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GRADUATE PROGRAM HANDBOOK OF REQUIREMENTS & POLICIES

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WELCOME

We are thrilled that you have decided to join the Chemical Engineering Graduate Program at the University of Florida. Our department has a long history of excellence in research and education and has had an impact in the formation of many professional and intellectual leaders in the chemical engineering profession. Graduate students will have the opportunity to work closely with our dynamic, internationally-recognized faculty in both the classroom and laboratory. Chemical engineering faculty and students benefit from state-of-the-art instrumentation housed in service centers throughout campus and close collaborations with other engineering disciplines, as well as with faculty and students from the College of Medicine, College of Dentistry, the College of Liberal Arts and Life Sciences, and the Institute of Food and Agricultural Sciences. Partnerships with international collaborators and institutions also enrich the educational and research experiences of our students. The quality of our programs, faculty, and students is recognized nationally, and we are consistently among the top 10 producers nationally of both undergraduate and graduate chemical engineers. Chemical engineering offers a vibrant environment supportive of advanced study and research, and the University of Florida is a comprehensive university ranked among the nation's top-5 public universities in the latest U.S. News & World Report Best College rankings.

Our graduate program includes Master of Science (M.S.), Master of Engineering (M.E.), and Doctor of Philosophy (Ph.D.) degrees in Chemical Engineering. We have an exciting graduate program that encompasses a broad range of educational opportunities and activities. The course requirements are kept to a minimum so that students have freedom in developing their own programs of study. Graduate students will learn to develop creative solutions to challenging and intellectually-stimulating problems while enhancing their technical and problem solving skills as they learn how to apply the scientific method to many engineering problems.

INTRODUCTION

This Handbook contains supplementary information to the Graduate Catalog, which is the primary document governing all academic programs at the University of Florida. Although every effort has been made to maintain accuracy, the Department of Chemical Engineering reserves the right to correct errors when found without further notice to students. The presence of errors will not affect the application of the rules and requirements applicable to all students. The set of policies described in this Handbook are established to ensure that all students are provided the opportunity to achieve a satisfactory level of competency required for a graduate degree in chemical engineering. Students may consult with the Graduate Academic Adviser, Master's Program Coordinator, or Associate Chair for Graduate Studies for any questions related to this Handbook.

Graduate students are regulated by the rules set forth in the Graduate Catalog and Handbook published in the academic year of the student's first term. Students transitioning from a Master's to Doctoral program must follow the catalog year in effect when they begin the Doctoral program. It is the responsibility of the student to be familiar with both publications and to know and take appropriate steps to meet all program requirements before graduation. **Rules are not waived for ignorance**.

STUDENT HONOR & CONDUCT CODE

The University of Florida strives to protect and to guide the educational community by establishing a Student Honor Code, a Student Conduct Code, and a Student conduct system. These codes and systems promote individual and social responsibility and are enforced through University Regulations. By becoming a member of the University of Florida community, a Student agrees to adhere to its Student Honor Code and its Student Conduct Code. Students acting as individuals or as members of Student Organizations are expected to follow all applicable Laws and Regulations. University Regulations have been designed to promote the safety of people and the campus community, to create an environment conducive to learning, and to achieve the mission of the Institution.

The University principles address our respect for people and property, for fairness, for Laws and Regulations, and for academic integrity. No policy or regulation shall be interpreted to limit the constitutional or statutory rights of any student, including but not limited to expressive rights protected by the First Amendment.

1. *Respect for people and property*. Students are encouraged both to conduct themselves in a manner that exemplifies respect for all people and property and to adhere to their personal values without imposing those on others.
2. *Respect for fairness*. Rules and established procedures are intended to ensure both fundamental fairness and an educational experience for students and Student Organizations.
3. *Respect for Laws and Regulations*. Students and Student Organizations are expected to follow all applicable Laws and Regulations.
4. *Respect for academic integrity*. Academic honesty and integrity are fundamental values of the University. Students commit to holding themselves and their peers to the high standard of honor required by the Student Honor Code. Any student who becomes aware of a violation of the Student Honor Code is encouraged to report the violation to the appropriate University Official.

The University has established procedures within the Dean of Students Office on how to handle possible Student Honor Code violations (https://sccr.dso.ufl.edu/process/student-honor-code/) and Conduct Code violations (https://sccr.dso.ufl.edu/process/student-conduct-code/). Detailed descriptions of the University Student Honor & Student Conduct codes as well as students' rights are found at:

https://sccr.dso.ufl.edu/policies/student-honor-code-student-conduct-code/.

Academic Honesty and Ethical Conduct in Research

All students admitted to the University of Florida have signed a statement of academic honesty committing themselves to be honest in all academic work and understanding that failure to comply with this commitment will result in disciplinary action. Students are expected to produce their own work in homework, projects, and exams (including the Candidacy Examination and Final Examination). Unauthorized collaboration in take-home exams, projects, and individual assignments is a serious violation of the University Honor Code and could lead to a grade decrease, course failure, and loss of degree status. The Honor Code specifies a number of behaviors in detail that are in violation of this code and the possible sanctions. Furthermore, **graduate students are obligated to report any condition that facilitates academic misconduct to appropriate personnel.**

Graduate students are expected to maintain high ethical standards in the conduct and reporting of scientific and scholarly research, including identification of potential conflicts of interest to responsible authorship and publication. All students funded by NSF, NIH, or USDA awards must complete the general Responsible Conduct in Research (RCR) training. Regardless, all graduate students are responsible for ethical research conduct to the University, to the academic community, to those sponsoring the research, and to the community at large. Research Misconduct, including fabrication or falsification of data, and plagiarism in proposing, performing, reviewing, or reporting of results, is a most serious offense that can greatly damage the welfare and reputation of the students, faculty, and the University. See https://research.ufl.edu/compliance/research-integrity.html for more information regarding Research Misconduct.

From the University of Florida Student Handbook: "**Plagiarism is not tolerated at the University of Florida. Plagiarism in a Master's Thesis or Doctoral Dissertation is punishable by expulsion. If the plagiarism is detected after the degree has been awarded, the degree may be rescinded.**" Likewise, the Candidacy Examination is subject to the same policy. For a thorough discussion of plagiarism and the applicable laws, see "Plagiarism in Colleges in the USA: legal aspects of plagiarism, academic policy" by Ronald B. Standler (manuscript is available at www.rbs2.com/plag.htm). Briefly, a student shall not represent all or any portion of the work of another as the student's own work. Plagiarism includes (but is not limited to):

1. Quoting oral or written materials, whether published or unpublished, without proper attribution.
2. Submitting a document or assignment which in whole or in part is identical or substantially identical to a document or assignment not authored by the student.

Plagiarism is probably understood as stealing someone else's words as your own. In fact, there are many different kinds of plagiarism. The top 5 types are:

1. Stealing verbatim,
2. Misquoting,
3. Paraphrasing without quoting,
4. Summarizing without quoting, and
5. Duplicating publication.

If graduate students have any questions or concerns regarding Research Misconduct and Plagiarism, they are encouraged to discuss them with their Research Adviser, Supervisory Committee, or the Associate Chair for Graduate Studies.

Professional Conduct in the Department

The Department of Chemical Engineering takes very seriously its commitment to providing a safe and healthy work environment, free from bullying or harassment. We value broad diversity within our community and are committed to individual and group empowerment, inclusion, and the elimination of discrimination. It is expected that all students will treat faculty, staff, and other students with dignity and respect regardless of gender, sexuality, disability, age, socioeconomic status, ethnicity, race, and culture.

Although bullying and harassment often include similar behaviors, harassment is a form of discrimination, i.e., negative behavior based on any legally protected characteristic (e.g., race, color, religion, sex, etc.). Both bullying and harassment are harmful not only to the target of the behavior but also damages the Department and University's culture and reputation. It is unacceptable and the Department of Chemical Engineering will not tolerate *in any instance* bullying or harassing behavior.

The purpose of this policy is to communicate that the Department of Chemical Engineering expects all students, staff, and faculty to maintain professional conduct at all times. If anyone breaches this policy, they may be subject to disciplinary action. In serious cases, this may include termination of employment. If a person makes a false complaint, or a complaint in bad faith (e.g., making up a complaint to get someone else in trouble, or making a complaint where there is no foundation for the complaint), that person may be disciplined and/or have their employment terminated.

Bullying is *repeated and unreasonable behavior* directed towards a person or persons that creates a risk to health and safety. A single incident of unreasonable behavior does not usually constitute bullying. However, it should not be ignored as it may have the potential to escalate into bullying behavior. Bullying includes both physical and psychological risks and abuse that may include (*i*) threatening, humiliating, or intimidating behaviors; (*ii*) work interference/sabotage that prevents work from getting done; or (*iii*) verbal abuse.

Bullying conduct can take many different forms that include the obvious to the subtler:

- Repeated personal insults or hurtful remarks or attacks about a person;
- Unwanted physical contact, physical abuse, or threats of abuse to an individual or an individual's property (defacing or marking up property);
- Attacking or threatening with equipment, knives, guns, clubs or any other type of object that can be turned into a weapon;
- Using obscene or intimidating gestures;
- Persistent singling out of an individual or spreading rumors and gossip regarding an individual;
- Inhibiting an individual from expressing themselves;
- Deliberately excluding an individual or isolating them from work-related or school-related activities, such as meetings or office hours;
- Manipulating the ability of someone to conduct their work (e.g., overloading, underloading, withholding information, assigning menial tasks, or deliberate changing of work hours or schedule to make it difficult); and
- Psychological harassment, including intimidation, mind games, or hazing.

The above examples do not represent a complete list of bullying behaviors. They are indicative of the type of behaviors that may constitute bullying that are unacceptable. A person's intention is irrelevant when determining if bullying has occurred. Bullying can occur unintentionally, where actions which are not intended to victimize, humiliate, undermine, or threaten a person actually have that effect.

Harassment includes all the conduct described above for bullying but is directed to an individual based on their family, sex, sexuality, gender identity, race or culture, age, religion, national origin, education or economic background, or any other legally protected characteristic. Harassing behavior can include verbal,

nonverbal, or physical conduct. Sexual harassment is behavior of a sexual nature that is unwelcome and offensive to the person or persons it is targeted toward. Examples of sexually harassing behavior may include:

- Unwelcome physical contact, such as touching, massaging, patting, pinching, stroking, or kissing;
- Stalking, intimidating, coercing, or threatening another person;
- Giving gifts of a personal and intimate nature;
- Foul language, jokes, or innuendo of an offensive sexual nature;
- Sexually explicit comments, conversations, propositions, or requests;
- Seeking emotional involvement for your benefit;
- Obscene gestures of a sexual nature; and
- Displays of sexually explicit pictures, drawings, or caricatures.

Reporting Misconduct

The University of Florida is committed to a policy of treating all members of the university community fairly in regard to their personal and professional concerns. The University believes strongly in the ability of students to express concerns regarding their experiences at the University. A formal grievance procedure exists to ensure each graduate student is given adequate opportunity to bring complaints and problems, exclusive of grades, to the attention of the University Administration with the assurance each concern be given fair consideration.

A grievance is defined as dissatisfaction occurring when a student thinks that any condition affecting him or her is unjust or inequitable or creates an unnecessary hardship. Areas in which student grievances may arise include scientific misconduct, sexual harassment, discrimination, employment-related concerns, and academic matters.

The University of Florida regulations provide a procedure for filing a formal grievance in Regulation 4.012. Prior to invoking a formal written grievance, the student is encouraged to discuss his or her grievance with the Associate Chair for Graduate Studies to discuss the appropriate course of action. If the grievance is against the Associate Chair for Graduate Studies, then the Department Chair should be contacted. Students may also contact the Herbert Wertheim College of Engineering (HWCOE) Associate Dean for Student Affairs, the University Ombuds or Dean of Students Offices. For complaints not satisfactorily resolved at the department level or which seem to be broader than one department, students are encouraged to submit those complaints to either the University Ombuds or Dean of Students Office.

Anyone who believes that he or she has been subjected to bullying or harassment is strongly encouraged to promptly report such behavior to any university official, administrator, supervisor, manager, Department Chair, Associate Chair for Graduate Studies, Research Adviser or faculty member. If violence, assault, or stalking has occurred during the incident, you should contact the Police Department immediately using 911 services for an emergency or 352-392-1111 for non-emergency situations.

Incidents should be reported as soon as possible after the time of their occurrence to allow the Department and University to take appropriate remedial action. No employee or student should assume Department or University officials know about a situation or incident. **Any university official (administrator, supervisor, or manager), faculty member, teaching assistant, or staff member with knowledge or complaint of sexual harassment (written or oral report) must promptly report it to the Title IX Coordinator** (titleix@ad.ufl.edu), and may be disciplined for failing to do so.

Students that have experienced bullying or harassing behavior are encouraged to use the following University resources to help them cope with the situation:

U Matter, We Care: umatter@ufl.edu or 352-392-1575
Counseling and Wellness Center: http://www.counseling.ufl.edu/cwc or 352-392-1575
Sexual Assault Recovery Services (SARS): Student Health Care Center, 352-392-1161

DEPARTMENT STRUCTURE & PERSONNEL

The Department of Chemical Engineering is part of the Herbert Wertheim College of Engineering (HWCOE), one of the largest and most dynamic engineering colleges in the nation, producing leaders and problem-solvers who take a multidisciplinary approach to innovative and human-centered solutions.

Key Personnel

Department Chair	**Prof. Carlos Rinaldi**	**BME J391**
Associate Chair for Graduate Studies	**Prof. David Hibbitts**	**CHE 221**
Master's Program Coordinator	**Prof. Sumant Patankar**	**CHE 223**
Ph.D. Recruitment Coordinators	**Prof. Whitney Stoppel**	**WERT 466**
Graduate Academic Adviser	**Ms. Shirley Kelly**	**Bldg. 0760**
Graduate Academic Adviser	**Ms. Gabrielle Donalson**	**Bldg. 0760**

Chemical Engineering Faculty

The current tenure and tenure-track faculty of the Department and their contact information are provided on our website: https://www.che.ufl.edu/ourfaculty/.

Graduate Faculty

The Graduate School includes Graduate Faculty members across the University that are approved to mentor graduate students completing a Master's Thesis or Doctoral Dissertation.

Department Chair

The Department Chair manages the operation of the Chemical Engineering Department. The Chair is responsible for overall administration and policy directions.

Associate Chair for Graduate Studies

The Associate Chair for Graduate Studies oversees the operation of the Chemical Engineering Graduate Program. The Associate Chair for Graduate Studies is responsible for academic program administration and policy directions, ensuring policy compliance with both the Graduate Catalog and this Handbook, scheduling graduate courses, collecting data associated with SACS accreditation, coordinating the Supervised Teaching course, Orientation of incoming graduate students, and approving academic Petitions. The Associate Chair for Graduate Studies serves as Faculty Academic Adviser to all admitted and present chemical engineering Ph.D. students who have not yet joined a research group or do not have a Research Adviser.

Master's Program Coordinator

The Master's Program Coordinator oversees the operation of the M.S. and M.E. Graduate Program. The Master's Program Coordinator is the Faculty Academic Adviser to all non-thesis master's students. The Master's Program Coordinator advises students on coursework, certificates, minors, and majors.

Graduate Program Committee

The Graduate Program Committee is comprised of Chemical Engineering Faculty members, including the Master's Program Coordinator, and is chaired by the Associate Chair for Graduate Studies. The committee is responsible for reviewing and establishing departmental policy and procedures pertaining to graduate affairs. This committee oversees formal aspects of the normal degree procedures and makes decisions on academic Petitions.

Graduate Academic Adviser

The Graduate Academic Adviser assists graduate students in program deadlines, course requirements, registration, and routine administrative issues. Inquiries regarding graduate program policies and procedures should first be made to the Graduate Academic Adviser, which can then be forwarded to the Associate Chair for Graduate Studies, if needed. The Graduate Academic Adviser is available to meet with any student during office hours or by appointment. The Graduate Academic Adviser also helps students with the application process and guides students through their matriculation into the graduate program.

Ph.D. Recruitment Coordinators

The Ph.D. Recruitment Coordinators are responsible for coordinating all recruitment activities, including the AIChE recruitment fair and Spring Visit.

Graduate Admissions Committee

The Graduate Admissions Committee is comprised of Chemical Engineering Faculty members, including the Master's Program Coordinator, and is chaired by the Ph.D. Recruitment Coordinator. The committee oversees admission of incoming students.

