

College of Engineering and Applied Science

Policy and Expectations for Faculty and Graduate Students

Faculty, staff, and students contributing to graduate programs in the College of Engineering and Applied Science (CEAS) aspire to the highest levels of excellence in education, professional development, discovery, dissemination of new knowledge, and support of economic development within the state of WY. This document sets forward policies and philosophy relevant to graduate student education within the CEAS. These policies are intended to compliment university policies posted in the UW Bulletin. Individual CEAS departments may have policies that are more prescriptive.

I. Expectations for Student Progress

A. MS Plan-A Students

Students are expected to meet regularly with their faculty mentors throughout the duration of the research work. Following is the expected timeline for Plan-A MS students:

- In the first semester a research advisor is identified and research begins.
- By end of the first year:
 - In consultation with the faculty advisor, the graduate committee is formed and the Committee Assignment Form is submitted to the Associate Vice Provost for Graduate Education.
 - A Program of Study is completed and submitted to the Registrar.
 - The student presents a research plan (following committee or department guidelines) to the committee, giving background on the research problem, results to date, work yet to be completed, and expected timeline.
- By end of the second year thesis research should be publicly presented and defended. MS theses should be delivered to the committee at least 2 weeks prior to the defense date, but the home department or committee may require more than 2 weeks be allowed. Announcement of the presentation should be posted on the CEAS website a minimum of one week prior to the defense (students should work with their department's Office Associate to post announcement).

Many MS students have left UW to accept employment before completing the writing and presentation of their theses, and these students have a very poor track record of completing MS degrees in absentia! Thus, the time commitment by both student and faculty mentor, as well as the fiscal investment in the student are typically not recouped when a student leaves prior to completion of degree requirements. When a faculty advisor and student agree to work together on a research problem there is an implied contract between the two parties to complete the work - indeed, students were paid to complete the work, funding contracts that supported the

work require final reports from the faculty member, and follow-on funding for future students likely depends on a successful outcome for the present work. Consequently, both students and faculty mentors need to be highly cognizant of time constraints so that students are on schedule for a timely completion of all degree requirements prior to the student leaving the UW campus.

B. Plan-B MS Students

Plan-B students should work with their assigned academic advisor to develop and submit a Program of Study to the Registrar by the end of their first year of graduate studies. Departments set specific degree requirements, including whether or not a Plan-B project and its presentation are required. However, UW policy requires that all Plan B students undergo either a project presentation or final exam with the student's committee.

C. PhD Students

PhD students should work with their advisor to form a committee as soon as possible. PhD students are required to convene a meeting of their dissertation committees each year for the purpose of reviewing research progress. The format for the annual progress review will be specified by the committee or home department.

The committee's function is to work with the advisor to keep the student on schedule, to offer constructive suggestions, and constructive criticism. Another role served by the committee is to verify that the advisor's expectations are appropriate and reasonable, and that the student's progress satisfactory. Specific timelines follow:

- In the first semester a research advisor is identified and research begins.
- By the end of the first year (for all PhD students, whether an MS degree has been earned or not) the graduate committee is formed in consultation with the advisor and the Committee Assignment Form is submitted to the Associate Vice Provost for Graduate Education.
- By the end of the second year (or by the end of the third year if the student does not have an MS degree),
 - The Qualifying Exam (required by some CEAS depts.) should have been completed.
 - The Program of Study should have been completed and submitted to the Registrar.
 - The Preliminary Exam whose requirements are specified by the home department should have been completed. The exam typically entails a written proposal submitted to the graduate committee 2 weeks prior to the preliminary exam, followed by a presentation in which the student discusses his/her research plan, results to date, and time line to completion. Upon successful completion of the Preliminary Exam with results reported to the Registrar on the appropriate form, the student is admitted to PhD candidacy and may be eligible for a higher stipend. If PhD students are not admitted to PhD candidacy by the end of the second year (or third year for students with no MS degree) their stipends may be suspended.

