

# *Graduate Student Handbook*

## Chemical Engineering Program

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*Graduate Student Handbook*  
*Department of Chemical & Materials Engineering*  
*Chemical Engineering Graduate Program*

**To All Chemical Engineering Graduate Students:**

This Handbook is designed to answer questions of interest to both new and continuing graduate students relative to the rules and policies of the Department and Graduate School. Sections include how and when one is assigned an academic advisor, coursework requirements, qualifying examination procedures, time limits for degrees, etc. Much of the content of these sections is determined by the rules and policies of the Graduate School.

In addition, policies set primarily by the Department faculty are given. These policies address aspects such as the pre-qualifying exam, research responsibilities, financial assistance, vacation policies, and academic standing in the Department.

In a number of instances, reference is made to administrative forms required by the Graduate School. Nearly all Graduate School forms can be accessed directly online, at: <https://gradschool.uky.edu/studentforms>. Please note that most forms require the approval or signature of the Director of Graduate Studies for the Chemical Engineering program.

Every attempt has been made to accurately relay information relative to the rules and regulations of the Graduate School. Should any clarification be needed, consult *The Graduate School Catalog* as it contains the official policies of the University of Kentucky Graduate School. If further clarification is needed, the Director of Graduate Studies will address the issue in conjunction with The Graduate School. The *Graduate School Catalog* is available at:

<http://catalogs.uky.edu/index.php>

Please keep this Handbook in your files as you may need to refer to it from time to time during your graduate career.

Welcome to the Department!

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# **1. General Information**

## **1.1. Program Expectations**

All graduate students are expected to be committed scholars and researchers who approach their scholarly activities with diligence, respect, dedication, and integrity. As such all graduate students are expected to maintain a minimum overall graduate GPA of 3.0. In addition, students are expected to maintain full- or part-time enrollment continuously during their studies; this is particularly important for international students.

Graduate students are expected to remain in good standing in the program, and failure to do so may result in loss of financial support or other academic consequences, as detailed in §3.2. Good standing requires attendance in class, the lab, and at seminar, the fulfillment of all responsibilities of any assistantships or fellowships held, an annual review of academic and research progress by the Advisory Committee, and up-to-date contact information and health and safety training.

Graduate study in the Plan A M.S. or Ph.D. in Chemical Engineering (CME) programs is to be treated as a full-time job. Each student's regular academic responsibilities (including all classwork, studying, exam preparation, and research towards a dissertation) are the job tasks to be done by the student. The Major Professor (also known as the Faculty Advisor, or informally, advisor) is the student's supervisor, sets expectations, and directs the student in all regular academic responsibilities.

## **1.2. The Major Professor**

Each graduate student enrolled in the CME program must be assigned a member of the CME graduate faculty to be his or her Major Professor. Throughout the student's graduate career, this is a faculty member who monitors and guides the student's academic progress, including selection and scheduling of courses; aids and assists graduate students in their thesis or dissertation research (Ph.D. and Plan A M.S. only); and when applicable, supervises the student in any research assistantship. Prior to the selection of a Major Professor, each student is required to meet with all faculty offering research projects. Each participating faculty member will present an overview of their research during the first few weeks of the Fall semester. Students should attend these presentations, and are strongly encouraged to follow-up with faculty members individually to obtain more information about a particular project. Each student then provides a list of their top three faculty choices to the CME Director of Graduate Studies (DGS). Every effort is made to match students with their top choices for Major Professor, but faculty preferences also play an important role, so it is important that incoming students make an effort to meet with the faculty that they are interested in working with. Assignments are typically finalized in October.

Please note that the ultimate identification and assignment of Major Professors is done by the CME DGS and depends on student preference, the availability of funding, and the discretion of faculty members seeking new graduate students. While accommodating student preference is a primary factor in matching students with a Major Professor, situations do arise where other considerations must be accommodated.

### 1.3. Financial Assistance

Financial assistance in the form of graduate Teaching Assistantships and/or Research Assistantships is available to qualified students. Also, merit-based university and industry fellowships are available. The Graduate School offers a number of fellowships for qualified applicants, such as dissertation year fellowships. As the requirements and qualifications for these fellowships vary considerably, the CME DGS will attempt to identify appropriate applicants within the Department. Offers of financial assistance will be made in writing by the CME DGS.

The responsibilities and requirements of research or teaching assistantships are *separate from and in addition to a student's regular academic responsibilities*, including any research towards a dissertation<sup>1</sup>. “Full” assistantships are 20 hours per week paid jobs for which students are compensated with a stipend and have their tuition (or a part thereof) paid. Students holding an assistantship do not do more or less work each week than students not holding assistantships, but their work is allocated differently. Namely, students holding assistantships must reserve 20 hours per week to be devoted to tasks other than the student's regular academic responsibilities<sup>1</sup>. This may mean that students supported on an assistantship require more time to complete their degree—but they do so while being financially compensated.

Some students may hold “half” assistantships, or a combination of two “half” assistantships totaling a “full” assistantship. A “half” assistantship is identical to a “full” assistantship except that it entails 10 hours per week of paid work in addition to regular academic responsibilities. “Half” assistantships are compensated at half the rate of “full” assistantships. Students with two “half” assistantships are paid for two separate 10 hour per week work commitments, again, in addition to their regular academic responsibilities.

*It is important to note that students on a “full” assistantship or fellowship are not allowed to do other work (e.g. grading, etc.) at U.K. or outside the University, and that any work required by an assistantship is separate from and in addition to all regular academic responsibilities, including research towards a dissertation, except as detailed below in §3.1.1.*

Additional details on Financial Assistance are provided in §3.1, and any related questions should be directed to the CME DGS.

## 2. Degree Programs and Requirements

### 2.1. Master of Science

The Department offers the M.S. degree under two distinct plans. The **Plan A** degree requires 24 hours of coursework, 6 hours of research credit, as well as the preparation and defense of a research-based thesis. The **Plan B** degree requires 30 hours of coursework as well as successful completion of a comprehensive oral final examination. By Departmental policy, Plan B is

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<sup>1</sup> In certain cases, the work done for a research assistantship *may* count towards the research required to complete a dissertation. This is discussed in more detail in §3.1.1.

restricted to students who are employed full-time in a position which requires the day-to-day practice of engineering or who are self-supporting. In such cases, the student must be admitted *at the outset* by the Graduate Committee under Plan B. This requirement specifically prohibits any student who has been supported by an assistantship or fellowship from subsequently opting for Plan B.

### **2.1.1. Specific Course Requirements (Plan A and Plan B)**

**Core course requirements:** Completion of a Master of Science degree in Chemical Engineering requires the completion of the following set of four “core” chemical engineering courses and a mandatory Mathematics elective. They are:

**CME 505** - Analysis of Chemical Engineering Problems

**CME 620** - Equilibrium Thermodynamics

**CME 630** - Transport I

**CME 650** - Advanced Reactor Design

**MA XXX** - Mathematics course of level 400G or above selected with approval of the DGS (also includes appropriate courses without MA prefix such as computer science, statistics, etc.). Courses that have been widely used in the past to satisfy this requirement include MA 432G, MA 481G, MA 537, STA 570 and STA 580.

