



THE UNIVERSITY OF TEXAS AT SAN ANTONIO

Department of Chemistry

Ph.D. Program Handbook

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The University of Texas at San Antonio

Department of Chemistry

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Chemistry Ph.D. Program Handbook

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Program Overview

The Ph.D. degree in Chemistry is offered by the Department of Chemistry at The University of Texas at San Antonio (<https://chemistry.utsa.edu>). The primary objective of the program is to educate students in a broad range of chemistry sub-disciplines and to focus on one or two specialized areas. This training will ensure that graduates are well prepared to participate and contribute to the chemistry profession in all its facets.

The curriculum is designed to provide an overview of contemporary chemistry through the Core and Elective courses, participation in research seminars and colloquia, teaching opportunities, and, of course, interactions with faculty. All students are required to take 3 out of 5 core courses in Analytical Chemistry, Biochemistry, Inorganic or Organic Chemistry, and Physical Chemistry, as well as a course in Research and Teaching Practice and Ethics. Additional required elective courses are normally taken in fields close to the student's area of specialization. Students will have access to laboratories located on the 1604 Campus in the Biotechnology, Sciences and Engineering (BSE) Building. All students are required to sign a Chemical Hygiene plan with their Supervising Professor, a copy of which will be kept in the Departmental office, before beginning any laboratory work.

Disclaimer

The information contained in this Handbook does not constitute a contract, expressed or implied, between any applicant, student or faculty member and the Ph.D. program in Chemistry, the Graduate School at The University of Texas at San Antonio or The University of Texas System.

Revisions

The Department of Chemistry reserves the right to alter and/or clarify the requirements and procedures set forth in this handbook at any time. Any changes become effective upon approval by the M.S. and Ph.D. Programs Committee (MPPC) and, if necessary, by faculty vote and University approval. The changes apply to prospective students and may apply to those already enrolled in the Program. **Suggestions from students and faculty for improving the contents of this handbook are encouraged.** Please forward your suggestions to the Department of Chemistry's Graduate Advisor of Record, Department of Chemistry, The University of Texas at San Antonio, One UTSA Circle, San Antonio, Texas 78249-0698.

Typical Timeline for the Ph.D. Degree

The procedures and requirements leading to the Ph.D. degree in chemistry are listed below in the recommended chronological order.

Application

All applications for admission to the Ph.D. program must be made to the Graduate School (not the Department of Chemistry). The Department of Chemistry encourages potential applicants to contact the Graduate Advisor of Record or other members of Faculty before submitting applications.

Minimum requirements for admission

- Minimum grade point average (GPA) of 3.0 in the last 60 hours of undergraduate college coursework
- Combined general GRE combined verbal reasoning and quantitative reasoning (new) scores > 300 (effective 2012)
- At least two strong letters of recommendation
- Meaningful statement of research interests and career goals (250-500 words)
- Payment of application fee

When applicable:

- TOEFL score (> 550 paper, > 79 Internet)

More details about the GRE and TOEFL may be found at <http://graduateschool.utsa.edu/>.

Upon official admission by UTSA, the student will receive an official letter of admission from the Graduate School and a letter of appointment from the Department of Chemistry. This letter stipulates the terms of the appointment and financial support.

Continued support is contingent upon the student remaining in good academic standing (see Academic Standing below) and making satisfactory progress towards the Ph.D. degree according to the timeline listed below. The Department of Chemistry's MPPC is responsible for evaluating academic standing and progress and for recommending continued financial support. The student's progress is reviewed annually with the Department Chair, GAR and Supervising Professor at the end of the calendar year. The GAR reviews student progress every semester when scheduling the student's classes for the coming semester.

Orientation

The Departmental orientation for graduate students takes place at the beginning of each semester. Attendance is mandatory. Topics typically include a general description of the graduate program, courses taught in that semester, and a questions and answer session.

Year-by-Year Milestones for the Ph.D. Degree

Year 1

- Complete 3 core courses earning a grade of B or better
- Take Research and Teaching Practice and Ethics
- Select doctoral research advisor (Supervising Professor)
- Sign Chemical Hygiene plan
- Attend departmental seminars
- Select Doctoral Studies Committee

Year 2

- Complete coursework (electives)
- Begin writing Dissertation Research Proposal
- Submit Program of Study
- Attend departmental seminars and research colloquia
- Continue dissertation research
- Submit and defend Dissertation Research Proposal
- Admission to Candidacy

Year 3

- Conduct research as specified in the Dissertation Research Proposal
- Be admitted to candidacy
- Write and defend Independent Research Proposal
- Attend departmental seminars and research colloquia
- Continue dissertation research

Years 4 and 5

- Complete dissertation research
- Write Dissertation
- Submit Dissertation to Doctoral Studies Committee for approval
- Defend Dissertation (Oral examination)
- Submit Dissertation to Graduate School
- Attend departmental seminars and research colloquia

Program Administration

The Dean of the Graduate School at The University of Texas at San Antonio has overall responsibility for the Ph.D. Program in Chemistry. All doctoral work is subject to approval by the Graduate School and by the Deans. The graduate faculty in the Department of Chemistry, along with the MPPC, and Graduate Advisor of Record, are responsible for curriculum development and review.

