

# HANDBOOK FOR GRADUATE STUDENTS

Department of Geology and Geological Engineering  
Colorado School of Mines  
Golden, Colorado 80401

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HANDBOOK FOR GRADUATE STUDENTS  
DEPARTMENT OF GEOLOGY AND GEOLOGICAL ENGINEERING  
COLORADO SCHOOL OF MINES

INTRODUCTION

This Handbook presents information and resources for graduate study in the Department of Geology and Geological Engineering (GE) and is intended to ease your transition into the Department and your life as a graduate student. This Handbook supplements and is subordinate to regulations in the *Bulletin* of Colorado School of Mines (CSM). It is the responsibility of each graduate student to read and understand information pertaining to graduate study in both this Handbook and the *Bulletin*. Members of the faculty, the Department assistants, or other graduate students can generally answer questions regarding the Handbook and the *Bulletin*.

Departmental focus areas include energy and minerals resources, hydrology, engineering geology/geotechnics, geochemistry, basic geosciences, and related new fields of endeavor.

MISSION STATEMENT

*To discover and disseminate knowledge for society through compelling research, excellence in teaching and engaging outreach by creating a welcoming and vibrant community that cultivates critical thinking, intellectual curiosity, and integrity.*

VISION STATEMENT

*To be a game-changer in discovery, understanding and education in geoscience to intelligently engineer Earth's resources.*

VALUES

***Experience:*** *We deliver a unique educational experience in the classroom, laboratory and the field.*

***Discovery:*** *We encourage creativity and celebrate insights in research.*

***Excellence:*** *We expect rigor and diligence in our work, honesty and accountability in our actions, and we embrace professional growth.*

***Compassion:*** *We treat others with respect, seek out diverse thought and support each other's willingness to take risks.*

***Enthusiasm:*** *We foster a positive friendly atmosphere, and lead with optimism.*

***Teamwork:*** *We work together and collaborate to achieve results that we cannot accomplish individually.*

## PROFILE OF DEPARTMENT

The Department of Geology and Geological Engineering emphasizes the study of science and engineering and the application of that knowledge to the solution of resource exploration and development, engineering and environmental problems. Graduate degrees are offered in Geological Engineering, Geology, Geochemistry, and Hydrology. The programs are broad enough to prepare graduates for a wide variety of careers in academic, research, or industrial organizations. The faculty is composed of full-time and adjunct geologists and engineers. Currently there are 119 registered undergraduate students and 92 registered graduate students in the Department programs.

## COLORADO RESIDENCY

All non-residents of Colorado who are U.S. citizens are strongly advised to begin to establish Colorado residency before they begin their first semester of study at CSM. The greatest advantage to establishing Colorado residency is a reduction in tuition. To qualify for residency a student must prove that they have lived in Colorado for one year or more immediately preceding the first day of classes for the semester in which resident status is sought. Important steps in establishing Colorado residency are obtaining a Colorado driver's license, transferring motor vehicle and voter registration to Colorado, and rent receipts before the first day of classes the first year. Employment and payment of state income taxes are additional but not essential criteria. There are no absolute requirements for establishing resident status. The Registrar considers cases on an individual basis. For additional information on establishing in-state residency consult the "In-State Tuition Classification Status" section in the *Bulletin*.

## FINANCIAL ASSISTANCE

The Department and CSM have designated funds for the support of Teaching Assistants, scholarships, and fellowships for graduate study. If you did not receive a financial aid offer at admission, there are also numerous sources of funding outside the school, which students are strongly encouraged to seek. You can obtain assistance from posted notices of funding opportunities, Office of the Dean of Graduate Studies, and Department faculty members. Evidence that you have attempted to solve your financial needs through application for outside grants will be considered in evaluating future requests for department funds. Financial support is also available for graduate students through the School's Financial Aid Office. The American Association of Petroleum Geologists, American Association of University Women, Colorado Scientific Society, Geological Society of America, Sigma Xi, and Society of Economic Geologists may have grant opportunities.

## AFFIRMATIVE ACTION

For Affirmative Action Policy, Unlawful Discrimination Policy and Complaint Procedure, Sexual Harassment Policy, Sexual Harassment Complaint Procedure, and Personal Relationships Policy, see the Policies and Procedures Section in *Bulletin*.

## DEPARTMENTAL INFORMATION

### Office Personnel

The office staff are here to help, so please feel free to stop by the main office if you need assistance. A brief description of their duties and some procedures are listed below.

Dorie Chen

1. Departmental accounting
2. Department Head's correspondence, telephone calls, appointments
3. Purchasing
4. Assists students, professors, other academic and support departments, and administration
5. Equipment check out (LCD projector, laptop)
6. Student employment contracts
7. Department *Newsletter*

Cheryl Medford

1. Provides information about the Department and school via telephone, email, and public contact.
2. Assists students, general public, professors, other academic and support departments, and administration
3. Handles all materials and items relating to:
  - drop/add forms
  - grade change forms
  - advisors
  - maintaining student files
  - assigning office space
  - building and room access
4. Processes thesis defense notices and forms
5. Assigns rooms for thesis defense
6. Van Tuyl Lecture logistics: schedules speakers, makes their travel arrangements, prepares and circulates notices, organizes refreshments.

### Supplies/Copying for Teaching Assistants (TAs)

1. TAs have use of supplies such as transparencies, pens, pencils, etc., for use only in classes they TA. The Department does not supply any materials needed for personal use.
2. The majority of class material needing to be reproduced is sent to the CSM Copy Service. Turnaround time is usually one day. Please see office personnel for proper paperwork and times for submission of materials or send electronic files directly to the copy center at [copycenter@mines.edu](mailto:copycenter@mines.edu).

### Spending Money

**You, as a student, should NEVER spend your own money to purchase something that your advisor says will be paid for with school money. You should never buy anything, order work to be done, or promise payment without getting approval from Dorie. The State can refuse to reimburse you if you did not follow State purchasing rules! Please talk with Dorie first.**

1. **Travel** - The school has procedures for traveling as a student at CSM. It is important that you

understand them and comply with them. There are preferred travel and car rental agencies to be utilized (see Appendix). Chrome River is the new way to record the school's credit card, reimburse for miscellaneous out of pocket expenses and to request authorization and reimbursement for all employee travel. This is a paperless system found through the Trailhead site. All reports will be completed in Chrome River and sent to the approvers through the electronic routing system. All Faculty, Staff and Graduate Students that are also considered Employees, are required to use Chrome River for all of the above purposes after approved training, including reimbursements. Trips require the Travel Authorization (TA) to be submitted PRIOR to the trip if it includes: a) International Travel; b) Sponsored Research; and/or c) Cash Advance. This is your authorization to go on the trip, use school funds, and put the school on notice that you are traveling on school business. If something were to happen to you while traveling on school business and you did not file a TA for the trip, there is no school responsibility for your travel. This would be especially critical if you were in a foreign country. The TA should be a fairly accurate estimate of the expenses you expect to incur. The travel authorization must be submitted by you, then will be forwarded to the person supplying the funding which will then be forwarded to the Department Head. If the trip is out of the country, the TA will be forwarded to the Office of International Programs (OIP) for approval. **The TA has to be submitted to OIP 2 weeks before you leave.** Reimbursements will be paid from a voucher or petty cash form. The final part of each trip is filing the Travel Expense (TE). The TE report can be generated from the TA report if applicable, and details your actual expenses and closes the trip report. Original, detailed receipts are required to be scanned and uploaded as attachments for all expenses that will be reimbursed. The TE report needs to be submitted within 20 working days of the trip. Anything after that could be treated as taxable income. The same electronic routing will follow after the TE is submitted as for the TA. The School may not reimburse your travel if you do not follow the procedures. Dorie is always available to answer any questions you have about the procedures.