**Elective Courses:** For the remaining courses, subject to the limitations detailed below, M.S. students can elect to enroll in any 500-level or above course offered at the University, or any 400G course *offered outside of the CME program*. For graduate credit, 400-level courses must have received prior approval from the Graduate School, as indicated with a “G” in the course bulletin, *and* have a non-CME prefix. The selection of specific courses beyond the CME core is to be done by the student in consultation with their Major Professor, and must meet the following requirements:

- At least half of the credits counted towards the student’s degree (that is, 15 credit hours) must be 600 or 700-level.
- Two-thirds of the credits counted towards the student’s degree (that is, 20 credit hours) must be in the major discipline (CME).
- For the Plan A M.S., students must complete 6 hours of research for credit consisting of any combination of CME 768, CME 780, CME 790 or any other research course approved by the CME DGS.

Full-time M.S. students must take a minimum of 9 credit hours per semester, and a maximum of 15 credit hours per semester.

### **2.1.2. Research Requirements (Plan A only)**

**General Requirements and Overview:** In addition to the required 30 credit hours of graduate coursework, Plan A M.S. students must carry out a research project resulting in a written thesis. The research activities and/or results on which the Final Examination is based (see details below) must be both reported in the thesis and be in addition to any research activities and/or results submitted for credit in research courses (e.g. CME 780, CME 790 or any other research-for-credit

course). In addition, all work reported in the thesis must be original research conducted by the student. A thesis consisting of reports of prior research, research completed primarily by others, or research completed for credit as part of a course does not fulfill the research requirement for a Plan A M.S. degree.

While research towards the thesis may occur throughout a student's enrollment in the CME Program, students often require time beyond the period during which they are actively taking courses to complete their thesis research. Upon completion of all required course work for the Plan A M.S. degree, students must enroll in 0 credit hours of CME 748 in both Fall and Spring semesters, *and* the 4-week and 8-week summer sessions until their Final Examination. Only students who have completed all required coursework, are actively working on thesis research, and are in good standing with the CME program may enroll in CME 748. Enrollment in CME 748 must be approved by the CME DGS and maintains full-time status for enrolled students.

**The M.S. Thesis:** The thesis is a comprehensive written report of the research activities conducted and results generated by the student. The thesis document is prepared by the student as overseen by the Major Professor. The specific content of the thesis is determined in consultation with their Major Professor, and a thesis may not be submitted to the Graduate School until approved by the student's Major Professor. The thesis should be an archival quality record of the student's research appropriate for publication and dissemination, and should meet all appropriate professional standards in content, form and appearance.

All M.S. theses must be submitted directly to the U.K. Graduate School in electronic form. Theses must be prepared according to specific technical and formatting requirements as detailed on the Graduate School home page, at:

<http://gradschool.uky.edu/thesis-dissertation-preparation>

Students must also provide an electronic copy of the submitted version of the thesis to (1) their Major Professor, and (2) the CME DGS.

Please note that the Graduate School requires payment of a modest thesis fee before a student's degree can be officially certified and the diploma issued. Details regarding payment of this fee can be found at the Graduate School's Thesis and Dissertation Preparation page linked above.

### **2.1.3. Scheduling the Final Examination (Plan A and Plan B)**

A final examination is given to all M.S. candidates. The oral final examination for Plan A students consists of a defense of their thesis research and an assessment of their mastery of relevant coursework. The final examination for Plan B students is either a written or oral exam covering content from the student's coursework. Details about both exam types are provided below.

For both Plan A and Plan B students, the Final Exam is conducted by an Examining Committee consisting of the student's Major Professor and two other members of the U.K. Graduate Faculty. Of the three committee members, at least two (including the Major Professor) must hold appointments in the CME program. At least one member of the student's examining committee



must hold Full Membership on the U.K. Graduate Faculty. Approval of the student's examining committee must be obtained from the CME DGS and the U.K. Graduate School.

The first step in scheduling the final examination is to determine in consultation with the Major Professor an approximate date for the student's final exam. This should be done early in the semester during which the exam is intended to be held. Students must submit the online *Application for Degree* form via MyUK within 30 days of the *start* of the semester in which they intend to take the final examination. To avoid having to reapply in a subsequent semester, the final examination itself must occur no later than eight days before the end of classes in the semester during which an *Application for Degree* has been approved (see U.K. *Academic Calendar*). Please note that in order for an *Application for Degree* to be approved students must:

- Be in good standing in the CME Program
- Have satisfied all course requirements and have no "I" grades
- Not be on academic probation.

Once the *Application for Degree* is approved, the student may select a date mutually agreed to by all members of the student's final examination committee (thesis committee for Plan A). *At least two weeks before the intended exam date* the student must formally schedule the examination by notifying the Graduate School via the online Final Examination form:

<http://gradschool.uky.edu/studentforms>

Plan A students must also complete and receive approval of their thesis from their Major Professor. Once the Major Professor deems the thesis complete, and *at least two weeks prior to the intended date of final examination*, students must provide copies of the thesis to all members of the Examining Committee.

#### **2.1.4. The Final Examination**

**Plan A:** The Final Examination for all Plan A M.S. students shall consist of an oral examination of the student's qualifications. The student will give a presentation, based on their thesis, summarizing their research and results that highlights the knowledge they have gained during their graduate studies. The Examining Committee will then examine the student on his or her knowledge of the field of Chemical Engineering, and his or her research. The scope of examination may include all topic areas covered by courses taken by the student, general topics in Chemical Engineering, plus topical areas specifically related to the student's research. The student's Examining Committee has sole discretion within these constraints to determine the nature and details of the topics discussed.

After the Final Examination is passed, Examining Committee members may suggest any and all appropriate revisions, additions, and adjustments to the thesis, and the student must prepare a final copy of the thesis incorporating these changes. This final copy is then submitted to the Graduate School with the signatures of the student's Major Professor and the Director of Graduate Studies. The final and complete thesis must be received by the Graduate School no later than **60 days** after the Final Examination.

**Plan B:** Plan B students will sit for an oral or written exam assessing the knowledge they have gained during their graduate studies. The scope of examination may include all general topic areas covered by courses taken by the student and general topics in Chemical Engineering. The student's Examining Committee has sole discretion within these constraints to determine the nature and details of the exam, and, in the case of written exam, the grading mechanism and scale.

**Determining the exam outcome (Plan A and Plan B):** Pass/Fail decisions for the final exam are based on a majority vote of the Examining Committee with all formally appointed committee members entitled to one vote. Only those committee members holding appointments as members of the UK Graduate Faculty and officially named by the Graduate School as committee members may vote. If the voting committee members are evenly divided, the candidate fails.

If the candidate fails a first attempted final examination, the Examining Committee recommends to the Dean of the Graduate School the conditions under which a second (and final) examination attempt may be administered. Insofar as it is practical, the same examining committee administers the second examination. A third examination is not permitted and a student failing a second attempted final examination is dismissed from the program.