The Ph.D. Program is supervised by the MPPC comprising members of the faculty, including the Graduate Advisor of Record. The MPPC is responsible for establishing admission requirements, overseeing academic curricula, monitoring students' academic progress, attesting eligibility for admission to candidacy for a degree, and verifying to the Graduate School that the student has fulfilled all requirements for the awarding of the degree.

The day-to-day administration of the Ph.D. program is the responsibility of the Graduate Advisor of Record (GAR). The GAR advises all doctoral graduate students, maintains records, and represents the program. Questions about degree requirements and academic policies should be directed to the GAR, who may consult with the MPPC.

Requirements and Regulations

Students enrolled in the Department of Chemistry's Ph.D. Program are subject to all established requirements and regulations of the Graduate School of The University of Texas at San Antonio. Refer to the Program Overview section of this Handbook for advice on determining which regulations may apply to your particular circumstances.

Students are strongly encouraged to refer to the current UTSA Graduate Catalog for guidance. This catalog is available in the Department of Chemistry's office and also on-line at <http://www.utsa.edu/gcat>.

Residency requirement

To establish residency, each doctoral student must spend at least two consecutive Semesters (Fall and Spring, Summer Terms I and II and Fall, or Spring and Summer Terms I and II) in residence as a full-time student taking a minimum of nine semester credit hours each long semester and three semester each summer in residence. This stipulation is based on the premise that the scholarship and proficiency required for a Ph.D. degree in Chemistry are best acquired through consistent and concentrated periods of dedicated research efforts in the University environment.

Time Limits

Students have six years from the term of original registration to complete their Ph.D. degree program under the catalog in effect at the time of their initial registration. Financial support is provided for a maximum of five years and requires maintenance of good academic standing. Students are strongly encouraged to complete their Ph.D. requirements within four to five years. Longer times may require prior coursework to be repeated. These time limits may be extended for a maximum of three years for students participating in military service.

Credit Hour Requirements

Students in the Department of Chemistry's Ph.D. program must complete all of the required courses outlined in the section of this Handbook entitled "Coursework Requirements". Students must complete a Program of Study that includes a minimum of 86 semester credit hours of graduate coursework and achieve an overall GPA of at least 3.0. In addition, the student must achieve a grade point average (GPA) of 3.0 or greater (on a 4.0 scale) in organized lecture courses. Note that Graduate Seminar and Research Colloquium are not organized lecture courses.

Transfer of Credit

With the approval of the Graduate School, graduate credit hours (with grades of B or higher) from other universities may be accepted *in lieu* of equivalent required courses. In some cases, graduate courses may be transferred for credit as a chemistry graduate elective course. Students are responsible for requesting course transfer credit. This process involves the submission by the student to the GAR, a brief letter of petition, course description and a copy of the relevant syllabus for each course for which credit transfer is sought. Upon approval by the MPPC, a

formal petition to Associate Dean for Graduate Affairs in the College of Sciences will be prepared for final ratification by the Dean of the Graduate School. Credit transfer courses are not included in the computation of a student's GPA.

English Language Requirements

Students are required to possess a competent command of written and spoken English. For international students this requirement is met by obtaining or exceeding TOEFL scores listed below.

The UTSA Graduate Catalog (2017-2019) states: "The English Language Assessment Procedure (ELAP) is a mandatory UTSA assessment for incoming international students whose Test of English as a Foreign Language (TOEFL) scores are between 500 and 600 (paper version) or 61 and 100 (Internet version). ELAP tests academic language skills in the areas of reading, writing, listening, and speaking. The test is administered during orientation week at no charge to the student. A registration hold is placed on students until the test is successfully completed."

Students who are required to take English for International Students (EIS) classes and do not register for them or drop them before they are successfully completed will be withdrawn from the University and will jeopardize their visa status. Once students successfully complete the EIS classes, the registration hold is removed from their record. Payment for registration in EIS classes is the student's responsibility.

Ethics Course Requirement

Students will be required to fulfill any course requirements, for example "Compliance Training", as determined by the Graduate School.

Supervised Teaching Requirement

A minimum of two Semesters of teaching in one or more disciplines of chemistry, under the supervision of one or more members of the Faculty, is required of all doctoral students. This requirement is normally fulfilled as a teaching assistant in either general chemistry or organic chemistry laboratory courses.

Registration

The Office of the Registrar schedules and announces the timing of the registration process to all students, Departments, Departmental Chairman, and their assistants prior to the start of each Semester. Information regarding registration can be found in the ASAP section <https://asap.utsa.edu/> of the UTSA website <http://www.utsa.edu/>. For individual registration concerns, students should consult the Department of Chemistry's GAR.

