

UNIVERSITY OF ILLINOIS CHICAGO

DEPARTMENT OF CHEMICAL ENGINEERING

UIC Engineering Innovation Building

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Chicago, IL 60608

GRADUATE STUDENT HANDBOOK

2025 – 2026 Academic Year

Updated 08/27/25

This manual contains information about the Chemical Engineering Department, the Graduate College, and many of the regulations and procedures you will encounter during your studies at UIC. This information supplements the current Graduate College Catalogue and does not supersede the official general rules and regulations of the Graduate College and University.

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WELCOME TO CHICAGO!

A Letter from the Department Head:

We are delighted that you have chosen to pursue your graduate education in Chemical Engineering at University of Illinois Chicago. Your admission to our graduate program attests to your qualifications to complete a course of study at either the M.S. or the Ph.D. level. The Faculty of the Chemical Engineering Department, with an unusually broad range of interests and a heavy commitment to research and high-quality graduate education, is also committed to assisting you in every way possible to achieve your goal of successful completion of your graduate studies.

This handbook, which describes the Department and the graduate programs in detail, is one way we can help you organize your studies efficiently. In addition, you have been (or will be) assigned an academic advisor whom you should feel free to consult as often as you need. You should also note that the current research interests of the faculty immediately follow this letter. You should use this list to determine which particular faculty members have research interests that coincide with your own and should meet with them as you begin to plan your research program.

Please feel free to stop by and see us if you have any questions.

Dr. Vikas Berry
Department Head
Department of Chemical Engineering

Faculty Research Interests

Achinivu-Ibagere, Ezinne C. *Ph.D. North Carolina State University, 2014, Assistant Professor*

Sustainable energy development, green chemistry and white biotechnology, transformation of waste into bioproducts like biofuel, bioplastics, bioactives, biorefining of waste biomass, molecular design and performance advantaged biopolymers.

Berry, Vikas *Ph.D. Virginia Polytechnic Institute & State University, 2007, Professor and Department Head*

Graphene and 2D nanotechnology, bionanotechnology, materials science, electronic materials, molecular electromechanics, sensors, and (electrical, structural, and chemical) characterization of nano- and bio-materials.

Chaplin, Brian P. *Ph.D. University of Illinois Urbana-Champaign, 2007, Professor and Director of Graduate Studies*

Electrochemical and catalytic water treatment technologies, heterogeneous reaction mechanisms, sensors, membrane separations, adsorbent/membrane separations.

Kim, Sangil *Ph.D. Virginia Polytechnic Institute & State University (Virginia Tech), 2007, Associate Professor*

Mass transport in nanofluidics. nano- and micro-engineered membrane technologies for gas separation, water purification, biomolecules separation, protective fabrics, and energy production/conversion.

Liu, Ying *Ph.D. Princeton University, 2007, Professor*

Self-assembling nanoparticles for targeted drug delivery and cardiovascular imaging. Microfluidic technologies for particle synthesis, drug screening, and cell encapsulation.

Mehraeen, Shafiqh *Ph.D. Stanford University, 2011, Associate Professor*

Statistical thermodynamics and computer simulation studies of self-assembly, diffusive and reactive complex fluids, charge transport in light-harvesting systems and solar-photochemistry.

Nemade, Roshan Y. *Ph.D. University of Illinois Chicago, 2023, Visiting Research Assistant Professor*

Nanomaterials Synthesis & Characterization, Graphene & 2D Materials Engineering, Electrochemical Energy Storage, Process Scale-up & Commercialization, Biosensors for Biomedical Applications, and Sustainable Materials Development.

Ngo, Anh *Ph.D. Ohio University, 2010, Professor*

Multiscale Modeling, Computational Materials Science for Materials Design, Renewable Energy and Nanotechnology, Advanced Battery Materials, Strongly Correlated Quantum Materials

Sharma, Vivek *Ph.D. Georgia Institute of Technology, 2008, Professor*

Soft Matter ODES: Optics, dynamics, elasticity and self-assembly. Fizzics (the science of bubbles, drops, emulsions & foams). Rheology & processing of complex fluids. Polymers, colloids, liquid crystals & proteins. Structural color.

Singh, Meenesh *Ph.D. Purdue University, 2013, Professor*

Artificial Photosynthesis, Pharmaceutical Engineering, Carbon Capture and Sequestration, Balancing Nitrogen Cycle, Water Purification, Solar Energy Conversion, Computational Materials, Electrocatalysis and Electrochemical Engineering.

Takoudis, Christos G. *Ph.D. University of Minnesota, 1982, Professor*

Microelectronic materials and processing, micro fabrication techniques, chemical sensors, micro-electro-mechanical systems (MEMS), heteroepitaxy in group IV materials. In situ surface spectroscopies at interfaces, heterogeneous catalysis, novel approaches to reaction kinetics, reaction engineering.

Wedgewood, Lewis E. *Ph.D. University of Wisconsin-Madison, 1988, Associate Professor*

Non-Newtonian Fluid mechanics; polymer kinetic theory, molecular-level simulation of complex liquids, continuums mechanics, laser-Doppler velocimetry.