2. **Supplies** - Whether these are materials for a lab or research supplies, check with Dorie before ordering, reserving, promising to buy from a person or company, or buying anything. The State requires purchases be made with purchase orders or school credit cards. Bring to Dorie complete information about the vendor (name, address, phone) and a quote of the items to be ordered to begin the purchase process. Also bring the index number to which the purchases are to be charged. Dorie has access to on-line ordering that provides school discounts with such suppliers as Fisher Scientific and VWR. She will place the order.
3. **Posters** - The Information and Technology Solutions center (I&TS) has poster printing capability. You will need to take a form to I&TS to pay for the printing. Dorie has these forms. She will need the index number to which the printing is to be charged.
4. **Chemicals** - DO NOT ORDER chemicals to be brought onto campus. You must go through Environmental Health and Safety (EHS) when you need chemicals. They will determine if the chemical can be brought onto campus. They have some chemicals in stock. If what you need is not in stock, they will order it. You will need to provide them with an index number. Anyone planning to use chemicals must attend a training course and get certification from EHS.
5. **Registration for meetings** - If your advisor is paying for your meeting registration with a grant, Dorie can pay for it with a credit card. Take the completed forms and the index number to her for processing. If you pay for the registration yourself and expect to be reimbursed, you cannot be reimbursed until after the meeting date.
6. **Analyses** - For off-campus analyses, a purchase order must be in place before you can order them to be performed. Bring the vendor information, analyses information, and the index number to Dorie so



a purchase order can be issued. If the vendor will accept credit card payments, the same information is needed.

7. **Travel Expense Support for Technical Presentation at Professional Meetings** – Depending on the availability of funds, the Department will help defray travel expenses for graduate students whose abstracts have been accepted for oral or poster session presentation at regional, national, or international meetings. The Department strongly encourages such professional activities. Written requests for such support, with supporting documentation, should be submitted to the Department Head as soon as the abstract has been accepted. The Office of Graduate Studies (OGS) also provides travel support for professional meetings.

### Graduate Student Offices

Graduate student office desk space is allotted each semester and is coordinated by the GE Office. We attempt to ensure that as many graduate students as possible have office space.

The order of priority is:

1. Teaching Assistants
2. Student Research Assistants
3. Ph.D. Candidates actively working on dissertation
4. M.Sc. Candidates actively working on their thesis

Graduate students may retain their office desk only during the period in which they hold a TA, RA or are actively engaged in writing their thesis. When no longer entitled to an office, students must vacate the space making it ready for the next occupant and notify the GE Office personnel that they have vacated. A list will be maintained of student requests for office desk space in another office area with students more conducive to their specialty and will be arranged when space becomes available there. It is your responsibility to keep the office area neat and clean. If the trash bins in the Graduate student office areas are full, please assist by emptying them. Please remember to keep noise at a minimum as other students in the office will be studying. After vacating/cleaning an office space, the space will be reallocated by the GE Office. **PLEASE REMEMBER TO BE COGNIZANT, QUIET AND RESPECTFUL TO YOUR FELLOW PEERS IN QUIETLY WORKING/ STUDYING IN THESE OFFICE AREAS.**

### Keys/Blastercards

Blastercards are issued to all students by the school. This Blastercard is required for entry into any campus building after regular school hours and on weekends. Some laboratories in Berthoud Hall require Blastercard activation for access. The computer room 222 has Blastercard access. Forms requesting access to Berthoud Hall and labs are in the main office. Students eligible for office space will be issued a key to the assigned area.

### Mailboxes

Each semester, every active graduate student in the Department is assigned a mailbox located in Room 215 of Berthoud Hall. Graduate students are not to use the Department as their principal mailing address. The CSM mailroom will not deliver incoming or accept outgoing personal mail. There are tables located in Room 215 to use as needed as a break room or meeting room along with a refrigerator, microwave, etc. Before leaving, please be sure to clean the area and appliances you have used. If the recycle bins are full, please assist by emptying them.

## Departmental Computer Facilities

The student Computer Labs are located in Berthoud Hall rooms 201 and 222. A network account agreement is required before you can obtain access. These forms are in the main office. Office personnel will supply paper and printer cartridges for computer labs.

Room 222 is reserved exclusively for student use. Room 201 is a teaching and short course lab. Pre-approved scheduling controls use of room 201. When not in use for classes or short courses, it is available for student use. We have many sophisticated geologic applications and special hardware items such as a slide scanner and a flat-bed scanner. In addition, all computers have CD-burners.

Room 203 is reserved exclusively for students (both undergraduate and graduate) working on research projects requiring the use of high-end workstations with advanced graphics cards. The workstations run a suite of programs dedicated to sub-surface analysis. Access to Room 203 is controlled through a Blastercard swipe key with approval by Dr. Alexei Milkov, Dr. Bruce Trudgill, Dr. Steve Sonnenberg, or Lesli Wood.

A few simple rules must be followed to ensure these resources will remain available.

1. Clean up after yourself. Do not abuse the Department's Computing Labs.
2. No food or open liquid containers are allowed in the computer labs room 201 & 222. Only closed/secure drinkware allowed.
3. Pets are **not** allowed in Berthoud Hall as per CSM rules.
4. Do not change **any** files or settings on the computers.
5. Do not add, move, or remove any hardware. Exercise extra care with network cables. They are fragile and you may cause the system to crash if tampered with or moved.
6. If you have problems with lab computers or your computer account, fill out a trouble ticket for I&TS at <http://helpdesk.mines.edu> requesting assistance. The lab computers hold labels with a CSM number to relay to I&TS.
7. Computers and printers remain on at all times. **DO NOT TURN THEM OFF.**
8. The Department has a policy in place for software compliance. Do not copy or install any software to or from workstations or the network. If specific software is required that we do not have, discuss implementation with the Department Staff. We must have licenses, original media and supporting documentation for all installed software. Software is only updated twice a year.
9. Printing costs for the Department are **high**. Students will be allotted 500 pages annually free of charge. Once that limit has been reached, payment will have to be made to have printing privileges at a price of 5 cents per page. Payment is made to Dorie.

Room 222 is reserved exclusively for student use. Room 201 is a teaching and short course lab. Pre-approved scheduling controls use of room 201. When not in use for classes or short courses, it is available for student use.

**PLEASE REMEMBER THAT THERE ARE SEVERAL STUDENTS (especially at the end of the semester) THAT ARE IN NEED OF AND USING THE COMPUTER LABS. WHEN YOU LEAVE THE COMPUTER LAB(S), PLEASE CLEAN UP YOUR COMPUTER DESK AREA OF ALL OF YOUR ITEMS SO OTHER STUDENTS WILL BE ALLOWED TO USE THE COMPUTER STATION (these areas are not for personal storage).**

**THANKS!**

This computer network is a result of the Department's commitment to the use of computer technology in the geosciences and is supported by Department money as well as your technology fee. Please treat the system accordingly and understand that most hardware replacements, repairs, and software upgrades are paid for directly by the Department. Money conserved on repairs and replacements can be applied toward new purchases, so it is in your best interest to take care of these computers as if they were your own.

## I&TS

Information and Technology Solutions provides computing and networking infrastructure and resources for CSM. Staff members serve as a resource to students as they conduct their studies.

Most computer systems are connected to the campus network and have access to the Internet and campus library resources. Black and white and color printing is available as well as poster printing and transparencies; check with the Help Desk (156A) in the Computer Commons at the Center for Technology and Learning Media (CTLM) for current charges.