A student must register each Semester and Summer Terms that s/he is enrolled in the PhD program. This includes courses in Research, Thesis, Dissertation and Graduate Seminars. No student can receive credit for a course for which s/he has not registered.

Semester Credit Hours

One Semester hour of credit is earned through:

1. Lecture clock hours: 15 to 18 (normally 16)
2. Laboratory clock hours: 45 to 60

A course, for example, has a credit value of three Semester credit hours if the class meets for three lecture hours per week during Fall or Spring Semesters.

Full-Time Status

The minimum full-time course load for a Semester is nine Semester credit hours and for the Summer Term, three credit hours. The maximum load is individually determined by the student's Faculty advisor, the Graduate Advisor of Record, and the MPPC. If a student is employed as a Teaching Assistant or Research Assistant, the course load may be reduced accordingly. In order to qualify for a Teaching Assistant position, students must register for at least 6 credit hours during the fall and spring semesters. Ph.D. students normally will not be Teaching Assistants over the Summer Terms because this time should be dedicated to research.

Doctoral students are required to submit a Request to Travel Authorization (RTA) form in advance for out-of-town travel.

The Ph.D. program in Chemistry is a full-time degree program. Students admitted to the Ph.D. program will receive a stipend and are not permitted to have any other employment beyond their Teaching/Research Assistantships.

Teaching/Research Assistantship Guidelines

Students who receive funding through teaching assistantships or research assistantships also receive tuition and fees to cover the nine credit hours taken in the Fall Semester, nine credit hours taken in the Spring Semester and three credit hours in the Summer Terms. The only exception is for students who are in their final Semester prior to graduation, during which registration for the final dissertation course will be considered a full-time course load.

Grading System

The following grading system is used for all coursework:

Grade Symbol	Grade Points	Meaning of Grade Symbol
A	4	Outstanding
B	3	Above average (average graduate work)
C	2	Average (below average graduate work)
D	1	Below average (failing graduate work)
F	0	Failure (failing graduate work)
CR	0	Credit – indicates successful credit by examination or through Faculty evaluation of class tests, assignments, <i>etc.</i>
NC	0	No Credit – indicates unsatisfactory progress

Credit hours are awarded only for the grades of A, B, C and CR. All A to F grades are included in the calculation of the GPA. CR/NC grades and their associated course credits do not contribute in any way to the GPA calculation. A grade of F in a course will automatically result in dismissal from the Ph.D. program. Note that in the calculation of GPA, only UTSA courses are included. Students must maintain a GPA of 3.0 or above throughout candidacy.

Other grades may be given that do not contribute to the calculation of the GPA. A grade of W means Withdrawal and indicates that the student was passing at the withdrawal or drop. A grade of IN means Incomplete and can be assigned according to university guidelines. A grade of NR means No Report and can only be assigned by the Registrar. A grade of RP means Research in Progress and is applicable to Doctoral Dissertation courses. When the dissertation is complete, the RP grades will be changed to letter grades up to the maximum number of semester credit hours approved for the specific degree.

Academic Standing

A student's academic standing is defined as good standing, academic probation, or academic dismissal. Academic probation describes the standing of a student in one of the following categories:

1. A student who fails to achieve a GPA of 3.0 or higher in any term at UTSA, irrespective of level of courses taken.
2. A student who received a grade of "D" in any course in a term.
3. A student who does not meet all requirements for unconditional or regular admission and who, by special action, is admitted on academic probation.
4. A student who has been reinstated following academic dismissal.

Academic probation is cleared only when none of the above criteria apply and when the student achieves an overall GPA of 3.0 as a graduate student at UTSA. In order to graduate, all graduate students must have a grade point average of at least a 3.0 (on a 4.0 scale). Students on academic probation are encouraged to discuss their status with their academic advisors and/or GAR.

Academic dismissal occurs when a student at the graduate level:

1. Earns a grade point average of less than 2.0 in any term.
2. Earns a grade of "F" in any course.
3. Currently on academic probation and would again be placed on academic probation under the provisions set forth above. If, however, the student's UTSA grade point average for the term is at least 3.0, he or she will continue on academic probation.

Standards for Graduate Support

Students are guaranteed support as Teaching Assistants (TA) and/or Research Assistants (RA), unless their academic standing falls into any of the categories below for two consecutive terms:

academic probation

not making adequate progress towards degree

not completing an average of 8 credits/long semester (16 credits/academic year)

not completing Qualifying Exam by end of 5th semester

not completing the Independent Research Proposal by the end of the 7th semester

Summer terms are not counted as semesters in the above requirements. Students are not guaranteed financial support after their 5th year in the Ph. D. program.