### **2.1.5. Master's Degree Time Limit**

All activities (coursework, research, etc.) which are used to satisfy Master's degree requirements must be completed within six (6) years preceding the proposed date of graduation. In rare cases, extensions to this time limit of up to a maximum of four (4) additional years may be considered by the Graduate Dean only upon written recommendation by the CME DGS. Failure to complete all degree requirements within these limits will result in dismissal from the program. All program requirements must be met again in their entirety if the student subsequently seeks readmission to the M.S. in CME program.

### **2.1.6. Transfer of Credit**

M.S. in CME students may request that up to nine hours of graduate coursework taken while enrolled (1) as a post-baccalaureate student, (2) as a graduate student in another U.K. department, or (3) as a graduate student in another university, be transferred to his/her academic record (see details in the *Graduate School Bulletin*). The CME DGS should be consulted for initiation of such a request. A grade of "B" or better is required in order for a course to be considered for transfer, and all such transfers are subject to the M.S. degree time limits of the Graduate School. In no case will independent study, research, thesis, or dissertation credit be transferred. Decisions on such requests are at the discretion of the CME DGS and the Graduate School.

## **2.2. Doctor of Philosophy**

### **2.2.1. Program Overview**

The Ph.D. in CME degree is offered to those students seeking to demonstrate exceptional scholarship, creativity, and problem-solving ability through significant original research. The program is demanding and time consuming, and represents a full-time, year-round job for students

throughout their enrollment in the program. Nearly all students admitted to the Ph.D. in CME program are supported by externally funded fellowships or assistantships, though details vary from student to student and are made known to each student at the time of their admission to the program.

The Ph.D. degree program is broken into a pre-qualifying residency and a post-qualifying residency. Residency is defined as a continuous period of full-time specialized training, generally measured in academic semesters (Fall and Spring). Summers are primarily reserved for research. The Graduate School requires a pre-qualifying residency sufficient to complete 36 credit hours of graduate course work. The pre-qualifying residency generally lasts 3-4 academic semesters. During the first two semesters of pre-qualifying residency students complete four required core courses, plus additional electives. After completing the core courses (that is, generally, after the second academic semester in the program) students take an oral pre-qualifying exam that assesses their knowledge of the fundamentals of materials science and engineering.

After completing 36 credit hours and passing the pre-qualifying exam, students may attempt the qualifying exam, and passing the exam marks the end of the pre-qualifying residency. The student is then formally a candidate for the Ph.D. degree, and must complete a post-qualifying residency during which the student focuses on the original research that will be presented in the dissertation. After a minimum of two consecutive semesters of post-qualifying residency, students may, with the assent of their Major Professor, schedule their dissertation defense, which represents the final examination. The time to complete the dissertation research varies widely depending on the specific circumstances of the individual student, but is generally ~5-8 academic semesters plus summers.

### **2.2.2. Residency Requirements for Doctoral Students**

**Overview:** The University of Kentucky requires that doctoral students have ample contact with the U.K. academic community so that the student will become involved in every aspect of scholarly life. For this reason, certain residency requirements must be satisfied.

**Pre-qualifying residency:** The pre-qualifying residency is complete when the student has completed a total of 36 credit hours of registered coursework and passed the pre-qualifying exam. In the CME program, courses include the core courses (see below), as well as elective and research courses, as appropriate (see notes below). Ph.D. students are expected to enroll in a minimum of 9 credits of coursework in each academic semester during their pre-qualifying residency in order to complete the residency within their first four academic semesters (2 years) of study.

Students may be eligible to apply prior graduate-level coursework or a completed Master's degree from another institution towards specific core course requirements and/or overall residency requirements, as discussed below and described in *The Graduate Bulletin*. All such petitions must be sent to and approved by the CME DGS, who will determine an appropriate study plan for the student in consultation with the Major Professor.

**Post-qualifying residency:** Students who have successfully completed their oral Qualifying Examination are required to maintain continuous enrollment until their graduation. This residency

must be for a minimum of two consecutive academic semesters and requires registration in two credit hours of CME 767 in all Fall and Spring semesters until completion of the degree (see details below, and in *The Graduate Bulletin*).

### **2.2.3. Course Requirements**

**Overview:** A total of 36 credit hours of graduate course work must be completed during the pre-qualifying residency.

**Required Core Courses:** Six of the courses taken toward the 36 credit hour requirement for a Ph.D. in CME must be the CME “core” graduate courses and mandatory Mathematics elective:

**CME 505** - Analysis of Chemical Engineering Problems

**CME 620** - Equilibrium Thermodynamics

**CME 630** - Transport I

**CME 650** - Advanced Reactor Design

**MA XXX** - Mathematics course of level 400G or above selected with approval of the Director of Graduate Studies (also includes appropriate courses without MA prefix such as computer science, statistics, etc.). Courses that have been widely used in the past to satisfy this requirement include MA 432G, MA 481G and MA 537.

**Elective Courses:** For the remaining courses, subject to the limitations detailed below, Ph.D. students may elect to enroll in any 500-level or above course offered at the University, or any 400G course *offered outside of the CME program*. For graduate credit, 400-level courses must have received prior approval from the Graduate School, as indicated with a “G” in the course bulletin *and* have a non-CME prefix. Selection of specific courses beyond the CME core is to be done by the student in consultation with their Major Professor. No more than 3 credit hours per semester of any combination of CME 780, CME 790 or any other research for credit course may count towards the student’s degree.

**Full-time Status:** Full-time Ph.D. students must take a minimum of 9 credit hours per semester, and up to a maximum of 15 credit hours per semester. Ph.D. students supported on a full-time assistantship (or combination of half-time assistantships that total to full-time) may take a maximum of 12 credit hours per semester.

Please note that in certain cases fellowships or other circumstances may limit a student’s selection of courses and maximum or minimum number of credit hours per semester. Students will be notified by the CME DGS if such circumstances apply.

**Grade Requirement in CME 780:** Ph.D. students are required to take CME 780 (*Special Problems in Chemical Engineering*) in their first Spring semester after the semester of their initial enrollment in the CME Ph.D. program (this is usually Spring of a student’s first year). The credits from this course will count toward the required 36 hours. The purpose of this course is to demonstrate aptitude, desire and dedication to research.

Final grades will be determined by the CME 780 Instructor of Record in consultation with each student's Major Professor. The grade will be substantially based on an oral presentation and a written report prepared and delivered by the student at the end of the semester. The presentation and report will contain an introduction to the research problem that will form the basis of the student's dissertation research, as well as a summary of planned research and preliminary results generated to date.

Students who do not receive a grade of B or better in CME 780 will be transferred to the Plan A M.S. program. Re-entry to the Ph.D. program is possible after satisfactory completion of the master's thesis and degree.

**Post-Qualifying Course Requirements:** Students must enroll in 2 credits of CME 767 every Fall and Spring throughout their post-qualifying residency. Students may first register for CME 767 in the first Fall or Spring semester after they complete the required 36 credit hours of the Pre-Qualifying Residency. Students need not have completed their Qualifying Exam to register for CME 767, but students *must* complete their qualifying exam before the end of their first semester of enrollment in CME 767.