All students need to establish a CSM e-mail and ADIT account. You may create personal web pages. An assortment of computer-based training courses is available. Virus protection and personal firewall software is available through the CCIT web page free of charge to registered students.

## Use of Laboratories and Equipment

Classrooms are equipped with computers and LCD projectors. If needed, the Department has a LCD projector that can be reserved through the main office. If this equipment is unavailable from the Department, the Computing Center might be able to supply it

Use of various laboratories is monitored by the faculty and/or staff member in charge of each facility. Access to, and use of, these facilities is granted by Department assistants upon written permission from the responsible faculty/staff member. Students must demonstrate their ability to operate specific laboratory equipment independently before receiving access to that laboratory. Questions regarding use of any lab should be directed to the designated person listed below. For a listing of analytical equipment descriptions, please see the appendix. Mandatory hazardous waste training conducted by the Environmental Health and Safety Office needs to be taken by all students.

<u>Lab</u>	<u>Location</u>	<u>Responsible Person</u>
Automated Mineralogy	Room 118/119	Katharina Pfaff
Carbon Coater	Room 118	Katharina Pfaff
FE-SEM	Room 116	Katharina Pfaff/Thomas Monecke
Field pH Meters	Room 301	Rick Sarg
Fluid Inclusion/ Cathodoluminescence	Room 111	Thomas Monecke
Franz Magnetic Separator, heavy liquids and picking microscope	Room 147C	Yvette Kuiper
Gas Mixing Furnace	Room 407	Ric Wendlandt
General Chemistry		
Fluid-rock Interaction	Room 406	Alexis Sitchler/ Alexander Gysi
Geomechanics	Room 303	Paul Santi
Geotech sample testing equip.	Garage	Paul Santi
High Pressure	Room 407	Ric Wendlandt

Isotope Sample Prep Jaw Crusher, Disk mill Ring mill	Room 301A Room 147D	Susann Stolze Yvette Kuiper/Thomas Monecke
Lab Space	Room 301A	Alexis Sitchler/ Rick Sarg
Mass Spectrometer/Isotope Microscope Lab	Room 404 Room 401B	Susann Stolze Thomas Monecke/Ric Wendlandt/Yvette Kuiper
Mineral Separation Lab	Room 406B	Thomas Monecke
Optical Mineralogy	Room 401	Ric Wendlandt
Sample examination	Room 110	Thomas Monecke/Alex Gysi/ Elizabeth Holley
Source Rock Analyzer	Room 301B	Steve Sonnenberg
Thin Section/Sample Prep	Room 147	Jae Erickson
Wilfley 'wet-shaking' table	Room 147E	Yvette Kuiper
X-Ray Diffractometer	Room 405	Ric Wendlandt

Brunton compasses, Jacob's staffs, and measuring tapes can be checked out from Jae Erickson in room 147. The Department has a limited number of hard hats that can be checked out along with safety vests and traffic cones. See Jae about this equipment.

### Lab and Work Request Procedures

#### **Thin Section Lab**

Jae Erickson operates the thin section lab in Room 147 of Berthoud Hall. Jae will cut, polish, and stain thin sections. Check with him if special processing of thin sections is needed. All submissions of samples for thin section processing require a thin section request form found on the departmental [thin section laboratory](#) website. For a thesis that requires petrographic work, a signed form from the advisor will be required for processing thin sections.

The following analytical preparation procedures can be accomplished in the Thin Section Lab:

- Sample cutting
- Sample polishing
- Production of petrographic thin sections
- Production of polished thin sections
- Staining of thin sections
- Impregnation of thin sections

The standard method for graduate students to request any of the above procedures involve the following steps:

1. Meet with thesis advisor to discuss an overall plan with respect to analytical procedures to be used for samples.
2. Obtain a "[Thin Section Request Form](#)" from the Thin Section Laboratory site, complete it by identifying the specific procedures to be followed, listing all samples by number, and have your thesis advisor sign the form.
3. Take samples to Jae Erickson and discuss with him the form request, specific procedures, timing, and costs.

Graduate students are allowed to use the equipment in the Thin Section Lab after proper training. Students should set up a training session time with Jae Erickson. After the student is trained on a piece of equipment, they can use the equipment during laboratory operating hours while the lab coordinator is present.

## Policies and Procedures for using Geochemistry Labs in Berthoud 406

Student and faculty users of the Geochemistry Labs (Berthoud Hall 406) are required to adhere to policies and procedures that create a collegial work environment and that ensure the safety of all users. The following policies have been developed to be in compliance with school-wide chemical hygiene policies administered by Environmental Health and Safety (EHS).

Each lab in Berthoud 406 has a Lab Supervisor and permission to use facilities in these areas should go through these individuals:

406 main lab and 406A research lab – Alexis Sitchler/Alexander Gysi  
406B – research lab - Thomas Monecke

In general, use will be granted for the 406 main lab only unless you are collaborating with one of the faculty who supervise the research labs 406 A and B.

The Department Head assumes overall responsibility for adherence to safety policies and procedures in all labs.

Because our general-purpose geochemistry lab (406) is small and serves diverse teaching as well as research needs, we have to enforce the access and equipment policies listed below:

- Priority for student use of general lab space in 406 is as follows:
  - Teaching
  - Students/post-docs on funded grants advised by GE Faculty
  - Students/post-docs without funding advised by GE Faculty
  - Other users
- Completion of EHS Safety and Hazardous Materials training is required prior to working in the lab.
- Faculty members are expected to provide all the equipment, chemicals, and other supplies needed by their project. Small amounts of general purpose glassware and a drying oven are available for communal use, however specialized equipment and necessary supplies, including refrigerator space exceeding about ½ shelf, must be obtained by individual investigators.
- There are sources of de-ionized water in BH404 and 406. Please check with Dr. Stolze regarding use of the water in BH404 or with Dr. Sitchler and Dr. Gysi for use of the de-ionized water in BH406.
- Each individual must maintain a safe environment that does not present a hazard to other lab users, particularly when a work area is left unattended, when experiments are in progress, and after completion of experiments.
- ***All users will execute an agreement***, signed by the user, faculty advisor (or faculty sponsor in the case of post-docs and visitors), and the lab supervisor, which will include the particular details of their lab use. This agreement allows the Department to have accurate records of the types and locations of chemicals, their hazards, and appropriate disposal, ensures that EHS and each Lab Supervisor conducts proper user training, ensures that users are fully aware of the health and safety issues pertaining to their research, and emphasizes the shared responsibilities of students, advisors, and lab supervisors. In the case of students, this agreement will include a check-out

procedure that must be completed when the work is completed and prior to graduation. A copy of this agreement will be placed on file in the lab being used.

- Oversight of all aspects of student (undergraduate and graduate) use of the lab by faculty advisors is required.
- Depending on the duration of the requested lab work, Blastercard access to BH406 may or may not be granted.
- Faculty hosting visitors on sabbatical leave are responsible for checking lab space availability before the visitor arrives and confirming that lab supervisors are willing to conduct necessary training and oversight of the visitor.

