



The University of Texas at Austin

Department of Mathematics

*College of Natural Sciences*

# **Graduate Student Handbook**

## **2021-2022**

**Doctor of Philosophy (Ph.D.) in Mathematics**

**Master of Arts (MA) in Mathematics, focus in  
Actuarial Mathematics**

This Graduate program Handbook provides an overview of the graduate program in mathematics at the University of Texas at Austin. The information presented in this Handbook is intended to supplement program information and requirements published in the 2021-2022 Graduate Catalog. This Handbook includes requirements for students starting enrollment in the 2021-2022 Academic Year.

## Table of Contents

<b>1. Overview of the Mathematics Department and the Graduate Program</b>	<b>6</b>
1. Our graduate program	6
2. Our department	7
3. Key People and Committees	8
<b>2. Life as a graduate student</b>	<b>10</b>
<b>3. Requirements for the MA in Mathematics with focus in Actuarial Mathematics</b>	<b>12</b>
<b>4. Requirements for the Ph.D. in Mathematics</b>	<b>14</b>
1. Demonstration of broad competence	15
2. Identification of an academic advisor	16
3. Oral candidacy exam	16
4. Formal admission to Ph.D. candidacy	17
5. Completion of Prelim requirements	17
6. Completion of dissertation	17
7. Exceptions	17
<b>5. Course Offerings</b>	<b>18</b>
1. Prelim courses	18
2. Topics courses	18
3. Conference courses	20
4. Offerings from other departments	20
5. Actuarial courses	20
<b>6. Preliminary exams and coursework policy</b>	<b>21</b>
<b>7. Selecting and working with an academic advisor</b>	<b>23</b>
1. Identifying an advisor	23
2. Who can be an advisor?	24
3. Dual advisors	24
4. Tracking progress	25
5. A network of mentors	25
<b>8. Advancing to Doctoral Candidacy</b>	<b>26</b>
1. Eligibility	26
2. The three steps to entering candidacy	26
3. The oral candidacy exam	26
4. Application to the Graduate School	27
5. Switch to Dissertation hours	27
<b>9. Ph.D. Defense and Graduation</b>	<b>28</b>
<b>10. Seminars and other lectures</b>	<b>31</b>
<b>11. Teaching Assistantships</b>	<b>33</b>
1. Mathematics teaching at UT Austin	33
2. Mathematics TAs	33
3. Training	34
4. Appointment	34
5. Duties	34

6.	Title IX and reporting _____	35
7.	International TAs _____	35
8.	Other teaching opportunities _____	35
<b>12.</b>	<b>Financial Support _____</b>	<b>37</b>
1.	Timeline _____	37
2.	Forms of financial support _____	37
3.	Teaching Assistantships _____	38
4.	Graduate Research Assistantships _____	38
5.	Fellowships _____	39
6.	Summer support _____	40
<b>13.</b>	<b>Academic Integrity _____</b>	<b>41</b>
	Avoiding Academic Dishonesty _____	42
<b>14.</b>	<b>Annual Assessment _____</b>	<b>43</b>
<b>15.</b>	<b>Course Registration and Grades _____</b>	<b>44</b>
1.	Full-Time Student Status & Course Load _____	44
2.	Continuous registration _____	44
3.	GPA Requirement _____	45
4.	Warning Status and Academic Dismissal _____	45
5.	Credit/No Credit Courses _____	45
6.	Auditing Graduate Courses _____	46
7.	Adding & Dropping Courses _____	46
8.	Grading Basis for Graduate Students _____	46
9.	Incomplete Work, or X grades _____	47
<b>16.</b>	<b>Student Engagement _____</b>	<b>48</b>
1.	Student Organizations in Mathematics _____	48
2.	Outreach Programs _____	48
<b>17.</b>	<b>Some University Policies and Procedures _____</b>	<b>50</b>
1.	Email Account _____	50
2.	Faculty Advising _____	50
3.	Research supervisors _____	51
4.	UT ID Card _____	51
5.	Residency requirement for graduate degrees _____	51
6.	Leaves of Absence _____	51
7.	Withdrawals _____	51
8.	Convocation/Commencement _____	52
9.	Grievances _____	52
<b>18.</b>	<b>Some College- and University-wide Resources _____</b>	<b>53</b>
1.	MyUT Portal _____	53
2.	Recreational Sports _____	53
3.	CNS Graduate Education Dean's Office _____	53
4.	Dean's Office Graduate Council _____	54
5.	CNS Career Services – Po-Tsan Ku _____	54
6.	CNS Data-Science Training _____	54
7.	Graduate Student Assembly _____	55
8.	Texas Global – International Student and Scholar Services _____	55
9.	Oden Institute for Computational Engineering & Sciences _____	55
10.	Faculty Innovation Center _____	55

11.	Emergency Information	56
12.	Help & Services – UT Police Department	56
13.	UT Counseling and Mental Health Center	56
14.	Services for Students with Disabilities	57
15.	Student Emergency Services	57
16.	University Ombuds Office	57
17.	University Health Services	58
18.	Charles A. Dana Center	58
19.	Sanger Learning Center	58
20.	Title IX	58
21.	Behavior Concerns Advice Line (512-232-5050)	58
22.	BE SAFE	58
23.	LifeSafe App at UT Austin	58

# 1. Overview of the Mathematics Department and the Graduate Program

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## 1. Our graduate program

The Department of Mathematics offers a **Doctor of Philosophy** (Ph.D.) degree. Each Fall, about 15 students embark on the challenges, rewards and camaraderie of our program as they pursue advanced training and original research in mathematics. The department also offers a **Master of Arts** (MA) degree with a focus in **Actuarial Mathematics**, enrolling about 2 students per year, and laying foundations for satisfying actuarial and statistical careers. *Note that we do not offer Masters programs in other areas of mathematics.*

Our community of 85-90 graduate students, in both Ph.D. and MA programs, is tight-knit and mutually supportive; diverse and inclusive with respect to groups traditionally under-represented in mathematics; ambitious and high-achieving. While the majority of our students are American, we also have a large international community, currently representing countries on six continents. We believe that our diversity—with respect to gender, race and ethnicity, geographic origin, and many other variables—positively impacts our whole community.

