RECOMMENDATIONS

Comments and Recommendations should be indicated below. The more unusual the request, the more detailed the comments should be. Petitions with minimal comments such as “support” may be returned for more detail. All petitions require a minimum of two different signatures. A signature from the student's advisor is required. The second signature must be from another person designated as an “authorized signature” for graduate petitions from the department's Graduate Studies Committee. If relevant, please attach additional letters and forms.

Student Advisor Comments & Recommendations – Signature Required

Advisor's Signature

Date

Graduate Studies Committee Chair, Comments & Recommendations – Signature Required

Graduate Studies Committee Chair, Signature

Date

Completed petitions should be submitted to:
Lana Holben, Dept. of Earth Science & Environmental Change, Graduate Student Administrator
3028 Natural History Building, MC-102, holben@illinois.edu

First Dissertation Committee Meeting Form, Pg. 1

DEPT. OF EARTH SCIENCE & ENVIRONMENTAL CHANGE
FIRST DISSERTATION COMMITTEE MEETING FORM

Name	UIN	Committee Meeting Date
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Dissertation Committee:

Research Advisor: _____

GSC Appointed Member: _____

Additional Members: _____

Students should complete the following form with their advisor and Dissertation Committee members as part of their first Dissertation Committee Meeting, which should take place during their first term as a Ph.D. student.

Meeting Goals:

1. Identify research interests.
2. Identify career goals and interests.
3. Discuss undergraduate and graduate level courses and educational background.
4. Gain feedback and guidance on a recommended course of study.

One week prior to the meeting the student should submit the following to your committee:

Relevant course work: *Please specify undergraduate vs. graduate. You may attach an additional page if needed.*

Current course enrollment:

Primary Research Interests:

First Dissertation Committee Meeting Form, Pg. 2

Primary Career Goals: *This will likely evolve in time, but this will aid the initial discussion.*

During the committee meeting, the Dissertation Committee should complete the following:

Potential research ideas and suggestions:

Recommended Course Work:

Recommended Career Development Opportunities:

Completed forms should be submitted to:
Lana Holben, Dept. of Earth Science & Environmental Change Graduate Student Administrator
3028 Natural History Bldg., MC-102, holben@illinois.edu

Annual Review Meeting Form, Pg. 1

DEPT. of EARTH SCIENCE & ENVIRONMENTAL CHANGE
ANNUAL REVIEW MEETING FORM

Name	UIN	Meeting Date
Degree Program (<i>circle</i>): M.S. Ph.D.	Program year: _____	
Committee / Readers: _____ _____		

As part of the Annual Review and Learning Outcomes Assessment (LOA), students should provide the following information to their committee/readers. For sections 1 to 3, please provide the date (or month), location (with meeting name if possible) and title of any publication you have given. For section 4, please provide as much and detailed information as possible. Please use additional pages if needed.

1. Peer-reviewed publications (i.e., journal articles) including those from <i>published to in prep</i> :
2. Presentations (oral or poster) given at national/international conferences:
3. Presentations (oral or poster) given at research group/departmental/college levels that represent significant academic progress and achievement:
4. Other types of publications (e.g., outreach activities, educational media materials, web-based resources, etc.):

Annual Review Meeting Form, Pg. 2

The second page of this form is to be completed by the student's Dissertation Committee following the Annual Review Committee meeting. Please indicate the level of performance the student has demonstrated for each of the following learning outcomes.

Learning outcome	Level*	Comments
The student has taken the required and necessary coursework in their area of study.		
The student can design and implement independent research that integrates and applies core knowledge in their specific field. Evidence includes: <ul style="list-style-type: none"> • Development of a thesis proposal • Regular research progress 		
The student demonstrates effective written and oral communication skills. Evidence includes: <ul style="list-style-type: none"> • Presentations • Publications • Proposal writing 		
The student is developing professional skills typical for academic researchers. Examples include: <ul style="list-style-type: none"> • Research management • Mentoring • Ethical conduct of research • Networking • Positive teaching evaluations 		

Is the student making adequate progress towards their degree and meeting program milestones? Yes / No
Comments:

*Level:

- 1) Beginning stages – The student has begun to develop this skill or is currently taking coursework to support this goal.
- 2) Intermediate – The student has developed competency, but does not have extensive skill in this area.
- 3) Advanced – The student has significant training or experience and is demonstrating advanced performance in this area.
- 4) Proficient – The student has achieved a high level of performance in this area.

Completed forms should be submitted to:
Lana Holben, Dept. of Earth Science & Environmental Change Graduate Student Administrator
3028 Natural History Bldg., MC-102, holben@illinois.edu

Third Dissertation Committee Meeting Form

DEPT. OF EARTH SCIENCE & ENVIRONMENTAL CHANGE THIRD DISSERTATION COMMITTEE MEETING FORM

Name	UIN	Committee Meeting Date
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Dissertation Committee:

Research Advisor: _____

GSC Appointed Member: _____

Additional Members: _____

This form is to be completed by the student's Dissertation Committee following the Third Committee meeting, prior to a student's Preliminary Exam.

Meeting Goals:

1. Discuss progress in coursework.
2. Discuss progress in research development.
3. Discuss and provide feedback on the prospective research project.
4. Set tentative time (month/year or date) for the Preliminary Exam.

1. Is the student making sufficient progress in their coursework? YES / NO

Comments

2. Are there any gaps in the student's coursework that need filled? YES / NO

Comments

3. Is the student making sufficient progress in their research and are they on track to sit their preliminary exam in their 4th term? YES / NO

Comments

Tentative Preliminary Exam Date*:

**month/year or a specific day*

Completed forms should be submitted to:

Lana Holben, Dept. of Earth Science & Environmental Change Graduate Student Administrator
3028 Natural History Bldg., MC-102, holben@illinois.edu