The Graduate Committee

This committee, through its Chairman, the Director of Graduate Studies (DGS), is responsible for the administration of the Department's graduate program. The Graduate Committee has the responsibility of evaluating and processing the applications for admission to the Graduate College, advising graduate students on programs of study and Department rules and regulations, evaluating newly submitted graduate courses and programs of study, recommending graduate students for financial assistantships, fellowships, and other financial aid programs, supervising graduate exams, and evaluating student academic progress. The Chemical Engineering Graduate Committee is currently comprised of:

Dr. Brian P. Chaplin, Director of Graduate Studies (DGS)

Dr. Vivek Sharma

Dr. Shafiqh Mehraeen

Dr. Ezinne C. Achinivu-Ibagere

Dr. Vikas Berry (alternate DGS)

The Graduate Program Coordinator is:

Mr. Eduardo M. Martinez, M.Ed, MBA

Room 226 EIB

Phone: (312) 996-3424

Fax: (312) 996-0808

E-mail: emarti59@uic.edu

Application, Admission Requirements, and Limited Standing

The **Application for Graduate Studies**, the **Declaration and Certification of Finances** form, official transcripts, and TOEFL scores must be submitted to the **Office of Admissions and Records (OAR)**.

Separately, the **Department of Chemical Engineering** requires the following materials to be sent directly to the department:

- Three letters of recommendation
- The **Application for Graduate Appointment**
- A **personal statement** attached to the appointment application

Please note that applications can be reviewed without the Financial Certification form. However, you must clearly inform the OAR that your enrollment is contingent upon receiving full financial support.

The OAR will evaluate your transcripts and calculate an equivalent grade point average. Once your academic records have been reviewed and all required materials are received, your application file will be forwarded to the Chemical Engineering Graduate Committee for review.

For more details, please visit: <https://applygrad.uic.edu/portal/programs>.

The Department reviews each applicant on an individual basis in view of multiple factors including, but not limited to, grades, grade point average, prior academic experience, references, independent and supervised research, and test scores. All decisions reflect these cumulative and multifaceted criteria, and no one factor is determinative. GPA and test scores, which meet minimal requirements, do not guarantee admission since applicants are judged on their overall qualifications. Applicants for a degree or non-degree admission must submit complete transcripts from all colleges and universities attended. The Department does not require taking the GRE test.

For admission to the M.S. degree program, applicants must have an engineering baccalaureate from an accredited college or university, a grade point average of at least 3.00/4.00 (A=4.00) for the final 60 semester hours of undergraduate study, and must submit three letters of recommendation.

Applicants to the Ph.D. degree program are similarly evaluated on the basis of their overall records. A minimum grade point average of 3.00/4.00 will be required before an application will be processed, and the preferred minimum accepted for admission is 3.50/4.00. All decisions regarding admission to graduate study in the degree program are discretionary and are determined solely by the Department with the approval of the Graduate College.

Admission on Limited Standing

Applicants who hold degrees in natural sciences (other than chemical engineering) may be admitted to the M.S. or Ph.D. program in Chemical Engineering on **Limited Standing**. These students must complete prerequisite coursework within their first two semesters to remedy any academic deficiencies. Upon successful completion, they may be advanced to **Full Standing**.

Required Courses for Students Without an Engineering Background

Students with sufficient preparation in mathematics, physics, and chemistry—but without undergraduate training in engineering—are required to complete the following courses during their first two semesters:

1. CHE 210 – Material and Energy Balances
2. CHE 301 – Chemical Engineering Thermodynamics

3. CHE 311 – Transport Phenomena I (Momentum Transfer)
4. CHE 312 – Transport Phenomena II (Heat and Mass Transfer)
5. CHE 313 – Transport Phenomena III (Separation Processes)
6. CHE 321 – Chemical Reaction Engineering

Additional Preparatory Coursework

Students who do not have three full years of chemistry (inorganic, organic, and physical), two semesters of physics, and four semesters of mathematics (three semesters of calculus and one semester of differential equations) must also complete these courses. Additional remedial coursework may be assigned as necessary. In exceptional cases, certain requirements may be waived if prior proficiency can be demonstrated. Most students with undergraduate degrees in Chemistry, Biochemistry, or Physics will have already completed much of this background.

Academic Standards for Advancement to Full Standing

- A **grade of B or better** is required in all prescribed undergraduate courses.
- Once all requirements are satisfied, students must submit a request to the **Director of Graduate Studies** for a change of status to Full Standing.
- Students who receive a grade lower than B in a required course but maintain a **GPA of 3.00/4.00 or higher** may petition for Full Standing after completing **12 hours of graduate coursework** toward the degree with a **GPA of 3.50/4.00 or higher**.

For more details, visit: <https://che.uic.edu/graduate-studies/>

Advising

Upon admission to the graduate program, a student is assigned a temporary faculty advisor or contact person. The temporary advisor will assist the student during their first semester of registration and acquaint them with the various rules, regulations, and procedures of the Department. Ph.D. students and M.S. (thesis option) students must select their permanent degree advisor by the tenth week of the first semester after entering the program. Students are required to meet all the faculty members by the sixth week of the first semester before deciding on their M.S. or Ph.D. thesis advisor and research topic. After this selection is made, the student must inform the DGS of their choice by completing the appropriate form. If an M.S. or Ph.D. student fails to meet all the faculty members and select a permanent advisor(s) before the required dates, the student may not be eligible for the financial support in the following semester.