We are proud of our students and their successes. UT Mathematics Ph.D. students make discoveries and advances in subjects ranging from knot theory to fluid dynamics, algebraic geometry to the mathematics of investment. Among our recent Ph.D. graduates, the majority have sought postdoctoral research positions. Of those, a high proportion have been successful in their job-searches, in many cases brilliantly so; and several have gone on to tenure-track appointments at universities including MIT, UC Davis, U. Penn, and the University of Oregon. A substantial proportion of our graduates take up high-skilled jobs at companies in finance, tech, data-science, and engineering, ranging from well-known giants (Google, Netflix, Boeing, etc.) to start-ups. Still others have pursued careers in teaching or in government.

Our Mathematics Ph.D. program is regularly ranked among the best. The US News & World Report survey published in 2019 was typical, placing it 14th in the US.

## 2. Our department

The core faculty of the Mathematics Department comprises around 50 tenured and tenure-track members who carry out research, supervise Ph.D. students, and teach graduate and undergraduate courses. There are also a handful of postdoctoral researchers, including our Bing Instructors, and several emeritus faculty.

As the flagship public university in Texas, a core part of our mission is teaching undergraduates from all over this huge and varied state. While graduate students and tenure-stream faculty contribute a great deal to this mission, we also have a substantial body of instructional faculty members. These highly-valued members of our department bringing excellence, commitment and innovation to their teaching. They include faculty members with expertise in actuarial mathematics, among them Mark Maxwell, who directs the Actuarial Mathematics MA program.

The department has internationally recognized research groups in a number of overlapping areas:

- Analysis
- Applied and Computational Mathematics
- Probability and Financial Mathematics
- Topology
- Geometry
- Algebra and number theory
- Groups and Dynamics

Our Ph.D. students carry out research in all of these areas. In 2019, the groups in Topology, Analysis and Applied Math were ranked among the top 10 nationally by US News & World Reports.

The large **Analysis** group is a powerhouse for research in partial differential equations (PDE), as well as geometric analysis, the calculus of variations, and certain aspects of mathematical physics. Among several outstanding researcher, endowed chair-holder Luis Caffarelli is renowned as one of the world's leading mathematical analysts, while Philip Isett recently won a prestigious Clay Research Award. The PDE of fluid dynamics and statistical physics are particular foci. The group was awarded a 5-year Research Training Grant (RTG) by the NSF in 2018; activities supported financially by the RTG include research by US graduate students working in the area.

Faculty working in **Applied and Computational Mathematics** often have dual appointments at the Oden Institute for Computational Engineering and Sciences (see <https://www.oden.utexas.edu/>), an interdisciplinary institute for mathematical modeling and scientific computation. These include endowed chair-holder Bjorn Engquist. Research topics include numerical analysis, applied aspects of PDE, signal

processing, and machine learning. In 2020, UT Austin was selected by the NSF as the home of a national Artificial Intelligence institute, focused on machine learning; mathematics faculty such as Rachel Ward are strongly involved in this project.

We also have faculty working on the mathematics of networks—notably, Simons Mathematics and Electrical and Computer Engineering Chair François Baccelli—and on the mathematics of neuroscience. Closely connected, research in **Probability** at UT covers financial mathematics (with connections to the McCombs School of Business), network theory, combinatorics and theoretical probability.

Our **Geometry** group works on a broad swathe of mathematics including algebraic and differential geometry, mirror symmetry, algebraic topology, geometric representation theory, categorical and “derived” methods, and the mathematics of quantum field theory. There is special strength in a nexus of ideas around algebraic geometry and mirror symmetry, notably represented in the work of endowed chair-holder and Clay Research Award recipient Bernd Siebert. Research in **Algebra** overlaps with that in geometry, and also includes number theory, arithmetic geometry, and representation theory.

The **Topology** group has traditionally focused on low-dimensional topology, as in the work of endowed chair Cameron Gordon on 3-manifolds and knots. A burgeoning **Groups and Dynamics** group has recently added to the department’s research portfolio. The Topology and Groups and Dynamics groups were in 2019 jointly awarded a 5-year Research Training Grant by the NSF, on *Groups and Dynamics*, covering a nexus of ideas including the dynamics of group actions, fundamental groups in 3-manifold topology, and geometric structures on manifolds.

### 3. Key People and Committees

#### Department Chair: Thomas Chen ([chair@math.utexas.edu](mailto:chair@math.utexas.edu))

The Chair plays a multi-faceted role in leading the department, in coordination with the faculty of the department and with the higher administration of the College of Natural Sciences (CNS) and the University. Many decisions, for instance those concerning hiring and tenure of faculty, cannot be taken unilaterally by the Chair but require the approval of the Budget Committee, comprising the tenured faculty of the department.

#### Graduate Advisor: Timothy Perutz ([gradadv@math.utexas.edu](mailto:gradadv@math.utexas.edu))

The Graduate Advisor is a faculty member of the Mathematics Department who oversees the graduate program, especially its academic aspects. The Graduate Advisor is typically appointed Associate Chair of Graduate Education by the CNS.