Research Adviser

Chemical Engineering students conducting Research need to have a Research Adviser. The Research Adviser has an active role in helping the student choose a research topic, develop the scientific and/or technical skills needed to conduct the research, and develop the oral and written communication skills required to present the research. The Research Adviser is responsible for ensuring that the student is aware of and understands the importance of Academic Honesty and Ethical Conduct in Research as well as Professional Conduct in the Department. The Research Adviser also becomes the Faculty Academic Adviser of students conducting research for a Master's Thesis or Doctoral Dissertation.

Faculty Academic Adviser

The Faculty Academic Adviser has an active role in helping the student interpret policies and achieve the requirements for the degree for which they are registered, monitor the progress towards degree completion, define realistic goals to maintain Satisfactory Progress, and prepare a career development plan. The Faculty Academic Adviser is responsible for informing the Associate Chair for Graduate Studies of any concerns about the student's progress or ability to achieve the degree for which they are registered.

Supervisory Committee

Students conducting Research for a Master's Thesis or Doctoral Dissertation must have a Supervisory Committee. The Supervisory Committee assists the graduate student in selecting coursework appropriate for the field of research, approves the Candidacy Examination for Ph.D. students, periodically reviews research Progress Reports, and approves the Final Examination. The Supervisory Committee is responsible for assuring that the completed Master's Thesis or Doctoral Dissertation is original research and is a

contribution to the body of knowledge. The Research Adviser and Supervisory Committee may assist the student in understanding all regulations governing the program, but the student has the ultimate responsibility for being aware of and meeting all requirements.

The Supervisory Committee is very important and should be chosen carefully. Before the end of the second semester of the degree program, students will nominate, with the advice and consent of the Research Adviser, the members of the Supervisory Committee. Typically, the Research Adviser is the Chair of the Supervisory Committee, unless they are not a primary or affiliate member of the Chemical Engineering Faculty. The Supervisory Committee should be communicated to the Graduate Academic Adviser as soon as chosen.

The Supervisory Committee for a Ph.D. candidate consists of at least four members selected from the Graduate Faculty. At least two members must have their primary appointment in the Chemical Engineering Department. At least one member of the Supervisory Committee serves as the external member and they should be from a different department.

The Supervisory Committee for a master's student consists of at least two members selected from the Graduate Faculty. At least two members must be from the Chemical Engineering Faculty.

GETTING STARTED

The first semester of graduate school can be a challenge. Students must move to a new school and city where they do not know other students or faculty, begin taking challenging coursework, complete visa, enrollment, and employment documentation, and become familiar with new policies and procedures of the University and Department. In addition, many graduate students commencing their research careers must Choose a Research Adviser and begin learning what it means to conduct cutting-edge research. This section provides some guidance for students as they transition to graduate school in the Department of Chemical Engineering at the University of Florida.

Graduate Student Expectations

The expectations and work conducted in graduate school is entirely different from what students experienced as undergraduate students. Students need to recognize the differences and adapt quickly. Satisfactory Progress in graduate school requires consistent productivity through independent discovery. Discovery is difficult to achieve and requires exceptional commitment and motivation. Most successful scientists or engineers put considerable effort into their work. Graduate student appointments reflect this commitment as a 0.5 FTE appointment (20 hours per week) and 9 credits of Research and Individual Work Courses (27-36 hours per week of academic activity). Graduate students often require a strong work ethic, including significant work outside of normal hours, to be successful in their chosen field of specialization. Specifically, the Ph.D. degree signifies that a student is capable of running an independent research investigation and that they are able to discuss the findings confidently with other experts in the field. In addition, most Ph.D. students are financially supported by research grants secured by the Research Adviser. Since these research grants have a fixed duration and well-defined objectives, graduate students must take ownership of their research project and complete the research objectives in a timely manner. Therefore, successful graduate students dedicate themselves to their work and make it their top priority to achieve a high level of competence in their field so that they can achieve swift progress in their research project.

Graduate students are not only expected to excel in the classroom and laboratory; they should also demonstrate professional and ethical behavior at all times. Students are encouraged to practice professional behavior from the beginning of their time in graduate school. This early start can help students adopt habits of respect, thoughtfulness, and self-reliance that will help them throughout their career.

First Semester

Students often have misconceptions about the nature of research and believe that they will be working on well-defined problems that are solved using known tools and methods. These misconceptions often lead to frustration. Some students may also experience self-doubt known as the "impostor syndrome." This feeling of not belonging or being an impostor is common because students become surrounded by other students that have excelled in their coursework and researchers who have worked in the field for decades and have much more experience and knowledge of the research field. Developing a plan to achieve all of the necessary skills for graduate school and using the resources available is a large step forward in becoming an expert in your chosen field and removing this self-doubt.

Interacting with Others: Rather than focusing on self-doubt, be humble and learn as much as you can from the Research Adviser and other graduate students early. Attend department events and support your colleagues and classmates. These personal and professional relationships can last your entire career.

Motivation and Attitude: Successful graduate students develop autonomy, independence, and high levels of self-regulation. Students are expected to achieve degree milestones independently with minimal supervision. This autonomy requires students to maintain a positive attitude and become self-motivated. A key step is establishing manageable goals that provide a sense of accomplishment.

Time Management: Graduate school requires students to attend class, complete homework, teach other students, plan research experiments, read the literature, write papers, present at conferences, and mentor other students. Students are encouraged to develop time management skills early, including (*i*) identification of peak work times for scheduling the most intellectually challenging and important tasks; (*ii*) establishment of clear short-term and long-term goals and prioritizing their completion; and (*iii*) regular assessment of recent activities to ensure efficient use of time.

Developing Good Research Skills: The majority of a student's time should be spent on research-related activities. Students can begin developing the skills needed to be successful in research before even joining a research group. Students should begin familiarizing themselves with how to maintain a laboratory notebook, including how to use it to manage research and archive important findings as well as its importance in intellectual property and the prevention of fraud. Students can also learn how to use local resources to conduct literature reviews and complete the required training expected of all students. **Coping with Setbacks in Graduate School:** Research is highly competitive and requires continued performance at a very high level. The stress associated with this in addition to the inevitable failures and disappointments inherent to research can be difficult to handle for new students. Students should understand that every researcher, however successful, has failed many times in their career. Students should focus on learning from these mistakes and evaluating how to avoid them in the future. The University has Graduate Student Wellness Services available to help.

Learn Policies and Procedures: Incoming students are responsible for becoming informed and observing all program regulations and procedures described in this Handbook. All students are provided with a University of Florida email account (ufl.edu) upon entrance to the program. The Department will use this account for all official communications. Students are responsible for promptly and thoroughly reading emails from these accounts and are expected to communicate in a professional manner.

Registration for courses must be completed online. Graduate students must enroll for a minimum of 9 credits in their first semester. Incoming Ph.D. students must attend the Graduate Seminar regardless of whether they have registered for the course. Instructions for registering for classes will be discussed at the onboarding meeting before the start of the first semester. Students are responsible for late fees and any other fees and charges incurred.

For all incoming Ph.D. students, registration fees, health insurance and non-resident tuition for the Fall semester are paid by the Department. Stipends are paid on a biweekly basis. Students will not be able to receive their first stipend until they have completed all employment documentation.

Start Your Research Career: Ph.D. and Master's students completing a thesis are expected to identify a Research Adviser. The choice of a Research Adviser is likely to be the most important decision that a first-year graduate student makes. This Research Adviser will serve as their primary mentor for their Doctoral Dissertation or Master's Thesis and as the Chair of their Supervisory Committee. The Research Adviser must have Graduate Faculty status within the Department of Chemical Engineering. If the desired Research Adviser is not a member of the Chemical Engineering Faculty but is a member of the Graduate Faculty, they can only serve as the co-adviser of the student. Students should devote significant thought on how to Choose a Research Adviser.

Complete Chemical Engineering Core Courses: The chemical engineering core courses provide graduate students an opportunity to demonstrate their dedication and competency to a potential Research Adviser. Graduate students should dedicate sufficient time and effort to the completion of these courses. Note that Ph.D. students must receive a letter grade of B- or better and a GPA above 3.0 in the three core courses to maintain their stipend, tuition, and healthcare benefits.

Departmental Access & Resources

This section provides brief instructions on how to gain access to various departmental resources that students likely need in the first semester. Other University of Florida Student Support Services are listed elsewhere.

Departmental Graduate Program Teams Channel and Homepage: The department has created a Teams channel that contains a lot of information about procedures and forms used to register for courses or complete specific degree requirements. There are also sections that help students learn about housing, orientation, professional development, specific research opportunities, upcoming degree deadlines, and student organizations. The homepage can be accessed at: https://uflorida.sharepoint.com/teams/ChemicalEngineeringGraduateProgram/SitePages/Home.aspx.

Computer Accounts and Facilities: A GatorLink account is a student's computer network identity at the University of Florida. Every student, faculty, and staff member is expected to have a GatorLink username and password. Many services, including email, are accessed with the GatorLink account. For more information about GatorLink accounts, please visit http://helpdesk.ufl.edu/ or the UFIT Wiki. The Chemical Engineering Computer Support Team is located in ChE 319A and can be reached by email at ticket@che.ufl.edu. They can be contacted for any computing related issues, including email issues, network access, printing, computer viruses, department-controlled software applications, and obtaining a new IP Address for a computer or printer.

All faculty, staff, and students of the University are required and expected to obey the laws and legal agreements governing software use. Failure to do so can lead to monetary damages and/or criminal penalties for the individual violator. Because such violations are also against University policies and rules, disciplinary action will be taken as appropriate. We, the members of the University of Florida community, pledge to uphold ourselves and our peers to the highest standards of honesty and integrity.

A copy machine (with scanner functionality) is available in ChE 233 for students conducting Research and Supervised Teaching coursework. Access codes can be obtained from the Main Chemical Engineering Office. The copier cannot be used for personal copying.

Office Space, Keys, and Card Access: First-year Ph.D. students will receive their office assignments from the Main Office of the Chemical Engineering Department during the first few days of the fall semester. When a student chooses a Research Adviser, they move into a laboratory or office space associated with their research group. Keys for the office and lab space can be obtained from the Main Office of the Chemical Engineering Department after Research Adviser approval. All graduate students have access to the building outside of normal business hours with their Gator 1 card. Please go to the Main Office of the Chemical Engineering Department about any problems with Gator 1 card access.

Student Mailboxes: Each student is assigned a mailbox, which is located on the second floor of the Chemical Engineering Building. Students are encouraged to check their mailbox regularly for notifications.

RESEARCH

Students conducting research become a member of the greater scientific community. Their research will be motivated by technical and societal problems and international experts in your field will see their work. The Department of Chemical Engineering has several faculty that have been recognized for their contributions to teaching and mentoring graduate students through their research. The faculty will help students develop the work ethic, deep thinking, and creativity necessary to find innovative solutions.

All students conducting research in a laboratory must be registered for research credits or employed by the University. In addition, all researchers must follow appropriate policies for laboratory access, safety, and responsible conduct in research. Students should review the Program Requirements to determine how to enroll in the appropriate Research Courses.

Choose a Research Adviser

The Research Adviser plays a central role in the research conducted by graduate students. While a student's research ultimately reflects their ideas, contributions, and impact on a field, the Research Adviser provides important leadership and guidance on how to conduct experiments and attain the desired results. Furthermore, the Research Adviser is expected to support a Ph.D. student financially through a Research Appointment and provide the resources necessary to complete the student's Doctoral Dissertation. Many academic milestones in the degree program also require significant involvement from the Research Adviser. Therefore, the relationship between a student and Research Adviser is important to the student's success. Students need to find a Research Adviser that is supportive and helps them mature into a researcher.

Students should understand the mechanism by which they are assigned a Research Adviser and collect all available information that will help guide their decision. During the first semester of the degree plan, Chemical Engineering Faculty that have sponsored research projects will present brief introductions to the research to be conducted by a Ph.D. student. Ph.D. students are required to attend these discussions to learn about the projects and ask questions. Ph.D. students are encouraged to meet with the faculty and their current graduate students to learn more about the research program and its motivation. The purpose of these meetings is to provide students with a better understanding of the research project, the technical skills and methods to be developed, and expected results.

These meetings also allow the Research Adviser to evaluate the students as potential research assistants in their laboratory. Students should be cautioned that faculty members may be hesitant to extend support for a student that has had little interaction and engagement with them (e.g., meeting only once).

Ph.D. students should meet with at least three different faculty during the selection period so that they can make an informed decision about their preferences for a Research Adviser. The assignment of a Research Adviser to the Ph.D. student will be made by the Associate Chair for Graduate Studies based on Ph.D. student preferences and the needs of the graduate program. Every effort will be made to assign students their preferred research project. However, students must note that faculty members can only accommodate a limited number of students in their group. Further, the Department has made a commitment to the faculty to provide them with sufficient students for their funded projects.

In rare occasions, Ph.D. students may not find a Research Adviser by the end of their first Fall term. Should this situation arise, the Department may appoint the student as Teaching Assistant for the Spring semester. Students must proactively search for a Research Adviser during this period. If a student has not found a Research Adviser by the end of the Spring semester, then the student will be dismissed from the Graduate Program for not making Satisfactory Progress toward the Ph.D. degree.

M.S. and M.E. students should also meet with Graduate Faculty to discuss research projects that can be conducted by a master's student. Master's students are encouraged to speak with the faculty and their current graduate students to learn more about the research program. Master's students should meet with at

least two different faculty so that they can make an informed decision about their preferences for a Research Adviser. The assignment of a Research Adviser for Master's students will be made by the Associate Chair for Graduate Studies and the Master's Program Coordinator based on student preferences and the needs of the graduate program.

Students should be aware that the Research Adviser is to mentor them in educational aspects of their degree. **Students are not expected to provide gifts or any other services to their Research Adviser at any time.** Students should report any inappropriate requests from their Research Adviser immediately to the Associate Chair for Graduate Studies or the Department Chair.

Laboratory Safety

The Department of Chemical Engineering considers laboratory safety to be both an educational objective and a laboratory imperative. The Department is committed to providing a safe and healthy working and learning environment for all of its students. An important aspect of safety is understanding that we are all responsible for our own safety and those around us. Therefore, **graduate students conducting experiments are responsible for the safe conduct of that experiment.** Any concerns regarding safety or training should be directed to your Research Adviser, the Student Safety Council, the HWCOE Director of Laboratory Safety, or Environmental Health and Safety (http://www.ehs.ufl.edu/). If you feel that your concerns are not being addressed, you should contact the Department Chair or the Associate Chair for Graduate Studies.

Graduate students are required to familiarize themselves and abide by all safety rules in the laboratory. Students are expected to be responsive to any and all safety improvements suggested by the Research Adviser, the Student Safety Council, the HWCOE Director of Laboratory Safety, or Environmental Health and Safety. **Failure to follow safe practices could result in dismissal from the program.**

Sustaining a culture of excellent laboratory safety starts with rigorous training. Because of its importance, most laboratory safety training is annual. Students are expected to keep their laboratory safety training record updated at all times. To further promote a culture of safety, our Department has a Student Safety Council, which is comprised of graduate students who conduct periodic laboratory inspections and provide guidance about health and safety procedures. Students are strongly encouraged to join the council.

All laboratory personnel (including Ph.D. and undergraduate students, postdoctoral researchers, volunteers, hosted minors, and technicians) are required to take the online course *Chemical Hygiene Plan for Laboratory Staff* (EHS 861). Additional training will be provided by your Research Adviser based on the laboratory-specific Chemical Hygiene Program created for your research activities. Annual training is required for all employees who generate or manage hazardous waste. Additional one-time or annual training may be required for researchers working in special-risk areas.

Proper personal protective equipment (PPE) is required at all times when working in all Chemical Engineering laboratories. Students should evaluate the Chemical Hygiene Plan for the laboratories in which they work to determine the appropriate PPE. Students should understand that selection of the proper PPE (lab coat, gloves, etc.) is often dependent on the inherent dangers within the laboratory. Students should review the safety information to ensure that they have the proper PPE for the experiments they are conducting.