Withdrawal

Permission for withdrawal from the Ph.D. program and the Graduate School may be granted by the Dean of the Graduate School. A student who wishes to withdraw should complete and sign a Withdrawal form available from the Enrollment Services Center. Students who withdraw during a regular “drop period” will receive a grade of “W” in all classes. Students who withdraw after the regular drop date with a passing grade will receive a “W”, while those who are failing will receive an “F”. Students will then be subject to UTSA’s academic standing probation and dismissal regulations. Students who withdraw should refer to the regulations on refunds of tuition and fees, readmission policies, and requirements for maintaining registration.

Leave of Absence

A leave of absence from the Ph.D. program for a maximum of one year may be granted by the Dean of the Graduate School, subject to prior approval by the MPPC. Such permission will be granted only for extenuating circumstances and will not be granted when degree progress is unsatisfactory or when a student is on academic probation. Students must apply for a leave of absence to the GAR in writing and include the reason(s) for the request and the expected time of absence. If the request for leave is approved, the student will be notified by letter from the Dean of the Graduate School and complete the Administrative Clearance Form provided by the Graduate School. The student should also drop all courses for which they are currently enrolled.

Non-registration

A student who fails to register for one or more consecutive semesters and does not elect to apply for a leave of absence can be dismissed from the program. If dismissed, the student may re-apply for admission. Such an application will be subject to the same requirements, procedures, and acceptance considerations that apply to first-time applicants.

Transfer To Another Graduate Programs

Any student who wishes to change the course of study from one graduate program to another must make written application to that program. Such an application will be subject to the same requirements, procedures, and acceptance considerations that apply to first-time applicants. Students who wish to apply for such a transfer must have an interview with the Dean of the Graduate School.

Graduation

The degree of Doctor of Philosophy is awarded by the Board of Regents upon the satisfactory completion of a prescribed Program of Study as documented by the MPPC, recommendation of the Graduate School, and certification of the candidate by the Dean and President to the Board of Regents. Degrees are awarded at the

end of each spring, summer and fall Semester. Commencement ceremonies are held in May and December, at the end of the spring and fall Semesters. Students who graduate at the end of the Summer Semester may participate in either the May or December ceremony. Information on the procedures to be followed is available in the Office of the Registrar or online at www.utsa.edu/registrar.

Misconduct

Students are responsible for knowing and observing the University's "Procedures and Regulations Governing Student Conduct and Discipline" and the "Rules and Regulations of the Board of Regents of The University of Texas system". This and additional information can be found in the UTSA catalogs (<http://www.utsa.edu/gcat>) which are available on-line.

Financial Support

Students in the Department of Chemistry's Ph.D. Program may be supported from several sources, such as the Department of Chemistry's Ph.D. Program, Supervising Professor's research grants, Teaching Assistantships (TA), Research Assistantships (RA), subject to being in good academic standing. It is the intention of the program to ensure that all students are supported for five years. If so stipulated in the Ph.D. program offer letter, up to five years of support are guaranteed so long as a student remains in good academic standing.

Special conditions apply to students receiving support from the Department of Chemistry's Ph.D. Program. This policy does not apply to those receiving support through their advisor's research programs, or other sources. If a student receives support from the Department of Chemistry's Ph.D. Program, s/he will receive a letter containing the following information. Students are expected to agree to these terms as a condition of accepting support.

Students are awarded financial assistance in the form of a twelve-month stipend, the dollar amount of which is specified in the initial offer letter, and which may be subject to annual increases. In addition, the Department will cover student tuition and fees. These stipends typically require appointment as a Teaching Assistant (TA) or Research Assistant (RA). This award requires official acceptance by UTSA and is subject to all stipulations in the Department of Chemistry's Ph.D. Program Academic Policies and Procedures Manual in regard to University-funded support of Ph.D. students. It is also dependent upon full-time participation in the Ph.D. program. Employee benefits, such as health insurance, are provided for Teaching Assistants.

In order to be eligible for this financial support, the student must:

1. Be enrolled in 9 semester credit hours during the first semester (Fall), 9 semester credit hours during each subsequent Spring and Fall semester, and 3-6 semester credit hours of Directed Research or Doctoral Research during the summer session.
2. Maintain a minimum GPA of 3.0.
3. Not hold outside employment.
4. Take all core courses during the first year, with a B average or better.
5. Make satisfactory progress towards the degree including but not limited to completing:

- a) the Doctoral Research Proposal by the end of the 5th long semester
 - b) the Independent Research Proposal by the end of the 7th long semester
6. Not be past their 5th year in the Ph. D. program.

Degree Requirements - Overview

The Ph.D. in Chemistry is awarded to candidates who have displayed an in-depth understanding of the subject matter and demonstrated the ability to make an original contribution to knowledge in their field of specialty. The regulations set forth below comply with the general University regulations in the Graduate Catalog (refer to [Chapter 2](#), General Academic Regulations and [Chapter 5](#), Doctoral Degree Regulations).