An advisor may indicate at any time that a student will no longer be retained under the advisor's supervision. In this case, the advisor must inform the student and the DGS in writing. Should a student desire to end the association, they must similarly inform the advisor and the DGS. If the student is in good standing, the Graduate Committee, in consultation with the Department Head, will advise the student on the selection of a new advisor.

Annual Review of PhD Students

Purpose. In alignment with the policies of the UIC Graduate College, the Department of Chemical Engineering (CHE) conducts annual evaluations of all PhD students. The purpose of this evaluation is to monitor degree progress, provide constructive feedback, and ensure students

receive appropriate mentoring and guidance to support their scholarly and professional development.

Frequency and Oversight

- Each PhD student must participate in a formal evaluation **once per academic year**.
- The evaluation process is coordinated by the **DGS**, with input from the graduate committee.
- A record of each annual review will be maintained in the student's departmental file and may be reviewed by the Graduate College if necessary.

Evaluation Components

The annual review consists of the following steps:

1. Student Self-Evaluation

- Students will complete a standardized self-evaluation form provided by the DGS.
- The self-evaluation should include:
 - Progress on academic milestones (e.g., coursework, qualifying exams, proposal defense, dissertation progress).
 - Research accomplishments, professional development, and service contributions.
 - Reflection on how prior feedback was addressed.
 - Goals and potential challenges for the upcoming year.

2. Advisor Evaluation

- The student's research advisor will prepare a written assessment of the student's progress.
- Advisor feedback must be framed in terms of **student development** rather than a list of research deliverables.
- Evaluations should identify both strengths and areas for improvement and provide constructive guidance for continued progress.

3. Student-Advisor Meeting

- The student and advisor will meet to review both evaluations.
- The meeting will focus on:
 - Discussion of progress and accomplishments.
 - Strategies for addressing any concerns.
 - Establishment of goals and milestones for the next academic year.

4. Departmental Review and Record Keeping

- Both the student's self-evaluation and the advisor's assessment will be submitted to the DGS.
- The DGS will review the documents for completeness, alignment with Graduate College expectations, and overall student progress.
- Evaluations will be incorporated into the student's academic record and may be referenced as part of departmental decision-making regarding funding and support.

Outcomes and Implications

- **Satisfactory Progress:** The majority of students are expected to demonstrate satisfactory progress. These students will receive confirmation from the DGS that they are in good standing.

- **Concerns or Unsatisfactory Progress:** Students showing insufficient progress will be given written feedback outlining deficiencies and expectations for improvement. Follow-up meetings or interim evaluations may be required.
- **Resource Allocation:** In circumstances of limited departmental resources (e.g., teaching assistantships, fellowships), outcomes of the annual review may inform prioritization of student support.

Compliance

Completion of the annual evaluation process is a **Graduate College requirement**. Students who fail to submit their evaluations or participate in the required meeting will be considered **not in good standing** and may be subject to loss of funding or other graduate privileges.

Conflict Resolution

Conflict resolution for graduate students within the Chemical Engineering Department at UIC follows the guidelines established by UIC's Graduate College. Graduate students are encouraged first to address conflicts or academic concerns informally with the individual involved, such as a faculty member or advisor. If informal resolution is unsuccessful, students may initiate a formal grievance according to the UIC Student Academic Grievance Policy. This policy outlines a three-stage process: (1) attempting informal resolution, (2) discussing with the DGS to mediate a reasonable solution, (3) filing a formal grievance with the department's DGS, and (4) if unsatisfied, appealing to the Graduate College's Grievance Officer, whose decision is final except in cases involving unlawful discrimination or procedural errors.

The full grievance process can be reviewed at:

<https://policies.uic.edu/educational-policy/student-academic-grievance-policy/>

Additional graduate college policies are available at:

<https://grad.uic.edu/academic-support/graduate-college-policies/>

DEGREE PROGRAMS

Degree Expectations

All Chemical Engineering MS and PhD students at UIC are expected to:

- **Maintain Good Academic Standing:** Keep a minimum 3.0 GPA and meet all Graduate College and department continuation and probation rules.
- **Enroll Continuously:** Register every fall and spring semester and make steady progress toward your degree.
- **Select an Advisor:** Choose a permanent faculty advisor within the timeline set by the department.
- **Complete a Mentor-Mentee Agreement:** Each student and advisor must complete and submit a department Mentor-Mentee Agreement outlining mutual responsibilities and the code of conduct.

- **File Course Approval:** Complete a course approval form, in consultation with your advisor, by the deadline for your program.
- **Act Professionally:** Exhibit academic integrity, research ethics, and respectful conduct in all departmental and university activities.
- **Attend Department Events:** Participate in required departmental seminars and other program activities.

Failure to meet these expectations or to uphold the mentor-mentee agreement may result in academic probation or dismissal, per Graduate College and department policies. Students are responsible for staying informed of all current requirements.

Curriculum and Procedures

Master of Science (M. S.)