### **Laboratory Safety Training Provided by EHS**

- Graduate Student Safety Seminar (Mandatory). All incoming graduate students who work in laboratories and shops are required to attend. EHS provides the training on two occasions at the beginning of each semester. The presentation takes about 60 minutes.
- Hazardous Materials Training (Mandatory). All campus personnel who procure regulated materials or who generate regulated chemical waste must attend this training on an annual basis. This includes faculty members, staff members, graduate students and some undergraduate students. This training is required by federal and state law and is offered by the EHS Department at the beginning of each semester. The EHS Department maintains a list of persons who have received the training within the last year and are thereby "authorized" to handle regulated materials. Unauthorized persons who request chemical procurement or waste disposal service are notified that service has been denied because their training is no longer current.
- Hazard Communication in Laboratories. The Occupational Safety and Health Administration prescribes the implementation of a "Chemical Hygiene Program" for laboratories. A primary component of this program is "Hazard Communication." This means that all personnel should be informed of the properties of hazardous materials in the lab and should be informed of hazards and safety procedures associated with lab equipment and processes. One of the ways this is done at CSM is by posting MSDS information sheets on a clipboard that is mounted in the hallway outside each lab. Most CSM labs have such clipboards. The CSM Safety Officer checks the accuracy of laboratory MSDS files during annual building inspections. In addition, each time the EHS Department issues a chemical from our Central Storage and Distribution Facility, the recipient is reminded to review the MSDS for the chemical. If the recipient does not have an MSDS, one is provided.
- Radiation Safety Training (Mandatory). Faculty members and graduate students who wish to be qualified to independently handle licensed radioactive material must attend a 10-hour Radiation Safety Course. The course is offered by the Radiation Safety Officer each semester. Faculty supervisors of radiation-producing equipment (X-ray machines) are responsible to provide training for users of such equipment.

## GRADUATE STUDENT ORGANIZATIONS

The American Association of Petroleum Geologists (AAPG), Association of Environmental Engineering Geologists (AEG), and Society of Economic Geologists (SEG) all have student chapters on campus. New students are encouraged to become involved in the activities of these groups. It is a great way to make contacts, learn useful information about the Department and help shape your life and studies at CSM.

- AEG is open to students in disciplines related to engineering geology, geological engineering, and hydrogeology. The purpose of the organization is to promote activities that expand the experience and knowledge of the student members in these disciplines. Monthly meetings, which feature speakers from industry and government, are held along with field trips and social events.
- Any student studying the geological sciences is eligible for membership in SEG. Purposes of the Society are to encourage increased knowledge of geology and its application to mining and mineral deposits, to promote professionalism and provide opportunities to meet geological professionals in the mining industry. Activities include technical speakers, field trips, and social events.
- The student chapter of AAPG is open to any student majoring in geology. The purpose of the chapter is to advance the science of geology, especially as it relates to petroleum and natural gas and to promote and maintain a high standard of professional conduct. Activities include speakers, field trips, and social events.

## GENERAL REQUIREMENTS FOR GEOLOGY AND GEOLOGICAL ENGINEERING GRADUATE DEGREE PROGRAMS

### Introduction

Graduate students must meet a number of responsibilities and fulfill certain requirements during their degree program. This section presents these requirements, deadlines, and suggested guidelines for completing these responsibilities. A two-year Master's program is possible, but only if these deadlines and guidelines are followed closely. The duration of Ph.D. programs is more variable. Examples of the forms referred to below are included in the Appendix. Please go to the Graduate School website for the most current forms as they are revised and upgraded periodically AND PLEASE USE THE FIELD DROP DOWNS TO SELECT THE APPROPRIATE CATEGORY!

### Registration

Registration requirements include the following:

1. Continuing students should preregister to insure that a class will have sufficient enrollment to be held. Without sufficient enrollment classes may be dropped – it is in your best interest to pre-register! The Department expects students to register before classes begin each semester. This permits the Department to make final decisions on classes and teaching assignments and permits you to begin classes in an orderly manner. Timely registration permits the school to acquire state funds that are reflected in financial aid to students and the Department. **Graduate students who have not registered before the School's registration deadline** (see Registrar's [academic calendar-  
http://inside.mines.edu/Registrars\\_Office](http://inside.mines.edu/Registrars_Office)), **will be assessed a \$100 late fee.**
2. Payment of tuition and fees.

### Full-Time Student Hour Requirements

To be deemed full-time during the fall and spring semesters, students must register for 9 or more hours of course and/or research credit. However, international students need only register for 6 credit hours per semester during their first year if they are required to take special language instruction or are accepted in Provisional Status. In the event a thesis-based student has completed his or her required course work and research credits (36 hours for master's students and 72 hours for doctoral students) and is approved for reduced, full-time registration, the student will be deemed full-time if he/she is registered for at least 4 hours of research credit.

### Eligibility for Reduced Registration

In order to be considered for the reduced, full-time registration category, and apply to graduate in Trailhead students must satisfy the following requirements:

- **For M.Sc./M.Engr. students**, completion of 36 hours of course and research credit hours combined and paid for 27 credits (Paid credits = 1-9 credits per semester. Credits 10-15 are charged the same as 9 credits and are therefore not considered paid credits); A Degree Audit form must be submitted by either November 1<sup>st</sup> to graduate in May or qualify for reduced registration for the spring semester, March 1<sup>st</sup> to graduate in August or May 1<sup>st</sup> to graduate in December or qualify for reduced registration in the fall.
- **For Ph.D. students**, completion of 72 hours of course and research credit hours combined and paid for 54 credits (Paid credits = 1-9 credits per semester. Credits 10-15 are charged the same as 9 credits and are therefore not considered paid credits). At least 24 of the hours must be research credit hours and at least 36 must be course credit hours. Students who enter the PhD program with a thesis-based Master's degree may transfer up to 36 semester hours in recognition of the course work and research completed for that degree (up to 24 of these semester hours can come from previous graduate-level course work). A Degree Audit form must be submitted by either November 1<sup>st</sup> to graduate in May or qualify for reduced registration for the spring, March 1<sup>st</sup> to graduate in August or May 1<sup>st</sup> to graduate in December or qualify for reduced registration in the fall; An Admission to Candidacy form must be submitted 2 weeks prior to census day of the semester in which they want to apply to graduate and/or be considered eligible for reduced registration (or earlier).

### Registration Requirements – Reduced Registration How to Qualify

Reduced registration allows students who have completed all the credits towards a degree, but still need to continue to work on research to complete a thesis, to register part time, but maintain full time student status.

- Students on reduced registration do not get reduced tuition
- Students on reduced registration pay for the number of credits registered

Reduced registration will benefit students in the following categories who need to be considered full-time students:

- International students
- Students on RA/TA contracts, hourly contracts or fellowships
- Students on financial aid or wishing to defer financial aid payments

#### **To qualify students must:**

- Be admitted into a Master's thesis or PhD program



- Have submitted the required forms
- Meet credit hour requirements

**MS THESIS STUDENTS** (students must meet all requirements to qualify):

1. **Submit Degree Audit form** (must have approved committee form on file with OGS) and indicate on the form that they want to be on Reduced Registration by:
  - **May 1** for **fall semester** reduced registration
  - **November 1** for **spring semester** reduced registration
2. **Master’s students must have earned 36 hours of course and research credits combined and have paid for 27 credits\***. These credits may include any transfer credits a student is using towards the degree.

**PHD STUDENTS** (students must meet all requirements to qualify):

1. **Submit Degree Audit form** (must have approved committee form on file with OGS) and indicate on the form that they want to be on Reduced Registration by:
  - **May 1** for **fall semester** reduced registration
  - **November 1** for **spring semester** reduced registration
2. **Submit Admission to Candidacy form by the first day of class for the semester in which the student wants to be on Reduced Registration.** Students must meet all institutional and departmental requirements for candidacy before the department will sign this form.
3. **Ph.D. students must have earned 72 hours of course and research credits combined and have paid for 54 credits\***. These credits may include any transfer credits a student is using towards the degree.