Responsibilities include student welfare, monitoring of students’ academic and professional performance, advocating for students and for an equitable climate in the



program, and leading the recruitment process for new graduate students. The Graduate Advisor coordinates with the CNS and Graduate School on matters related to the graduate program, and works closely with the Graduate Program Administrator on the running of the program.

Students may consult the Graduate Advisor on academic aspects of the program and issues of welfare and well-being, and in situations where a dispute with a faculty member (such as an academic advisor or the instructor for a course in which the student is the TA) arises.

### **Assistant Graduate Advisor: Maria Gualdani ([gualdani@math.utexas.edu](mailto:gualdani@math.utexas.edu))**

The Assistant Graduate Advisor provides additional support in the areas of student welfare and recruitment.

### **Graduate Program Administrator ([liesbeth@austin.utexas.edu](mailto:liesbeth@austin.utexas.edu))**

The Graduate Program Administrator, sometimes called the Graduate Coordinator, is responsible for the administration of the graduate program. Important aspects include matters related to appointments and employment, benefits, and course registration. This role is carried out in close consultation with the Graduate Advisor, and also involves coordination with the CNS and Graduate School.

Students should consult the Graduate Program Administrator on queries and concerns of an administrative, rather than academic, nature.

### **The Graduate Studies Committee**

The Graduate Studies Committee (GSC) comprises the tenured and tenure-track faculty of the Mathematics department, as well as certain faculty members from other departments of the university (typically working in fields closely allied to Mathematics). Only members of the GSC are permitted to supervise Ph.D. students. The GSC is responsible for major strategic decisions concerning the graduate program. The GSC delegates some of its responsibilities to the Administrative Subcommittee of the Graduate Studies Committee (or ASGSC). The ASGSC is currently chaired by Gordan Žitković ([gordanz@math.utexas.edu](mailto:gordanz@math.utexas.edu)). The responsibilities of the ASGSC include the administration of Prelim exams (**see section 5**). The ASGSC also adjudicates when a student requests an exception to program rules, and in the rare event of a dispute between a graduate student and the Graduate Advisor.

### **Actuarial Program Director: Mark Maxwell ([maxwell@math.utexas.edu](mailto:maxwell@math.utexas.edu))**

The Actuarial Program Director is responsible for academic aspects of, and recruitment to, the MA program with focus in Actuarial Studies.

## 2. Life as a graduate student

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A Ph.D. program is quite different from an undergraduate degree program, and life as a graduate student is different from life as an undergraduate. We are here to support you throughout your graduate student life.

Striving for success as a Ph.D. student means...

- **Managing your time:** coursework, research and teaching responsibilities all demand time and attention, and you need to find a balance.
- **Finding work-life balance:** you will need to work hard in the Ph.D. program, but you also have to allow time for other pursuits. While you will likely make long-lasting friendships within the program; engage with other communities too by joining university-wide/Austin societies.
- **Seeing the bigger picture:** Original research leading to a dissertation is the most important and most challenging part of your program. And mathematical research is an immersive, long-term endeavor; talk to your advisor about setting goals and structuring your research.
- **To be resilient in the face of setbacks:** As in any challenging and worthwhile endeavor, the path to success is never a straight line.
- **Building a nucleus of deeply-understood mathematical knowledge:** new knowledge can aggregate to this nucleus. When you learn of something unfamiliar, ask yourself how it connects to what you already understand.
- **Making yourself an expert in your chosen area:** Don't wait until the perfect graduate course is offered; study textbooks yourself (including exercises); find peers to study with and set up a study group. Deepen your knowledge by reading books and papers, including new postings on the ArXiv; participating in seminars and conferences; and actively engaging in discussions. Breadth is desirable, but depth is essential: by the end of your Ph.D., you should be an expert in the area of your thesis.
- **Planning your career:** It is crucial to allow for backup options. Avail yourself of training opportunities. Expert, individualized career-planning help is available at <https://cns.utexas.edu/graduate-education/professional-development-career-support/career-services>.
- **Acknowledging** difficulties that arise, and seeking help in resolving them.

We know graduate students face many challenges. Some are purely academic, such as the difficulty in solving a tough research problem. Some involve mental health problems: these are common and widespread in the general population, but in the US

have been found to be even more common among Ph.D. students, especially those towards the end of their program. The university offers resources on campus to help graduate students facing ~~for~~ various kinds of difficulties; however, we—in particular, the Graduate Advisor and Graduate Coordinator—are available to discuss the challenges you may be facing, to make plans, and to offer advice and support.

Our graduate student community is tight-knit and mutually supportive. Maintaining that ethos depends on

- Active engagement with the community.
- Treating your peers with respect. You will find other students who have backgrounds and skill-sets different to your own. Treat your fellow-students with respect and sensitivity.
- Treating others with respect and professionalism. Your engagement with faculty (including teaching faculty for who you may work with as a TA), staff, and students (graduate and undergraduate) should be respectful and professional.

Our aim is to foster a strong community of ambitious people, making discoveries at the cutting edge of mathematical knowledge and to the limits of their abilities, and launching productive careers. We treat our Ph.D. students as adults and as junior colleagues.

Whenever a student is admitted to the Ph.D. program, the admissions committee, including the Graduate Advisor, believe that that person has the ability to thrive in our program. A mathematics Ph.D. program is a highly challenging endeavor, and achieving success will not be easy. It also is a highly satisfying one: discovering something truly new, and explaining it to others, is a joyful experience. We will support you as you take on the next chapter in your life.

### **3. Requirements for the MA in Mathematics with focus in Actuarial Mathematics**

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The Mathematics Department provides expert training in actuarial mathematics, both at the Bachelors and Masters levels. The MA program with a focus in Actuarial Mathematics is a professional program focused on providing the academic preparation for entry-level actuarial jobs in the United States.