For details of course requirements see: <https://che.uic.edu/graduate-programs/ms/>

Thirty-six semester hours are required to complete the M.S. degree. There are three options:

- **Thesis Option:** Complete the five required courses plus one elective, conduct original research (CHE 598, up to 12 hours), and defend your thesis before a faculty committee. Total: 36 hours.
- **Project Option:** Complete the five required courses plus three electives, carry out a research project (CHE 597, 4 hours), and present your project report to a panel of three faculty members for evaluation. Total: 36 hours.
- **Coursework-Only Option:** Complete the five required courses plus 16 additional hours of approved electives. All electives are chosen with your advisor, and you must submit a written justification for your area of emphasis or course plan along with the Course Approval Form. Total: 36 hours.

Elective courses pertinent to a student's research may be taken outside of the Department or COE, in consultation with the advisor and with the approval via the course approval form. The course approval form should normally be completed during the second semester, but can be updated when necessary. A timetable to assist the student in implementing the Master of Science Program is given below.

Admission to the Ph.D. program is not automatic for those completing the M.S. Degree at University of Illinois Chicago. A student desiring to continue graduate study in the Department of Chemical Engineering beyond the M.S. level must apply in writing to the Graduate Committee for admission to the Ph.D. program. Current M.S. students in the Department of Chemical Engineering may apply for admission to the Ph.D. program. At least three core courses at UIC for a minimum grade point average of 3.50/4.00 will be required before an application will be processed. There is not a foreign language examination requirement for the Ph.D. degree in the Department of Chemical Engineering.

M.S. Timetable

1. Students must select a degree advisor not later than the sixth week of the first semester of your M.S. program. An advisor selection form is shown at <https://che.uic.edu/graduate-programs/graduate-student-resources/>. This and most other forms can be obtained from the Graduate Program Coordinator in the main office, room 226 EIB.

2. In consultation with your advisor, you will complete the course approval form and, with your advisor's signature, submit this form through the DGS to the Graduate Committee for approval before the sixth week of the second semester of M.S. candidacy. A copy of the course approval form is given at <https://che.uic.edu/graduate-programs/graduate-student-resources/>. Students pursuing the Course-Work-Only option must also submit a written justification for the selection of elective courses.

3. Each M.S. student's permanent advisor will recommend a Thesis Committee to the DGS nine weeks before the examination date. The committee consists of at least three members, two of whom must have permanent membership on the Graduate Faculty. One member of the committee may be from outside the Department or even from outside the university. Approval of the thesis by all but one member of the committee is required. Any delay in the submission of forms may result in a delay in the award of the degree.

4. For thesis M.S. candidates, the defense of the thesis must be conducted in accordance with the limits set by the Graduate College. For project M.S. candidates, approval of the project report by the three-faculty panel must be obtained before the thirteenth week of the semester in which the student is seeking credit in CHE 597. The student's M.S. Thesis should be submitted to the Thesis Committee at least two weeks prior to their defense.

5. A typed, PDF copy of the thesis or CHE 597 project report/presentation must be filed with the Graduate Committee and Graduate Program Coordinator to be sent to the Graduate College. Check with the Graduate Program Coordinator for detailed requirements.

Master of Science (M.S.) (Options)

1. If a student is working towards the M.S. degree with the research project option, they must enroll in CHE 597 for a maximum of 4 semester hours. No more than 4 semester hours will be credited in CHE 597 for the Master's project. A typed, PDF copy of the CHE 597 project, approved by the three-faculty panel, must be filed for the Departmental Library by the thirteenth week of the semester in which you are seeking credit.
2. If a student is working towards the M.S. degree with the thesis option, they must enroll in CHE 598 for at least 4 hours per semester. No more than 12 semester hours will be credited in CHE 598 for the Master's thesis. A copy of the approved thesis must be filed with the Department, as mentioned above.
3. If a student is working towards the M.S. degree with the course-work-only option, there are no special course requirements beyond the 5 core courses.

Doctor of Philosophy (Ph.D.)

For more details of course requirements see: <https://che.uic.edu/graduate-programs/phd/>

A total of 108 credit hours are required for the Ph.D. degree in Chemical Engineering. This includes 48 hours of coursework and 60 hours of research (CHE 599 - Ph.D. Thesis Research).

- **For students entering with a B.S.:** You must complete six required core courses (24 hours) and six elective courses (24 hours). Students who receive teaching assistantship (TA) support are expected to take at least three core chemical engineering courses (12 credit hours) and the departmental seminar (CHE 595) during their first two semesters.
- **For students entering with an M.S.:** You should not repeat courses similar to those previously completed. Prior courses may be counted toward required course requirements, but must be verified with transcripts and course syllabi and approved by the DGS. In addition to any required courses that were not taken previously, students must complete six elective courses (24 hours). Students with TA support must take at least 12 credit hours of coursework and the seminar (CHE 595) in their first two semesters.
- **Academic Standing:** All Ph.D. students must maintain a GPA of at least 3.0/4.0 and perform satisfactorily in their teaching assistant duties to remain eligible for departmental financial support. Students may request course requirement exemptions in exceptional cases, but only with approval from the Director of Graduate Studies.
- **Preliminary Exam:** All Ph.D. students must take the preliminary exam by the end of their fifth semester in the program.
- **Dissertation:** The primary requirement for the Ph.D. is the completion of an original research thesis, supervised by your advisor, and its successful defense before your Thesis Committee. The committee may accept the thesis, request minor or major revisions, or reject it.