- By the end of the third year and each year thereafter, the student presents a progress report to their graduate committee, including results to date, articles published, presentations made, work remaining, and expected timeline.
- Upon completion, the dissertation research will be publicly presented and defended. Dissertations should be delivered to the committee at least 2 weeks prior to the defense date, but the home department or committee may require more than 2 weeks be allowed. In all cases, announcement of the presentation should be posted to the CEAS website a minimum of two weeks prior to the defense (students should work with their department's Office Associate to post announcement). It is important to have PhD defenses announced well in advance since these are showcase events that highlight CEAS research and graduate education to campus and state-wide communities.

II. Expectations for Faculty

Plan B MS students and other students who have not yet been paired with a research advisor/mentor will be assigned an academic advisor who will provide course work guidance, answer student questions, and make suggestions to facilitate a productive start to the student's graduate degree program. All CEAS Faculty should generally be available to graduate students for consultation on technical subjects since these interactions are fundamental to the mission of the university.

The faculty/student relationship has many facets. Among these is guidance as to the values and practices of the discipline, lessons in professionalism, discussion of our uncompromisingly high standard of ethics, and both encouragement and constructive criticism in the search for knowledge.

Faculty as "Tour Directors": Faculty should be mindful that graduate school is a new experience, with different expectations for students that will need to be carefully explained. Examples of new issues for students include the number and different types of credit hours that should be taken each semester, the role of graduate committees, Programs of Study, research, qualifying and preliminary exams, thesis and dissertation defenses, writing of technical articles, and conference presentations. It is the faculty mentor's responsibility to both explain and guide the student protégé through these new aspects of the graduate school experience.

Faculty Advisor as Role Model: Faculty are expected to set a high standard for professionalism and ethical behavior. Most current faculty can point to one or more of their teachers to whom they credit their own set of professional values, and thus it is important for current faculty to be mindful of their own influence on the present student body, and in particular on graduate students with whom they work closely. Collegiality between faculty, students, and staff plays a strong role in maintaining positive workplace and educational environments, and thus faculty should be attentive to maintaining such collegiality even when strong differences of opinion may exist.

Teacher of Communication Skills: The graduate school experience requires significant development of technical communication skills and it is incumbent on faculty mentors to work with their students to further develop technical writing, oral speaking, and formal presentation skills. Writing of theses, dissertations, conference papers, and journal articles are all new undertakings for graduate students with which they will need careful guidance from the faculty mentor. Faculty have a responsibility to provide thoughtful editing recommendations for a student's thesis, dissertation, and publications. Oral communication of difficult technical material also needs to be mastered, with the faculty member providing guidance on how best to communicate technical information accurately and succinctly. Presentation of a year or more of research output in the time frame of a 15 minute conference presentation is a critical skill with which the graduate student will have limited experience, and faculty mentors need to invest the appropriate time to assist students with developing presentation and speaking skills.

Specific Obligations for Faculty:

- Guide students to appropriate coursework consistent with the student's professional goals and their particular research problem.
- Faculty advisors should meet regularly with their graduate students to provide thoughtful council and guidance on the research problem. This is especially true for MS students, but PhD students are expected to develop and demonstrate independence from their advisor by the end of their degree program.
- Faculty should work with students to identify and recruit appropriate faculty for their students' committees, and whenever possible these should be faculty whose technical expertise pertains to the research problem undertaken by the student. Inclusion of committee members from outside UW is encouraged since this helps showcase UW research, build connections to industry and other institutions, and bring expertise that might not be available at UW to bear on the research problem .
- Faculty are expected to serve on graduate committees and to share their time and expertise with students when asked to serve in this supporting role. Accepting the committee role obligates faculty to meet with the committee annually to field a progress report by the student, to make suggestions, and to review the student's time line to graduation. The committee should provide the student with clear feedback at the conclusion of each annual review, and then complete and submit a department-level Graduate Research Progress Report form to the home department's Graduate Coordinator.
- The faculty advisor should recommend appropriate scheduling of the Preliminary Exam (PhD students only) and Final Exam, and disclose results of these exams to the student within 24 hours. If exam performance was unsatisfactory and the student has options beyond dismissal from the program, then these options and faculty expectations should be communicated to students within 24 hours.