*\*Paid credits are any credits 1-9 per semester. Credits 10-15 are considered free credits, because the student is not charged any additional tuition and fees. So, when counting paid credits you may only count a maximum of 9 credits per semester, even if the student took more than 9 credits.*

**Reduced Registration Credit Calculator**

Once a student qualifies for Reduced Registration, the student must register correctly. Students who qualify for Reduced Registration, but fail to register correctly will not be put on Reduced Registration. All students who qualify for Reduced Registration will receive an email with registration instructions. If a student doesn’t get an email, but thinks (s)he should qualify, the student must contact the OGS at [grad.services@mines.edu](mailto:grad.services@mines.edu). *Students who register for 4 credits, but are not eligible and or are not on the reduced registration list will not be put on reduced registration and will be considered “less than half-time” students.*

Leave of Absence

Leave of absence will be granted only when unanticipated circumstances make it temporarily impossible for students to continue to work toward a degree. Students may take up to 2, not necessarily consecutive semesters of leave. Any request for a leave of absence must have the prior approval of the student's faculty advisor, the Department Head, and the Dean of Graduate Studies. The request for a leave of absence must be applied for in writing and must include (1) the reasons why the student must interrupt his or her studies and (2) a plan (including a timeline and deadline) for resuming and completing the work toward the degree in a timely fashion. Thesis-based students may not do any work related to their thesis and may not discuss their thesis with their faculty advisor while on a leave of absence. Students who wish to return to graduate studies after an unauthorized leave of absence must apply for readmission and pay a \$200 readmission fee.

### Grade Point Average

A cumulative GPA of 3.0 out of 4.0 must be maintained. Failure to maintain a 3.0 GPA will result in academic probation. Students failing to attain a 3.0 GPA by the end of a semester during which they are on probation are subject to suspension. Credit will be given for a grade of "C", however, a GPA of 3.0 or higher must be maintained. Graduate credit will not be given for courses in which grades less than "C" were received.

### Transfer Credits

Transfer credits from other universities or credits from non-degree programs at CSM must be approved by the student's committee and the Graduate Dean. Only courses in which a grade of "B" or better was received may be considered for transfer. Transfer credits from other universities will not be used in calculation of a student's GPA. A maximum of 9 hours, which were not counted toward any other awarded degree, can be transferred into a Master degree program. Students who enter the PhD program with a thesis-based Master's degree may transfer up to 36 semester hours in recognition of the course work and research completed for that degree (up to 24 of these semester hours can come from previous graduate-level course work). No more than 9 hours taken as a CSM non-degree student can be transferred and no more than 3 of these units can be 400-level. The remainder must be graduate level.

### Progress Grades

A student may receive a grade of In Progress-Satisfactory or In Progress-Unsatisfactory (PRG or PRU) for a course or research hours. An In Progress grade indicates that the work is not complete. Progress towards successful completion of a graduate degree shall be deemed unsatisfactory if any of the following conditions occur: failure to maintain a cumulative grade point average of 3.0 or greater or receipt of an In Progress-Unsatisfactory for research hours. Upon the second occurrence of an unsatisfactory progress indication, the Dean shall notify the student that he or she is subject to discretionary dismissal according to the "Unsatisfactory Academic Performance" section listed in the *Bulletin*.

### Incomplete Grades

If a graduate student fails to complete a course because of illness or other reasonable excuse, the student receives a grade of Incomplete. The grade INC indicates deficiency in quantity of work and is temporary. A graduate student must remove all incomplete grades within the first four weeks of the first semester of attendance following that in which the grade was received. If not removed within the four weeks, the Incomplete will become an F.

## Deficiencies

Students with an insufficient background in a particular area of geology or related science will be notified at the time of acceptance. They will be required to take appropriate courses to satisfy these deficiencies as approved by their committee and maintain a B average in any deficiency course. No graduate credit will be received for these courses. Any student receiving a “D” in a deficiency course will be required to repeat the course. Deficiencies should be removed as soon as possible after enrollment. Deficiency courses may be taken at a school other than CSM if approved by the student’s advisor.

## Research/Thesis Committees

Students pursuing degrees should choose a research or thesis advisor and thesis committee by the end of their second semester by meeting with faculty members who are interested in appropriate research topics. All thesis-based students are required to have a thesis advisor and committee while non-thesis based students require a research advisor only. A research advisor/thesis advisor and committee form is available online (<https://www.mines.edu/graduate-studies/forms/advisorthesis-committee/>). On the thesis committee and assignment request form you can use the drop downs to note what your program and degree is and type in the committee members’ names, the department head’s name spelling out Dr. Wendy Bohrson. The advisor and committee members must sign the form. It should be submitted to Cheryl or Dorie who will present it for approval by the Department Head before submission to the Graduate School. An approved copy of the form will be returned to student. The purpose of a research advisor or thesis committee is to monitor progress of courses and research/thesis work. Meetings between student and research advisor or thesis committee should be arranged as needed and should be no less than one per semester. It is most important that the student and research advisor or thesis committee stay closely in touch to prevent any miscommunication or misinterpretation of work to be done and progress to be made. It is up to the student to schedule all meetings. The research advisor or thesis committee will oversee the student’s entire graduate program including transfer of credits, elimination of deficiencies, course of study, and in the case of a thesis-based program, thesis proposal, thesis research, and thesis defense.

Thesis advisors must be members of the Department. Tenured or tenure-track faculty may advise graduate students. Research faculty members may co-advise graduate students with a Department tenured or tenure-track faculty member or may serve as a thesis advisor if they meet minimum requirements listed below and have been approved by the Department Head. Research faculty members wishing to serve as graduate advisors, as a minimum must have 1) served as co-advisor (through completion of degree) to at least one thesis-based CSM graduate student, 2) a record of on-going relevant research, and 3) a full-time presence in the Department. The Research faculty member may apply for advisor status with a recommendation by the Department Head. All graduate committees are subject to approval by the Department Head and the Dean of the Graduate School.

A minimum of three faculty members constitute a M.Sc. committee; two members must be full time faculty from the home department. At least one member of the committee must be a tenured or tenure-track CSM faculty and will serve as the “committee chair” (do not need to specify on form). Additional members, such as non-CSM personnel, may be included on the committee. Off-campus members have the option of voting or non-voting (ex officio) status. Voting members have all responsibilities of academic members, including advising on technical matters, reading and critiquing the thesis, attending committee meetings, the qualifying examination, and the defense of dissertation. A brief resume for off-campus committee members who hold voting status on the committee is required and must be attached to the initial thesis committee form. Faculty and others outside the Department may serve as co-advisors. In the use of a co-advisor, the required number of committee members is increased by one.

For a Ph.D. dissertation committee, there must be a minimum of four full time faculty members; at least two members from the home or allied departments, and at least one (tenured/tenure-track) member outside the home or allied department recommended by the student and advisor(s). Individual committees can be established with more than four members. A majority of the voting members of the committee must be tenured or tenure-track CSM faculty members. The required committee chair is the fourth member. Additional members, such as non-CSM personnel, may be included on the committee. Off-campus members have the option of voting or non-voting (ex officio) status. Voting members have all responsibilities of academic members, including advising on technical matters, reading and critiquing the dissertation, attending committee meetings, the qualifying examination, and the defense of dissertation. A brief resume for off-campus committee members who hold voting status on the committee is required and must be attached to the initial thesis committee form. Faculty and others outside the Department may serve as co-advisors. If a co-advisor is appointed, the required number of committee members is increased by one.