The Ph.D. degree requires a minimum of 86 semester credit hours beyond the baccalaureate degree. The core curriculum comprises 12 semester credit hours of formal coursework, required teaching, research, and completion of the dissertation following advancement to candidacy. Specific course requirements are listed below. Enrollment in Chemistry Graduate Seminar and/or the Chemistry Research Colloquium (meetings of professors and students in a specific research area) is required each semester of enrollment and may be taken for a maximum combined total of 12 semester credit hours. A minimum of 53 semester credit hours in doctoral research, including 12 semester credit hours of Doctoral Dissertation, must be completed. Note that at least 18 hours of CHE 6991-3 Directed Research must be completed before the Qualifying Examination and that credit hours for Directed Research in excess of the minimum 18 hours stipulated cannot be transferred to CHE 7921-3 Doctoral Research. Registration for Directed Research in excess of 24 credit hours will not be paid by the Department of Chemistry.

The student must have a grade point average of 3.0 or greater (on a 4.0 scale) in the core courses and elective courses combined. Each student must be a Teaching Assistant (TA) for a minimum of one academic year. Students matriculating with a M.S. degree may use up to 30 semester credit hours toward the Ph.D. degree provided the courses are comparable to core and elective courses. Other degree requirements, including the Qualifying Examination, Independent Research Proposal and Written Dissertation are described below.

Minimum Course Requirements (2011-2013 Graduate Catalog)

- **Required (Core) Courses - 9 credit hours** in Analytical Chemistry, Biochemistry, Inorganic Chemistry Organic Chemistry, and Physical Chemistry.
- **Seminars and Research Colloquium – a maximum of 12 credit hours**
- **Electives – 9 credit hours** with specific courses chosen by the student in consultation with their supervising professor and Doctoral Studies Committee. Courses outside the department may be included upon approval by the supervising professor, MPPC and GAR.
- **Doctoral Research – 53 credit hours** of doctoral research including **12 credit hours** of doctoral dissertation.

TOTAL: 86 credit hours

[Course descriptions](#) are listed are listed on-line.

A. Core curriculum (9 semester credit hours required)

<u>CHE 5263</u>	Advanced Analytical Chemistry
<u>CHE 5313</u>	Advanced Biochemistry
<u>CHE 5453</u>	Advanced Inorganic Chemistry
<u>CHE 5643</u>	Advanced Organic Chemistry
<u>CHE 5843</u>	Advanced Physical Chemistry

B. Colloquia and seminars (maximum of 12 semester credit hours will count towards degree)

<u>CHE 5981</u>	Graduate Seminar in Chemistry
<u>CHE 7911</u>	Chemistry Research Colloquium

C. Doctoral research (minimum 56 semester credit hours required)

<u>CHE 5992</u>	Research and Teaching Ethics
<u>CHE 6991-8</u>	Directed Research (minimum 18 hours)
<u>CHE 7921-8</u>	Doctoral Research (minimum 24 hours)
<u>CHE 7931-8</u>	Doctoral Dissertation (minimum 12 hours)

D. Electives (minimum 9 semester credit hours required)

<u>CHE 5483</u>	Inorganic Solid State Materials
<u>CHE 5833</u>	Computational Chemistry
<u>CHE 6263</u>	Recent Advances in Bioanalytical Chemistry
<u>CHE 6403</u>	Bioinorganic Chemistry
<u>CHE 6433</u>	Organometallic Chemistry
<u>CHE 6443</u>	Green Chemistry and Catalysis
<u>CHE 6623</u>	Advanced Organic Synthesis
<u>CHE 6633</u>	Bioorganic Chemistry
<u>CHE 6643</u>	Chemistry of Heterocyclic Compounds
<u>CHE 6683</u>	Topics in the Chemistry of Natural Products
<u>CHE 6693</u>	Pharmaceutical Chemistry
<u>CHE 6813</u>	Molecular Thermodynamics
<u>CHE 6823</u>	Chemical Kinetics and Dynamics
<u>CHE 6833</u>	Quantum Chemistry
<u>CHE 6843</u>	Statistical Mechanics
<u>CHE 6853</u>	Biophysical Chemistry
<u>CHE 6883</u>	Mass Spectrometry
<u>CHE 6973</u>	Special Problems
<u>CHE 7633</u>	Advanced Catalysis in Organic Synthesis
<u>CHE 7973</u>	Special Problems

Choose Supervising Professor/Generate Preliminary Results

By the end of the first semester of Year 1, the student should choose a major research advisor (the Supervising Professor), who must be a member of the Department of Chemistry and the graduate faculty, and start to develop knowledge

of the supervising professor's research areas. Descriptions of faculty research can be found at <https://chemistry.utsa.edu/directory/faculty>.

Starting the second semester and/or first summer session of Year 1 the student should begin research in the supervising professor's laboratory. It is critical that the student develops sufficient laboratory skills to generate preliminary results prior to the Qualifying Examination. The preliminary results should be of sufficient rigor and merit to justify continued investigation, and serve as the basis for the proposed dissertation project.