The program is funded by the State of Texas and strongly supported financially by actuarial employers throughout the United States, who hope to recruit qualified graduates of the program.

The program is intended for students needing to learn the academic content of SOA and CAS Exams IFM, LTAM, STAM, 3F, 3L and 4. Possible schedules for graduate students vary enormously, depending on exam status upon arrival, but the program often takes 4 semesters to complete.

The MA degree requires completion of at least 33 semester-credit-hours of coursework (11 three-credit-hour courses) to include M 389U, M 389V, M 389W, M 389J, and M 389P. Up to nine hours of upper-division undergraduate coursework may be used to satisfy program requirements, with no more than six of those nine in a single subject. At least 18 semester hours must be completed in Mathematics coursework, and at least six hours must be completed in supporting work, or coursework offered outside of Mathematics. Graduate program requirements vary by individual and are determined based upon on each student's exam status on arrival.

<b>MA, focus in Actuarial Sciences: program requirements</b>	
Required Courses: M 389U: Actuarial Contingent Payments I M 389V: Actuarial Contingent Payments II M 389W: Financial Mathematics for Actuarial Applications M 389J: Probability Models with Actuarial Applications M 389P: Actuarial Statistical Estimates	15 SCH
Electives (appropriate graduate-level coursework, approved by the program director)	9 SCH
Supporting Coursework (upper-division undergraduate coursework, of which at most 6 hours is from any one subject)	9 SCH
<b>Total</b>	<b>33 SCH</b>

Some students in this program are employed as Teaching Assistants (TAs). These students are required to take the 3-hour course 398T: Supervised Teaching in Mathematics (these hours do not contribute to the 33 required).

Further information about this program can be found at <https://sites.cns.utexas.edu/actuarial-science/ma-actuarial-focus>.

## 4. Requirements for the Ph.D. in Mathematics

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The Doctor of Philosophy (Ph.D.) is a research degree designed to prepare students to discover, integrate, and apply knowledge as well as to communicate and disseminate it. Students are required to enroll in 9 credit-hours per semester.

While the Ph.D. degree formally requires a minimum of 30 semester hours of advanced coursework, including a minimum of six dissertation hours, high-performing students normally require five to six years of full-time enrollment (9-12 semesters) to complete requirements of the Ph.D. degree. It is quite exceptional (applies to less than 1% of students, and only in unusual circumstances) that a student is able to complete the requirements in less than 9 semesters. *Students who are **veterans**, or eligible for VA educational benefits under the GI Bill, should note that the VA may only consider the 30 required semester- hours as benefits-eligible.*

In particular, completion of a research program leading to a dissertation worthy of the Ph.D. degree usually requires at least three years of work, taking the form both of conference courses with an agreed academic advisor (before formal passage to candidacy) and as dissertation hours (post-candidacy).

While the overall degree generally requires five to six years, the distribution of the coursework and dissertation components of the degree varies considerably. Among other factors, it depends on the mathematical preparation of the student on entry.

The following list lays out the kinds of coursework required of all Ph.D. students:

- Required coursework: Prelim courses ([see section 5](#))
- Elective coursework: Topics courses ([see section 5](#)) and graduate courses offered by other departments
- Conference courses (to establish an academic advisor, prepare for candidacy and embark on a research program)
- Dissertation hours (minimum 6 hours)

The **prelim courses** will be completed early in the degree (in 1-3 years); **conference courses** will begin in year 1 or 2 and continue until formal passage to candidacy (in years 2-4); **elective coursework** will begin in year 1 or 2 and continue throughout the

degree; **dissertation hours** will begin after formal passage to candidacy and will continue for the remainder of the degree.

Note that even after they have demonstrated their broad competence, students are expected to deepen and further broaden their knowledge by taking “topics” courses, as detailed in Section V below. Students enroll in 9 hours of coursework per semester, consisting of prelim and other graduate courses, conference courses, and dissertation hours.

The GSC specifies the coursework PhD students must complete, the qualifying examinations Ph.D. student must pass, the conditions under which Ph.D. students must retake all or part of an examination, and the procedures Ph.D. students must follow in developing a dissertation proposal. Each student seeking the Ph.D. must be admitted to candidacy on the recommendation of the GSC. Students may not register for the dissertation course until they are admitted to candidacy, and completion of course work does not in itself constitute admission. The student must register for at least six hours of dissertation courses in order to graduate. A dissertation is required of every candidate.

Candidates for the Ph.D. degree must comply with all relevant Graduate School requirements. In addition, the specific steps toward obtaining a Ph.D. degree in Mathematics are as follows:

### **1. Demonstration of broad competence**

This is accomplished through passage of Preliminary (“prelim”) examinations and coursework. The department offers twelve prelim courses, which are usually presented as six two-semester sequences. The twelve courses are:

- Algebra (parts I and II);
- Analysis (Real and Complex);
- Methods of Applied Mathematics (parts I and II; these courses cover functional analysis, harmonic analysis, and other analytic methods);
- Numerical Analysis (part I, covering linear-algebraic topics, and part II, covering differential equations); Probability (parts I and II);
- Topology (Algebraic and Differential).

In addition to the courses, exams are offered twice yearly (in August and January) in the twelve prelim areas. Students can fulfill a part of their prelim requirement by passing a course with a grade of B or higher, or by passing the corresponding exam. Students are required to pass at least 7 prelims in distinct areas, at least 3 of them by exam. Details of the prelim policy will be explained in section VII.