### Qualifying Examinations

Ph.D. students must pass qualifying examinations by the end of the second year of their programs. This timing may be adjusted for part-time students. The examination will be administered by the student's doctoral committee and will consist of an oral and a written examination administered in a format to be determined by the student's doctoral committee. Two negative votes by the doctoral committee constitute failure of the examination.

In case of failure of the qualifying examination, a re-examination may be given upon the recommendation of the doctoral committee and approval of the Graduate Dean. Only one re-examination may be given.

### Degree Audit and Admission to Candidacy

#### **Forms:**

All Masters (including non-thesis) and PhD students are required to submit a *Degree Audit* form for a degree plan. The *Admission to Candidacy* form confirms that a PhD candidate has completed the PhD qualifying process and is admitted into candidacy.

To be eligible to apply to graduate in Trailhead and be eligible for reduced registration:

- Master's students:
  - Need to submit the Degree Audit form by the posted deadline (see below)
  
- PhD students:
  - Need to submit the Degree Audit form by the posted deadline (below)
  - AND
  - Need to submit the Admission to Candidacy form 2 weeks prior to census day of the semester in which they want to be considered eligible for reduced registration (or earlier).

Degree Audit form deadlines are:

- November 1<sup>st</sup> to graduate in May
- April 15 to graduate in August
- May 1<sup>st</sup> to graduate in December.

These deadlines are the same as OGS use to require for the complete *Degree Audit* and *Admission to Candidacy form*.

Prior to submitting a Degree Audit and/ or Admission to Candidacy form there must be a thesis committee on record with the Grad Office and Department. All degree thesis candidates must submit a Degree Audit by completing all prerequisites and core curriculum course requirements. For thesis-based students, the form must be submitted within the first calendar year after enrolling in the Master degree program and within the first two calendar years in the Ph.D. program. Admission to Candidacy must be granted before the student is permitted to defend his/her Ph.D. thesis. In order to meet graduation deadlines, the form must be submitted by the dates listed on the OGS webpage.

The Degree Audit application must be reviewed and approved by the committee research advisor and should contain a complete list of courses (completed, in progress, and proposed) being used toward the degree. This includes transfer courses and 400 level courses (if applicable) along with 500/600 level courses used to satisfy requirements for the degree. Upon approval by the Department Head, the form is submitted to the Graduate Dean for agreement. Any changes in the course program listed on the Degree Audit form must be re-approved by the thesis committee or research advisor and Graduate Dean. The advisor and committee members must sign the form. It should be submitted to Cheryl or Dorie who will present it for approval by the Department Head before submission to the Graduate School. An approved copy of the form will be returned to student.

### Non-Thesis Procedures

When the non-thesis degree student student applies to graduate in Trailhead, OGS will enroll students in a CANVAS Checkout Course. Students must complete the following: accept course invitation and complete 100% of the course by 5pm on the Check-out Course Completion Deadline listed on the OGS webpage.

### Thesis and Dissertation Procedures

Each candidate for the thesis-based M.Sc. or Ph.D. degree will be required to write a thesis acceptable to the committee and Department. The thesis must show original research of excellent quality in a suitable technical field and must exhibit satisfactory literary merit. The subject of the thesis is selected by mutual agreement between the candidate and the advisor and/or co-advisor, if applicable. Any major change in the scope of the research requires the approval of the thesis committee. It is the responsibility of the advisor or co-advisor to supervise the research and to consult with other members of the thesis committee on the progress of the work. During the final semester of the program, each candidate must pass an oral defense of the thesis that may cover course work as well as the thesis topic. Format instructions are available in the Graduate Office and should be obtained before beginning to write the thesis.

### **Proposal**

A thesis or dissertation proposal is required of all candidates for the purpose of (1) defining the scope of the proposed research and (2) to permit the thesis committee to determine the suitability of the research for a graduate thesis. The proposal should be approved by the thesis committee prior to the start of significant work on the project.

The proposal should stress the original research involved and follow the general outline listed below:

1. Title
2. Objectives and purpose

3. Thesis area location
4. Scope of research
5. Previous research of record
6. Description of proposed research
7. Schedule for completion of proposed research
8. Budget and funding source
9. Course schedule (including deficiencies, qualifying exam courses, and completed courses)
10. Written release for public disclosure of results (when outside funding is involved).

An outline for the thesis proposal should first be submitted to the thesis advisor for approval prior to writing and formal submission of the proposal itself. The proposal should be written in a concise format. The thesis committee will review the proposal and may suggest changes. After committee approval, a copy must be placed in the student's file.

### **Budget**

Thesis/dissertation research (travel, living expenses, analysis, thin sections, etc.) costs can be significant. It is the responsibility of the student to develop a budget and plan for financial support prior to committee approval of the proposal. Individual faculty members or the Department may, in some cases, be able to provide assistance in securing support.

### **Proprietary Research**

Under special circumstances, the School may enter into an agreement with a sponsor to include proprietary research in a graduate student's thesis or dissertation. The nature and extent of proprietary research reported in the thesis or dissertation must be agreed upon in writing by the sponsor, principal investigator, student, and Dean of Graduate Studies. The thesis defense will remain open to the public. Denial of public access to the written thesis will be limited to a maximum of twelve months from the date of submittal of the Thesis Defense form to the Dean of Graduate Studies.

### **Manuscript Preparation**

An "ideal" sequence for draft preparation and review is as follows. The student, in conjunction with the advisor, prepares an initial outline of the thesis. This outline is developed into a draft following the Graduate Studies [thesis writer's guide](https://www.mines.edu/graduate-studies/thesis-writers-guide/) (https://www.mines.edu/graduate-studies/thesis-writers-guide/) (including all figures, tables, and plates), which is submitted to the thesis advisor and/or co-advisor, if applicable, for the first review. Students must follow the Step by Step Thesis Guide procedures at the Graduate School website. After the first draft has been returned to the student, a second draft is prepared which incorporates the revisions, corrections, and suggestions made on the draft. Upon approval of a defensible draft, the student may schedule a defense. Copies of the thesis should be submitted to committee members at least two weeks prior to the defense. Further revisions may be required as a result of the defense. After, the student must follow any edits and formatting needed for final approval by the Graduate Studies Office.

### **Thesis and Dissertation Defense**

The defense must be open to the public and should occur at least one week after public notification of the scheduled defense date. Following the satisfactory defense of the thesis, the student will complete any revisions specified by the thesis committee and, after approval by the advisor, submit it to the Department

Head for signature before submitting the final copy to the Graduate Office for format approval. See Grad School Guidelines.

Two negative votes from the thesis committee constitute failure of the oral defense regardless of the number of committee members present at the defense. At the discretion of the thesis committee, a second oral defense of dissertation may be scheduled. A second failure to defend the dissertation satisfactorily constitutes automatic, irrevocable termination of the graduate program. In either case of pass or fail, members voting in the negative may file a report on why they voted to fail. In the case of failure, the Chair of the Thesis Committee will prepare a written statement indicating the reasons for failure of the defense and will provide copies to the student, Thesis Committee, the Department Head, and the Graduate Dean.

### Graduation Deadlines

**Please view the current deadlines calendar located on the OGS website**

**<https://www.mines.edu/graduate-studies/graduation-deadlines/>**

- Students must complete the following steps by the stated deadlines in order to defend their thesis and graduate at the end of a semester. The defense is scheduled via the Thesis Defense Request form (form obtained from the OGS website = <https://www.mines.edu/graduate-studies/forms/>) and signed by all committee members showing their approval to meet at the agreed upon time and date. Submit the completed form to Cheryl Medford, **at least one week in advance of the thesis defense date.** She will assign a room for the defense and will send announcements of the defense to committee members, the student, and post the notice on the lecture board. When the student applies to graduate in Trailhead, OGS will enroll students in a CANVAS Checkout Course. Students must complete the following: accept course invitation and complete Module #1 prior to thesis defense to obtain Thesis Defense Form to take to the defense. Students must complete 100% of the course by 5pm on the Upload and Check-out Course Completion Formatting Approval Deadlines.