Departmental Seminars

The Department of Chemical Engineering organizes a number of seminars each academic year, and graduate students are **required** to attend these seminars to receive the credit. An attendance record will be kept by the seminar coordinator and will be presented to the Graduate Committee. Absence from seminars without reasonable cause is a violation of departmental requirements and can constitute a deficiency in the student's record towards graduation. Note that up to 4 hrs (one hour per semester) of graduate credit can be earned for CHE 595 (Seminar in Chemical Engineering Research).

Timetable

1. Application for admission to the Ph.D. program in the Department may be submitted through the Office of Admissions and Records at any time. For UIC M.S. graduates, the application should either be made before the thirteenth week of the first semester after completion of the M.S. degree or during the thirteenth week of the fourth semester of the M.S. program, whichever is earlier.

2. The student must select a degree advisor no later than the eleventh week of the first semester following admission to the Ph.D. program. An advisor selection form is shown in <https://che.uic.edu/graduate-programs/graduate-student-resources/>. The student's temporary advisor will conduct initial advising, including the first-semester course enrollment and details of settling into the program.
3. In consultation with the degree advisor, the student will organize a preliminary exam committee. All the necessary paperwork for the Graduate College must be submitted. Upon successful completion of the preliminary examination, the student is formally admitted to Ph.D. candidacy.
4. In consultation with the degree advisor, the student will propose a list of a minimum of 48 credit hours of graduate courses and, with the advisor's signature, submit the list through the graduate secretary to the Graduate Committee for approval by the end of the third semester after admission to the Ph.D. program. A blank course approval form is shown in <https://che.uic.edu/graduate-programs/graduate-student-resources/>
5. The student's Thesis Defense Committee is nominated by the student upon consultation with the advisor and must be approved by the Graduate Committee, who will then make a recommendation to the Graduate College. The Graduate Dean formally appoints the nominated Thesis Defense Committee. The student's Ph.D. thesis should be submitted to the committee at least two weeks before the scheduled date of the defense. The time limit for the defense, for graduation in a particular semester, is set by the Graduate College. The Department's graduate secretary will have these deadlines as well as graduation request forms.
6. The student must file one typed PDF copy of the Ph.D. Thesis with the Department in addition to those normally required by the Graduate College.

M.S./Ph.D. Thesis Defense Committees

The M.S. Defense Committee consists of three members, at least two of whom must be permanent members of the Graduate Faculty. The committee reports its recommendations to the DGS and it is then sent to the Graduate College. The Committee vote is pass or fail, and it may require that prescribed conditions be met before a pass recommendation becomes effective. The Dean, on the recommendation of the committee, may then permit a second thesis defense.

The Ph.D. Defense Committee must include at least five members (including the chair), with at least three full members of the UIC Graduate Faculty and two tenured faculty; the chair must be a full member. Additional requirements are for one member to be outside the Chemical Engineering Department and at least three of the members be Chemical Engineering faculty. The committee chair is usually the student's academic advisor, although this appointment is not mandatory. These are the same requirements as for the Preliminary Exam Committee, although the committee members may be substituted after the Preliminary Exam. The committee reports its recommendations in writing through the Head of the Department or DGS to the Dean of the Graduate College. The Committee vote is pass or fail, and it may require that prescribed conditions

be met before a pass recommendation becomes effective. The Dean, on the recommendation of the committee, may then permit a second thesis defense.

Ph.D. Preliminary Examination

Ph.D. students must take the preliminary examination during or before their fifth semester in the graduate program. The minimum requirements are that they complete or receive prior credit for the six required Chemical Engineering courses and after learning the basic research methods related to their dissertation research as determined by their Ph.D. advisor. In accordance with Graduate College policy, students must be in good academic standing (i.e., GPA of 3.00/4.00 or higher) and registered for credit during the exam term, (there is no minimum credit requirement), and they must maintain continuous registration each semester after passing the exam until they defend their dissertation. At least one full year must elapse between passing the preliminary exam and defending the dissertation.

The committee for the preliminary examination is appointed by the Dean of the Graduate College upon departmental recommendation and must include at least five members (including the chair), with at least three full members of the UIC Graduate Faculty and two tenured faculty; the chair must be a full member. Additional requirements are for one member to be outside the Chemical Engineering Department and at least three of the members be Chemical Engineering faculty. The committee chair is usually the student's academic advisor, although this appointment is not mandatory. Passing the preliminary exam constitutes formal admission to PhD candidacy.

In the Department of Chemical Engineering, **students are required to take the preliminary exam by the end of their fifth semester at UIC**; those admitted on Limited Standing must achieve full standing before attempting the exam, and their timeline begins upon attaining Full Standing. **Unless approved by the committee chair and the Director of Graduate Studies, students not taking the exam by the end of their fifth semester will be dismissed from the Chemical Engineering Ph.D. program.** The preliminary exam consists of a written report and an oral presentation to the committee, and a publication requirement cannot be imposed prior to taking the exam. Each committee member assigns a grade of 'pass' or 'fail'; a candidate cannot be passed with more than one 'fail' vote. The committee may require that specific conditions be met before a 'pass' recommendation becomes effective (i.e. conditional pass). The due date for completing these conditions is at the discretion of the committee but should not extend past two weeks of the exam date. On the committee's recommendation, a second exam may be permitted and should be taken within six weeks of the first exam, but a third attempt is not allowed.