Should **any incident** occur in the laboratory, the Research Adviser and the Chemical Engineering Safety Coordinator must be informed of the injury as soon as is practicable after receiving any emergency treatment. All students conducting research in a laboratory should be enrolled in research credits or be employed by the University. These procedures ensure that students are covered by Workers Compensation for any injuries sustained while conducting research. The student, Research Adviser, and the Chemical Engineering Safety Coordinator should work together to ensure that any incident is properly reported.

DOCTORAL PROGRAM REQUIREMENTS

The Doctor of Philosophy (Ph.D.) degree requirements are presented in this section. More details of the general requirements can be found in the Graduate Catalog. Students are strongly advised to read the relevant parts of this Handbook to understand them. **Students are ultimately responsible for ensuring they are on track to finish their degrees.**

The Ph.D. degree is for those students who wish to attain mastery of a field of knowledge and demonstrate accomplishment in Research. Study for the Ph.D. degree will be open only to those with demonstrated competence in the core areas of chemical engineering. An M.S. degree is not required for the Ph.D. program unless required by the Research Adviser. Final acceptance into the Ph.D. program requires successful completion of the Candidacy Examination. The granting of the degree is based on general proficiency and distinctive achievements of the Ph.D. candidate in their chosen research field. Ph.D. students are expected to demonstrate the ability to conduct independent investigation of research problems and attain mastery of a field of knowledge, as exhibited by the Final Examination.

Doctoral Overview

As detailed below, the Doctor of Philosophy (Ph.D.) program requirements consist of:

1. Completion of at least 90 credits of coursework, subject to Course Restrictions and Classifications approved by the Department, including:
   a. 12 credits of Required Coursework in chemical engineering;
   b. At least 6 credits of Chemical Engineering Electives;
   c. At least 6 credits of graduate-level Technical Electives or Non-Technical Electives;
   d. Attendance at Graduate Seminar in each semester of residence, regardless of registration;
   e. 4 credits of *Supervised Teaching* (ECH 6940).
2. Conduct Research in a safe, ethical, and responsible manner.
3. Maintain Satisfactory Progress towards degree milestones.
4. Maintain Professional Conduct in all department-related activities, including maintenance of all required Training.
5. Completion of Individual Development Plan (IDP) each year.
6. Completion and successful defense of the Candidacy Examination, which includes a written Research Proposal and an Oral Qualifying Examination.
7. Completion of Research Presentation on work contained in the Doctoral Dissertation at the GRACE symposium during final year of study.
8. Completion and successful defense of the Final Examination, which includes a written Doctoral Dissertation and a Final Oral Defense Examination.

Program Schedule

Continuous registration is expected of all doctoral students. **All Ph.D. students appointed as Graduate Assistants must register for 9 credits in the Spring semester, 9 credits in the Fall semester, and 6 credits in the Summer semester.** A Leave of Absence may be granted under extraordinary circumstances. A doctoral student who ceases to be registered at the University for more than 1 term needs prior written approval from the Research Adviser for a Leave of Absence of the stated period of time. The student must reapply for admission on returning. **Campus Residence Requirement:** Beyond the first 30 credits counted toward the doctoral degree, students must complete 30 credits enrolled at the University of Florida campus or at an approved branch station of the University of Florida Agricultural Experiment Stations or the Graduate Engineering and Research Center.

Graduation: The minimum requirements for the Ph.D. program can be met in 3 years following a Bachelor of Science degree. Although the time to complete all Ph.D. degree requirements is dependent on the specific research program and student motivation, **Table 1** shows a common timeline towards graduation. **Table 2** shows the due dates for key milestones during the Ph.D. degree program.

The Department considers a 5-year time horizon to be reasonable for completion of the Ph.D. program by a full-time student who matriculates with no deficiencies. This time is measured from the semester a student begins their doctoral program. The Department expects most students to graduate within this timeframe with only rare cases requiring close to 6 years. Therefore, the Department is under no obligation to support a Graduate Assistantship after six years of residence.

All work for the Ph.D. degree must be completed within 5 calendar years after the Candidacy Examination. Failure to complete the degree requirements within this timeframe requires the Oral Qualifying Examination to be repeated. There must be at least 2 terms between the Candidacy Examination and the date of the degree. All coursework, including transferred credits, must be completed within 7 years of the term in which the degree will be awarded.

Table 1: Common timeline towards graduation for Ph.D. students.

Year	Fall Semester	Spring Semester	Summer Semester
1	● *Transport Phenomena* (ECH 6285) ● *Molecular Thermodynamics* (ECH 6272) ● *Advanced Mathematics* (ECH 6847) ♦ Select Research Adviser	● *Graduate Seminar* (ECH 6926) ● *Chemical Engineering Kinetics* (ECH 6506) **or** *Reactor Design and Optimization* (ECH 6526) ● *Elective* (Optional) ● *Advanced Research* (ECH 7979) ♦ Select Supervisory Committee	● *Advanced Research* (ECH 7979)
2	● *Graduate Seminar* (ECH 6926) ● *Elective* (Optional) ● *Elective* (Optional) ● *Advanced Research* (ECH 7979) ♦ Submit Individual Development Plan	● *Graduate Seminar* (ECH 6926) ● *Elective* (Optional) ● *Advanced Research* (ECH 7979) ♦ Submit Research Proposal ♦ Complete Oral Qualifying Examination	● *Advanced Research* (ECH 7979) ♦ Submit Supervised Teaching preferences
3	● *Graduate Seminar* (ECH 6926) ● *Supervised Teaching* (ECH 6940) ● *Research for Doctoral Dissertation* (ECH 7980) ♦ Submit Individual Development Plan	● *Graduate Seminar* (ECH 6926) ● *Supervised Teaching* (ECH 6940) ● *Research for Doctoral Dissertation* (ECH 7980)	● *Research for Doctoral Dissertation* (ECH 7980)
4	● *Graduate Seminar* (ECH 6926) ● *Research for Doctoral Dissertation* (ECH 7980) ♦ Submit Individual Development Plan	● *Graduate Seminar* (ECH 6926) ● *Research for Doctoral Dissertation* (ECH 7980)	● *Research for Doctoral Dissertation* (ECH 7980)
5	● *Graduate Seminar* (ECH 6926) ● *Research for Doctoral Dissertation* (ECH 7980) ♦ Complete Research Presentation ♦ Submit Individual Development Plan	● *Graduate Seminar* (ECH 6926) ● *Research for Doctoral Dissertation* (ECH 7980) ♦ Submit Doctoral Dissertation ♦ Complete Final Oral Defense Examination	

Table 2: Due dates for Ph.D. milestones.

Ph.D. Milestones		Due Date	Submitted to:
Select Research Adviser		First Semester	Graduate Academic Adviser and Associate Chair for Graduate Studies
Select Supervisory Committee		Second Semester of Ph.D. Program	Research Adviser and Graduate Academic Adviser
Submit Research Proposal	First draft	End of Fourth Semester of Ph.D. Program	Research Adviser
	First submission	Third Week of Fifth Semester of Ph.D. Program	Research Adviser and Graduate Academic Adviser and Associate Chair for Graduate Studies
	Final submission	2 weeks before Oral Qualifying Examination and by End of Sixth Semester of Ph.D. Program	Research Adviser and Supervisory Committee
Complete Oral Qualifying Examination	Scheduling	At least 1 month in advance	Research Adviser and Supervisory Committee
	Notification	At least 2 weeks in advance	Graduate Academic Adviser
	Final Exam	End of Sixth Semester of Ph.D. Program	Research Adviser and Supervisory Committee
Submit Supervised Teaching preferences		During Sixth Semester of Ph.D. Program	Graduate Academic Adviser and Associate Chair for Graduate Studies
Submit Individual Research Plan		Required each year in the program	Research Adviser and Supervisory Committee and Graduate Academic Adviser
Submit Doctoral Dissertation	First draft		Research Adviser
	First submission	Check with Graduate School	Research Adviser and Graduate School Editorial Office
	Exam submission	2 weeks before Final Oral Defense Examination and at least 1 week before Final submission deadline of Graduate School	Research Adviser and Supervisory Committee
	Final submission	before Final submission deadline of Graduate School	Graduate School Editorial Office
Complete Research Presentation		During last year of degree	Graduate Academic Adviser
Complete Final Oral Defense Examination	Scheduling	At least 1 month in advance	Research Adviser and Supervisory Committee
	Notification	At least 2 weeks in advance	Graduate Academic Adviser
	Final Examination	At least 1 week before Final submission deadline of Graduate School for Doctoral Dissertation	Research Adviser and Supervisory Committee

Required Doctoral Coursework

The chemical engineering coursework required of all Ph.D. students consists of:

- *Transport Phenomena* (ECH 6285)
- *Molecular Thermodynamics* (ECH 6272)
- *Advanced Mathematics for Chemical Engineering* (ECH 6847)
- *Chemical Engineering Kinetics* (ECH 6506) or *Reactor Design and Optimization* (ECH 6526)

The core courses are taught only once a year. The three core courses (ECH 6285, ECH 6272, and ECH 6847) are offered in the Fall semester while *Chemical Engineering Kinetics* (ECH 6506) and *Reactor Design and Optimization* (ECH 6526) are offered in alternating Spring semesters. Students must receive a letter grade of B- or better in the core courses. Note that Ph.D. students must also receive a letter grade of B- or better and a GPA above 3.0 in the three core courses to maintain their stipend, tuition, and healthcare benefits. Ph.D. students, including those transferred from the M.S. or M.E. programs, are only provided two opportunities to pass these courses and graduate with a Ph.D.

Elective Doctoral Coursework

Ph.D. students must fulfil the remaining portion of the 24 credits of required coursework with elective courses. Ph.D. students must complete at least 6 credits in Chemical Engineering Electives or Approved Chemical Engineering Electives. The remaining 6 credits of electives can be taken from any Technical Electives or Non-Technical Electives.

Other Doctoral Coursework

The courses in this section do not count towards the 24 credits of required coursework. Ph.D. students must enroll in *Graduate Seminar* (ECH 6926) each semester of residence after the first semester. In most semesters, Ph.D. students register for Research Courses to fulfil their minimum registration requirement. Prior to graduation, Ph.D. students must also complete at least 4 credits of *Supervised Teaching* (ECH 6940).

Research Courses

Ph.D. students must register for *Advanced Research* (ECH 7979) before passing the Candidacy Examination and for *Research for Doctoral Dissertation* (ECH 7980) after passing the Candidacy Examination. **Although students may only be registered for a few research credits in a given semester, they are expected to devote their full effort towards their research to continue making Satisfactory Progress.**

Graduate Seminar Course

Graduate seminars keep students informed of new developments in chemical engineering and the breadth of Research conducted in the field. **It is critical to the success of our Department that all seminars are well attended.** Therefore, Ph.D. students shall attend the Chemical Engineering *Graduate Seminar* (ECH 6926) every semester of residence, regardless of registration. Students are allowed as many as two absences from seminar each semester for any reason. If a student has a conflict with seminar due to another enrolled course (including Supervised Teaching) or if the student will not be in residence during the semester, they should instruct the Associate Chair for Graduate Studies prior to the start of the semester.

Students will receive seminar announcements from department staff reminding them of upcoming seminars. It is expected that all students check their UF email account regularly to stay informed of upcoming seminars. Regardless, students are responsible for their own attendance.

Seminar speakers are guests of our Department who take time away from their other duties to share their most exciting research results with our students and faculty. Students are expected to treat speakers with respect and utmost professionalism. This includes being on time for the seminar, remaining silent during presentations and question & answer sessions, paying attention to the presentation and discussion, and contributing to the experience by raising questions for the speaker to answer.

Supervised Teaching Course

To gain valuable teaching and communication experience consistent with the Ph.D. degree, all Ph.D. students are required to take the *Supervised Teaching* (ECH 6940) course as part of their degree requirements. Students will assist instructors in undergraduate or graduate coursework for at least one semester. Students are expected to have at least 1 hour of contact time with the students in the assigned

course each week of the semester. Other responsibilities may include delivering lectures, holding office hours and recitation sessions, preparing homework and exams, grading, and supervising students in laboratory courses. The Supervised Teacher is expected to follow the attendance policy of the instructor. It is assumed that the Supervised Teacher will be a role model to students and demonstrate professional and ethical behavior, including punctual attendance.

Students must register for *Supervised Teaching* (ECH 6940) during each semester they assist in the classroom. Students must complete 4 credits of *Supervised Teaching* during their degree program. Students are required to attend a departmental workshop on Effective Teaching Strategies in Chemical Engineering prior to completing a Supervised Teaching assignment. The workshop will be offered once a year during the month of August. Ph.D. students should register for 4 credits for the semester. Graduate students must be on campus during the entire semester until grades are submitted for the course they are assigned. Exceptions for travel to conferences, meetings, or research experimentation must be approved by the instructor well in advance and preferably at the start of the semester.

Students will discuss their specific roles and responsibilities of the course with the instructor prior to the start of the semester. At the end of the semester, the instructor will issue a Pass/Fail grade for the Supervised Teacher. The Supervised Teaching assignment will not be counted towards the degree requirements if the instructor issues a Fail grade but this grade will not appear on the transcript. **Exceptions to Supervised Teaching will not be permitted.**

The Associate Chair for Graduate Studies will send a list of available opportunities to Ph.D. students prior to the start of each year in the degree program. Ph.D. students must return these preferences to the Associate Chair for Graduate Studies before the due date in Table 2. Supervised Teaching assignments will be made by the Associate Chair for Graduate Studies based on Ph.D. student course preferences and the needs of the undergraduate and graduate program.

Ph.D. students are ultimately responsible for ensuring that their Supervised Teaching requirement is met prior to graduation. Ph.D. students who anticipate graduating within one year but have not yet fulfilled the Supervised Teaching requirement must notify the Associate Chair for Graduate Studies.

Individual Development Plan

The Graduate School requires that all students complete an Individual Development Plan (IDP) each year in the doctoral program. The IDP is to be completed by the students and then discussed with their Research Adviser. Students should work with their Research Adviser to determine the IDP template that is most appropriate for tracking their progress. The Department has created its own template for the IDP but students may choose to use the template from the Graduate School or other appropriate templates, such as the one from myIDP. Finalized IDPs must be submitted to the Graduate Academic Adviser before August 15 each year.

Research Presentation Requirement

Ph.D. candidates are required to present their Research to an audience *comprised of chemical engineering graduate students and faculty*. The Research Presentation shall be in the GRACE symposium during the last year of the Ph.D. candidate's residence. The Research Presentation should cover selected results from the candidate's Doctoral Dissertation. At the discretion of the Associate Chair for Graduate Studies, presentation at a national or international conference in the last year of the candidate's residence can be used as a substitute for the Research Presentation. **The Ph.D. degree will not be issued to candidates until the Research Presentation requirement is satisfied.**

Candidacy Examination

A graduate student becomes a candidate for the Ph.D. degree after successful completion of both the Research Proposal and the Oral Qualifying Examination. Ph.D. students must complete their Candidacy Examination before June 1 of their second year in the program. A summary of key requirements is listed in **Table 3**. Such admission requires the approval of the student's Supervisory Committee, the Department Chair, the Dean of HWCOE, and the Dean of the Graduate School. The approval will be based on:

- The academic record of the student;
- Supervisory Committee opinion on overall fitness for candidacy;
- An approved Doctoral Dissertation topic; and
- An Oral Qualifying Examination.

To be eligible for the Candidacy Examination, Ph.D. students must have:

1. Appointed a Supervisory Committee, including a Research Adviser.
2. Completed the three core courses (*Transport Phenomena*, *Molecular Thermodynamics*, and *Advanced Mathematics for* Chemical Engineering) with a B− or better in each course.
3. Maintained Satisfactory Progress for their degree, including no incomplete grades.
4. Received a satisfactory grade for Research Courses in the semester **prior** to the Oral Qualifying Examination. This grade must be assigned by the Research Adviser and placed on record in the student's file prior to the exam.

The purpose of the Research Proposal and the Oral Qualifying Examination is to assess the Ph.D. student's potential to perform scholarly Research. The objective is to ensure that students begin their Doctoral Dissertation with a set of goals based upon a thorough understanding of the literature, a logical analysis of the proposed research problem, and adequate preliminary results showing their ability to collect the required data. The student is expected to demonstrate creativity, impetus, curiosity, and professionalism.

Table 3: Key Requirements for Candidacy Examination.