## 2. Identification of an academic advisor

You should identify an area of specialization and an academic advisor with one year of passing the third prelim exam. To do so, you should identify a potential advisor, (a member of the GSC—see <https://catalog.utexas.edu/graduate/fields-of-study/natural-sciences/mathematics/>) and take a Conference Course under the advisor's supervision - and subsequent conference courses if both you and instructor consider it likely that the faculty member will become your academic advisor. Taking conference courses need not be delayed till the completion of prelim requirements; often the second or third semester is an appropriate time for a first conference course. Once an academic advisor has been identified, and has agreed to serve in this role, you will work with the advisor to select **an advisory committee of three faculty members to oversee the candidacy exam**; and, after passing the candidacy exam, a committee of four to oversee the dissertation.

You are guided in this process by the Graduate Advisor, who ensures that all steps conform to Graduate School requirements.

## 3. Oral candidacy exam

Having identified an area of specialization and an academic advisor, you must successfully complete an oral candidacy exam in the chosen area of specialization. The topics of this exam are set by the advisory committee in consultation with the student.

In order to pass the exam, you must demonstrate to their advisory committee:

- a) acquired adequate content knowledge in the area of specialization,
- b) the ability to interpret existing research literature and devise a program of original research, and
- c) the ability to effectively communicate mathematics in English.

The candidacy exam takes the form of a lecture presentation by the student, followed by questions from the committee. While some candidacy lectures present original research by the students, this is not a requirement; presentation of existing material relevant to the area of specialization and the student's planned research may also be appropriate, as determined by the academic advisor and candidacy committee (a total of three faculty members).

Students become eligible for oral candidacy exams after passing 5 distinct prelims, at least 3 by exam. Students are expected to complete their candidacy exam by August of their third year.



#### **4. Formal admission to Ph.D. candidacy**

To advance to doctoral candidacy, you must have:

- passed the oral candidacy exam (as well as the prelim eligibility requirement as described above);
- obtained the agreement of faculty members to serve on the dissertation committee (including one external member, meaning a qualified faculty member, either from another university, or from UT Austin but not a member of the Mathematics GSC); and
- submitted a formal candidacy application to the Graduate School. The formal application includes a statement of proposed research which must be approved by the student's academic advisor, chair of the GSC, Graduate Advisor, and Graduate School. Students must comply with any other applicable Graduate School requirements.

#### **5. Completion of Prelim requirements**

If you have any remaining prelim requirements, these must be completed within a year of formal admission to Ph.D. candidacy. The requirements are 7 prelim courses and exams in distinct areas, passed via courses or exams, but at least 3 of them by exam.

#### **6. Completion of dissertation**

The research written up in the dissertation is the most important part of the Ph.D. program. This, fundamentally, is what a Ph.D. is about. It consists of original research in mathematics performed by the student with regular input from the academic advisor. You are expected to complete the dissertation within three years of passing the candidacy exam. While writing the dissertation, students must be continuously registered in the dissertation course during the Fall and Spring semesters.

#### **7. Exceptions**

A student wishing an exception to be made to any of the regulations above must first consult with the Graduate Advisor, and then, if circumstances warrant, make a formal appeal to the Administrative Subcommittee of the Graduate Studies Committee (ASGSC). The ASGSC is the final arbiter in all such matters.

## 5. Course Offerings

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The Department offers a broad assortment of graduate courses, of the following types:

- Prelim courses (comprehensive materials)
- Topics courses (specialized materials)
- Conference (i.e., individual reading) courses
- Actuarial courses

### 1. Prelim courses

Every year, the department offers a two-semester course sequence in each of the six areas covered in its preliminary examinations, namely Algebra (with part I covering groups, rings and module, part II fields and Galois theory); Analysis (Real and Complex); Methods of Applied Mathematics (with part I focused on functional analysis and part II on Fourier analysis and methods useful for PDE); Numerical Analysis (with part I about linear algebraic methods, part II about numerical approaches to differential equations); Probability (with part I covering foundations of measure-theoretic probability and discrete-time random processes, part II on continuous-time random processes); and Topology (part I Algebraic Topology, part II Differential Topology). The syllabi are largely standard, and are available at

<https://www.ma.utexas.edu/academics/courses/course-syllabi>.

### 2. Topics courses

In addition, the department offers graduate “topics” courses (typically 14-16 per year). Many topics courses cover standard material, integral to the research areas represented in the department. For instance, a two-semester sequence on Partial Differential Equations is offered most years, while a number of courses in geometry and topology (for example, Algebraic Geometry, Riemannian Geometry) are repeated every few years so that all students have an opportunity to them. Further topics courses cover advanced and cutting-edge material, in response to faculty interest and student demand.

In the academic year 2020-21, the following topics courses were offered (the listing below assigns the courses crudely to a broad area, but some lie in the intersection of two or more areas):

#### Analysis

- Partial Differential Equations 1
- Partial Differential Equations II

- Introduction to Optimal Mass Transport
- Kinetic and Integro-Differential Equations

### **Applied and computational mathematics**

- Mathematics in Deep Learning
- Geometric Foundations of Data Science
- Foundational techniques in Machine Learning and Data Science

### **Probability**

- Stochastic Processes I
- Topics in Stochastic Analysis

### **Geometry and topology**

- Complex Geometry
- Symplectic Topology
- Riemannian Geometry
- The Geometric Langlands Program

### **Algebra and dynamics**

- Examples in Group Theory
- Combinatorial Group Theory
- Dynamical Systems

In the previous academic year, the following topics courses were offered:

### **Analysis**

- Partial Differential Equations I
- Partial Differential Equations II: Kinetic and Collisional Theory
- Geometric Harmonic Maps

### **Applied and computational mathematics**

- Mathematics in Deep Learning
- Statistical and Discrete Methods in Scientific Computation

### **Probability**

- Stochastic Processes I
- Markov Chains and Mixing Times

### **Geometry and topology**

- Algebraic Geometry
- $p$ -adic Geometry and Hodge Theory
- Geometry of Moduli Spaces

- Geometric Structures on Manifolds

### **Algebra and dynamics**

- Algebraic Number Theory
- Geometry in Group Theory
- Orderability of 3-Manifold Groups
- Ergodic Theory and Group Actions

### **3. Conference courses**

Conference courses, that is, reading courses for one or a small number of students working with a supervisor, are encouraged as part of the processes of identifying an area of specialization and academic advisor, training and embarking on research in that area, and preparing for candidacy. (After candidacy, they are supplanted by dissertation hours.)