The Preliminary Exam Report should be structured similarly to a standard federal research grant proposal, such as those submitted to the National Science Foundation. The report should begin with a one-page project summary, followed by a project description that is not longer than 15 pages. This project description may include figures and tables, but the page limit does not include references. The report should be single-spaced, 1-inch margins, and at least an 11-point font size. It must provide a comprehensive overview of the proposed research project, including a review of relevant literature, clearly defined research objectives, a detailed description of the methodology, the anticipated impact of the research, any preliminary data that has been collected, and a realistic plan for completing the thesis research. The report must be submitted to the committee at **least two weeks before the oral exam**, during which the student will present and defend the proposal. The committee evaluates both the report and the oral presentation, assigning

a grade of pass or fail based on the student's demonstrated ability to conduct independent doctoral research and the quality and feasibility of the proposed project.

Instructions for Preparation of Thesis

The Thesis Manual (<http://grad.uic.edu/thesis>) was prepared by the Graduate College to provide guidance for the student and advisor in the formal preparation of the thesis and should be consulted before the student begins compiling the document. While there are a number of format and presentation requirements that should be followed, the Graduate College allows for deviations for accepted disciplinary manuscript practices, and the guidelines allow flexibility for many of these deviations. Consult the manual for more information, and also consult with your advisor and Department. A checklist is provided in the back of the Thesis Manual, and it should be carefully reviewed.

Miscellaneous Procedures

Application for Graduation (M.S. or Ph.D.)

The university uses an automated process for graduating students called the Pending Degree List. All students (undergraduate, graduate, professional, and Advanced Dental) must submit a Pending Degree List form electronically using the process below. Please read these directions carefully.

The Pending Degree List form may be submitted starting the semester before your graduation semester until the Friday of the third week of the fall and spring semester or the second week of the summer semester.

Pending Degree List Steps:

1. From the menu in [Student Self Service](#) select Graduation Information
Note: The Pending Degree List form is available during the registration period for the term through the 3rd week (2nd week in summer).
2. Click on Notify Intent to Graduate This Term
3. Select your graduation term and click on submit.
4. Select the degree period listed and click on submit.
5. Verify the major/graduate program, graduate concentration, undergraduate minors listed on the Add Pending Degree web page.
6. If any of the information is incorrect, click on help for specific instructions on how to enter the correct information in the text box.
7. Click on submit.
8. Print the confirmation page for your records.
9. A confirmation email will be sent. Note: At the bottom of the confirmation page, there will be a message about the confirmation email (sent to xxxx@uic.edu or could not be sent).
10. From the menu in Student Self Service select Personal Information and create a "Diploma Address".

Note: All upcoming graduates must create a Diploma Address; failure to do so could delay the receipt of your diploma.

It is primarily the student's responsibility to ensure that all such requirements have been satisfied.

Petitions

Students desiring a waiver or a variation of Department or Graduate College regulations must apply by petition. "Graduate Student Petition" forms may be obtained from the Graduate Coordinator. A sample form is can be found at <https://grad.uic.edu/academic-support/student-resources/graduate-student-forms/>. The individual request must be clearly and fully stated, the form completed and signed by the student, then endorsed by the student's advisor. Completed petitions are submitted to the Graduate Coordinator. Whenever further information is needed on any of these matters, the student should consult the DGS or the Graduate College catalog.

Transfer of Graduate Coursework

Consideration will be given to the transfer of graduate work completed in other accredited institutions. The limit on transfer credits is set by the graduate college, which in general, is 25% of the required hours for the degree. No transfer is automatic; credit earned by an irregular undergraduate student or non-degree graduate student is not transferred if the student is later admitted to the Graduate College in a degree program. Only graduate work that meets at least the quality and content criteria of courses offered at University of Illinois Chicago is acceptable. Consideration is given to the transfer of credit in three categories:

- a. Graduate work completed elsewhere before admission to UIC and for which a degree was not awarded.
- b. Graduate work completed elsewhere after admission to UIC and for which a degree was not awarded. A student considering taking graduate work elsewhere during a Leave of Absence or Off-Semester Vacation should consult his/her advisor and the Director of Graduate Studies about rules and about courses that could be accepted for transfer.
- c. Graduate work completed in the senior year at UIC that was not applied to the baccalaureate.

The petition form, "Graduate Petition for Credit Toward an Advanced Degree," can be found at <https://grad.uic.edu/academic-support/student-resources/graduate-student-forms/>

Continuation and Probation Rules

Students may continue to register as long as they remain in good standing, herein defined as satisfactory progress and achievement, and satisfactory behavior within the code of conduct described in the Student Handbook. The minimal Graduate College academic criterion is that a student must maintain a cumulative grade point average of at least 3.0/4.00 on all work taken at UIC as a graduate student. Two separate averages are computed: (a) on all courses (100-400 levels); and (b) on graduate courses alone (400-500 levels). A minimum GPA of 3.0/4.00 is required in each group. Transfer and extension credit is not computed in the cumulative GPA.