Candidacy Examination		
Research Proposal	*First Draft Deadline*	Feb 1 (second year in program)
	Submission to Supervisory Committee	2 weeks prior to Oral Qualifying Examination
	Maximum Length	15 pages, single-spaced
	Minimum Font	11 point
	Mandatory Sections	Safety Assessment & Proposed Future Work
Oral Qualifying Examination	*Deadline*	June 1 (second year in program)
	Notification to Graduate Academic Adviser	2 weeks prior to Oral Qualifying Examination
	Format	Proposal Presentation; Fundamentals Q&A; Proposal Q&A
	Mandatory Attendance Requirements	All Supervisory Committee members at scheduled time; Chair or Co-chair physically present
	Approx. Total Time	~ 2 hours
	Approx. Presentation Time	~ 30 minutes

All members of the Supervisory Committee must take part in the Candidacy Examination at the scheduled time. The performance of the Ph.D. student in the Oral Qualifying Examination will be evaluated by the Supervisory Committee for:

1. Knowledge in fundamentals of chemical engineering, particularly related to their research field, and
2. Ability to conduct scholarly research.

Research Proposal

The Research Proposal is a written description of the research work to be conducted by the Ph.D. student. The ability to write clearly and succinctly is an essential skill for a chemical engineer. Therefore, the Research Proposal is to be **written primarily by the Ph.D. student** in consultation with the Research

Adviser. After the consent of the Research Adviser, the first draft of the Research Proposal should be submitted to the Graduate Academic Adviser and the Associate Chair for Graduate Studies by the stated due date in Table 2. **The Research Proposal should also be submitted to the Supervisory Committee members no later than 2 weeks before the Oral Qualifying Examination**.

The purpose of the written Research Proposal is to demonstrate that Ph.D. students can identify important research problems, prepare a detailed experimental plan to study the research problem, utilize the tools needed to conduct advanced research to address the research problem, and analyze the results obtained by their research. The Research Proposal must outline the area of research and its importance, a clear problem statement, background to the research area, specific tasks that will be performed, preliminary results, and subsequent steps. A number of excellent manuals (for example, references available via www.nsf.gov) are available on writing Research Proposal and may be used as guides in preparing the proposal. A maximum of 15 single-spaced, typed pages, including figures and tables is allowed. A font type of Arial or Times New Roman using a minimum of 11-point should be used for the main text. Captions for tables and figures can use a minimum of a 9-point font. The Research Proposal should include a title, a table of contents, references, and an abstract in addition to the 15 pages of text. A maximum of two appendices, such as submitted papers, detailed derivations, etc. could be included in addition to the 15-page proposal. Although there is no set format, the main body of the document often includes the following sections:

1. **Introduction**: A concise overview of the research topic and its importance. (Suggested length: 1 page)
2. **Background**: Literature review and relevant background needed to place the proposed study in the larger context of the field and to highlight the relevance and novelty of the proposed work. (Suggested length: 2 – 3 pages)
3. **Problem description:** A description of the specific problem, objectives of the proposal, and the novelty of the proposed work. (Suggested length: 1 page)
4. **Specific objectives/aims:** A description of proposed theoretical and/or experimental work and a list of specific tasks (including feasibility probes) needed to accomplish the proposed objectives. (Suggested length: 1 page or less)
5. **Preliminary work:** A description of preliminary work performed by the Ph.D. student that supports the feasibility of the proposed work and an analysis or discussion of such preliminary work. (Suggested length: 2 – 4 pages)
6. **Safety Assessment:** A detailed analysis of the experimental setup to identify possible causes of accidents, steps to avoid accidents, and steps to take in case of an accident. The Supervisory Committee will include questions on safety during the Oral Qualifying Examination. (Suggested length: 1 page or less)
7. **Proposed Work:** Details of the subsequent steps planned to achieve the specific objectives of the research. (Suggested length: 3 – 5 pages)
8. **Summary:** A concise statement of the expected outcomes of the proposed research. (Suggested length: 1 page or less)
9. **References:** A list of references cited in the proposal.
10. **Tables & Figures:** Tables and figures used in the proposal should be integrated into the text.

The format of the written Research Proposal is not fixed. The guidelines above must be interpreted as suggestions that may be altered whenever necessary to improve the clarity and legibility of the proposed work. However, Ph.D. students should ensure that any deviations produce a more persuasive and better-structured Research Proposal.

Oral Qualifying Examination

After receiving consent from the Research Adviser and the Associate Chair for Graduate Studies, the Ph.D. student may schedule the Oral Qualifying Examination. The Oral Qualifying Examination is a public presentation of the Research Proposal followed by a private examination of the Ph.D. student by the Supervisory Committee. The purpose of the Oral Qualifying Examination is to evaluate the student's ability to engage in scientific and technical discussions with other engineers and scientists that may not necessarily be experts in their chosen field. **Students and faculty are not allowed to provide the Supervisory Committee or audience any food or drinks under any circumstances for the examination.** The Supervisory Committee will discuss with the student all aspects of the Research Proposal as well as the scientific and technical issues surrounding the research topic.

Ph.D. students are encouraged to plan ahead and schedule the Oral Qualifying Examination at least one month ahead of time. The Oral Qualifying Examination shall be publicly announced and held on campus. The initial presentation by the Ph.D. student will be open to the public unless the nature of the work cannot be publicly disclosed. Students should plan on the Oral Qualifying Examination lasting 2 hours or more. The Oral Qualifying Examination will be divided into three parts.

1. In the first part, the Ph.D. student will present the Research Proposal. This part of the exam is public and should last about 30 minutes.
2. The Supervisory Committee will question the Ph.D. student on fundamental issues pertinent to the research area in the second part. The Supervisory Committee will evaluate the Ph.D. student's breadth of knowledge in chemical engineering fundamentals related to the area of research and ability to think critically. This part of the exam should last about 30 minutes.
3. In the last part, the Supervisory Committee will question the Ph.D. student on issues directly related to the Research Proposal. This part of the exam should last about 60 minutes or more. The Supervisory Committee will evaluate the quality of the Research Proposal and the response to questions about the Research Proposal in order to assess the Ph.D. student's oral communication skills, depth of knowledge in their chosen research field, ability to think critically, and ability to formulate and defend a research plan.

All members of the Supervisory Committee must take part in the examination at the scheduled time. The Oral Qualifying Examination may be conducted using video and/or telecommunications. However, the Ph.D. student and Chair or Co-Chair must be in the same physical location. All other Supervisory Committee members may participate from remote sites via technological means. If a Supervisory Committee member is unable to attend, students may Change Supervisory Committee Member if approved by the Department. The substitute Supervisory Committee member should be given sufficient time to read the Research Proposal and prepare for the Oral Qualifying Examination. A minimum of two weeks is recommended.

Assessment of the Candidacy Examination

The Supervisory Committee will provide feedback to the candidate on all aspects of the Research Proposal and the Oral Qualifying Examination by completing the SACS rubric. The Research Proposal will be assessed for its organization, understanding of the relevant literature and pertinent research problem, the hypotheses of the proposed research, the logical arguments and preliminary data supporting the hypotheses, the analysis of experimental results, and the use of citations, language, and grammar. The Oral Qualifying Examination will cover all aspects of the Research Proposal. In addition, the Oral Qualifying Examination will be assessed for the ability of the student to demonstrate fundamental knowledge of basic chemical engineering principles and aspects related to the research topic, describe the research problem and the methods required, ability to prepare visual aids, clarity of oral presentation, and ability to respond to questions.

Based on the combined performance in the three parts of the Oral Qualifying Examination and the evaluation of the written Research Proposal, the Supervisory Committee will evaluate the overall quality of the Research Proposal as satisfactory or unsatisfactory, and accordingly award a Pass or a Fail grade. A student that does not pass on their first attempt may be allowed a second attempt of the Oral Qualifying Examination on the advice of the Supervisory Committee and discretion of the Associate Chair for Graduate Studies. The retaken exam must take place in the subsequent semester. A student who does not pass the retaken examination will not be allowed to continue in the Ph.D. program and must terminate with a master's degree or withdraw from the program. In very limited and unusual circumstances, students may request to delay the first or second attempt. Requests to defer the examination must be made through the Petition process. Students should make every effort to follow the required schedule as exceptions to this rule are extremely rare. **Note: failing to pass the Candidacy Examination on time may result in the loss of stipend support.**

Doctoral Final Examination

Ph.D. students are required to complete a Final Examination that includes a written Doctoral Dissertation and a Final Oral Defense Examination described below.

MASTER OF SCIENCE PROGRAM REQUIREMENTS

The Master of Science (M.S.) degree requirements are presented in this section. More details of the general requirements can be found in the Graduate Catalog. Students are strongly advised to read the relevant parts of this Handbook to understand them. **Students are ultimately responsible for ensuring they are on track to finish their degrees.**

The M.S. degree is for those students who wish to expand their knowledge of chemical engineering and gain valuable experience in Research or industrial practice through an Internship. The M.S. program is open only to students with demonstrated competence in the core areas of chemical engineering through completion of an undergraduate chemical engineering degree. M.S. students need to focus on a specialization area of chemical engineering. M.S. students conducting Research should Choose a Research Adviser early in the degree plan, especially if they aim to complete a Master's Thesis.

Master of Science Overview

As detailed below, the Master of Science (M.S.) program requirements consist of:

1. Completion of at least 30 credits of coursework, subject to Course Restrictions and Classifications approved by the Department, including:
   a. 15 credits of Required Coursework in chemical engineering;
   b. At least 9 credits of graduate-level Technical Electives; and
   c. A maximum of 6 credits of graduate-level Non-Technical Electives.
2. Maintain Satisfactory Progress towards degree milestones.
3. Maintain Professional Conduct in all department-related activities, including maintenance of all required Training.
4. If applicable, conduct Research in a safe, ethical, and responsible manner.
5. Completion and successful defense of the Final Examination.

Program Schedule

The minimum requirements for the M.S. program can be met in 1 year following a Bachelor of Science degree. However, many M.S. students choose to complete their degree in approximately 2 years. Note that registration is not required for the Summer semester but interested M.S. students can take Research and Individual Work Courses or electives during these semesters. Although the time to complete all M.S. degree requirements is dependent on the specific objectives and motivation of the student, **Table 4** shows a common timeline towards graduation. **Table 5** shows the due dates for key milestones during the M.S. degree program.

Table 4: Common timeline towards graduation for M.S. students.

Year	Fall Semester	Spring Semester
1	• *Transport Phenomena* (ECH 6285) • *Advanced Chemical and Biological Processing Lab* (ECH 6937) • *Advanced Mathematics* (ECH 6847) + Select Research Adviser*	• *Chemical Engineering Kinetics* (ECH 6506) or *Reactor Design and Optimization* (ECH 6526) • *Advanced Chemical and Biological Processing Lab* (ECH 6937) • *Elective* (Optional)
2	• *Elective* (Optional) • *Elective* (Optional) • *Elective* (Optional) + Select Supervisory Committee*	• *Elective* (Optional) + Submit Master's Thesis* or Report + Complete Final Oral Defense Examination*

* Degree requirements for M.S. students completing a Master's Thesis only.

Table 5: Due dates for M.S. milestones.

M.S. Milestones		Due Date	Submitted to:
Select Research Adviser*		Start of Second Semester	Graduate Academic Adviser and Master's Program Coordinator and Associate Chair for Graduate Studies
Select Supervisory Committee*		End of Fourth Semester	Research Adviser and Graduate Academic Adviser
Submit Master's Thesis*	First draft		Research Adviser
	First submission	Check with Graduate School	Research Adviser and Graduate School Editorial Office
	Exam submission	2 weeks before Final Oral Defense Examination and at least 1 week before Final submission deadline of Graduate School	Research Adviser and Supervisory Committee
	Final submission	before Final submission deadline of Graduate School	Graduate School Editorial Office
or Submit Report	At least 2 weeks before the end of term	Graduate Academic Adviser and Master's Program Coordinator	Submit Report
Complete Final Oral Defense Examination*	Scheduling	At least 1 month in advance	Research Adviser and Supervisory Committee
	Notification	At least 2 weeks in advance	Graduate Academic Adviser
	Final Examination	At least 1 week before Final submission deadline of Graduate School for Master's Thesis	Research Adviser and Supervisory Committee

* Degree requirements for M.S. students completing a Master's Thesis only.

Required M.S. Coursework

The chemical engineering coursework required of all M.S. students consists of:

- *Transport Phenomena* (ECH 6285)
- *Advanced Mathematics in Chemical Engineering* (ECH 6847)
- *Chemical Engineering Kinetics* (ECH 6506) or *Reactor Design and Optimization* (ECH 6526)
- *Advanced Chemical and Biological Processing Lab* (ECH 6937) (**Fall Semester**)
- *Advanced Chemical and Biological Processing Lab* (ECH 6937) (**Spring Semester**)

The three core courses (ECH 6285, ECH 6272, and ECH 6847) are offered in the Fall semester while *Chemical Engineering Kinetics* (ECH 6506) and *Reactor Design and Optimization* (ECH 6526) are offered in alternating Spring semesters. *Advanced Chemical and Biological Processing Lab* (ECH 6937) is offered twice each year.

Elective M.S. Coursework

M.S. students must fulfil the remaining portion of the 30 credits of required coursework with elective courses. M.S. students must complete a minimum of 15 credits of total coursework within the Chemical Engineering Department. These 15 credits include the Required M.S. Coursework as well as Chemical Engineering Electives, Approved Chemical Engineering Electives, or Research and Individual Work Courses. At least 24 of the required 30 credits of coursework must be considered Technical Electives. A maximum of 6 credits of Non-Technical Electives can be included towards the M.S. degree. Students should note that some courses are subject to Course Restrictions and Classifications. All coursework, including transferred credits, must be completed within 7 years of the term in which the degree will be awarded.

M.S. Final Examination

M.S. thesis students are required to complete a Final Examination that includes a written Master's Thesis and a Final Oral Defense Examination. M.S. non-thesis students are required to complete a Final Examination that includes a written Report. Details are described further below.

MASTER OF ENGINEERING PROGRAM REQUIREMENTS

The Master of Engineering (M.E.) degree requirements are presented in this section. More details of the general requirements can be found in the Graduate Catalog. Students are strongly advised to read the relevant parts of this Handbook to understand them. **Students are ultimately responsible for ensuring they are on track to finish their degrees.**

The M.E. degree is for those students who wish to gain knowledge of chemical engineering and obtain valuable experience in Research or industrial practice through an Internship. The M.E. program is for students without an undergraduate chemical engineering degree. Therefore, the M.E. program starts with the student taking appropriate Undergraduate Coursework to attain a comprehensive understanding of chemical engineering principles. M.E. students further this understanding in an area of specialization in chemical engineering. M.E. students conducting Research should Choose a Research Adviser early in the degree plan, especially if they aim to complete a Master's Thesis. The primary role of the Research Adviser is to train the student in advanced research techniques and methods.

Master of Engineering Overview

As detailed below, the Master of Engineering (M.E.) program requirements consist of:

1. Completion of at least 30 credits of coursework, subject to Course Restrictions and Classifications approved by the Department, including:
   a. 15 credits of Required Coursework in chemical engineering; and
   b. 9 credits of graduate-level Technical Electives; and
   c. 6 credits of graduate-level electives.
2. Maintain Satisfactory Progress towards degree milestones.
3. Maintain Professional Conduct in all department-related activities, including maintenance of all required Training.
4. If applicable, conduct Research in a safe, ethical, and responsible manner, including maintenance of all required Training.
5. Completion and successful defense of the Final Examination.

To ensure that M.E. students have a comprehensive understanding of fundamental chemical engineering principles, the M.E. program has an additional requirement of:

6. Completion of Undergraduate Coursework based on prior degree of student.

Program Schedule

The minimum requirements for the M.E. program can be met in in approximately 2 years following a Bachelor of Science degree. Although the time to complete all M.E. degree requirements is dependent on the specific objectives and motivation of the student, **Table 6** shows a common timeline towards graduation. **Table 7** shows the due dates for key milestones during the M.E. degree program.

Table 6: Common timeline towards graduation for M.E. students.