Students are discouraged from taking conference courses purely for the purpose of learning material if this is not likely to lead to the establishment of an academic supervising relationship.

### **4. Offerings from other departments**

Other departments on campus offer courses with various mathematical content, such as computer science, operations research, optimization theory, optimal control theory, engineering mechanics, statistics, etc. Students may select such courses when they are relevant to their area of specialization, but are advised to consider taking them on a credit/no credit basis.

### **5. Actuarial courses**

Courses in the following topics are regularly offered:

- Introduction to financial mathematics for actuaries
- Theory of interest
- Probabilistic models with actuarial applications
- Actuarial contingent payments I
- Actuarial contingent payments II
- Actuarial case studies
- Actuarial statistical estimates

## 6. Preliminary exams and coursework policy

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The primary goals of the first two years of graduate school are twofold. The first is to complete the prelim requirements; the second, and possibly more important, is to find an academic advisor (dissertation supervisor.) Students should not lose sight of the second objective while working on the first.

Students entering with an extensive background in graduate-level mathematics may be able to complete the prelim requirements within one year. All students should strive to complete the prelim requirements required for candidacy within two years. Ordinarily this can be done without needing to take more than two prelim courses per semester.

Because students are expected to earn credit in three courses during each long semester, this leaves time for you to take the department's Introduction to Teaching course (M398T), which is required no later than the first semester in which the student is employed as a TA, and to take various topics or conference (reading) courses, which are useful for sharpening a research specialization and identifying an appropriate dissertation supervisor.

The department offers two-semester "Prelim" course sequences in six core areas, making twelve Prelim segments in total: Algebra; Analysis (Real and Complex); Applied Mathematics (principally functional analysis); Numerical Analysis; Probability; and Topology (Algebraic and Differential). The course syllabi can be found [here](#).

90-minute examinations ("prelim exams") covering the twelve areas are administered twice per academic year: in August before the start of the Fall semester, and in January before the start of the Spring semester.

Whenever possible, exams covering different areas are administered on different days. The two exams covering a single area (for instance, the two Algebra exams) are administered sequentially on the same day, with a brief rest break in between.

Of the 12 Prelim segments, students must pass at least 7, in distinct areas, of which at least 3 must be by exam. A passing grade in a Prelim course is a "B", while the passing standard for a Prelim exam is determined by the faculty committee administering that exam.

Students are expected to meet the following milestones:

- By the beginning of their 2nd Semester: Pass 1 Prelim exam.
- “3+2”: By the beginning of their 4th Semester: pass 5 Prelim segments, all distinct, at least 3 by exam. Note that you become eligible to take a candidacy oral exam once the above requirements are completed.
- “3+2+2”: By the beginning of their 8th semester (or before the beginning of the semester of their Ph.D. thesis defense, whichever comes first): pass two additional prelim courses or exams, distinct from the “3+2”.

While this schedule is not rigidly enforced, students are expected to make steady progress towards the completion of their prelim requirements. Students falling distinctly behind this schedule risk losing their good academic standing within the program, and should consult the Graduate Advisor.

Students are welcome to take both a prelim course and the corresponding exam, though they cannot both be counted towards the prelim requirements. There is no penalty for failing a prelim exam; they can be retaken on subsequent occasions. There are no waivers for prelim exam requirements.

There are three ways in which students may be allowed to skip some or all of required prelim courses:

- (1) As implied by the above rules, they may pass more exams instead of taking the courses.
- (2) Students with prior graduate coursework may appeal to the Graduate Advisor for waivers of one or more prelim course requirements.
- (3) Interdisciplinary students, with the advice of an academic supervisor and permission of the ASGSC (Administrative Subcommittee of the Graduate Studies Committee) may be allowed to substitute courses in their specialty for some of the four required prelim courses.

## 7. Selecting and working with an academic advisor

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### 1. Identifying an advisor

It is of key importance that Ph.D. students should identify an academic advisor, who will supervise their dissertation research, as early as possible in the program.

You need adequate time to conduct research leading to a dissertation. The milestone of identifying an academic advisor must therefore be completed at the latest by the end of the third year. Students not meeting this deadline are not in good academic standing.

Identifying an advisor means making an agreement with that faculty member that they will serve as your advisor. The relationship will be formalized when you enter candidacy.

Beginning research early is crucial because the time required for completion of a research project cannot be predicted with certainty; there may well be setbacks along the way.

For students planning an academic career after graduation, building a portfolio of results and publications is critical when applying for postdocs and long-term academic positions. Spending longer on research allows for a more extensive portfolio or more ambitious projects.

As an undergraduate, your transcript and GPA had a major effect on the opportunities open to you. By contrast, the transcript of your graduate coursework grades is of no importance when applying for academic jobs such as postdocs.

Success in a Ph.D. program is usually founded on a strong working relationship between a student and their academic advisor. This involves both an alignment of mathematical interests, and an open and effective channel of communication, about the details of the research and more broadly about the student's progress and about both student's and advisor's expectations, hopes and plans.