1. If, during two successive terms in residence, the cumulative GPA is below 3.0/4.00 as defined above, the student is placed on probationary status. This is a warning that if the student's academic record continues to be unsatisfactory, permission to register may be denied.
2. After three consecutive terms in residence with a cumulative GPA below 3.0/4.00 as defined above, the student will not be eligible for further registration.

FINANCIAL AID

Research and Teaching Assistantships

There are three forms of financial aid: Fellowships, Assistantships (Research and Teaching), and Tuition-and-Fee Waivers. Research assistantships are assigned by a particular faculty member from their own research funding on an individual basis and are generally given to students of longer tenure who are more disposed to perform in-depth research. Teaching assistants normally aid professors in large courses by handling laboratory and discussion sections and grading papers. With rare exceptions, students can hold a teaching assistantship for no more than four semesters. The criteria for assigning teaching assistantships is at the discretion of the DGS, but general criteria are as follows:

1. Teaching assistants are expected to be competent in the course to which they are assigned. This is generally based on their academic qualifications.
2. The ability to communicate well is especially important in laboratory and discussion courses, so every attempt is made to assign only students with above-average communication skills to such courses. International TA's are required to pass a test for oral English proficiency administered by the ITA English Proficiency Program (Vandana Loomba Loebel, 312-413-2235, vloomba@uic.edu). The oral English proficiency test is given during the two weeks preceding the fall semester and at other times during the year.
3. The Department evaluates TA performance on a semester basis, and the continuation of the assignment is contingent upon satisfactory results in such evaluations. Assistantships are normally granted at the level of 50%, which is considered "full support." That is, the student, in theory, allows 50% of a workweek (20 hours) to the assignment (Attending classes, in theory, accounts for the other 50% of the time). Incoming students supported by TAs must take at least three classes within the chemical engineering department for each of their first two semesters unless suitable courses are not offered, or their assistantship will be withdrawn. The DGS must be petitioned by the student and their advisor for an exception to this rule. Receipt of a 50% TA or

RA includes tuition and fee remission, and the tuition and fee waiver will continue through the summer even if the Assistantship does not, as long as a TA or RA has been received in the spring semester of the preceding academic year.

Tuition and Fee Waivers

Waivers are awarded by the College of Engineering, not by the Department. If your advisor suggests that you obtain a Tuition Fee Waiver (TFW), please email the DGS and provide your UIN in the email. The DGS will submit the names of student TFWs to the College. It has been this Department's experience that no more than four students are awarded TFWs per semester. As mentioned above, if an assistantship has been received in the spring semester, a waiver will carry through the summer.

Students given tuition and fee waivers, including teaching and research assistantships, must register for at least 8 hours of credit during the fall and spring semesters and three hours during the summer semester.

The Graduate Committee continuously reviews the record and progress of every graduate student. All appointments are conditional on satisfactory performance.

National, State, and University Fellowships

Graduate fellowships are awarded both to incoming students, as a recruiting tool, and to encourage outstanding continuing students to pursue Ph. D. research. They are awarded by the Graduate College (not by the Department), or by other agencies outside the university. Fellowship applications have periodic deadlines and are filled out in concert with the student's research advisor and the DGS. A student can apply to any Fellowship for which the conditions are met; if more than the allotted numbers of applications are received for a particular fellowship, the Graduate Committee decides which are sent in. A general calendar of currently available fellowships and their approximate monthly deadlines can be found at the Graduate College website or you may visit <http://grad.uic.edu/cms/?pid=1000893#alf> for more information and deadlines. (Deadlines will be posted and updated throughout the year.)

Office contact information:

Benn Williams
Fellowships Coordinator
Assistant Director of Interdisciplinary Programs and Development
Graduate College
University of Illinois Chicago
614 University Hall, MC 192
601 South Morgan Street
Chicago, IL 60607

T: 312.413.2389
F: 312.413.0185
E: bwilli7@uic.edu

GENERAL INFORMATION

Suggested courses for 1st Fall semester of graduate students entered with BS degree (students with an MS degree will be advised on a case by case basis):

ChE 520 (Transport Phenomena)	4 hrs
ChE 545 (Mathematical methods)	4 hrs
ChE 501 (Advanced Thermodynamics)	4 hrs
Elective course #1	1 to 4 hrs
ChE 595 (Seminar in Chemical Engineering Res)	1 hrs
Subtotal:	14 to 17 hrs

CHE 595 (Seminar in Chemical Engineering) is required for at least the first two semesters (1 credit hr) of all new graduate students.

CHEGSA/GRACE

The Chemical Engineering Graduate Student Association (CHEGSA) (previously Graduate Association of Chemical Engineering, or GRACE) was founded in January of 1987. The goals of this organization were formulated by graduate students and can be divided into three major categories. First, in order to create and maintain a warm and friendly atmosphere in the Department, CHEGSA plans events such as social gatherings and athletic tournaments. Second, to enhance communication and information sharing among various research groups in the Department and encourage professional development through research events like the annual graduate research symposium. Finally, CHEGSA is the voice of graduate students in the Department and will protect their interests in all matters. Since its establishment, CHEGSA has been able to gain enthusiastic support of both the graduate students and faculty, and it has now become an integral part of the chemical engineering department. The graduate students consider CHEGSA as a major factor in making their stay in this Department a more fruitful and fulfilling experience.