Doctoral Studies Committee

The Doctoral Studies Committee should be chosen no later than the end of first semester of Year 2. The Supervising Professor chairs the Doctoral Studies Committee. Additional members of the Doctoral Studies Committee are chosen by the supervising professor in consultation with the student. The committee must consist of at least four members, of which at least three, including the supervising professor, must be from the Department of Chemistry. If justified, one or more members of the Doctoral Studies Committee can be external to the Department of Chemistry; the GAR should be consulted in this case, because a special application must be made to the Graduate School.

Program of Study

The Program of Study (POS) consists of the courses taken towards the degree (See **Course Requirements**) and must be approved by the student's Supervising Professor, Doctoral Studies Committee, and MPPC. The POS must then be submitted to the Graduate School for final approval by the end of first semester of Year 2.

Qualifying Examination

The Qualifying Examination is divided into written and oral portions. The Dissertation Research Proposal (DRP) constitutes the written portion, an oral presentation open to the public, and a defense of the DRP before the Doctoral Studies Committee constitutes the oral portion. The DRP should be based on the student's current and proposed research leading to the dissertation. The purpose of the written DRP and oral defense is to assess the student's ability to coherently describe and defend the thesis research, the unsolved problem(s) to be addressed, and its significance in the context of the general research area. The DRP should describe research that has the potential to generate novel results suitable for publications in peer-reviewed journals, presentations at scientific meetings, and/or patents. Close consultation with the Supervising Professor during preparation of the DRP is encouraged.

The DRP should follow the NSF (or NIH) grant proposal guidelines as follows:
10-15 numbered pages, double-spaced, with 1" margins, left-right and top-bottom, minimum of 11 pt font.
A 200-word abstract (does not count towards the page limit)

Specific Aims (with testable hypotheses)
Background and Significance
Preliminary Results
Experimental Plan
Cited References (does not count towards the page limit)

A hard copy of the DRP should be submitted to the Doctoral Studies Committee at least **two weeks** before the oral defense, and the oral defense should be held no later than one month following submission of the hard copy.

The student's performance on both the oral and written portions shall be evaluated by the Doctoral Studies Committee, which shall recommend either passage or changes in order to remedy deficiencies in the oral and/or written portions. Deficiencies must be remedied within two months of the Doctoral Studies Committee's recommended changes via another oral presentation before the Doctoral Studies Committee and/or presenting hard copies of a suitably amended DRP to the Doctoral Studies Committee. Both the written and oral portions (PowerPoint slides should be numbered) of the Qualifying Examination should be taken no later than the end of second semester of Year 2. No more than two attempts to pass the Qualifying Examination are permitted.

Admission to Candidacy

All students seeking a doctoral degree at UTSA should be admitted to candidacy by no later than the first semester of Year 3. One of the requirements for admission to candidacy is passing the Doctoral Qualifying Examination, and typically follows soon after passing the Doctoral Qualifying Examination. Students should consult the University's Doctoral Degree Regulations for the other requirements.

Independent Research Proposal

An Independent Research Proposal (IRP) outside the dissertation research area must be submitted and defended by the end of Year 3. The guidelines for writing, oral defense and evaluation of the IRP are the same as those for the Dissertation Research Proposal (see **Qualifying Examination**), except that the IRP should be prepared without close consultation with the Supervising Professor.

Written Dissertation

The student shall write a draft of the Dissertation and submit it for review to the Supervising Professor. After appropriate editing, hard copies of the draft shall be submitted to all members of the Doctoral Studies Committee for further review. Requirements for the format and style of the written dissertation are available at [Dissertation Guidelines](#). Scientific terminology is determined by the supervising professor in consultation with the student, but should be clear, concise and consistent throughout. Following the final oral examination, the Doctoral Studies Committee makes recommendations for changes to and must approve the final version of the written dissertation.

Final Oral Examination

The final oral examination shall be held no sooner than one week and no later than one month following submission of the written draft to the Doctoral Studies Committee. The final oral examination consists of a public oral presentation

(PowerPoint slides should be numbered) of the written dissertation and a closed oral defense. The defense is administered and evaluated by the student's Doctoral Studies Committee and covers the dissertation as well as the general field encompassing the dissertation.

Submission of Approved Dissertation to Dean of the Graduate School

Requirements and deadlines for [Submission of Dissertation](#) to the Graduate School are available by clicking on the link above. Two original quality, unbound hard copies of the written dissertation must be submitted to the Dean of the Graduate School. One bound copy is to be submitted to the Department of Chemistry. Upon request, copies are submitted to members of the Doctoral Studies Committee.

Forms

In order to maintain accurate records and to track student progress, a number of forms require completion. Descriptions and examples of these forms are listed below in approximate chronological order.