A starting point is to identify faculty members working in areas that plausibly fit with your own interests. You can do this by attending lectures, courses and presentations given by faculty, browsing their websites and papers, and talking to other students.

Think not only about the subject-areas, but also about your mathematical strengths and tastes: for instance, do you excel at problem-solving? At making conceptual connections? At computations?

The next step is to contact faculty about a conference/reading course (M396D); do this well ahead of time. For many students, semester 2 or 3 is a good time for a first conference course. If (and only if!) it goes well, request a follow-up reading course with the same supervisor.

If the follow-up course also goes well, have a conversation with the faculty member about becoming their advisee. This is an important step. Ask the potential advisor about their expectations from and working practices with students, and be prepared to talk about your expectations, aspirations and concerns.

It is not effective to try out several areas or several possible advisors in an attempt to find the optimal fit. There isn't time. Your aim should be to find one area that fits your interests and strengths, and one advisor in that area with whom you find a rapport.

You are welcome to consult the Graduate Advisor about identifying academic advisors; if you are having difficulty with this process, you should certainly seek advice from the Graduate Advisor.

## **2. Who can be an advisor?**

Your advisor must be a member of the Mathematics Graduate Studies Committee (GSC). The comprises tenured and tenure-track faculty in the department, and a small number of other UT faculty members. If you are interested in working with a UT faculty member not in the Mathematics GSC, you should consult the Graduate Advisor. Your project will need to be appropriate for a mathematics Ph.D., and you will need a GSC-member to serve as your formal advisor.

## **3. Dual advisors**

Dual advisors may be appropriate if you are working on a project at the intersection of two faculty members' distinct areas of expertise.

It is not appropriate to attempt to work simultaneously on distinct projects with distinct advisors.

There are certain circumstances in which your principal academic advisor—the person you work with closely on your dissertation research—is not in the Mathematics GSC. The advisor could be in another UT department, or could be a GSC member who moves



to another university or retires after agreeing to advise you. In such circumstances, you will need to establish a formal advisor who is in the GSC.

#### **4. Tracking progress**

At least once a year, you should have a frank, in-person conversation with your advisor about your progress, aspirations and concerns. The completion of the annual assessment (see below) is a good time to have an in-person conversation with your advisor.

Researchers have found that a mismatch of expectations, or a mismatched assessment of progress, between student and advisor, is a common source of anxiety for students. Students may worry that their progress is insufficient while their advisor believes they are doing well, or vice versa. Such mismatches are problems that you and your advisor should strive to avoid.

In late Summer, you are required to complete an annual assessment form. Your responses are seen by your advisor, who is asked to comment on your progress, and you then see these comments. The completion of the annual assessment is a good time to have an in-person conversation with your advisor.

#### **5. A network of mentors**

As you progress through the program, it is a good idea to cultivate relationships with a number of faculty you interact with: course instructors, conference course supervisors, candidacy committee members, etc. For instance, your research might involve areas in which they are experts, and you could occasionally ask for their input. Your network of informal faculty mentors may be useful sources of advice, not only on your research but on your career aspirations and other matters. They might also be able to write letters of recommendation for you.

## 8. Advancing to Doctoral Candidacy

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### 1. Eligibility

You become eligible to advance to candidacy once you have

- (i) passed at least 5 distinct prelims, including at least 3 prelim exams, and
- (ii) identified an academic advisor.

We recommend that you should have begun planning, or carrying out, a research project at the time you take your oral candidacy exam, but your research need not be far advanced: it is strongly recommended to enter candidacy soon after you become eligible. Plan on doing your oral candidacy exam before the end of your third year if at all possible, or soon thereafter if not.

### 2. The three steps to entering candidacy

Step 1: Oral candidacy exam

Step 2: Application to the Graduate School

Step 3: Switch to dissertation hours

### 3. The oral candidacy exam

The oral candidacy exam should be planned in consultation with your advisor.

You must establish a candidacy committee of three Mathematics GSC members, including the advisor.

You then schedule and deliver a presentation, typically of 45-50 minutes, to an audience including the candidacy committee. You are encouraged to advertise your presentation on the department's seminar calendar. There is no requirement that the presentation be of original research. Indeed, it may be an exposition of material from research papers relevant to your planned research. However, it is desirable to include information about your research plans. If you have already completed a stage in your dissertation research—a “warm-up project” or a definite portion of a larger project—you may report on that. The committee will assess your ability to give a clear, concise and accurate exposition of the material in good English.

Note that your lecture should be targeted principally at the candidacy committee, as distinct from your advisor specifically, or the students in the audience. The committee

members will have expertise in the broad area of the lecture, but not necessarily of the precise area of the presentation.

After the presentation, the committee will ask the rest of the audience to leave. You will then be asked questions that probe your understanding of the material presented, its mathematical context, and your research plans.

The committee will tell you whether or not you have passed the oral committee exam. If you pass, please remind your supervisor to send an email the Graduate Advisor and Graduate Coordinator reporting the result. No forms are required at this stage.

#### **4. Application to the Graduate School**

Please read the instructions at

**<https://gradschool.utexas.edu/academics/theses-and-dissertations/doctoral-candidacy>**

After you have passed your oral candidacy exam, you should identify a doctoral committee. This comprises at least three members of the Mathematics GSC, including your advisor, and one suitably qualified external committee member, from a different university or a different department of UT. You should consult your advisor about selecting and contacting the external member. You will need to obtain a CV from the external member.

You must write a brief description of your thesis proposal, to be approved by your advisor. This description can be at most 60 lines long. A typical and appropriate length is 3-4 paragraphs.

Once you have written the summary and established a doctoral committee, you must complete an online application form, available at the webpage linked above.