Housing

University of Illinois Chicago has residence halls available to graduate students both on the east side of campus and at the Health Sciences Center. The residence halls on the eastside campus are located at the corner of Halsted and Harrison. For housing at the Health Sciences Center, the intercampus shuttle bus offers direct service from residence halls to the entrance of CEB. In both residences, meals are served in adjoining cafeterias and a wide range of recreational and social opportunities are available within the residential complex. For further information contact:

Campus Housing; 818 S. Wolcott Ave.; Ste. 220, Chicago, IL 60612; (312) 355-6300
or visit the Campus Housing website: www.housing.uic.edu

If the University Residence Hall is not a solution for you, contact the UIC Housing Service Office, 704 Student Center East (6-5055). Notices of vacancies, roommates wanted, etc., are posted on the bulletin board on the first floor near the main entrance of CCC. Students are encouraged to check the Chicago Tribune and the Sun-Times for further housing information.

Transportation

University of Illinois Chicago is well served by public and University transportation. A shuttle bus runs every twenty minutes between the Health Sciences Center and the Chemical Engineering Building (CEB). If you drive to school, you can obtain a parking lot key card. The Parking Office is located at 1100 S. Wood St., Room 122 WSPS (3-5800).

The Chicago Transit Authority has a rapid-transit station just north of the campus, on the median strip of the Eisenhower Expressway. There is also a station on Clinton Street, three blocks north of CEB. The trains are on the Congress-Douglas line and can get you to downtown Chicago in three minutes. There are five bus routes that serve the campus, on Harrison, Halsted, Taylor and Roosevelt Road. Many commuter trains stop at Northwestern Station (Clinton and Madison) and Union Station (Clinton and Jackson). Both stations are within walking distance from the campus; however, there is also a University-sponsored shuttle bus, which operates mornings and afternoons. The parking office (709 SCE) has a schedule for the shuttle. Coupons for the Shuttle (for 25 rides) can be obtained from the cashier's office (220 SCE).

Since the commuter shuttle bus only runs in the AM and PM rush hours, it is possible to take the subway from the Clinton subway stop and get off at the U of I/Halsted stop at other times.

Health Services, Counseling, and Insurance

The University Health Services is located at 835 S. Wolcott Ave., Room E-144, (6-7420) has an outpatient clinic for students for the treatment of minor illnesses, injuries, immunizations, etc. *CampusCare* is an affordable self-funded student health benefits program that has been providing comprehensive health care benefits to eligible enrolled students and their covered dependents. Please visit the website for more information on *CampusCare* coverage: <https://campuscare.uic.edu>.

The UIC Counseling Center located at SSB, Suite 2010, 1200 W. Harrison (6-3490), is a primary resource providing comprehensive mental health services that foster personal, interpersonal, academic, and professional thriving for UIC students. The Speech, Language, and Hearing Clinic, is also located in SSB.

Athletic and Recreational Activities

The Student Center East (SCE) has an art gallery, a crafts workshop, a music lounge, television rooms, as well as facilities for swimming, rifle practice, table tennis, bowling, handball, weight lifting, dance, golf, archery, and racquetball. For information on recreational activities call ext. 3-5040.

If you want more organized activities, there are intramural programs in badminton, basketball, bowling, fencing, handball, racquetball, softball, squash, swimming, tennis, touch football, track, volleyball, and water polo. Information can be obtained from room 149 of the Physical Education Building, ext. 6-5164.

The Intercollegiate Athletic Program has moved into Division 1A, does well, and deserves your support.

Bookstores

The main University Bookstore is on the ground floor of SCE. There is also a small shop in the basement of BSB and a general bookstore on the first floor of SCE; medically oriented books can be obtained at the bookstore at the Health Sciences Center. General scientific books are also available in a variety of city bookshops.

MISCELLANEOUS USEFUL INFORMATION

Check Cashing: Cashier's Office is on the second floor, main lobby of SCE (\$75 limit). There is a \$.25 charge. The other cashier's office is located in the Marshfield Avenue Building (MSB), 809 South Marshfield (Marshfield and Polk Streets), first floor, check cashing (\$200 limit). There is no charge. You must present your UIC student ID card.

Lost & Found:

- SCE, 1st floor, 750 S. Halsted St. (312-413-5100, 312-413-5130)
- Student Services Building, 1st floor, 1200 W. Harrison St. (312-413-5000)
- Student Center West, 1st floor, 828 S. Wolcott Ave. (312-413-5200)

Also, you can check with the Chemical Engineering Office, 226 EIB.

Day Care: Contact information: UIC Children's Center, 1919 W. Taylor St., Rm 116 M/C 525, Chicago, IL 60612, Ph: 312-413-5326, Fax: 312-413-5329, Email: uicchildcenter@uic.edu, website: <http://childrenscenter.uic.edu/westsite.shtml>

Blood: To donate blood, please visit the following website: http://hospital.uillinois.edu/Patients_and_Visitors/Visiting_a_Patient/Donate_Blood.html or call ext. 6-6970 for more information and/or schedule to an appointment.

I-Card: All students must obtain a UIC photo ID. The ID Center is located at SSB, 1200 W. Harrison St., Room 1790 and is open Monday-Friday between 8:30 am - 5 pm.