PLEASE DOWNLOAD THE LATEST VERSION OF THE FOLLOWING FORMS FROM THE GRADUATE SCHOOL WEBSITE WITH THE LINKS PROVIDED BELOW

Application for Teaching Assistantship (TA) (attached)

After receiving and Acceptance Letter from the Department of Chemistry, a student must apply for a Teaching Assistant (TA) position. All Ph.D. candidates are required to teach for at least two semesters. TA positions are typically not available for Ph.D. students during the summer because they are expected to dedicate all of their time towards research and are supported through the Department or Grants.

Petitions and Other Forms

[Petition for Waiver of University Wide Requirements:](#) This form must be completed in order to petition to waive university wide requirements when another form does not exist to complete the request.

[Petition to Waive or Substitute GRE/GMAT:](#) This form must be completed in order to petition to waive or substitute a student's required GRE or GMAT scores.

[Removal of Admissions Conditions:](#) This form should be completed in order to remove conditions placed on a student at the time of admission.

[Substitution of Core Courses:](#) This form must be completed in order to petition for substitution of core courses in a student's degree plan.

[Transfer of Graduate Credit towards Master's Degree](#) and [Transfer of Graduate Credit towards Doctoral Degree:](#) Students are expected to complete all coursework at UTSA. Exceptions require completion of this form and must meet conditions for transfer of credit.

[Course\(s\) Exceeding Time Limitation:](#) This form is required to approve courses that have exceeded the six year time limitation.

[Doctoral Degree to Interim Master's Degree Request:](#) This form must be completed to request an Interim Master's Degree for a student currently in a doctoral program.

[Change in Level Classification \(Doctorate to Master's\):](#) This form must be completed to change a student's level from Doctoral to Master's. Changes in classification are permanent--should a student wish to return to his or her original (doctoral) program after the change in classification has been approved, he or she must reapply to the doctoral program.

[Voluntary Withdrawal from a Graduate Degree Program:](#) This form should be completed by the student when he or she wishes to withdraw permanently from a graduate degree program. Once this request is approved, the student must reapply and be readmitted to UTSA to resume graduate enrollment.

[Leave of Absence for Doctoral Students:](#) Students enrolled in a doctoral program may apply for a leave of absence each term (Fall or Spring), not to exceed one year, when events such as illness or injury, active military service, or the need to provide care for a family member prevent active participation in the degree program. A Leave of Absence Request should be submitted no later than or during the semester prior to the requested leave. In the event that this is not possible, the request should be submitted as soon as the student is aware that he or she will not be able to register for any given semester.

[Leave of Absence Extension Request for Doctoral Students:](#) Students must currently be on an approved Leave of Absence in order to request an extension. The total time for a leave of absence may not exceed one year throughout the degree program. Under no circumstances may a leave of absence be applied retroactively.

Doctoral Forms

Doctoral forms are required for all doctoral students. These forms must be routed to The Graduate School for approval.

Interim Program of Study: This form should be obtained from the department, as the form length and structure varies from program to program. The Interim Program of Study is required and is to be established very early in the student's doctoral career. The student's advisor completes this form.

Program of Study: This form should be obtained from the department, as the form length and structure varies from program to program. The Program of Study is completed in the final semester of the student's doctoral career by the student's advisor or department administrator.

[Appointment of Doctoral Dissertation Committee:](#) This form establishes the student's dissertation committee.

[Completion of the Qualifying Exam:](#) This form must be completed after the student has successfully completed all parts of the qualifying exam.

[Application for Candidacy:](#) This form must be filled out by the student and advisor to establish that the student is ready to begin work on the dissertation.

[Dissertation Proposal Approval:](#) This form should be submitted to the advisor, dissertation committee, and The Graduate School for approval.

[Certification of Completion of Dissertation Requirements:](#) The department will complete this form and route to The Graduate School for approval once the student has met all requirements to graduate.

RESEARCH/TEACHING EXPERIENCE

Name of Institution	Type of Institution	Position or Rank	No. of Years
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OTHER TYPES OF EMPLOYMENT IN ASCENDING ORDER:

Place	Type of Business	Position	No. of Years
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PUBLICATIONS: (List title of books, pamphlets, articles, research projects, and publication dates).

PRESENTATIONS AND ABSTRACTS: (Where presented and when)

MEMBERSHIPS:

Professional: _____

Non-Professional: _____

REFERENCES SUPPLYING LETTERS OF RECOMMENDATION – APPLICANT IS RESPONSIBLE FOR INSURING LETTERS ARE SENT: (unless indicated, UT San Antonio will assume that contact can be made to the references listed).

NAME	ADDRESS	TELEPHONE	POSITION
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NOTE: UT San Antonio is an equal opportunity employer.

In order for the application to be considered, the student must be admitted to one of the Masters Programs in the College of Sciences as a degree-seeking student. The student must have two or more letters of recommendation submitted.

I certify that the statements made by me in this application are true, complete, and correct to the best of my knowledge and belief and are made in good faith. I understand that any false statements made herein will void this application and any actions based on it. I understand that any offer of employment tendered me is contingent upon my agreement to abide by the Rules and Regulations of the Board of Regents of The University of Texas System.