Graduation Checklists & Deadlines (see Calendars in Appendix)

December 2019 Graduation Commencement: Friday, December 13, 2019

### **Forms to Submit Prior to Applying to Graduate:**

- Prior to May 1, 2019: Master's thesis and PhDs must submit [Committee form](#)
- **May 1, 2019: All graduate students must submit [Degree Audit form](#) by 5:00 p.m.**
- August 20, 2019: PhDs must submit [Admission to Candidacy form](#) by 5:00 p.m.

### **EARLY CHECK-OUT CHECKLIST AND DEADLINES**

- **Student must have been registered for summer 2019 credits**
- **Student does not need to register for fall 2019 credits**
- **August 23, 2019: All students must apply to graduate in Trailhead**
  - Students may only apply after all the forms above have been processed.
  - After students apply to graduate in Trailhead, students will enroll the student in a CANVAS Graduation Check-Out Course
  - Enrollment dates can be found at: [Steps to Graduation](#)

### **Non-Thesis Students:**

- **September 4, 2019:** Complete [Graduation Check-Out Course](#) in CANVAS

### **Thesis Students**

- **August 27, 2019:** Complete [Graduation Check-Out Course](#) in CANVAS by 5:00 p.m.

- **August 27, 2019:** Submit signed Thesis Defense Form to the Registrar's Office by 5:00 p.m.  
*-Thesis Defense Form is available only at the end of the 1st quiz in the Graduation Check-Out Course*  
*-Thesis Defense Form should only be signed after the student has passed the defense & all content revisions have been approved.*
- **August 27, 2019:** Upload thesis in [ProQuest](#) 11:59 p.m.  
*-Only after you have completed all the steps above, will the format review begin*
- **September 4, 2019:** Thesis Formatting Approval by 1:00 p.m.  
*-Students must complete the [CANVAS course titled Thesis Writer's Workshop](#)*  
*-OR-*  
*-Use the [Latex template on the Graduate Studies website](#) (do not create your own template)*

Early Check-Out degrees will be awarded December 16, 2019 – January 6, 2020

Students checking out early to graduate in December may walk in December commencement ceremony

### STANDARD CHECK-OUT CHECKLIST AND DEADLINES

- **Student must be registered for fall 2019 credits**
- **September 4, 2019:** All students in all degree programs must [apply to graduate in Trailhead](#)  
*-Students may only apply after all the forms above have been processed by OGS.*  
*-After students apply to graduate in Trailhead, OGS will enroll the student in a CANVAS Graduation Check-Out Course*  
*-Enrollment dates can be found at: [Steps to Graduation](#)*

#### **Master's Non-Thesis Standard Checkout**

- **November 8, 2019:** [Graduation Check-Out Course](#) Completion in CANVAS by 5:00 p.m.

#### **Master's Thesis Standard Checkout**

- **November 18, 2019:** Complete [Graduation Check-Out Course](#) in CANVAS by 5:00 p.m.
- **November 18, 2019:** Submit signed Thesis Defense Form to the Registrar's Office by 5:00 p.m.  
*-Thesis Defense Form is available only at the end of the 1st quiz in the Graduation Check-Out Course*  
*-Thesis Defense Form should only be signed after the student has defended, passed the defense and all revisions have been approved.*
- **November 18, 2019:** Upload thesis in [ProQuest](#) by 11:59 p.m.  
*-Only after you have completed all the steps above, will the format review begin*
- **November 22, 2019:** Thesis Formatting Approval by 1:00 p.m.  
*-Students must complete the [CANVAS course titled Thesis Writer's Workshop](#)*  
*-OR-*  
*-Use the [Latex template on the Graduate Studies website](#) (do not create your own template)*
- **PHD Standard Checkout**
- **November 11, 2019:** Complete [Graduation Check-Out Course](#) in CANVAS by 5:00 p.m.
- **November 11, 2019:** Submit signed Thesis Defense Form to the Registrar's Office by 5:00 p.m.  
*-Thesis Defense Form is available only at the end of the 1st quiz in the Graduation Check-Out Course*



*-Thesis Defense Form should only be signed after the student has defended, passed the defense and all revisions have been approved*

- **November 11, 2019:** Upload thesis in [ProQuest](#) by 11:59 p.m.  
*-Only after you have completed all the steps above, will the format review begin*
- **November 15, 2019:** Thesis Formatting Approval by 1:00 p.m.  
*-Students must complete the [CANVAS course titled Thesis Writer's Workshop](#)*  
*-OR-*  
*-Use the [Latex template on the Graduate Studies website](#) (do not create your own template)*

*Standard Check-Out degrees will be awarded December 16, 2019- January 6, 2020  
Students may walk in December commencement ceremony*

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May 2020 Graduation Commencement: May 7, 2020

### **Forms Needed to Apply to Graduate**

- Prior to November 1, 2019: **Master's thesis and PhDs** must submit an **Advisor/Committee form**
- November 1, 2019: **All graduate students** must submit **Degree Audit form** by 5:00 p.m.
- January 7, 2020: **PhDs** must submit **Admission to Candidacy form** by 5:00 p.m.

### **EARLY CHECK-OUT CHECKLIST AND DEADLINES**

- **Student must have been registered for fall 2019 credits**
- **Student does not need to register for spring 2020 credits**
- **January 10, 2020: All students** must **apply to graduate in Trailhead**  
*-Students may only apply after all the forms above have been processed.*  
*-After students apply to graduate in Trailhead, students will be enrolled the student in a CANVAS Graduation Check-Out Course*  
*-Enrollment dates can be found at: [Steps to Graduation](#)*

### **Non-Thesis Students**

- **January 22, 2020:** Complete the **Graduation Check-Out Course** by 5:00 p.m

### **Thesis Students**

- **January 15, 2020:** Complete **Graduation Check-Out Course** in CANVAS by 5:00 p.m
- **January 15, 2020:** Submit signed Thesis Defense Form to the Registrar's Office by 5:00 p.m.  
*-Thesis Defense Form is available only at the end of the 1st quiz in the Graduation Check-Out Course*  
*-Thesis Defense Form should only be signed after the student has defended, passed the defense and all revisions have been approved.*
- **January 15, 2020:** Upload content approved thesis in **ProQuest** by 11:59 p.m. (thesis students only)  
*-Only after you have completed all the steps above, will the format review begin.*
- **January 22, 2020:** Thesis Formatting Approval by 1:00 p.m.