- Faculty should demonstrate respect for students and colleagues by being on time to class and meetings with students.
- In the normal course of events there will inevitably be misunderstandings and differences of opinion. Faculty are expected to set a high standard of professionalism in working to resolve these challenges while simultaneously being respectful to the other parties involved.
- Faculty advisors should recognize that students on state-supported teaching assistantships may be obligated to work up to 19 hours to support the CEAS teaching mission. Hence teaching obligations and course load may limit the time available for the student to work on their research problem.
- PhD students are being trained to be expert researchers, and because research results are typically disseminated at national conferences, faculty should whenever possible facilitate conference exposure and experience for their PhD students.
- Faculty are encouraged to involve PhD students in the proposal writing process since this is a common element of many PhD positions.
- If an MS student's thesis research will not be presented within 2 years of beginning the program, the department's Graduate Coordinator should report the delay to the applicable Department Head and CEAS Associate Dean overseeing Graduate Studies. Note Academic Affairs policy limits state funding of MS students to 2 years.
- If a PhD student's dissertation research will not be presented within 4 years of beginning the PhD program (or within 5 years of entering the program if student does not have MS degree), the department's Graduate Coordinator should report the delay to the applicable Department Head and the CEAS Associate Dean overseeing Graduate Studies. Note Academic Affairs policy limits state funding of PhD students to 3 years.

III. Expectations for Students

Graduate students have new responsibilities beyond those associated with their undergraduate educations. Graduate education typically involves research in close conjunction with a faculty mentor so that graduate students are making long-term contributions to the College mission of discovering new knowledge. As key contributors to the professional growth of themselves, faculty, and the national reputation of CEAS programs, graduate students will be recognized and respected as important players on the department's team.

Develop a Research Partnership: Particularly at the MS level of study, pursuing a research problem is a partnership between student and faculty member as they encounter and solve a continuous stream of challenges in pursuit of the answers to their research. Every faculty member has a different approach to working with graduate students, and some may want to visit with MS students on a daily basis, while others may prefer a bi-weekly basis, or a weekly basis. As an MS student matures and gains experience, they are expected to be more self-sufficient in solving daily

problems. For those pursuing the PhD degree, or "the research degree" as it is commonly called, the student should eventually demonstrate the ability to conduct research independently with little or no input from the faculty advisor.

Be Self-Motivated: Graduate students should recognize that there is a finite time frame available for them to take advantage of a graduate education at UW. Most students are supported on some sort of graduate assistantship, but these are usually limited to 2 years for MS students and to 4 or 5 years for PhD students. In most cases, these time frames should be sufficient for completion of the degree. If supported on an external research contract, then the faculty member has an obligation to produce research results by a particular deadline, and the student is being hired to do much of the work that has been promised. If the student does not make regular and steady progress on the project, then he/she should not expect continuous financial support since the contract deadline is not open-ended. MS students in particular need to begin their research work in their first semester of graduate study; it is naïve to expect that the research work can be completed after all coursework is complete. Successful MS students will find time almost every day to make some progress on their research. Furthermore, almost every MS student underestimates the time required to write a thesis; this is a time-consuming process that should begin early! Students should anticipate that early drafts of the thesis or dissertation may require substantial rewriting after the faculty advisor's editing.

In conclusion, the student should work continuously to complete degree requirements in a timely fashion, and take responsibility for seeking out the faculty mentor for consultation whenever such help is required.

Be a Contributor: The traditional model whereby faculty share their knowledge in the classroom while students absorb as much as possible is only the first step associated with taking a graduate class. Graduate students are expected to be highly committed to both their classroom educations and research studies. Thus in the classroom graduate students are expected to think about the material beyond merely what is presented in class. Bring thoughtful questions to class for discussion – the faculty member will be delighted! Similarly, in the research arena students will not be treated as technicians with tasks A, B, C, etc. to complete, but rather they are expected to be contributors who solve problems on their own, who anticipate the next hurdle, who propose direction and solutions to their faculty mentor, etc. Furthermore, students are expected to seek out and read the literature relevant to their research problem. In summary, the academic maturity of a graduate student can oftentimes be judged by their growing independence as a researcher.