Year	Fall Semester	Spring Semester	Summer Semester
1	• *Elementary Transport* (ECH 3264) • *Advanced Mathematics* (ECH 6847) • *Advanced Chemical and Biological Processing Lab* (ECH 6937) + Select Research Adviser*	• *Phase & Chemical Equilibria* (ECH 4123) • *Chemical Engineering Kinetics* (ECH 6506) or *Reactor Design and Optimization* (ECH 6526) • *Advanced Chemical and Biological Processing Lab* (ECH 6937) •	• *Elective* (Optional) • *Elective* (Optional)
2	• *Transport Phenomena* (ECH 6285) • *Separation and Mass Transfer Operations* (ECH 4403) • *Elective* (Optional) + Select Supervisory Committee*	• *Elective* (Optional) • *Elective* (Optional) + Submit Master's Thesis* or Report + Complete Final Oral Defense Examination	

* Degree requirements for M.E. students completing a Master's Thesis only.

Table 7: Due dates for M.E. milestones.

M.S. Milestones		Due Date	Submitted to:
Select Research Adviser*		Start of Second Semester	Graduate Academic Adviser and Master's Program Coordinator and Associate Chair for Graduate Studies
Select Supervisory Committee*		End of Fourth Semester	Research Adviser and Graduate Academic Adviser
Submit Master's Thesis*	First draft		Research Adviser
	First submission	Check with Graduate School	Research Adviser and Graduate School Editorial Office
	Exam submission	2 weeks before Final Oral Defense Examination and at least 1 week before Final submission deadline of Graduate School	Research Adviser and Supervisory Committee
	Final submission	before Final submission deadline of Graduate School	Graduate School Editorial Office
or Submit Report	At least 2 weeks before the end of term	Graduate Academic Adviser and Master's Program Coordinator	Submit Report
Complete Final Oral Defense Examination*	Scheduling	At least 1 month in advance	Research Adviser and Supervisory Committee
	Notification	At least 2 weeks in advance	Graduate Academic Adviser
	Final Examination	At least 1 week before Final submission deadline of Graduate School for Master's Thesis	Research Adviser and Supervisory Committee

* Degree requirements for M.E. students completing a Master's Thesis only.

Undergraduate Coursework

To ensure that M.E. students have a comprehensive understanding of fundamental chemical engineering principles, the M.E. program has additional coursework requirements of specific undergraduate courses. The Department recognizes that these additional courses require more time to complete your degree but the

Department believes that these are critical courses that provide an important foundation in understanding the role of a chemical engineer and preparing students for the challenges associated with graduate-level chemical engineering courses.

The undergraduate chemical engineering coursework required of M.E. students will consist of approximately 9 – 10 credits from the undergraduate curriculum. Typically, students are required to take 3 of the following courses:

- *Process Thermodynamics* (ECH 3101)
- *Elementary Transport (ECH 3264)*
- *Phase & Chemical Equilibria (ECH 4123)*
- *Separation and Mass Transfer Operations (ECH 4403)*
- *Chemical Engineering Kinetics (ECH 4504)*

Each undergraduate course is offered twice a year. The undergraduate courses do not count as credits towards the degree. The Department recognizes that some disciplines have courses with significant overlap in content with the courses above. Only **students with Certified Degrees in these disciplines** will be provided the option of taking required undergraduate courses with recognized overlap in content. These courses will be listed on the Acknowledgement of Required Undergraduate Coursework Form given to students during Orientation. Students must sign this form to acknowledge the required Undergraduate Coursework expected for completion of their degree. **No exceptions or Petitions to waive these required courses will be allowed**.

Required M.E. Coursework

The chemical engineering coursework required of all M.E. students consists of:

- *Transport Phenomena* (ECH 6285)
- *Advanced Mathematics for Chemical Engineering* (ECH 6847)
- *Chemical Engineering Kinetics* (ECH 6506) or *Reactor Design and Optimization* (ECH 6526)
- *Advanced Chemical and Biological Processing Lab* (ECH 6937) (**Fall Semester**)
- *Advanced Chemical and Biological Processing Lab* (ECH 6937) (**Spring Semester**)

The two core courses (ECH 6285 and ECH 6847) are offered in the Fall semester while *Chemical Engineering Kinetics* (ECH 6506) and *Reactor Design and Optimization* (ECH 6526) are offered in alternating Spring semesters. *Advanced Chemical and Biological Processing Lab* (ECH 6937) is offered twice each year.

Other M.E. Coursework

M.E. students must fulfil the remaining portion of the 30 credits of required coursework with elective courses. M.E. students must complete a minimum of 15 credits of total coursework within the Chemical Engineering Department. These 15 credits include the Required M.E. Coursework as well as Chemical Engineering Electives, Approved Chemical Engineering Electives, or Research and Individual Work Courses. At least 24 of the required 30 credits of coursework must be considered Technical Electives. A maximum of 6 credits of Non-Technical Electives can be included towards the M.E. degree. Students should note that some courses are subject to Course Restrictions and Classifications. All coursework, including transferred credits, must be completed within 7 years of the term in which the degree will be awarded.

M.E. Final Examination

M.E. thesis students are required to complete a Final Examination that includes a written Master's Thesis and a Final Oral Defense Examination. M.E. non-thesis students are required to complete a Final Examination that includes a written Report. Details are described further below.

ADDITIONAL DEGREE REQUIREMENTS FOR ALL GRADUATE STUDENTS

This section lists additional requirements for all graduate degrees in the Department of Chemical Engineering at the University of Florida.

Maintaining Satisfactory Progress

A student is considered to be making Satisfactory Progress by the Department if they have (*i*) maintained scholarship and (*ii*) satisfactorily completed all degree requirements consistent with their time in the program. Ph.D. students and master's students completing a thesis are expected to conduct research as part of their degree requirement. Therefore, Ph.D. students and master's students completing a thesis must also demonstrate that they have (*iii*) achieved acceptable progress in research. Every student is expected to make Satisfactory Progress toward graduation each semester, including the timely passing of academic milestones expected during that semester, paying all fees and registering each semester, and adhering to and promoting all aspects of the Student Honor and Conduct Code.

Satisfactory scholarship is defined as the ability to (*i*) maintain an overall, major, and minor GPA of 3.00 (truncated[1]) or greater; (*ii*) complete all required courses with the required letter grade defined in the degree plan; and (*iii*) adhere to all aspects of the Student Honor and Conduct Code. If either the overall, major, or minor GPA drops below 3.00, the student may be **denied** registration. A violation of any ethical, moral, or professional standard is regarded as a serious offense. Any conduct offenses may result in academic sanctions, including suspension or dismissal by the Department and/or the Graduate School.

Graduate students in chemical engineering are expected to meet the criteria and timeframes listed in the Degree Requirements Section. The established timeframes take into account the effect of all aspects of the program on the rate of completion. Unapproved delays in meeting the following academic milestones, as defined by their specific degree, may jeopardize Satisfactory Progress:

- Identification of a Research Adviser to mentor the student's research;
- Maintenance of required Training certifications;
- Formation of a Supervisory Committee;
- Pass the Candidacy Examination;
- Submission of Progress Reports;
- Presentation of the Research Seminar; and
- Pass the Final Examination;

Without an approved Petition, students must resolve a delay in any academic milestone by the semester following its anticipated completion to be considered by the Department as making Satisfactory Progress.

Acceptable progress in research is determined by the Research Adviser and should be based on the student meeting expectations and performing tasks that the Research Adviser communicates to the student. Students are also expected to conduct their research according to all safety standards. Lack of research progress or any disregard for safety protocols will receive an unsatisfactory (U) grade earned in research coursework. Students with Graduate Assistantships will also receive an unsatisfactory performance evaluation on their Letter of Appointment (LOA) for the next semester.

Communication between the Research Adviser and student as well as documentation of expectations and performance are very important to maintaining Satisfactory Progress in research. Students are encouraged to meet regularly with their Research Adviser to discuss:

[1] Truncated means that the GPA is not rounded-up, e.g. a 2.99 GPA would not be considered a 3.0.

- Short and long-term research objectives for the project. Short-term objectives should indicate tasks that the student should accomplish in a given time period, such as an academic semester. Long-term objectives should describe milestones to be accomplished. At the end of a semester, students should discuss their performance evaluation and expectations for the next semester.
- Expectations and objectives in writing publications, preparing research reports to funding agencies, and delivering presentations at conferences.
- Duties associated with the management of the research group, including lab manager, safety manager, website designer, etc.

A student whose research performance is determined to be unsatisfactory will receive written documentation from their Research Adviser listing all deficiencies and/or outlining the level of performance required to continue working with the Research Adviser. Students will be given a reasonable time limit to complete the expected work. A copy of the written documentation will be provided to the Associate Chair for Graduate Studies for inclusion in the student's file. The deficiencies must be remedied before the stated timeframe in the documentation in order to maintain Satisfactory Progress.

Any graduate student that has not maintained Satisfactory Progress for two terms may be denied registration and subsequently dismissed from the degree program by the Department of Chemical Engineering, HWCOE, or the Dean of the Graduate School. Students with Graduate Assistantships may have additional consequences, including dismissal from the group of the Research Adviser and/or loss of their stipend, tuition, and healthcare benefits. These consequences apply even if the student's GPA meets or exceeds the minimum set by the Department or Graduate School.

Training Requirements

All students funded by NSF, NIH, or USDA awards must complete the general Responsible Conduct in Research (RCR) training.

FINAL EXAMINATION

The ability to communicate clearly and succinctly with others is an essential skill for a chemical engineer. Therefore, **all graduate students are required to complete a Final Examination for their degree that is to be written primarily by the student**. Ph.D. students must complete a Final Examination that includes a written Doctoral Dissertation and a Final Oral Defense Examination. M.S. and M.E. thesis students are required to complete a Final Examination that includes a written Master's Thesis and a Final Oral Defense Examination. M.S. and M.E. non-thesis students are required to complete a Final Examination that includes a written Report.

Students should note that it is important to satisfy both the regulations of the Graduate School and the Department. The Graduate School regulations primarily focus on the physical form of the Master's Thesis or Doctoral Dissertation. The Graduate School has several guides and templates to help prepare these documents. The Department is responsible for ensuring that the technical content of the written Report, Master's Thesis, or Doctoral Dissertation meet the standards of excellence expected of students seeking an advanced degree.

Table 8: Key Requirements for Final Examination.

Final Examination		
Dissertation or Thesis	*First Draft Deadline*	See Graduate School website
	Format	Follow Editorial Office requirements
	Submission to Supervisory Committee	2 weeks prior to Final Oral Examination
Final Oral Examination	*Notification to Graduate Academic Adviser*	2 weeks prior to Final Oral Examination
	Mandatory Attendance Requirements	All Supervisory Committee members at scheduled time; Chair or Co-chair physically present
	Approx. Total Time	~ 2 hours
	Approx. Presentation Time	~ 30 – 45 minutes

The format of the written portion of the Final Examination is not fixed. The guidelines must be interpreted as suggestions that may be altered whenever necessary to improve the clarity and legibility of the content. However, graduate students should ensure that any deviations produce a more persuasive and better-structured document.

The Graduate Council requires the Graduate School Editorial Office, as agents of the Dean of the Graduate School, to review the Doctoral Dissertation or Master's Thesis for acceptable format, and to make recommendations as needed. Please consult the Graduate Catalog for requirements. **Please note that the Graduate School has strict deadlines when applying for graduation, including the submission of the first draft.** Students are encouraged to check the timeline for the term in which they anticipate completing their degree requirements.

Doctoral Dissertation

Each Ph.D. candidate must prepare and present a Doctoral Dissertation that shows independent investigation that is acceptable in form and content to the Supervisory Committee and to the Graduate School. The work must be of publishable quality and must be in a form suitable for publication using the Graduate School's format requirements. It is to be **written primarily by the Ph.D. candidate** in consultation with the Research Adviser. **The Ph.D. candidate and Supervisory Committee are responsible for the level of quality and scholarship.**

The Ph.D. candidate, upon completion of other degree requirements and the consent of the Research Adviser, will submit their Doctoral Dissertation to the Supervisory Committee and the Graduate School. **The Doctoral Dissertation should be submitted to the Supervisory Committee members no later than 2 weeks before the Final Oral Defense Examination**.

Master's Thesis

Each M.S. or M.E. student enrolled in the thesis option must prepare and present a Master's Thesis that shows independent investigation that is acceptable in form and content to the Supervisory Committee and to the Graduate School. The work must be of publishable quality and must be in a form suitable for publication using the Graduate School's format requirements. It is to be **written primarily by the M.S. or M.E. student** in consultation with the Research Adviser. **The M.S. or M.E. student and Supervisory Committee are responsible for the level of quality and scholarship.**

The M.S. or M.E. student, upon completion of other degree requirements and the consent of the Research Adviser, will submit their Master's Thesis to the Supervisory Committee and the Graduate School. The Master's Thesis **should be submitted to the Supervisory Committee members no later than 2 weeks before the Final Oral Defense Examination**.

Master's Report

Each M.S. or M.E. student not enrolled in the thesis option must prepare and present a written Report on a specialized area of chemical engineering. M.S. or M.E. students conducting Research and Individual Work Courses are expected to write their final written Report on the Research or Internship activities undertaken during the course.

The Report must outline the area of specialization and its importance, problem statement, background information, results, discussions, and potential future steps. A Report based on Research should also include specific tasks and methods used. A maximum of 15 single-spaced, typed pages, including figures and tables is allowed. A font type of Arial or Times New Roman using a minimum of 11-point should be used for the main text. Captions for tables and figures can use a minimum of a 9-point font. The Report should include a title, a table of contents, references, and an abstract in addition to the 15 pages of text. A maximum of two appendices, such as submitted papers, detailed derivations, etc. could be included in addition to the 15-page Report. Although there is no set format, the main body of the document often includes the following sections:

1. **Introduction**: A concise overview of the research topic and its importance. (Suggested length: 1 – 2 pages)
2. **Background**: Literature review and relevant background needed to place the proposed study in the larger context of the field and to highlight the relevance and novelty of the proposed work. This section should demonstrate the student's ability to read engineering literature critically. (Suggested length: 2 – 3 pages)
3. **Problem description:** A description of the specific problem, objectives of the proposal, and the novelty of the proposed work. This section should demonstrate the student's ability to formulate a problem. (Suggested length: 1 page)
4. **Methods:** A description of the theoretical and/or experimental work. This section should demonstrate the student's ability to solve engineering problems. (Suggested length: 2 – 4 pages)
5. **Results and Discussion:** Description of the results accompanied by an analysis or discussion of the results. This section should demonstrate the student's ability to use the techniques, skills, and modern engineering tools necessary for engineering practice at an advanced level.
6. **Proposed Future tasks:** Details of the potential future research in the same area. This section should demonstrate the student's ability to identify new problems.
7. **Concluding remarks:** A brief summary of the work with details of what new has been accomplished in the student's research.
8. **References:** A list of references cited in the report.
9. **Tables & Figures:** Tables and figures used in the report should be integrated into the text.
10. **Appendices (if needed):** Submitted papers, detailed derivations, detailed experimental protocols.

Final Oral Defense Examination

After submitting the Doctoral Dissertation or Master's Thesis to the Supervisory Committee and completing all other degree requirements contained in this document, graduate students may schedule the Final Oral Defense Examination. The Final Oral Defense Examination should be scheduled no more than 6 months before degree award. The Final Oral Defense Examination shall be publicly announced and held on campus. The initial presentation by the Ph.D. student will be open to the public unless the nature of the work cannot be publicly disclosed. The Final Oral Defense Examination is a public presentation of the Doctoral Dissertation or Master's Thesis followed by a private examination of the student by the Supervisory Committee. **Students are not expected to provide the Supervisory Committee or audience any food or drinks under any circumstances for the examination.**

Students should plan on the Final Oral Defense Examination lasting 2 hours or more. The Final Oral Defense Examination will be divided into two parts.

1. The graduate student will present the Doctoral Dissertation or Master's Thesis in the first part. This part of the exam is public and should last about 30 – 45 minutes.
2. In the last part, the Supervisory Committee will question the graduate student on issues directly related to the Doctoral Dissertation or Master's Thesis. This part of the exam should last about 60 minutes or more. The Supervisory Committee will evaluate the quality of the Doctoral Dissertation or Master's Thesis and the response to questions in order to assess the student's oral communication skills, depth of knowledge in their chosen research field, ability to think critically, and ability to formulate and defend their research.

All members of the Supervisory Committee must take part in the examination at the scheduled time. The Final Oral Defense Examination may be conducted using video and/or telecommunications. However, the graduate student and Chair or Co-Chair must be in the same physical location. All other Supervisory Committee members may participate from remote sites via technological means. If a Supervisory Committee member is unable to attend, students may Change Supervisory Committee Member if approved by the Department. The substitute Supervisory Committee member should be given sufficient time to read the Doctoral Dissertation or Master's Thesis and prepare for the Final Oral Defense Examination. A minimum of two weeks is recommended.