#### **2.2.4. Credit Requirement Waiver for Prior M.S. Degree**

Students with a previously earned Master of Science degree in CME or a related field from a reputable institution may be eligible for a waiver of up to 12 credit hours of pre-qualifying coursework. Application for this waiver must be made via email to the CME DGS no later than the tenth week of the student's second academic semester in the Ph.D. in CME program. If the previous M.S. degree is deemed relevant within the broad field of Chemical Engineering and of sufficient academic quality, the CME DGS may forward the waiver request to the Graduate School for final approval. The decision to forward the waiver request rests with the CME DGS. In the event that a student disagrees with the CME DGS's decision NOT to forward the request to the Graduate School, the student may appeal the decision to the Chemical & Materials Engineering Graduate Studies Committee.

#### **2.2.5. Pre-Qualifying Exam**

The pre-qualifying examination evaluates the student's preparedness for chemical engineering research. All Ph.D. students are expected to take the pre-qualifying exam after completing their two semesters of graduate coursework.

The prequalifying examination is administered by a student's Ph.D. advisory committee, and the exam should be scheduled with the committee by the 2<sup>nd</sup> week of their third semester in the program and completed by the 12<sup>th</sup> week of that semester. The pre-qualifying exam can only be delayed if a written request is provided by the student's advisor and approved by the DGS. The committee will be provided with the individual development plan (IDP) from CME 780, an extended CV, unofficial transcript, and abstract (2 page max) one week prior to the exam. The exam should last at most 2 hours and will consist of a presentation by the student (~30 minutes) followed by questions from the committee about the presentation and related foundational courses for the student's research. The student presentation should include:

- a. A description of the tentative dissertation topic
- b. A brief critical review of the most relevant literature, methods, and safety considerations in their field study
- c. A progress report based on CME 780 and the summer of research
- d. Proposed plans to prepare for the qualifying exam, including courses to be completed and tentative research goals

Based on the student's performance on the exam, each committee member votes for the student to **pass or fail** the exam. A majority of passing votes is needed to pass the pre-qualifying exam. Failing means that a student will transfer to the M.S. program in order to develop and demonstrate research abilities. A student who completes the M.S. after failing the pre-qualifying exam may be considered for re-admission to the Ph.D. program.

The chair of the committee will also complete the pre-qualifying exam rubric with input from the other committee members, providing constructive feedback for areas to improve prior to the qualifying exam.

### **2.2.6. The Advisory Committee**

While a student's Major Professor is generally appointed during their first semester as a graduate student, a student's Qualifying and Final Exams are administered by an Advisory Committee. In addition, the Advisory Committee serves a vital role in supporting, mentoring, and advising the student during their dissertation research. As such, an Advisory Committee must be formed:

- Before the end of a student's second semester in the Ph. D. program
- No less than one year prior to the Qualifying Exam

Advisory Committees consist of at least four voting members, all of whom must be faculty who are members of the UK Graduate Faculty. At least two of the voting members must hold primary appointments in the Chemical Engineering program—with one of these being the student's Major Professor—and at least one must hold a primary appointment outside of the Chemical and Materials Engineering department. At least three of the voting committee members must possess Full Graduate Faculty status. Faculty members from other Universities may serve on the Advisory Committee, but they must first be appointed as associate members of the UK Graduate Faculty. Non-faculty members (e.g. researchers or collaborators from industry) may only serve as non-voting Auxiliary participants with a student's Advisory Committee, and need to be formally approved in this role by the Graduate School.

The Advisory Committee must remain intact for the duration of the student's graduate career. If for any reason a committee member cannot continue to serve on the panel, a suitable replacement must be recommended for approval by the Director of Graduate Studies. The Director of Graduate Studies must approve all Advisory Committees. Students can initiate the Committee formation process through the UK Graduate School webpage:

<http://gradschool.uky.edu/studentforms>

### **2.2.7. The Qualifying Examination**

**Overview & Eligibility:** The Qualifying Exam is the last step before the advancement to doctoral candidacy, and assesses whether a student is properly trained and equipped to complete research sufficient to prepare and defend a dissertation. To be eligible to attempt the Qualifying Exam students must:

- Have earned 36 credit hours from graduate coursework and resolved all incomplete grades
- Have passed all core courses
- Have passed the Pre-Qualifying Exam
- Be in good standing in the CME Program

It is the expectation of the CME Program that students will attempt the Qualifying Exam in the semester (academic or summer) immediately following the completion of all pre-qualifying residency requirements. This is typically after a student's third or fourth academic semester in the Ph.D. program, meaning that most Qualifying Exams are first attempted in either students' second Spring semester or second Summer in the Ph.D. program.

Detailed regulations pertaining to the qualifying exam can be found in the *Graduate School Bulletin*.

**Scheduling the Exam:** The Qualifying Exam must be officially scheduled through the Graduate School and approved by the CME DGS. The student's entire Advisory Committee, including Major Professor, must be in agreement that the student is prepared to attempt the exam before the exam can be scheduled, and must be present for the exam (see notes below).

To begin the process of scheduling the Qualifying Exam, students should first verify that they have, or will have met, all pre-qualifying residency requirements. Students should consult with their Major Professor and Advisory Committee to select a potential date. Students must then complete the online *Request to Schedule the Qualifying Examination* to begin the formal scheduling process. Please note that the *Request to Schedule the Qualifying Examination must be submitted and all approvals processed no less than two weeks prior to the intended exam date.*

**Content of the Exam:** The Qualifying Examination consists of the preparation of a Dissertation Prospectus and its defense before the student's Advisory Committee. The Dissertation Prospectus is a comprehensive written document that demonstrates the feasibility and scope of the research project the student intends to complete during post-qualifying residency. The prospectus should be sufficiently detailed so as to leave no question that the student understands the nature, planned approach, and implications of the proposed research. It should reveal the basic approach, fundamental and specific hypotheses, nature of experimentation, and other relevant aspects of the proposed work. A full review of the relevant literature should be included. The document should be of the same degree of detail that would be required of a grant proposal to a major funding agency.

Each member of the Advisory Committee will be furnished a hardcopy of the prospectus two weeks in advance of the Qualifying Exam. It is expected that the student will provide their Major Professor an opportunity to review and approve the document prior to its distribution to the Committee. The preparation of the required copies of the prospectus is the responsibility of the student.

The Qualifying Examination itself is comprised of a formal presentation of the dissertation prospectus, followed by questions from the student's Advisory Committee. During the presentation and question and answer period, the student should be prepared to address all aspects of the proposed research project, questions related to all prior coursework, and be able to demonstrate a breadth and depth of knowledge of topics in the field of Chemical Engineering consistent with that expected of a professional researcher.