- Students must complete the [CANVAS course titled Thesis Writer's Workshop](#)
- OR-
- Use the Latex template on the Graduate Studies website (do not create your own template)

## STANDARD CHECK-OUT CHECKLIST AND DEADLINES

### **Student must be registered for fall 2019 credits**

#### **January 22, 2020:** All students in all degree programs must **apply to graduate in Trailhead**

- Students may only apply after all the forms above have been processed.
- After students apply to graduate in Trailhead, students will be enrolled in a CANVAS Graduation Check-Out Course
- Enrollment dates can be found at: [Steps to Graduation](#)

#### Non-Thesis Master's

**April 3, 2020:** Complete **Graduation Check-Out Course** by 5:00 p.m.

#### Thesis Master's

- **April 13, 2020:** Complete **Graduation Check-Out Course** in CANVAS by 5:00 p.m.
- **April 13, 2020:** Submit signed Thesis Defense Form to the Registrar's Office by 5:00pm
  - Thesis Defense Form is available only at the end of the 1st quiz in the Graduation Check-Out Course
  - Thesis Defense Form should only be signed after the student has defended, passed the defense and all revisions have been approved.
- **April 13, 2020:** Upload content approved thesis in **ProQuest** by 11:59 p.m.
  - Only after you have completed all the steps above, will the format review begin.
- **April 17, 2020:** Thesis Formatting Approval by 1:00pm
  - Students must complete the CANVAS course titled Thesis Writer's Workshop
  - OR-
  - Use the Latex template on Graduate Studies website (do not create your own template)

#### PhDs

- **April 6, 2020:** Complete **Graduation Check-Out Course** in CANVAS by 5:00 p.m.
- **April 6, 2020:** Submit signed Thesis Defense Form to the Registrar's Office by 5:00pm
  - Thesis Defense Form is available only at the end of the 1st quiz in the Graduation Check-Out Course
  - Thesis Defense Form should only be signed after the student has defended, passed the defense and all revisions have been approved.
- **April 6, 2020:** Upload content approved thesis in **ProQuest** by 11:59 p.m.
  - Only after you have completed all the steps above, will the format review begin.
- **April 12, 2019:** Thesis Formatting Approval by 1:00pm
  - Students must complete the [CANVAS course titled Thesis Writer's Workshop](#)
  - OR-
  - Use the Latex template on our website (do not create your own template)

*Students Graduating in May are allowed to walk in the May Commencement Ceremony Degrees will be awarded May 11-22, 2020*

- **The Geology and Geological Engineering Department checkout form must be submitted and signed off by Cheryl Medford or Dorie Chen.**

Degree Level Change and Program Change

Students wanting to change a degree level must submit the Degree Level Change Request Form. This form may only be used when changing degrees within the same department AND with exact degree titles. The table below shows under which conditions a student must submit the Degree Level Change Request form.

MS Thesis	to	MS Non-Thesis
MS Non-Thesis	to	MS Thesis
MS Thesis	to	Master of Engineering (Non-Thesis)
Master of Engineering (Non-Thesis)	to	MS Thesis
Currently in PhD and dropping	to	MS Thesis or MS (Non-Thesis)

Note: All students submitting this form may also need to submit a new Degree Audit Form if one was already submitted prior to making the change in degree level.

\*\*\*For example, changing from a PhD "Geology" to MS (thesis) in "Geology" constitutes a change to a degree level with the "Same Program Name". Changing from an MS (thesis) in "Geology" to a Professional Master (Non-Thesis) in "Mineral Exploration" (or vice versa) constitutes a change to a degree level with a different name, so the student cannot use the Degree Level Change form and will need to apply online.

Students wanting to add degree programs must submit a new application online for the new degree program for the following conditions:

- If currently in PhD degree program and adding any Master’s degree program
- If currently in any Master’s degree program and adding a PhD degree program
- If not changing Master’s degree level but changing degree major/title

A student who has started a Master of Science program may request permission to convert to a Doctoral program without obtaining the Master degree, provided all requirements for the Master degree, except the completion of the thesis, have been completed. International students are advised to complete a Master degree prior to applying for the Ph.D. program. The procedure to be followed is outlined below:

- After completing the equivalent of at least one summer working on the Master of Science research project, the student should confer with the thesis committee and obtain permission to initiate an application for conversion to the Ph.D. program. Approval by the committee at this time is only approval to initiate the application and does not constitute Departmental approval of the conversion.
- If the committee approves initiation, the student should then prepare a report, substantiated with appropriate illustrations, explaining the results of research accomplishment to that date.
- A separate written proposal defining the purpose and scope of the proposed doctoral program should be prepared and submitted together with the above report. This proposal should include a justification for the conversion of the initial Master program to a Doctoral program and specify the scope and nature of the proposed research for the doctoral dissertation (i.e., what has changed in the original research program to qualify for a dissertation?).
- The committee will then arrange a meeting time for presentation and defense of the proposal. The examining committee will consist of the student’s M.Sc. committee. Upon written committee

approval of the proposal, the student will then be allowed to submit an application through the on-line application system. Letters of recommendation, transcripts, GREs and statements of goals will not be required of the applicant. The application will be processed according to procedure. Once admitted into the PhD program, students who will not complete the MS degree will be required to submit a Withdrawal from a Program form to the OGS.

### Completion of M.Sc. Program and Admission to Ph.D. Program

A student who completes a Master degree program is not automatically allowed to continue in a Doctoral program. A student wishing to continue for a Ph.D. will complete an on-line application through the school application system. If a student is admitted before all Master degree work is completed, all Master degree requirements must be satisfied before the start of the Ph.D. program.

### Checkout Process

#### **Prior to checkout, every student needs to:**

- Submit an [Advisor/Committee](#) form to the OGS. *This is only required for thesis based students.* Master's non-thesis only need to submit a [Master's Non-Thesis Advisor Change / Minor Rep form](#) if changing advisors or if adding a Minor Representative.
- Submit a [Degree Audit](#) form to the OGS
- PhD Candidates need to: Submit an [Admission to Candidacy](#) form to the OGS
- [Apply to Graduate](#) in Trailhead

#### **Once these steps are completed, then:**

- After applying to graduate in Trailhead, OGS will enroll students in a CANVAS Checkout Course. Students must: accept course invitation and complete Module #1 prior to defense to obtain Thesis Defense Form to take to the Defense. The student must complete 100% of the course by 5 pm on Upload and Check-out Course Completion and Formatting Approval deadlines.
- Verify your [Diploma Mailing](#) Address on [Trailhead](#).
- Verify your [Personal Email](#) address on [Trailhead](#). The graduation photographer will communicate with you via your personal email address.
- Upload your [Thesis/Dissertation](#) into ProQuest and obtain format approval from OGS (MS thesis and PHD students only)
- Complete the [Survey of Earned Doctorate](#) (PHD students only).

**Checkout with the [OGS](#) by the [Deadline](#)** (required - ALL graduating students).

#### **After checkout, make sure to:**

- Settle accounts with the [Cashier's Office](#)
- Return your keys to the [Key Shop](#). Holds will be placed on student accounts until keys are returned.
- If you would like to pick up a free package of announcements or if you need to order more announcements, contact the bookstore.
- Pickup commencement tickets for guests. Tickets will be available a few weeks prior to commencement from the OGS. Entrance to the graduation ceremony will be by ticket only.
- Complete the Graduate Student Exit Questionnaire. This will be emailed to each graduating student at the end of the semester.



# APPENDIX

**FORMS AND EXAMPLES FOLLOW. FOR THE MOST RECENT FORMS, PLEASE ALWAYS GO TO THE INSIDE.MINES.EDU WEBSITE (FORMS SHOWN ARE EXAMPLES THAT ARE UPDATED PERIODICALLY).**

Controller's website

Preferred Travel and Car Rental Agencies

Department

Checkout – Please see Dorie or Cheryl

Graduate Studies forms – Please go to the Graduate Studies website

(<https://www.mines.edu/graduate-studies/>) for the most current forms as they are revised and upgraded periodically:

Step-by-Step Guide

Advisor/ Thesis Committee Requirements

MS Non-thesis Graduate Deadlines Chart

MS Thesis Graduate Deadlines Chart

PHD Graduate Deadlines Chart

Thesis Defense Request Form

Transfer Credit Limits

Laboratories and Equipment

Analytical Equipment List

General Laboratory and Workshop Safety