Assessment of the Final Examination

The Master's Program Coordinator will assess the written Final Examination for all non-thesis M.S. and M.E. students. For non-thesis M.S. and M.E. students conducting Research in the Department, the Master's Program Coordinator may consult with the Research Adviser about the content and organization. The Supervisory Committee will assess the written and oral portions of the Final Examination for Ph.D. and master's students completing a Master's Thesis.

The written portion of the Final Examination will be assessed for its organization, understanding of the relevant literature and pertinent research problem, the analysis of experimental results, and the use of citations, language, and grammar. The oral portion of the Final Examination will be assessed for the ability of the student to demonstrate fundamental knowledge of basic chemical engineering principles and aspects related to the research topic, describe the research problem and the methods required, ability to prepare visual aids, clarity of oral presentation, and ability to respond to questions.

Based on the combined performance of all aspects of the Final Examination, the Supervisory Committee will evaluate the overall quality of the exam as satisfactory or unsatisfactory, and accordingly award a Pass or a Fail grade. A student that does not pass on their first attempt may be allowed a second attempt of the Final Oral Defense Examination on the advice of the Supervisory Committee and discretion of the Associate

Chair for Graduate Studies. The retaken exam must take place in the subsequent semester. A student who does not pass the retaken examination will not be allowed to continue in the Ph.D. program and must terminate with a master's degree or withdraw from the program. In very limited and unusual circumstances, students may request to delay the first or second attempt. Requests to defer the examination must be made through the Petition process. Students should make every effort to follow the required schedule as exceptions to this rule are extremely rare. **Note: failing to pass the Final Examination on time may result in the loss of stipend support.**

Satisfactory performance on this examination and adherence to all Graduate School regulations outlined above complete the requirements for the degree. The Supervisory Committee and other designated faculty sign the Doctoral Dissertation or Master's Thesis signature pages.

Leaving Campus before Completion of Final Examination

Students may consider leaving the Department to accept employment before their Master's Thesis or Doctoral Dissertation is completed and accepted by the Graduate School. However, a graduate student must have completed all other degree requirements and must register for the minimum Registration Requirements each semester following departure from campus. Graduate students will be financially responsible for paying the cost of tuition each semester.

REGISTRATION & COURSEWORK

The Department of Chemical Engineering offers an exciting range of graduate courses that encompasses a broad range of topics. The course requirements for graduate students are kept to a minimum so that students have freedom in developing their own programs of study.

Registration Requirements

Registration for all coursework should be done after consulting with the Graduate Academic Adviser and your Faculty Academic Adviser. All students are urged to complete their coursework as expeditiously as possible. After consulting with your Faculty Academic Adviser, students may consider broadening their education by taking more than the minimum number of courses.

Full-time registration is considered to be 9 credits in the Fall and Spring semesters. The registration requirement for the Summer C semester is reduced to 6 credits. Registration for fewer than 9 credits may be considered equivalent to full-time enrollment for an Internship if approved by the Graduate School prior to the semester. The minimum registration for graduate students is 3 credits in the Fall and Spring semesters and 2 credits in the Summer C semester. International students or students with financial aid or external support may have other requirements to maintain full-time registration.

Ph.D. students with a Graduate Assistantship are required to register for 9 credits in the Fall and Spring semesters and 6 credits in the Summer C semester. Students on appointment are financially liable for credits in excess of the required number. If a student with a Graduate Assistantship drops below the required registration at any time in the semester, the student becomes financially liable for the entire registration. Students who do not register properly are not permitted to remain on appointment.

Registration Process

Holds are placed on all students each semester until they consult and receive consent from their Faculty Academic Adviser. Registration forms are required and should be submitted to the Graduate Academic Adviser before the start of the semester. After receiving the signed form, the Graduate Academic Adviser will register students in the course. Students can view available courses at https://one.uf.edu. Students need to register on time to avoid unnecessary late registration fees. Registration may be restricted if a student is not maintaining Satisfactory Progress. Ph.D. students with Graduate Assistantships making Satisfactory Progress towards their degree will have their tuition paid by their Research Adviser. However, it is the student's responsibility to make sure that other fees are paid by the fee deadline.

Students must be registered for classes and their fees paid by approximately the second week of the semester. Specific registration and payment deadlines for each semester can be found at https://catalog.ufl.edu/UGRD/dates-deadlines/. Students need to pay any fees by the fee payment deadline, even if a tuition waiver has not been processed. Registration holds and late fees can be seen at https://www.student.ufl.edu.

A Tuition and Fee Calculator is also provided at http://www.fa.ufl.edu/bursar/current-students/.

Course Credit

Courses listed at 5000 and above are considered graduate-level courses limited to graduate students. Courses numbered 7000 and above are designed primarily for Ph.D. candidacy students, who have passed their Candidacy Examination.

In general, graduate courses may not be repeated for additional credit. However, selected courses are designed to be taken multiple semesters. Students should note that some of these repeatable courses are subject to a maximum number of credit hours (see Course Descriptions).

Master's students can take *Engineering Graduate Research* (EGN 6913) to conduct research but *Research for Master's Thesis* (ECH 6971) cannot count towards Master's non-thesis degrees. *Advanced Research* (ECH 7979) and *Research for Doctoral Dissertation* (ECH 7980) are not eligible to count toward any master's degree program.

In order to ensure that a student has comprehensive understanding of the curriculum and their chosen research field, the Associate Chair for Graduate Studies or Faculty Academic Adviser may suggest course(s) to enhance this student's education to the benefit of that student and their matriculation and experience through the graduate program. For these select cases, 3000 level courses **outside** of chemical engineering could be potentially credited towards the graduate degree with an approved Petition prior to enrollment. If a student elects to enroll in an undergraduate course without approval, they may be liable for the fees of the course and it will not count towards their degree.

Course Restrictions and Classifications

Graduate students should note that there are limitations to the number of credits for many courses, especially Research and Individual Work Courses. Master's students may register for a maximum of 2 credits of any seminar courses. Master's students completing a Master's Thesis may register for a maximum of 6 credits of *Research for Master's Thesis* (ECH 6971); however, this course cannot count towards Master's non-thesis degrees. *Advanced Research* (ECH 7979) and *Research for Doctoral Dissertation* (ECH 7980) are not eligible to count toward any master's degree program. Note that the total credits taken from all seminar and Research and Individual Work Courses cannot exceed 9 credits.

Course Descriptions

Core Chemical Engineering Courses

Integrated introduction to transport processes in continuous media with emphasis on fluid mechanics and heat and mass transfer.

ECH 6272: *Molecular Thermodynamics* **(3 credits)**

Statistical mechanics and microscopic explanation of macroscopic laws of classical thermodynamics, transport phenomena, and chemical kinetics. Statistical mechanical theories that connect molecular structure to macroscopic properties.

ECH 6506: *Chemical Engineering Kinetics* **(3 credits)**

Fundamental aspects of chemical reactors, including collision theory, transition rate theory, unimolecular rate theory, homogeneous gas and liquid phase kinetics, and heterogeneous kinetics.

ECH 6526: *Reactor Design and Optimization* **(3 credits)**

Fundamentals of heterogeneous reactor design including the characterization of catalytic reactions and support, the development of global rate of the intrinsic reaction affected by chemical and physical deactivation of catalyst, intraphase and interphase mass and heat transfer, and the design and optimization of various types of heterogeneous reactors.

ECH 6847: *Advanced Mathematics for Chemical Engineering* **(3 credits)**

Methods of linear systems, chemical engineering applications in finite and infinite dimensional spaces, concepts of stability, application to transport phenomena.

ECH 6937: *Advanced Chemical and Biological Processing Lab* **(3 credits)**

Basic training in polymer, chemical and bio-based processing techniques. The course aims to expand the students' ability in hands-on experiments, report writing, and oral presentation. Upon accomplishing the course, students are expected to have basic technical skills and understanding of physicochemical processes.

ECH 6926: *Graduate Seminar* **(req'd for Ph.D. every semester except first; max: 2 for MS/ME)**

Develop a diverse and fundamental understanding of chemical engineering principles through invited seminar presentations from experts at UF and other institutions.

Chemical Engineering Electives

In addition to the courses listed below, students may take any Core Chemical Engineering Courses that are not part of their degree requirements as a Chemical Engineering Elective.

ECH 6937: *Topics in Chemical Engineering* **(3 credits; repeatable)**
Special topics in Chemical Engineering. This course is used for new electives from Chemical Engineering faculty.

ECH 6225:*Electron Transport Phenomena in Semiconductors* **(3 credits)**
Application of fundamental chemical engineering concepts of transport phenomena (e.g., fluid, heat, and mass) to the principles of electron transport in solid-state semiconductors. Special emphasis will be placed in relating electronic transport to fundamental chemical and material properties.

ECH 6326: *Computer Control of Processes* **(3 credits)**
Introduction to digital computers, sampled data systems and Z-transforms, control of multiple input-multiple output systems, optimal control, state estimation and filtering, and self-tuning regulators.

ECH 6709: *Electrochemical Engineering Fundamentals and Design* **(3 credits)**
Fundamentals of electronics and ionics applied to systems of interest in electrochemical engineering.

ECH 6726: *Interfacial Phenomena I* **(3 credits)**
Introduction to the forces responsible for unique physical properties at interfaces, including wetting phenomena, the adsorption of polymers and surface-active molecules at interfaces, and the structure of these solutions.

ECH 6727: *Interfacial Phenomena II* **(3 credits)**
Discussion of the forces responsible for unique physical properties at solid-liquid interfaces and their application in various engineering problems. Topics include the role and application of colloids, spreading of liquids on surfaces, lubrication, flotation, and nanomaterial synthesis.

ECH 6828: *Polymer Science & Engineering for Chemical Engineers* **(3 credits)**
An overview of polymer science and engineering for chemical engineers. Special emphasis will be placed on polymer research in chemical engineering derives its engineering relevance from answering fundamental questions underlying polymerization, polymer phase separation, and processing technology.

ECH 6843: *Statistics and Design of Experiments for Chemical Engineers* **(3 credits)**
Statistical design of experiments and treatment of data, including regression analysis, interpolation, and integration applied to chemical engineering problems.

ECH 6851: *Impedance Spectroscopy* **(3 credits)**
Intended for chemists, physicists, materials scientists, and engineers with an interest in applying electrochemical impedance techniques to study a broad variety of electrochemical processes.

ECH 6716: *Managing Safety in the Chemical Industry* **(3 credits)**
XXX

ECH 6845: *Chemical Process Data Science* **(3 credits)**
Introduction to fundamental data science visualization methods and algorithms, with a strong emphasis on applications in science and technology.

ECH 6837: *Complex Fluids* **(3 credits)**
Introduction to complex fluids, with a focus on microhydrodynamics.

ECH 6728: *Material Self-Assembly Over All Length Scales* **(3 credits)**
Students introduced to interdisciplinary nanoscience and nanotechnology. It shows how nanometer and micrometer scale building blocks with a variety of shapes, compositions and surface functionalities can be assembled spontaneously into unprecedented and functional nanostructures.

ECH 6537: *Molecular Understanding of Catalysis* **(3 credits)**
Concepts of catalysis will be discussed including techniques of catalyst synthesis, characterization, and kinetic testing. Hands-on use of computational tools will assist in understanding catalysis at the molecular level.

ECH 6275: *Nanoscale Transport* **(3 credits)**
Introduction to theoretical concepts and approaches that describe nanoscale mass diffusion and its relevance to chemical engineering problems.

ECH 6836: *Semiconductor Device Fabrication Principles for Chemical Engineers* **(3 credits)**
Provide students with knowledge in semiconductor material characterization and device fabrication techniques and the role that chemical engineers have in many of these processes.

ECH 6538: *Surface Science* **(3 credits)**
The principles of adsorption and reactions on solid surfaces, focusing on the surfaces of metals, semiconductors and insulators will be covered. We will discuss surface structure and the nature of molecule binding on solid surfaces, including aspects of the electronic structure of solid surfaces. We will cover adsorption isotherms, adsorbate phase behavior, and the kinetics of adsorption onto solids. Lastly, we will discuss trends in surface reactivity as well as the mechanisms and kinetics of surface reactions. The course provides particular emphasis on developing quantitative descriptions of the rates of adsorption and reactions on surfaces.

ECH 6502: *Research Methods in Chemical Engineering* **(1 credit)**
Methods, mechanics, and best practices of planning, performing, documenting, and disseminating independent engineering research.

ECH 6716: *Managing Safety in the Chemical Industry* **(3 credits)**
The importance of chemical properties, including transport properties, fluid dynamics, turbulence, thermodynamics, and kinetics, in safety analysis. Application of applied mathematics and computational methods in the assessment of safety in separation processes, reactor design, particulate systems, biochemical and electrochemical systems.

Approved Chemical Engineering Electives

The Department has approved the following courses to be treated as a Chemical Engineering Elective if taught by Chemical Engineering Faculty.

BME 6221: *Biomolecular Cell Mechanics* **(3 credits)**
Biomolecular basis of cell mechanics and cell motility, emphasizing quantitative models and systems-biology approaches.

BME 6322: *Dynamics of Cellular Processes* **(3 credits)**
Develops research skills, including generation of questions, hypotheses testing, reporting, interpretation, and discussion of findings.

BME 6644: *Pharmacokinetics* **(3 credits)**
Basic pharmacokinetic and pharmacodynamic concepts and models. Use of these concepts in the drug discovery process.

Research and Individual Work Courses

Master's students may discuss Research and Individual Work opportunities with Graduate Faculty. Only after the consent of a Graduate Faculty member, can a master's student register for *Individual Work* (ECH 6905) or *Engineering Graduate Research* (EGN 6913) with that faculty member. Students must discuss the expectations and responsibilities with the faculty member before registering. These courses are department controlled and registration can only be completed by contacting the Graduate Academic Adviser. The Graduate Academic Adviser will provide forms that need to be completed and signed by the Graduate Faculty member prior to registration. **All students conducting Research in a laboratory must be registered for research credits or be employed by the University.**

Alternatively, students can enroll in *Practicum/Internship/Cooperative Work Experience* (EGN 5949) to complete a semester Internship with a sponsoring company or U.S. government laboratory. Master's students conducting Research and Individual Work are expected to write their final Report on the Research or Internship activities undertaken during the course.

Ph.D. students must register for *Advanced Research* (ECH 7979) before passing the Candidacy Examination and for *Research for Doctoral Dissertation* (ECH 7980) after passing the Candidacy Examination.

Although students may only be registered for a few research credits in a given semester, they are expected to devote their full effort towards their research to continue making Satisfactory Progress.

ECH 6905: *Individual Work* **(1 – 6 credits; max: 7)**
Independent study to gain knowledge of a topic not offered in other coursework that is guided by an instructor. Not intended to provide credit for supervised research.

EGN 5949: *Practicum/Internship/Cooperative Work Experience* **(1 – 6 credits; max 6)**
Practical cooperative engineering work under approved industrial and faculty supervision.

EGN 6913: *Engineering Graduate Research* **(0 – 3 credits)**
Course will provide the student with supervised research in a laboratory setting.

ECH 6940: *Supervised Teaching* **(1 – 5 credits; 4 req'd for Ph.D. students, max 5)**
Practicum course to provide students with supervised teaching experience on developing effective instructional methods and materials in engineering education.

ECH 6971: *Research for Master's Thesis* **(1 – 15 credits; max: 6; S/U)**
Research for Master's students approved to complete a thesis.

ECH 7979: *Advanced Research* **(1 – 12 credits; repeatable; S/U)**
Research for doctoral students before admission to candidacy. Designed for students with a master's degree in the field of study or for students who have been accepted for a doctoral program. Not appropriate for students who have been admitted to candidacy.

ECH 7980: *Research for Doctoral Dissertation* **(1 – 15 credits; repeatable; S/U)**
Research for doctoral students admitted to candidacy.

Technical Electives

Any courses listed at 5000 and above within the HWCOE (exceptions listed below) are acceptable for the remaining credits. Students may prepare a Petition for courses outside the HWCOE.