**Determining the Exam outcome:** The outcome of a Qualifying Examination is determined by majority vote of the Advisory Committee. If the Committee is evenly split, the candidate fails. In the event that a student fails a first Qualifying Exam attempt, a second examination attempt can be scheduled no less than four months and no more than twelve months after the first attempt. A second examination attempt may only be scheduled with the approval of the CME DGS and the members of the Advisory Committee. The Advisory Committee may set additional requirements for the student to meet before a second attempt may be scheduled, and no changes to the Advisory Committee are permitted between a first and second Qualifying Exam attempt. Students failing a second Qualifying Exam attempt will be transferred to the Plan A M.S., and re-entry to the Ph.D. program will not be permitted.

### **2.2.8. The Dissertation**

All doctoral candidates must conduct a major original research project, the results of which culminate in a written dissertation. The dissertation must be a complete, comprehensive, well-reasoned, original contribution to the knowledge and field of materials science and must show evidence of scholarly achievement. The dissertation should be prepared by the student, and detailed requirements for the structure and content of the dissertation document must be determined in consultation with the student's Major Professor and Advisory Committee.

The dissertation—complete in its entirety, with all figures, tables, captions, appendices, references, etc., properly included—must be distributed to all members of the Advisory Committee *at least two weeks prior to the intended defense date*. The Major Professor must agree that the dissertation is complete and assent to its distribution to the Advisory Committee.

Upon successful completion of the Final Examination (see below), the student makes any required modifications to the dissertation under the supervision of the Major Professor and the Director of Graduate Studies. All dissertations must be submitted directly to the U.K. Graduate School in electronic form. Dissertations must meet specific technical and formatting requirements as detailed on the Graduate School home page, at:

<http://gradschool.uky.edu/thesis-dissertation-preparation>

Students must also provide an electronic copy of the submitted version of the dissertation to (1) their Major Professor, and (2) the CME DGS.

Please note that a dissertation fee (currently \$74.00) must be paid before a student's degree can be officially certified and the diploma issued. Details regarding payment of this fee can be found at the Graduate School's Thesis and Dissertation Preparation page linked above.



### 2.2.9. Final Examination

**Overview and Eligibility:** The completion of the doctoral degree requires the submission of a doctoral dissertation and the defense of that dissertation during the Final Examination. Before attempting the Final Exam, students must complete at least two semesters of post-qualifying residency, and may only initiate the process of scheduling the Final Exam after consultation with and approval by the student’s Major Professor and Advisory Committee. Students must resolve any ‘I’ or ‘S’ grades on their official transcript before the Final Examination may be scheduled.

**Scheduling the Exam:** The Final Exam must be officially scheduled through the Graduate School and approved by the CME DGS, and must occur *during* a period when classes are in session, and no later than 8 days prior to the last day of classes of the semester in which the student intends to graduate<sup>2</sup>. Students should begin the scheduling process by consulting with his or her Major Professor and Advisory Committee. A majority of the student’s Advisory Committee, including the Major Professor, must be in agreement that the student is prepared to attempt the exam before any steps to schedule the exam can be completed.

At the beginning of the semester in which the Final Exam is to be attempted, students must submit the required *Application for Degree* via myUK for the semester in which they intend to complete their degree. Failure to do so may result in delay in awarding the degree.

No later than *eight weeks* prior to the intended date of the Final Examination, a *Notification of Intent to Schedule a Final Examination* form must be submitted to the Graduate School. Upon receipt of this form, the Graduate Dean will appoint an Outside Examiner as an additional voting member of the Advisory Committee.

It is the responsibility of the student to reserve a room appropriate for the Final Examination. In selecting a room, students should note that the exam is public, and the room should be appropriate for accommodating the presentation itself, the Advisory Committee, and any members of the public who might reasonably be expected to attend.

Once a final date, time, and location have been agreed, and no later than *two weeks* prior to the intended exam date, a *Request for Final Examination* form must be submitted to the Graduate School indicating the agreed date, time, and location of the Final Examination. As noted above, at this point the dissertation must be in its final form, complete with all figures, tables, captions, appendices, references, etc., and must be distributed to the Advisory Committee (including the Outside Examiner).

**Content of the Exam:** The Final Examination consists of a presentation by the student of the original research results they have generated during their studies followed by a period of questioning and discussion. The period of questioning and discussion is the formal “defense” of the student’s dissertation and work. The presentation and at least an initial period of questioning and discussion is public. Any member of the University community may attend and pose questions

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<sup>2</sup> In rare cases exceptions may be made under which a Final Examination may occur during a period when classes are not in session. Please contact the CME DGS if this may be necessary.

to the student. Questions about the student's research, coursework, or materials science in general are all appropriate to be posed to the student. After allowing for all volunteered public discussion and questioning, the Major Professor may excuse members of the public to allow a period of questioning and discussion by the Advisory Committee (and Outside Examiner) alone.

**Determining the Outcome of the Exam:** A majority opinion of the Advisory Committee (plus Outside Examiner) of either Pass or Fail prevails in all Final Examination decisions. If the committee is split evenly, the candidate fails. In the event of a failure, the Advisory Committee recommends to the Graduate School conditions under which a second examination may be administered. A third examination is not permitted.

**Submitting the Dissertation Final Copy:** After the Final Examination is passed, the final copy of the dissertation is prepared including all corrections and adjustments required by the Major Professor or Advisory Committee. It is then submitted to the Graduate School with the signatures of the student's Major Professor and the CME DGS. The dissertation must be received by the Graduate School no later than **60 days** after the Final Examination.

### **2.2.10. Doctoral Degree Time Limit**

Students enrolled in the doctoral program are required to successfully complete the Qualifying Examination within five (5) years of their entry into the program. Failure to do so will result in dismissal from the program. In rare cases, extensions to this time limit of up to a maximum of three (3) additional years may be considered by the Graduate Dean only upon written recommendation by the CME DGS.

As detailed above, it is the expectation of the CME program that students sit for the qualifying examination immediately after satisfaction of the coursework and pre-qualifying residency requirements, generally 3-4 academic semesters after entering the program.

In addition, all degree requirements for the Ph.D. degree must be completed within five (5) years following the semester or summer session in which the candidate successfully completes the oral Qualifying Examination. Extensions up to one additional year may be approved by the Dean of the Graduate School, upon the recommendation of the Director of Graduate Studies. Further extensions (up to a total of ten years) require the approval of the Graduate Council and involve re-taking the oral qualifying examination.

Failure to complete all degree requirements within these limits will result in the termination of degree candidacy. All pre- and post-qualifying residency requirements must be met again in their entirety if the student subsequently seeks readmission to the Ph.D. in MSE program. Please see details in the *Graduate School Bulletin*.

### **2.2.11. Transfer of Credit**

For students enrolled in the Ph.D. in CME program, prior graduate work may not be transferred to count directly towards degree requirements. Previous graduate coursework may be applicable to the pre-qualifying residency requirements, as well as for the satisfaction of certain core course

requirements. Students with prior graduate credits should consult with the CME DGS, who will evaluate all prior graduate work and who will assist in determining an appropriate course of study.