Be a Scholar with Breadth: Graduate education entails experiences beyond those in the classroom, student offices, and laboratory. Graduate students are expected to regularly attend their department's seminars even when the topic is not in their primary area of interest since these talks provide important perspective, breadth, and knowledge within the discipline. Further, students should explore select seminars in other disciplines to better understand problems related

to their own discipline. Finally, there are a variety of cultural events on campus that students are encouraged to attend on their path to a well-rounded education.

Specific Obligations for Graduate Students:

- The graduate student's primary responsibility is to be a scholar in all respects, through course work, attendance at research seminars, and through independent learning.
- Graduate students are the primary users of our research laboratories and the chief overseers of our teaching labs, so it is incumbent on every student to immediately report any and all safety concerns to their research advisors, to Department Heads, and to department Safety Officers.
- As members of their departments, students should be ever mindful that they represent their research group, department, college, and university both on campus and off, so that like a faculty member, they should conduct themselves to a high professional standard.
- As members of their departments, students may be called upon to assist in department business such as recruiting new students, discussing their research with visitors, and assisting with teaching activities.
- Students on state-supported GAs are paid to support the undergraduate teaching mission and a committed performance to teaching our undergraduate students is expected.
- Students should respect and cultivate the cultural diversity that encompasses graduate education within our College by learning about and learning from those who come from other cultures.
- Students should assume primary responsibility for filing required forms on time. These include the Committee Assignment Form, Program of Study, Report on Preliminary Examination (for PhD students), Report on Final Examination, forms pertaining to changes in committee or Program of Study, etc. In most cases Office Associates in each department will assist with these forms, and in all cases the faculty advisor should be consulted for input.
- Graduate students will maintain the highest ethical standards and consult with their research advisors about any questionable scenarios they might witness or find themselves involved in.
- Students should show respect for their colleagues and faculty by being on time for classes and meetings. Disrespectful or unprofessional behavior toward any person associated with UW or the Laramie community, whether faculty, staff, or fellow student, is grounds for dismissal from CEAS graduate programs.

Graduate Students can Expect:

- To be treated by faculty and staff as professional colleagues of their department.
- To receive attentive and personalized mentoring from their faculty advisors.
- That Plan-A MS students should usually have some aspect of their research published, and PhD students should expect that multiple publications will result from their research.
- PhD students interested in academic careers should be provided the opportunity to have at least one comprehensive teaching experience where they are the primary instructor of record.
- Graduate students having concerns that cannot be resolved with their advisors or committees should immediately approach their Department Heads to discuss their concerns. If meeting with the Department Head does not resolve the concerns, then these should be conveyed to the CEAS Associate Dean overseeing Graduate Studies who serves as an advocate for graduate students in the College.

IV. UW Resource Page for both Faculty and Graduate Students

UW's policies pertaining to graduate education, committee formation, funding, and other issues can be found here: <http://www.uwyo.edu/uwgrad/faculty-staff/>

V. UW Forms and Policies Relevant to Graduate Students:

(available at www.uwyo.edu/registrar/students/graduate_student_forms.html)

Academic Reinstatement

Anticipated Graduation Date

Committee Assignment Form

Committee Change Form

Graduate Committee Formation Policy

Continuing Registration Petition

Dissertation Format Guide

Exception Request

Five Pages you need to have to get your thesis/dissertation approved

Four-Year Rule Petition (for PhD students)

Guideline for Graduate Student Appeals

Graduation Information and Deadlines
LaTeX Thesis/Dissertation Template
New Parent Accommodation Petition
New Parent Accommodation Policy
Optional Student Fee Package Petition
Overload Petition
Program of Study Worksheet - Masters Programs
Program of Study Worksheet - Doctoral Programs
Program of Study, Instructions for Developing
Report of Final Examination - Master's and PhD only
Report on Preliminary Examination for Admission to Candidacy
Request for Change in Graduate Program
Six Year Rule Petition (for MS degrees)
Survey of Earned Doctorates
Thesis Template 2010
Thesis Format Guide
Thesis Formatting Manual for Word 2007
Travel Funding Request Application Process
Twelve-Hour Petition, (Exception to Regulation: Limit of 12 non-degree seeking hours)

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