Non-Technical Electives

Some courses do not contain adequate technical content. The Department recognizes the importance of these courses but strongly believes that an advanced degree should have adequate technical content. Therefore, students are allowed to count up to 6 credits from the following courses.

EGN 6640: *Entrepreneurship for Engineers* **(3 credits)**
Introduction to entrepreneurship, idea generating and feasibility analysis, and business planning. Lectures, case studies, student-led discussions, team business plans, and investor presentations.

EGN 6642: *Engineering Innovation* **(3 credits)**
Concepts of innovative thinking and innovation practices. Using lectures, case studies, team exercises, and guest speakers, the course teaches life skills in innovative thought and action that students can use in careers ranging from starting companies to executing R&D projects in large companies.

EGN 6937: *Engineering Fellowship Preparation* **(1 credit)**
Engineering Fellowship Preparation will instill in students an understanding of the fellowship and grant process.

EGS 6039: *Engineering Leadership* **(3 credits)**
Concepts, theory and practice of engineering leadership; effective written and oral communications and presentations; engineering leadership characteristics, individual differences and self-awareness; developing and building teams; managing change, conflicts, and crises; and understanding real-world ethics and core values.

EGS 6050: *Foundations in Engineering Education* **(2 credits)**
An introduction to fundamental issues, questions, and approaches to engineering education.

EGS 6101: *Divergent Thinking* **(3 credits)**
Focuses on student acquisition of divergent thinking skills to support the engineering design process. It emphasizes the importance of student practices such as observing, questioning, learning and experimenting, and stresses cultivating an openness to new experiences, in order to generate ideas and devise solutions to complex design problems.

EGS 6626: *Fundamentals of Engineering Project Management* **(3 credits)**

Provides engineering students with a comprehensive understanding of how to plan, optimize and efficiently manage projects (or tasks) to implement products, services or developments. This includes building the structure, processes, components and linkages with a team for successful project delivery within schedule, budget and quality requirements.

EGS 6628: *Applied Engineering Project Management* **(3 credits)**

Applied Engineering Project Management expands on foundational project management practices to include complex as well as new project delivery concepts. Topics include project acquisition; negotiation skills; advanced risk planning and management; program management; project.

EGS 6681: *Advanced Engineering Leadership* **(3 credits)**

Designed to further develop the leadership framework and capabilities of graduate engineering students. It involves a case study-based instructional approach that reviews and applies strategic leadership concepts and knowledge critical to the success of engineering-based companies that now operate in a highly uncertain and volatile business environment.

Course Grades and Grade Point Average (GPA)

The only passing grades for graduate students are A, A-, B+, B, B-, C+, C, and S. All letter graded courses taken as a graduate student are used in calculating the cumulative GPA. Letter grades of C-, D+, D, D- or E are not considered passing at the graduate level, although the grade points associated with these letter grades are included in GPA calculations. Per Graduate School rules, grades earned for undergraduate courses outside the Department will automatically count towards the student's overall GPA (up to the first 6 credits), regardless of whether it counts towards their degree. Grade points are not designated for S and U grades and are not used in calculating the GPA; however, a grade I (incomplete) will convert to a 0.0 credit if not changed within 1 semester.

Add/Drop Courses

Courses may be dropped or added during the drop/add period without penalty; however, students with Graduate Assistantships must clear these changes with their Research Adviser prior to modifications. This period typically lasts five calendar days (two days for Summer sessions) beginning with the first day of the semester (exact dates available on https://student.ufl.edu). Classes that meet for the first time after the drop/add period may be dropped without academic penalty or fee liability by the end of the next business day after the first meeting of the class. Note that this does not apply to laboratory sections. After this period, a course may be dropped and a W will appear on the transcript. Students are financially liable for the full cost (credit and fees) for any course added or dropped after the deadline. This includes students with tuition waivers, as these waivers cannot be used for credit modifications after the drop/add window. If a student on a Graduate Assistantship drops credit(s) that reduce their course load below the enrollment requirements for their appointment, they will be held fully liable for the entire cost of the courses (credit and fees), not just the cost of the dropped credits. Further, their appointment will be automatically terminated, as full-time enrollment is a stipulation of most Fellowship or Graduate Assistantships. Discuss the ramifications of course adjustments with the Graduate Academic Adviser, Research Adviser, Associate Chair for Graduate Studies, or Human Resources prior to modifying your course schedule.

Retaking Courses

Graduate students may only retake a non-repeatable course once in which they earn a failing grade. According to Graduate School Policy, grade points from both the initial failed attempt and the first attempt earning a grade of C or better are included in computing the GPA. Students receive credit for the satisfactory attempt only.

Transfer of Credits from Other Institutions

Students may Petition to transfer credits from institutions approved by the University towards their degree requirements. Only graduate-level courses (equivalent to course numbers 5000-7999) with a grade of B or better are eligible for transfer of credit. For Ph.D. students, a maximum of 30 transfer credits is allowed. For M.S. students, a maximum of 9 transfer credits is allowed. Some of these transferred credits may be used to satisfy required coursework. Credits transferred from other institutions are applied toward the degree requirements but grades earned are not computed in the student's GPA. All work, including transferred credits, counted toward the degree must be completed during the seven years immediately preceding the date which the degree is awarded.

A Petition for transfer of credit requires submission of full course materials, including the contact information of the course instructor. Each Petition should be sent to the Graduate Academic Adviser for review during the first term of enrollment for Master's students and before the third term of enrollment for Ph.D. students. The pertinent course instructor and the Graduate Program Committee will evaluate the

submitted materials. Final acceptance of credit transfers requires approval from the Associate Chair for Graduate Studies and the Dean of the Graduate School.

Florida State Residency

Eligible Ph.D. students (i.e., those who receive tuition waivers and who are U.S. citizens, permanent resident aliens, or legal aliens granted indefinite stay by the Immigration and Naturalization Service) may become in-state residents for tuition purposes. Students should begin the process of establishing Florida residency as soon as possible. GRACE can provide students with advice on how to prepare the correct documentation.

DEGREE ENHANCEMENTS

The University of Florida has other degree options to enhance the educational experience of graduate students. Students interested in pursuing these options should discuss them with their Faculty Academic Adviser.

Concurrent Degree

Graduate students who wish to enroll in a concurrent degree program must obtain the appropriate forms from the Graduate School. **The Associate Chair for Graduate Studies will sign these forms only after consulting the Department Chair and after the student's Faculty Academic Adviser has given written approval for the student to enroll in the concurrent degree program**. A copy of all communications regarding the application for the program will be maintained in the student's graduate records with the Graduate Academic Adviser.

Minor Degree

With the Supervisory Committee approval, graduate students may choose one or more Minor degrees. Minor work may be completed in any academic unit outside the Chemical Engineering degree if approved for Master or Ph.D. programs in the Graduate Catalog. If a Minor degree is pursued, it must be approved by the minor department and one member of the Supervisory Committee must be from the minor department. If one minor is chosen, the Supervisory Committee member representing the minor or the minor department suggests the appropriate coursework.

For Ph.D. students, 12 to 24 credits of courses numbered 5000 or higher are taken as preparation for an Oral Qualifying Examination. Part of the credits may have been earned while the student was enrolled in a master's degree program. If two Minor degrees are chosen, each must include at least 8 credits. Competence in the minor is demonstrated by a written examination by the minor academic unit or by the Oral Qualifying Examination, as defined by the established procedures of the minor department. Minor course work at the Ph.D. level may include courses in more than one academic unit if the objective of the Minor degree is clearly stated and the combination of courses is approved by the Graduate School (this approval is not required for a Minor degree in one academic unit).

For M.S. and M.E. students, at least 6 credits of courses numbered 5000 or higher are required. If two Minor degrees are chosen, each must include at least 6 credits. Competence in the minor is demonstrated by a written examination by the minor academic unit or by the Oral Qualifying Examination, as defined by the established procedures of the minor department.

Certificate Programs

The Graduate Certificate Program is a formal collection of courses that together form a coherent program of study offered through an academic unit. A Graduate Certificate is an academic credential granted by the University of Florida in recognition of the acquisition of knowledge and skills in a given field of study. As such, all Graduate Certificates must follow the requirements of admission, successful completion of approved graduate-level coursework, application to receive the credential, and enrollment during the term in which the certificate is awarded and posted to the transcript. For the list of available Graduate Certificates, please visit the Graduate School's website.

POLICIES & PROCEDURES

Chemical Engineering Forms

The department has created a Teams channel that contains a lot of information about procedures and forms. Students should use this site to access the latest forms required for specific procedures.

https://uflorida.sharepoint.com/teams/ChemicalEngineeringGraduateProgram/SitePages/Forms.aspx

Room Reservations

Graduate students may need to reserve a room for research presentations or other department-related events. To make a reservation in the Department conference rooms, graduate students should contact the Main Office of the Chemical Engineering Department. Students wishing to reserve other rooms across campus should seek the responsible authority. Our students sometimes use the Particle Science & Technology Building when the Department conference rooms are unavailable.

Petitions

Graduate students are expected to be familiar with the program requirements described in both the Graduate Catalog and this Handbook. If a student seeks to deviate from any guideline from either document, they must submit a formal Petition to the Graduate Academic Adviser for a waiver, deferment, or alleviation of consequences associated with that deviation. Note that a Petition must be appropriately justified. Examples of a typical Petition include enrollment of courses outside the HWCOE (in advance of course enrollment); deferment in Research Proposal or Oral Qualifying Examination; and deferment of Supervised Teaching requirements.

A Petition must be formally approved prior to enforcement. It is always advisable to request a Petition in advance (prior to the deviation) to avoid consequences if the Petition is denied. When filing any request, graduate students should consult with the Graduate Academic Adviser regarding their academic needs or concerns, as well as to procure the appropriate forms for this formal Petition.

Students must complete the required form to start the petition process. The approval process for the Petition depends on the nature of the request. A Petition to department policies described in this Handbook will be reviewed by the Associate Chair for Graduate Studies and, depending on the nature of the Petition, sent to the Graduate Program Committee for full committee vote. For deviations from Graduate School guidelines, Petition requests are more stringent and must be approved first by the Department, then HWCOE, and then the Graduate School. Note that the Graduate School rarely permits guideline deviations and only under extraneous circumstances. Furthermore, some guidelines (e.g., graduation, GPA requirements, and total credit hour requirements) cannot be petitioned.

Leave Policy

The Department of Chemical Engineering follows the established policies within the Graduate Assistants United (GAU) Collective Bargaining Agreement (CBA) with the University of Florida. More details can be found at https://www.ufgau.org/cba.html.

Personal Time

Graduate students are not obligated to work on official UF holidays (check academic year calendar), which typically includes Martin Luther King Day, Memorial Day, Independence Day, Labor Day, UF Homecoming, Veterans Day, Thanksgiving, and the week between Christmas and New Year's Day. In addition, Graduate students should not come to campus during any declared emergency.

Graduate Assistants do not have separate vacation and sick days. Any other leave from campus is considered personal time and must be recorded/tracked and must be pre-approved by the Graduate Assistant's

Research Adviser by signature on the Leave Form, which is to be completed and submitted to the Graduate Academic Adviser. The form includes contact information during the Graduate Assistant's absence that must be provided in the event that an emergency should develop. Following the CBA, personal time for any reason is paid to Graduate Assistants for up to five (5) days per semester; it is not cumulative and cannot be rolled over into another semester. Each Graduate Assistant shall be credited with five (5) days at the beginning of each semester and shall use leave in increments of not less than one (1) day. For example, a Graduate Assistant scheduled to work six (6) hours on Monday and three (3) hours on Tuesday, who is unable to perform assigned duties on these days, would be charged with two (2) days of personal time regardless of FTE appointment or number of work hours scheduled. However, the Research Adviser has the authority to work with the Graduate Assistant to modify their work schedule so that work is completed without using personal time. These arrangements must be agreed upon prior to any leave from the Graduate Assistant responsibilities.

Leave of Absence

An unpaid Leave of Absence may be granted under extraordinary circumstances and a Petition must be approved by the Graduate Program Committee prior to petitioning the Graduate School. Students should ensure that the Graduate Program Committee has sufficient time to evaluate their request prior to any Graduate School deadline.

Changes to Your Degree Program

Changes to the Degree Program may have a significant impact on immigration and employment status. It is highly recommended that students discuss any possible changes with the Associate Chair for Graduate Studies before proceeding.

Change from Ph.D. to M.S. Degree Plan

Graduate students originally admitted to the Ph.D. program may wish to change their trajectory towards a M.S. degree. If the student wishes or needs to leave before the completion of the Ph.D. degree and meets the requirements for the M.S. degree set by the Department and Graduate School, then the decision to grant a M.S. degree will be made in mutual agreement between the student and the Research Adviser.

Change or Continuation from M.S. to Ph.D. Degree Plan

M.S. students who demonstrate exceptional understanding of chemical engineering fundamentals and outstanding progress in research achievements may advance to the Ph.D. program when there are available opportunities. Typically, M.S. students are admitted to the Ph.D. program to continue conducting Research with the same Research Adviser. However, M.S. students may seek a new Research Adviser for their Ph.D. degree requirement. To be considered for the Ph.D. program, M.S. students are encouraged to re-submit their application materials directly to the Ph.D. Recruitment Coordinator before December 5, but after completion of the three core courses (*Transport Phenomena*, *Molecular Thermodynamics*, and *Advanced Mathematics for Chemical Engineering*). Applications will be considered against those of the other new Ph.D. applicants and decisions will be made based on student credentials and the projected number of available projects. In addition to the typical credentials for admission (undergraduate GPA, GRE, etc.), the Graduate Admissions Committee will consider performance in the M.S. program and recommendations from Chemical Engineering Faculty.

Change from Non-Thesis to Thesis Degree Plan

All M.S. and M.E. students are admitted to the non-thesis program. Students with a strong interest in conducting Research may choose to complete a Master's Thesis for their degree. Once a Research Adviser

has agreed to mentor your Master's Thesis, contact the Graduate Academic Adviser to transfer to the Thesis program.

Change from Thesis to Non-Thesis Degree Plan

M.S. and M.E. students may choose to covert back from the Master's Thesis to the non-thesis option upon approval of the Research Adviser. A maximum of 3 credits earned with a grade of S in *Research for Master's Thesis* (ECH 6971) can be counted toward the degree requirements only if converted to credit as A, A-, B+, or B in *Individual Work* (ECH 6905). The Supervisory Committee must indicate that the work was productive in and by itself and that the work warrants credit as a special problem or special topic course.

Continuation from M.E. to Ph.D. Degree Plan

M.E. students who intend to apply to the Ph.D. program must (without exception) complete the Undergraduate Coursework requirements before they receive funding and begin their doctoral program requirements. Such students are strongly advised to adhere to the suggested program of study given above. Typically, M.E. students are admitted to the Ph.D. program to continue conducting Research with the same Research Adviser. However, M.E. students may seek a new Research Adviser for their Ph.D. degree requirement. To be considered for the Ph.D. program, M.E. students are encouraged to re-submit their application materials directly to the Ph.D. Recruitment Coordinator before December 5, but after completion of the three core courses (*Transport Phenomena*, *Molecular Thermodynamics*, and *Advanced Mathematics for Chemical Engineering*). Applications will be considered against those of the other new Ph.D. applicants and decisions will be made based on student credentials and the projected number of available projects. In addition to the typical credentials for admission (undergraduate GPA, GRE, etc.), the Graduate Admissions Committee will consider performance in the M.E. program and recommendations from Chemical Engineering Faculty.

Change Supervisory Committee

Graduate students may seek to change their Supervisory Committee prior to Final Examination. Students should read this section carefully before proceeding.

Change Research Adviser

Sometimes Research does not proceed according to the expectations of the student, the Research Adviser, or both. Rare situations may arise where a student wishes to change the research group due to irreconcilable personality conflicts with the Research Adviser or differences in opinion about the overall research direction.

Changing Research Adviser is an important decision that can significantly impact your academic progress as well as the Research Adviser's research program. Early recognition of the possibility of switching topics and/or Research Adviser is an important factor in successfully managing this process. The best approach to accomplish this task is to adopt an attitude of respect and professional courtesy to your Research Adviser. Students should notify their Research Adviser of their desire to change research groups as soon as possible. **Unless conduct is a factor, the student should make an effort to work through differences with their Research Adviser and explore possible options for addressing the student's concerns and reconciliation before making a final decision**.