### **3. Departmental & Program Policies**

#### **3.1. Financial Assistance**

##### **3.1.1. Research and/or Teaching Assistantship Responsibilities**

Research Assistants (RAs) are paid to conduct research on behalf of an RA supervisor, who may or may not be the student's Major Professor. While research work for a research assistantship is technically separate from and in addition to any dissertation research being conducted by the student, it is generally the case in the CME program that any research assistantship a student may hold is aligned with the student's dissertation project. Similarly, RA supervisors in the CME program are generally a student's Major Professor. In this way, research done in fulfillment of a research assistantship can often be included as part of the research required to complete a student's dissertation. This does not mean that a student whose research assistantship is aligned with their dissertation research works less each week than a student whose research assistantship is not; both treat their regular academic responsibilities and assistantship responsibilities as a full-time job. Instead, students with aligned research assistantships and dissertation projects are able to complete their dissertation more quickly. While every effort is made to align dissertation projects, research assistantships and RA advisors, there are cases where this is not possible.

Teaching Assistants (TAs) are paid to conduct instruction-related tasks as assigned by the Instructor of Record for the class (or classes) to which they have been assigned. Instruction-related tasks may include grading papers, holding office hours, leading recitation sections, assisting students in a laboratory course, or any combination thereof. As with a Research assistantship, this work is in addition to the student's other regular academic responsibilities, including research towards dissertation preparation. Assignment of TAs to classes is done by the CME DGS before the beginning of each semester, and TAs are not necessarily assigned to classes where their Major Professor is the instructor of record. "Full" TAs may enroll in between 9 and 12 hours of graduate coursework, while "Half" TAs may enroll in between 12 and 15 credits.

All assistantships are contingent upon continuous satisfactory progress towards the student's degree, and upon satisfactory performance in the responsibilities of the assistantship. The RA advisor (for RAs) or Instructor of Record (for TAs) is responsible for periodically evaluating the student's performance on assistantship responsibilities. Students not meeting requirements of an assistantship are not in good standing in the program.

*Note:* The *Graduate School Bulletin* specifies the terms and conditions for academic termination from the M.S. and Ph.D. programs; academic termination is distinct from the termination of financial support, the latter of which is at the discretion of the Major Professor and the CME DGS, and may also be subject to the availability of funds.

##### **3.1.2. Fellowship Responsibilities**

Fellowships are financial awards where a student is paid to make academic progress towards a degree. Certain fellowships are available through the College of Engineering or the University, and others are available from external funding agencies, industry associations, or specific companies. All fellowships are competitively awarded, and each has its own application process and requirements. The CME DGS will make every effort to alert students to available fellowships for which they may be eligible to apply.

Once awarded, fellowships generally require that students achieve certain markers of academic progress, including maintaining a certain GPA, or presenting at certain conferences or meetings. Each fellowship has its own unique requirements. While the CME DGS will assist in monitoring and reporting student progress, it is ultimately the student's responsibility to know and adhere to any fellowship requirements. Failure to meet all requirements set forth in a fellowship award may result in loss of the fellowship.

### **3.1.3. Maximum Support for M.S. and Ph.D. Students**

A student enrolled full-time in an CME graduate degree program who is making satisfactory progress and is in good standing in the program can hold an assistantship or fellowship, or any combination of multiple assistantships and/or fellowships, for 18 months for a M.S., or 54 months for a Ph.D. The Major Professor may authorize funding for up to six more months. Under no circumstances will a CME graduate student be permitted to hold an assistantship or any combination of assistantships for more than 24 months for a M.S., or 60 months for a Ph.D. This time limit is independent of the source of funding and the type of assistantship, and represents a total accrued time holding an assistantship or fellowship, regardless of whether the time period is contiguous. Readmission after suspension or probation from a CME M.S. or Ph.D. program does not reset this accrued time.

Students who have completed and defended a master's degree and continue for a Ph.D. will be provided with a stipend for 42 months. The Major Professor has the option of extending this funding for 6 more months. Under no conditions will funding be provided for more than 48 months.

Students are strongly encouraged to finish within the specified time. However, students who require more time, and who exceed the funding time limits established by the Department, will be required to complete their research using their own funds. This would include living expenses, as well as any tuition costs necessary to maintain continuous enrollment standing in the program. Please note that Graduate School time limits may also apply in this situation.

*All funding is contingent upon satisfactory performance in classes and research, and availability of funds. If a student is not showing satisfactory performance in research, funding can be terminated.*

### **3.1.4. Academic Requirements to Maintain Financial Support (Stipend and/or Tuition)**

**Financial Support Originating from the Chemical and Materials Engineering Department:** Any student having completed 12 or more credit hours of graduate coursework (cumulative) will be considered deficient for purposes of Departmental financial support (stipend and any

Department-paid tuition) if, at the end of any semester, a cumulative graduate GPA of  $< 3.0$  is recorded. The student will be informed of this deficiency by the Graduate School. The student will have one semester in which to raise his or her cumulative GPA above 3.0. Failure to do so will result in the loss of all Departmental T.A., R.A., or scholarship support, as well as tuition scholarship support as of the first pay period after notification that the student has failed to raise his or her cumulative GPA above 3.0.

An exception to this rule is the case where a repeat option would normally be exercised (E in a course) but cannot be exercised because the course is not offered in the current semester. Students in this situation must meet the above requirement relative to the courses they have taken other than the failed course, which qualifies for exercising a repeat option. For example, a student with a cumulative GPA  $< 3.0$  has completed 12 credit hours of graduate courses; he/she has received grades of B, B, C, and E. Assuming the course in which the E was earned is not offered in the next semester, the student must earn grades in the next semester sufficient to bring the cumulative GPA *excluding the E* up to 3.0 by the end of the current semester. Failure to do so will result in the loss of all financial support as of the first pay period after notification that the student has failed to raise his or her cumulative GPA above 3.0.

**Financial Support Originating from the UK Graduate School:** Any student having completed 12 or more credit hours of graduate coursework (cumulative) will be considered deficient for purposes of Graduate School support if at the end of any semester a cumulative GPA of less than 3.0 is recorded. The Graduate School policy is to terminate all support immediately. That is, there is no grace period of one semester, as for departmental support. Since most students have their tuition paid by a graduate school scholarship, a cumulative GPA  $< 3.0$  can result in the loss of the tuition scholarship. The exact statement of policy is given in the *Graduate School Bulletin*.

**Financial Support from Mixed Sources:** Some students are partially supported by the Department and partially by the Graduate School. These parts are subject to the respective portions of this policy, as stated above.

### **3.1.5. Unsupported Students**

In certain rare circumstances, a student may be admitted to the M.S. or Ph.D. program without financial support. In this situation, the CME DGS stipulates the conditions under which such a student may be eligible for future financial support, if such support (*e.g.* a research or teaching assistantship) becomes available. Consideration for financial support would typically include an evaluation of the student's performance in coursework in the Department, as well as any research activities. However, *this policy in no way implies or guarantees financial support for any unsupported student.*

## **3.2. Standing in the CME Graduate Program**

### **3.2.1. Overview**

Graduate students are expected to be fully engaged scholars who seek to maximize the learning opportunities associated with their classwork, teaching and research responsibilities. As such,

students are expected to maintain good standing in the CME program. In addition to specific requirements detailed below, students in good standing are expected to make every effort to attend all classes and submit all required assignments and meet their teaching and research obligations in a timely manner. Students who receive financial support including any RA and/or TA funding, travel awards, or other support have an added obligation to meet these responsibilities to the greatest extent possible.