Date _____

Signature _____

Milestone Agreement

UTSA Doctoral Program in Chemistry

This document is provided to inform the student regarding the academic milestones that they will be expected to reach to earn their Ph.D. degree in Chemistry. It details when students are expected to complete each of the milestones. Students who are not making satisfactory progress may lose funding, may be placed on academic probation, or may be dismissed from the program.

Academic Advising

The Ph.D. Program is supervised by the MPPC comprising members of the faculty, including the Graduate Advisor of Record. The MPPC is responsible for establishing admission requirements, approving transfer credits, overseeing academic curricula, monitoring students' academic progress, attesting eligibility for admission to candidacy for a degree, and verifying to the Graduate School that the student has fulfilled all requirements for the awarding of the degree.

The day-to-day administration of the Ph.D. degree in Chemistry is the responsibility of the Graduate Advisor of Record (GAR). The GAR advises all doctoral graduate students, maintains records, and represents the program. Questions about degree requirements and academic policies should be directed to the GAR, who may consult with the MPPC.

The Department reviews the progress of all graduate students at the end of each calendar year to determine the student's continued eligibility.

Academic advising includes the following procedures that are established to ensure that the students remain in good academic standing and that students are making satisfactory progress. The GAR is responsible for the following:

- Ensure that students follow the curriculum as approved by the faculty in the Department of Chemistry. The GAR will enroll students in their courses in consultation with the student's thesis advisor.
- The GAR will review the student's progress at the end of each semester while enrolling students in their courses.
- A student's selection of a dissertation advisor must be approved by the Chemistry MPPC, the Graduate Advisor of Record and the Department Chair.
- Students will follow the curriculum outlined in the Department of Chemistry Ph.D. Program Handbook unless approved by the GAR in writing to do otherwise.
- Students are expected to complete the program in 5 years or less. Program extensions may be granted on an individual basis and must be approved by the Supervising Professor, the Chemistry MPPC, the Graduate Advisor of Record and the Department Chair.

Orientation

The Departmental orientation for graduate students takes place at the beginning of each semester. Attendance is mandatory. Topics typically include a general description of the graduate program, courses taught in that semester, and a questions and answer session.

Year 1

- Complete 3 core courses earning a grade of B or better
- Take Research and Teaching Practice and Ethics
- Select doctoral research advisor (Supervising Professor)
- Sign Chemical Hygiene plan
- Attend departmental seminars
- Select Doctoral Studies Committee

Year 2

- Complete coursework (electives)
- Begin writing Dissertation Research Proposal
- Submit Program of Study
- Attend departmental seminars and research colloquia
- Continue dissertation research
- Submit and defend Dissertation Research Proposal
- Admission to Candidacy

Year 3

- Conduct research as specified in the Dissertation Research Proposal
- Be admitted to candidacy
- Write and defend Independent Research Proposal
- Attend departmental seminars and research colloquia
- Continue dissertation research

Years 4 and 5

- Complete dissertation research
- Write Dissertation
- Submit Dissertation to Doctoral Studies Committee for approval
- Defend Dissertation (Oral examination)
- Submit Dissertation to Graduate School
- Attend departmental seminars and research colloquia

I have read the Milestone Agreement for the UTSA Doctoral Program in Chemistry and have discussed the information in it with my advisor, the graduate advisor of record and the Department Chair. I understand the academic milestones that I am expected to meet during the course of my studies at UTSA. I understand that the failure to meet these milestones according to the schedule presented here may result in the loss of my support, placement of academic probation or dismissal from the program.

Ph.D. Student

Date

Chair, Dissertation Committee

Date

Chair, MPPC

Date

Graduate Advisor of Record

Date

Chair, Department of Chemistry

Date

Degree Completion Check List

- Core course #1 Course: CHE_____ Title:_____

Semester:_____ Grade:_____ Instructor:_____
- Core course #2 Course: CHE_____ Title:_____

Semester:_____ Grade:_____ Instructor:_____
- Core course #3 Course: CHE_____ Title:_____

Semester:_____ Grade:_____ Instructor:_____
- Elective course #1 Course: CHE_____ Title:_____

Semester:_____ Grade:_____ Instructor:_____
- Elective course #2 Course: CHE_____ Title:_____

Semester:_____ Grade:_____ Instructor:_____
- Elective course #3 Course: CHE_____ Title:_____

Semester:_____ Grade:_____ Instructor:_____
- Supervising Professor:_____ Date:_____
- Dissertation Committee:
- Member #1 (Chemistry):_____ Date:_____
- Member #2 (Chemistry):_____ Date:_____
- Member #3():_____ Date:_____
- Member #4():_____ Date:_____
- Dissertation Research Proposal
- Title:_____ Date:_____
- Independent Research Proposal
- Title:_____ Date:_____
- Dissertation
- Title:_____ Date:_____