Students are encouraged to seek advice from a peer or the Associate Chair for Graduate Studies to assess your needs and determine whether a different Research Adviser would be good for you, particularly if you are attempting to change Research Adviser towards the final phase of your degree program. However, it is inappropriate for the student to speak to other Chemical Engineering Faculty members about the situation or their intention prior to consultation with the Research Adviser or the Associate Chair for Graduate Studies.

If the student and Research Adviser are in mutual agreement that a change of research group is appropriate, the student should contact the Associate Chair for Graduate Studies for consultation and assistance. The process for changing Research Adviser depends on the degree program.

Master's Students: If Master's students have appointed positions, they must follow the procedure outlined for Ph.D. Students. Otherwise, Master's students should work with the Research Adviser to prepare a Transition Plan before finalizing a change in Research Adviser.

Ph.D. Students: Most Ph.D. students are financially supported by research grants secured by the Research Adviser. Since the research grant has a fixed duration, changing the assigned student in the middle of the project may have negative impacts on the student, the specific project, the Department, and the University. For this reason, the Ph.D. student is expected to take ownership of the project and make the best effort to complete the project before they move to another project. The Department does not have a budget to support students, which is why the student signs a Letter of Appointment (LOA) as a contract to work for their Research Adviser for that semester. Therefore, the student should make every effort to continue to work in the laboratory of their Research Adviser until the end of the semester. Students should note that leaving a Research Adviser before a formal transition may jeopardize their stipend and the student may be responsible for the entire cost of tuition during the semester. If the student and Research Adviser have attempted reconciliation and have a mutual agreement that a change is appropriate, they should begin developing a Transition Plan. If the student and Research Adviser are unable to reach an agreement, the student should meet with the Associate Chair for Graduate Studies, who will help develop a Transition Plan to bring the ongoing research efforts to a reasonable state of completion.

Transition Plan: The student and Research Adviser should discuss and arrange a timeframe for completing any remaining work before the change of Research Adviser takes place. Students are reminded to be professional at all times during the transition period. Avoid doing or saying anything that could have negative ramifications for your future. The Transition Plan should include an agreement about the remaining financial responsibility of the Research Adviser if appropriate.

After the Transition Plan is implemented, the Associate Chair for Graduate Studies will work with the student in identifying a new Research Adviser. When talking with a potential Research Adviser, it is recommended that students focus discussions on their interests and goals and not on negative incidents or difficulties. In all cases, it is the student's responsibility to meet with interested faculty members to try to identify a new Research Adviser. If the student cannot find a faculty member willing to serve as their Research Adviser, the student will need to consider other options, including the pursuit of a graduate degree in another program.

After students have identified a new Research Adviser and brought their prior research to a reasonable state of completion, students should complete or update any paperwork that contains information about their Research Adviser.

Change Supervisory Committee Member

Graduate students may seek to change an existing Supervisory Committee member. Students should consult with their Research Adviser and the Graduate Academic Adviser about the change. Changes to a student's committee are allowed until the midpoint of the term of degree award if the defense has not occurred. No changes are allowed after the defense.

Internships

The Department does not have a formal Internship program but many students often gain practical experience by working with a sponsoring company or U.S. government laboratory. Students are encouraged to take advantage of Internship opportunities if it enhances a student's research or enriches the student's graduate education in some other specific manner.

Planning for an Internship should be done with the full knowledge and cooperation of the Faculty Academic Adviser. Students should plan Internships to start and end in concurrence with either Fall, Spring, or Summer semester starting and ending dates. If a student starts or ends an Internship after a semester has started, it is generally not possible to pay the student as a Graduate Assistant during that semester. Thus, it is very important to plan Internships in advance and make every effort to have them coincide with the semester start and end dates.

Students may receive up to 3 credits for an Internship (40 hours per week for entire semester) by registering for *Practicum/Internship/Cooperative Work Experience* (EGN 5949). Students with a Graduate Assistantship need to have permission from their Research Adviser before the start of the Internship. These students should also contact Human Resources for information on how an Internship may affect their stipend, tuition, and healthcare benefits. The Associate Chair for Graduate Studies will review these requests. The Graduate Academic Adviser will register students for the course.

International students should note that employment for F-1 and J-1 students is limited and working without permission is a violation of status and a deportable offense. Curricular Practical Training (CPT) instructions and registration requirements can be found at http://www.ufic.ufl.edu. Note that F-1 students will be responsible for course registration during the semester working under CPT as well as tuition payment.

UNIVERSITY OF FLORIDA STUDENT SUPPORT SERVICES

Students are welcome to meet with the Associate Chair for Graduate Studies for any reason, especially if they unsure on how or where to get the services they need. In some cases, these situations may be so significant that it prevents a student from making Satisfactory Progress in classes or research. In these extreme cases, students may consider a Leave of Absence. Students should discuss a Leave of Absence candidly with their Research Adviser, the Associate Chair for Graduate Studies, and/or the Dean of Students Office.

Graduate Student Wellness Services

Graduate students may experience health problems (sickness, injury, mental health, etc.), legal problems, or upsetting major life events, such as the death of a family member, during graduate school. Students may also struggle to cope effectively with the stresses encountered in graduate school. Graduate student wellness encompasses 8 dimensions, including physical, emotional, intellectual, spiritual, environmental, occupational, financial, and social wellness. The University of Florida has numerous resources to help students with these stressful situations, including:

GatorWell

352·273·4450
http://gatorwell.ufsa.ufl.edu

As health education leaders at the University of Florida, GatorWell uses health promotion strategies to educate UF students about health and wellness topics relevant to the college experience. These strategies include health-related individual services, programming, advocacy and assessment. The GatorWell website includes resources and services specific to students.

GatorCare

352·392·2477
http://gatorcare.org/wellness/

GatorCare is a Direct Service Organization of the University of Florida established to reduce health care costs and promote access to quality health care and innovative health and wellness solutions for the employees, including Graduate Assistants. GatorCare provides numerous resources to help with all aspects of wellness.

U Matter, We Care

352·294·2273
https://umatter.ufl.edu/
umatter@ufl.edu

We want all students at the University of Florida to know that they have the power to take action for themselves and/or others. At UF, Care is not just an idea that we talk about but we demonstrate every day. Through big actions, small conversations, or longer support UF is dedicated to supporting students in their academic success and overall well-being.

Life can get difficult at times, especially while in college. Many students are faced with stressors and challenges that begin to impact their success as a student. These stressors can appear in many different forms: difficulty adjusting to university life, family issues, financial difficulties, accessing accommodations, etc. Our goal is to ensure that every Gator has the knowledge and path to connect to the appropriate resource on campus. UMatter We Care provides care-related programs and resources for students and employees. UMatter We Care also trains individuals to recognize the signs of distress and provide support and assistance.

Counseling and Wellness Center

352·392·1575
http://www.counseling.ufl.edu/cwc

The UF Counseling & Wellness Center (CWC) is a confidential resource that offers free counseling, workshops, biofeedback, crisis and emergency assistance, psychiatry, testing, and drug and alcohol support to students as well as resources

for faculty and staff in recognizing signs of distress and what to do in an emergency. The CWC also provides workshops, self-help resources, and community referrals.

University of Florida Student Health Care Center

352·392·1161
http://shcc.ufl.edu/

The Student Health Care Center is an outpatient clinic that provides primary and specialty care services as well as urgent care. The SHCC also provides access to campus and community healthcare resources and a variety of educational programs.

University of Florida Police Department (UFPD)

9·1·1 (emergencies)
352·392·1111 (non-emergencies)
updinfo@admin.ufl.edu

The University of Florida recognizes the importance for an institution of higher learning to develop and maintain a safe and secure environment in which the academic and social pursuits of its members can be fully realized. The University has the utmost concern for the success of each student and strives to give each student maximum freedom to live his/her life free from outside interference. UFPD is a state, nationally, and internationally accredited law enforcement agency established to provide the highest degree of safety and security possible for the University of Florida community. UFPD provides 24-hour per day patrol and protection of campus and local assets, enforcing all laws and ordinances. UFPD is committed to the prevention of crime and the protection of life and property. UFPD has a Criminal Investigations Division dedicated to investigating crimes occurring on our campus, a Bicycle Patrol Team, Critical Incident Response Team (CIRT), K-9 Team (Sergeant Davis and Gator), Motor Cycle Unit, Office of Victim Services, and specialized units responsible for duties unique to the campus environment.

Office of Victim Services (OVS)

9·1·1 (emergencies)
352·392·1111 (non-emergencies)
ovs@mail.ufl.edu

The Office of Victim Services (OVS) is a confidential resource that provides a crime victim advocate to anyone who has become a victim of crime while on the University of Florida campus. The victim advocate ensures that victims of crime receive fair treatment in accordance with the provisions of Florida State Statute 960. All services are free and confidential.

National Graduate Crisis

800·GRAD·HLP
http://gradresources.org/category/national-grad-crisis-line/

This non-profit center is available 24/7 and specifically accommodates graduate students in crisis. This organization is committed to supporting the emotional and spiritual needs of graduate and professional students across the United States and around the world so they can pursue their purpose with passion and determination.

University or College Services

Disability Resource Center

352·392·8565
https://disability.ufl.edu/
DRCAccessUF@ufsa.ufl.edu

The Disability Resource Center (DRC) serves as a resource for students with physical, learning, sensory or psychological disabilities and assists in facilitating and providing reasonable accommodations for students and providing services to address the impact of disabilities on student performance and success. The DRC provides an array of Academic Coaching and Support Services to assist students with disabilities, including Executive Functioning Skills, Academic Coaching, Reading Efficiency, Test Preparation, Study Skills, Test Anxiety, Learning Style Inventories, Academic Planning, Disability Management Support, and Post-Graduation Planning.

Multicultural & Diversity Affairs

352·294·7850
https://multicultural.ufl.edu/

The University of Florida Multicultural & Diversity Affairs is a department within the Division of Student Affairs. It provides a wide range of services, educational opportunities, learning, support, outreach, activities and engagement for students. Through transformative educational experiences and developmental opportunities, Multicultural and Diversity Affairs celebrates and empowers diverse communities and advocates for an inclusive campus for all students across identities.

Ombuds Office

352·392·1308
https://www.ombuds.ufl.edu/

The purpose of the Ombuds office is to assist students, staff, and faculty in resolving problems and conflicts that arise in the course of interacting with the University of Florida. By considering problems in an unbiased way, the Ombuds works to help students and staff find solutions to university related problems and concerns.

The role of the Ombuds is to serve as a resource and designated neutral party for students and staff who may have a university related concern or problem. Such problems may be related to grades, difference of opinion with instructors or co-workers, interpretation of university policies, or other administrative issues that may be of concern. The Ombuds will work with staff and students to interpret university policy, and help identify options and strategies for resolving issues. Students are advised to first contact the instructor, the department chairperson, and/or the college dean before seeking assistance from the Ombuds, although instances do exist where contact with the University Ombuds first is beneficial.

Title IX Office

352·273·1094
https://titleix.ufl.edu/
inform@titleix.ufl.edu

Title IX addresses sexual harassment, sexual violence, or any gender-based discrimination that may deny a person access to educational benefits and opportunities. Under Title IX, universities must ensure that all students and employees have equal access to education and educational facilities, regardless of gender, sexual orientation, or gender identity. Sexual harassment and sexual violence are forms of gender discrimination that are prohibited by Title IX, including when the incident(s) occur off-campus or involve people who are not students.

When a student or employee has experienced a hostile environment such sexual assault or severe, pervasive, and objectively offensive sexual harassment, universities must stop the discrimination, prevent its recurrence, and address its effects. This includes retaliation from other students, school administrators, or faculty. Universities must proactively prevent and respond to claims of sexual harassment, sexual violence, and other forms of gender-based violence, retaliation, discrimination, and must have an impartial and prompt process for investigating and adjudicating reported cases.

It is the policy of The University of Florida to provide an educational and working environment for its students, faculty, and staff that is free from all forms of sexual misconduct. In accordance with federal and state law, the University prohibits discrimination on the basis of sex. These behaviors will not be tolerated, and individuals who engage in such conduct will be subject to disciplinary action. Students, faculty, staff, contractors, and visitors are urged to promptly report any such behavior to the Office of Title IX Compliance.

Dean of Students Office

352·273·1261
https://dso.ufl.edu

The Student Conduct and Conflict Resolution Office, located within the Dean of Students Office, is the main university entity that works with students to resolve disciplinary matters and to make sure students receive fair treatment in all hearings. Students, faculty and staff who believe there has been a violation can contact this office to discuss

options available for reporting incidents to the appropriate authorities. Office staff can assist victims of assault or harassment by a University student. Staff also provides a variety of educational programs.

Career and Professional Development

Career Connections Center

The Career Connections Center offers a variety of services for career and professional development, including career planning, interview preparation, and the Molm Family Gator Career Closet.

352·392·1601
https://career.ufl.edu/
CareerCenter@ufsa.ufl.edu

FINAL TERM

Students are responsible for meeting all requirements and observing every deadline. The department has created Degree checklist forms to help students determine if they meet the requirements. Specific deadlines are published each semester in the Graduate Student Handbook and online at the Graduate School website. Major deadlines are posted on the Graduate Program Teams Homepage. **Rules for graduation are not waived for ignorance**.

All students must submit a Degree Application on ONE.UF before the published deadline of the term. Degree Applications do not carry over from one semester to the next. If the degree is not awarded, the student must (*i*) request that the Department remove their name from the current term degree list; (*ii*) re-apply for the degree award via ONE.UF in a subsequent term by the published deadline for that term; and (*iii*) meet all other requirements for the term in which the degree will be awarded. These requirements also apply when a thesis or dissertation student has been approved to Clear Prior by the Graduate School Editorial Office.

All students must also meet the minimum Registration Requirements for the term in which the degree will be awarded. During this term, the student must be registered for at least 3 credits in the Fall or Spring semesters and at least 2 credits in the Summer semester. These credits must count towards the specific degree and the courses cannot be an online course. M.S. or M.E. students completing a Master's Thesis are required to take *Research for Master's Thesis* (ECH 6971) in their final term. Ph.D. students are required to take *Research for Doctoral Dissertation* (ECH 7980) in their final term. This minimum final term registration is applicable to all graduate students and the Graduate School will not accept a Petition to this policy. Note that students receiving Fellowships, Graduate Assistantships, or Financial Assistance may be required to register for more than this minimum number of credits.

All work for the Ph.D. degree must be completed within 5 calendar years after the Candidacy Examination. Failure to complete the degree requirements within this timeframe requires the Oral Qualifying Examination to be repeated. There must be at least 2 terms between the Candidacy Examination and the date of the degree.

All graduate students should also note that graduate degrees are not awarded to students with incomplete letter grades on their transcripts or an overall, major, and minor GPA below 3.00 (truncated[2]).

When the thesis or dissertation is in final form for submission to the Graduate School, the student should review the format requirements of the Graduate School Editorial Office and should work with the Application Support Center to format the document in order to meet the minimum submission requirements of the Editorial Office. The Application Support Center assists students with troubleshooting their documents free of charge. The Center also provides more extensive formatting and pdf-conversion services for reasonable fees to the student. It is highly recommended that all students writing theses and dissertations use their services, in order to alleviate some of the stress felt during the approval process.

Once graduate students have completed their degree requirements, they should work with their Research Adviser to bring all research to a reasonable state of completion, including training of other graduate students, handing over all research notebooks and data to the Research Adviser, disposing of unneeded samples, and cleaning of any laboratory and/or office space assigned to the student. Any office keys must be returned to the Main Office of the Chemical Engineering Department.

[2] Truncated means that the GPA is not rounded-up, e.g. a 2.99 GPA would not be considered a 3.0.

Clear Prior

Ph.D. and M.S. or M.E. thesis students who complete all graduate degree requirements during a given semester, but narrowly miss the Final deadline specified by the Graduate School, may receive their degree in the following semester and avoid the minimum Registration Requirements. Students must notify the Graduate Academic Adviser of their intention to Clear Prior before the start of the subsequent semester. Note that Clear Prior can be granted only if all degree requirements have been satisfied during or prior to the registration phase of the graduating semester. Students can Petition to participate in a graduation ceremony even if all of the requirements for the degree have not yet been completed, provided the Associate Chair for Graduate Studies expects completion of all requirements in the near future. Please see the Graduate Catalog for specific information on Clear Prior deadlines and terms.