A student must be in good standing in the CME program in order to:

- Schedule or attempt an Exam (Pre-Qualifying, Qualifying, or Final Exam)
- Receive new financial support (Research Assistantship, Teaching Assistantship, Travel Award)

To be considered in good standing in the CME program, students must have (see below for details on each of these points):

- Completed an Annual Review with their Advisory Committee within the past 12 months
- Provided up-to-date contact and academic information in the CME Graduate Student Database
- Completed all required safety and responsible conduct of research training
- Continuously satisfied the responsibilities and requirements of any Fellowship, or Research and/or Teaching Assistantship.
- Attended or been excused from attending at least all but two departmental seminars in the past semester

Students' standing is reviewed before each academic semester (around August 15<sup>th</sup> and January 5<sup>th</sup>), and at the time of any request to schedule or attempt an exam or receive a new funding award. If it is determined that a student is not in good standing, the CME DGS will immediately notify the student, and indicate how the student may take corrective action. Details of corrective actions are provided below. Once a student returns to good standing, pending requests to schedule or attempt an exam, or to receive a new funding award can proceed immediately.

Any student found not to be in good standing in two consecutive academic semester reviews will be immediately subject to a formal review by the CME DGS. Formal reviews of student standing are conducted by the CME DGS, and may result in academic consequences, termination of financial support, or, where appropriate, dismissal from the program. Policies and procedures for Formal Reviews are detailed below.

### **3.2.2. Annual Progress Review**

To satisfy Graduate School requirements, the CME program requires that each student's progress towards their degree be formally evaluated by the student's Advisory Committee (or Major Professor, if no committee is in place) at least once a year. This review must consist of a meeting of the full Advisory Committee, including the Major Professor, and the student. Non-UK members of the Advisory Committee may participate in the meeting remotely. The student shall present an overview of the current status of their coursework and research, and answer questions relating to both coursework and research, as deemed appropriate by the Advisory Committee.

If the committee determines that the student has been making exceptional progress in research and scholarship, the committee may recommend the student for special supplementary fellowships and awards from the Department. The number, amount, and selection criteria for such awards varies and depends on availability. Students who are found not to demonstrate an appropriate level of commitment and/or progress in research or coursework are no longer in good standing in the program. In this situation, the deficiencies in research/course effort will be identified, and the student will be given a limited time to improve and return to good standing. Failure to address deficiencies in research/course performance in the time specified will result in a Formal Review.

At the conclusion of an Annual Review the members of the Advisory Committee must complete an evaluation form. These completed forms must then be submitted to the CME DGS. In addition, the student must verify that their contact and academic information (including lists of publications and presentations, and safety training confirmations) is up-to-date in the CME Graduate Student Database and submit a single slide overview of the student's research project and progress to the CME DGS. Email the CME DGS for a current template to use for this slide, and see the Appendix for an image of the current layout. As part of this update, the Major Professor must verify with the CME DGS what Health and Safety Trainings the student is required to keep current.

The student must schedule an Annual Review meeting no less than once every 12 months. Oral exams, including the Qualifying and Final Exam (but excluding the Pre-Qualifying Exam) serve as an equivalent to an Annual Review meeting. Note that this requires that evaluation forms, single-slide summaries, and verification of contact and academic information, and Health and Safety Training checks must occur at each of these Exams in addition to the exam itself. In addition, the Major Professor or CME DGS may call a review meeting to address any immediate or urgent concerns or questions. Students are required to participate in any and all Major Professor or CME DGS called review meetings.

If a student is found not to be in good standing in the program because more than 12 months have elapsed since the last Annual Review, the student may correct this by holding an Annual Review as soon as possible. Note that if an attempt to schedule an oral exam triggered a finding that a student was not in good standing, an Annual Review must be held *prior* to the student receiving CME DGS approval to schedule the exam.

### **3.2.3. Seminar Attendance**

The Department holds its regular Seminar series on Wednesdays throughout the Fall and Spring semesters at 11:00 A.M. The seminar is comprised primarily of visiting speakers from other universities, industrial facilities, and national laboratories. Attendance at the seminar is considered part of each student's scholarly development as a researcher, and is REQUIRED, regardless of the student's point of progress in the program. **Students who wish to register for courses which conflict with the seminar MUST obtain approval in advance from the Director of Graduate Studies.**

Attendance will be taken at all seminars and recorded for review. If a student is unable to attend seminar, it is the student's responsibility to notify the CME DGS, who will determine if the absence is appropriate and therefore excused. Failure to notify the CME DGS of an absence will count as

an unexcused absence. More than two (2) unexcused absence in a semester will result in a student no longer being in good standing in the CME program.

Students found not to be in good standing—and not already temporarily returned to good standing—due to non-attendance at seminar may temporarily return to good standing by notifying the CME DGS in writing that the student intends to attend (or be excused from) at least all but two seminars over the next academic semester. More than two (2) unexcused absence in that following semester will trigger a second consecutive finding that the student is not in good standing and a Formal Review.

#### **3.2.4. Contact and Academic Information**

Students are expected to keep their contact and academic information continuously up-to-date in the CME Graduate Student Database. More information about the database will be sent out soon.

#### **3.2.5. Health, Safety, and Responsible Conduct of Research Training**

The University of Kentucky requires that all students and employees complete appropriate Safety and Responsible Conduct of Research training. At the time of assignment of the Major Professor the CME DGS will request from the Major Professor a list of the safety training courses required by work in that Professor's lab. This list of required safety trainings will be reevaluated at each Annual Progress Review. To enable accurate record keeping it is the responsibility of the student to provide the CME DGS proof of the completion of a completed safety training course in the form of a copy of the digital certificate of completion. Please note that some training must be renewed annually.

Information on Responsible Conduct of Research Training will be provided by the CME DGS. Information on Health and Safety Training can be found at:

<http://ehs.uky.edu/classes/>

Students found not to be in good standing because of lapsed or incomplete training may return to good standing by completing all required trainings and updates. Persistent failure to complete required trainings, or behavior in egregious violation of Health, Safety and/or Responsible Conduct of Research requirements will result in a Formal Review.

#### **3.2.6. Fellowship and Research and/or Teaching Assistantship Responsibilities**

The responsibilities of Research and/or Teaching Assistants (3.1.1) and Fellows (3.1.2) have been detailed above. Any student who fails to meet the requirements of their assistantship or fellowship is not in good standing in the CME program and will be notified via their official university email address of the specific deficiencies in his or her performance. Such students will have a limited time in which to improve and correct noted deficiencies, and failure to do so will result in a Formal Review.

### **3.3. Academic Integrity**



The Department maintains the highest standards of academic integrity and ethical scientific conduct. Academic offenses such as plagiarism or the fabrication or misrepresentation of research results can lead to actions administered by the Dean of the Graduate School or the Provost that include suspension or expulsion from the University. The “*Student Rights and Responsibilities*” (<http://www.uky.edu/StudentAffairs/Code/>) details policies and procedures regarding academic misconduct.

Students are advised that all academic work completed for the satisfaction of program degree requirements are subject to the academic standards of the University. This includes (but is not limited to) all coursework, written portions of the pre-qualifying and qualifying examinations, and any required research proposals or reports (e.g., CME 780 report; proposal document for the oral qualifying examination, advisory committee reports, etc.). All submitted work must be the original work of the student; students who have questions with respect to issues of plagiarism and/or the proper citation or attribution of the work of others should consult their major professor, or the Director of Graduate Studies. Such consultations should occur *before* the work is submitted.

Students found to have committed academic misconduct per the University’s policies and procedures are automatically not in good standing in the program. Return to good standing is upon the discretion of the CME DGS, who may require any appropriate academic or professional corrective action, or immediately refer a student for a Formal Review. Failure to comply with any required corrective action will result in a Formal Review.

### **3.4. Formal Reviews**

Formal Reviews are holistic assessments of a student’s performance as a member of the CME program and are conducted by the CME DGS. The CME DGS will solicit all appropriate input from a student’s Major Professor, Advisory Committee, RA Advisor, TA Instructor of Record, or any other individual with relevant information. The result of a Formal Review may be no action, requirement of specified academic or professional actions or steps by the student, termination of any assistantship or loss of other financial support, or the initiation of formal proceedings to dismiss the student from the program.

*Note:* The *Graduate School Bulletin* specifies the terms and conditions for academic termination from the M.S. and Ph.D. programs; academic termination is distinct from the termination of financial support, the latter of which is at the discretion of the Major Professor and the CME DGS, and may also be subject to the availability of funds.

Results of a Formal Review may be appealed in writing to the department’s Graduate Studies Committee (via email or printed notification of the CME DGS) within 10 working days of notification of the initial decision.

### **3.5. Vacation and Time Off**

Graduate students are expected to treat their studies (including any assistantships held) as a full-time job. As such graduate students are expected to spend normal working hours during all periods

that the University is officially open focused on tasks related to their studies: attending class, conducting research, studying, and/or fulfilling assistantship or fellowship responsibilities.

Graduate students are expected to be working any time that the University is officially open, including “breaks” during which classes are not in session (e.g., Fall, Spring, and/or Summer “breaks”). While no classes are held during these periods, they are not “time off” for graduate students. In contrast, graduate students (as well as faculty and staff) are not expected to be working during periods that the University is officially closed (e.g., the week between 12/25 and 1/1).

Graduate students can request limited periods of paid time off (e.g., for a vacation or other travel) from their Major Professor. Reasonable requests of 1-2 weeks per year that do not interfere with the student’s academic progress or the ongoing research or academic activities of the student’s group are likely to be granted, but doing so is at the discretion of the Major Professor.

Extended periods of travel or time off from research may be requested as *unpaid* time off. Requests for time off greater than two consecutive weeks must be approved by both the Major Professor and CME DGS, and there is no obligation for permission to be given. Students who feel it is necessary to step away from their studies for extended periods for medical or personal reasons should immediately speak with both their Major Professor and the CME DGS.

### **3.6. Professional and Technical Conferences and Meetings**

The CME Program encourages students to attend and participate in professional and technical conferences and meetings. Students must request permission from their Major Professor before planning submissions or travel to such events. In certain cases, students may be reimbursed for expenses incurred during travel for purposes related to their research and studies. Students should discuss financial support for travel with their Major Professor prior to making any plans or commitments, and financial support may not always be available.

The Chemical & Materials Engineering Department also has limited resources available to support travel to conferences and/or meetings by students. Graduate students may request up to \$500 (\$750) each academic year (7/1-6/30) to defray travel costs to a conference or meeting in the United States (or another country). To be eligible to receive this support the student must be the *presenter* of a talk or poster. Support for travel to workshops or other events not involving a student presentation will be considered only in exceptional circumstances, upon petition from the Major Professor. The online application form for departmental travel support may be found at:

<http://www.engr.uky.edu/research-faculty/departments/chemical-engineering/about/internal-forms>

Strict University-level rules govern *all travel* associated with research or academics. Students *must* contact their Major Professor *before* making any plans or commitments to travel, and should contact the staff in the department office to receive assistance arranging any travel approved by the student’s Major Professor.

### **3.7. Student Health Insurance**

All fully-supported graduate students (R.A.; T.A.; fellow) who are in good standing are enrolled in the Graduate School student group health insurance plan. Also, health insurance is required for

international students. For more details, please review the *Graduate School Bulletin*, or visit the Graduate School's health insurance web site:

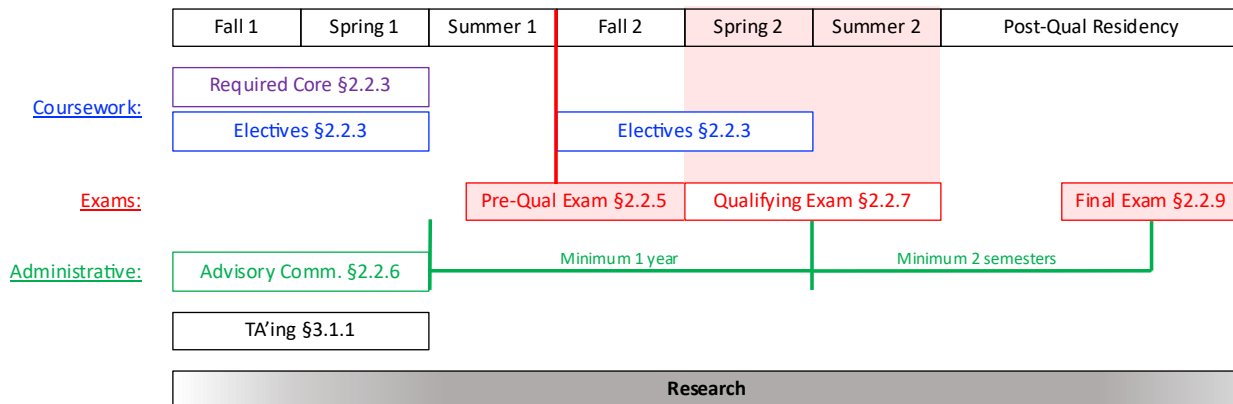
<http://gradschool.uky.edu/health-plan>

### **3.8. Checking Out**

If a student completes a graduate degree program, it is his/her responsibility to leave the desk or carrel and all laboratory space in good, clean condition. All keys for desks and carrels must be returned to the Director of Graduate Studies or the appropriate Departmental staff. In addition, any residual charges on the student's record (*e.g.*, library fines, parking tickets, etc.) can result in the University withholding transcripts and diplomas. Students are strongly encouraged to confirm that they are in good standing prior to leaving the University.

# A. Appendix

## A.1. Timelines



### Qualifying Exam Timeline (§2.2.7):



### Final Exam Timeline (§2.2.9):