Your candidacy application will be forwarded to the committee members, Graduate Advisor, GSC Chair, and the Associate Dean of Graduate Studies for approval.

#### **5. Switch to Dissertation hours**

Once you have advanced to doctoral candidacy, you will enroll for dissertation hours, not for conference courses. If your candidacy application is approved mid-semester, you can change your conference course enrollment(s) to dissertation hours; contact the Graduate Coordinator for help with this process.

For forms and general instructions:

**<https://gradschool.utexas.edu/academics/forms>**

For important deadlines:

**<https://gradschool.utexas.edu/academics/policies/key-dates>**

## 9. Ph.D. Defense and Graduation

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The semester *before* your defense semester, please read the following instructions carefully.

*Caution:* Planning your Ph.D. thesis defense requires a significant number of administrative steps. They are described here. It is your responsibility to read and follow them carefully. Failure to do so could lead to a delay in your graduation (this has happened more than once!).

**Step 0:** At the beginning of the semester of your defense, **notify the Graduate Advisor and Graduate Coordinator** of your intent to defend. Do so by the second week of the semester.

**Step 1:** At the beginning of the semester of your defense, **read the rules and submit the Doctoral Graduation Application form:**

- Read the Graduate School webpage <https://gradschool.utexas.edu/academics/graduation/deadlines-and-submission-instructions> very carefully, and take note of all relevant deadlines.
- Prepare all forms well ahead of time. The main page for forms is <https://gradschool.utexas.edu/academics/forms>. Many of the forms can only be submitted after your Ph.D. Defense, at the time when your Ph.D. Thesis can be uploaded in electronic form, see Step 5. However, the time between your defense and the submission deadline might be very short, and you will be busy with many other tasks.
- You need to be registered for Dissertation (M-99W) and have to submit the online **Doctoral Graduation Application Form**.
- Formatting your thesis: Be sure to observe the formatting requirements for the Ph.D. thesis: <https://gradschool.utexas.edu/sites/default/files/Format%20Guidelines%209-13-2018.pdf>

**Step 2: Schedule your defense** more than a month ahead.

- Determine a date for your Ph.D. Defense in consultation with your advisor and the members of the committee. It is expected that all members of the committee attend the defense. The Graduate School does not distinguish between physical

attendance or electronic/virtual attendance of the defense. One non-supervisory committee member may be absent from the defense in if necessary. It is strongly recommended that the student and as many others as is practical attend in person (however, during the COVID-19 pandemic, all defenses are fully virtual). Because faculty are typically busy and travel often, it is important that you start scheduling your dissertation defense well ahead of time. Scheduling can be particularly challenging in the Summer.

- If there is no possibility that sufficiently many committee members can attend to your defense either physically or virtually, you may need a change of committee. If you must request a change of committee within less than 30 days before your defense, you need to ask the Graduate Advisor to write a petition letter on your behalf, which you submit to the Graduate School together with the change of committee form. Please plan in a timely manner so that this can be avoided.

### **Step 3: Send your thesis to the Doctoral Committee:**

- The Graduate School requires that you do this at least four weeks before the defense. If you need to make corrections after sending it to them, send the committee an updated copy as soon as possible.

### **Step 4: Submit the formal request for Final Oral Examination:**

- Once you have determined the date of your defense, and your definite Doctoral Committee, submit the request for Final Oral Examination at least 2 weeks prior to the defense (to Main Building 101). A defense cannot be held within two weeks of the last class day of the semester, unless the committee has consented to hold the defense within those last 2 weeks.

### **Step 5: Ph.D. Defense and signing of forms:**

- At the defense, you will give a lecture on your work (usually of around 50 minutes) and field questions from the committee. Plan the content of your lecture with your supervisor. Your target audience is the Doctoral Committee. Typically, this will contain members whose expertise is not in the precise area of the thesis, but in a related area. You will have to make judicious choices about what to include and what to omit. Typically, it is appropriate to touch briefly on background and motivation; state main results clearly; and indicate key techniques ideas that go into the proofs. A balance must be struck: it is not appropriate to give a superficial presentation lacking in substance and detail; nor is it appropriate to make the presentation so technical that only the supervisor can follow it.

- The following forms need to be signed at the time of the defense:
  - (I) The “Report of Dissertation Committee”. The Graduate School will send this form to the student’s supervisor, who brings it to the defense. It has to be signed by the supervisor, the GSC Chair (not the Graduate Advisor!) and all committee members who are physically and virtually present at the defense.
  - (II) Three copies of Doctoral Signature Page. This page should be formatted as per p.18 of the format guidelines <https://gradschool.utexas.edu/sites/default/files/Format%20Guidelines%209-13-2018.pdf>. Prepare these early: all three copies have to contain the signatures from all Doctoral Committee members, whether they attend to the defense or not. Signing this form indicates that the committee member approves of your thesis. Note that clear scanned signatures are now accepted by the Graduate School for committee members other than the supervisor.
- Be absolutely sure that at the conclusion of your Defense, all forms have been signed by all Ph.D. Committee members who need to sign them. It is your responsibility to verify this. Please reach out to the Graduate Program administrator if you need help collecting virtual signatures.

### **Step 6: Upload:**

- Upload the electronic version of your final thesis version and submit all forms. Reread the instructions and make sure you have followed all the rules. All of the forms from Step 1 and Step 4 need to be delivered to Main Building 101 before the submission deadline.

In response to the university’s social distancing policy for Covid-19: student can contact the Graduate School and submit forms via email:  
**([GradStudentSvcs@austin.utexas.edu](mailto:GradStudentSvcs@austin.utexas.edu) )**

## 10. Seminars and other lectures

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Seminars and other lectures are advertised on the departmental **Seminar Calendar**. Regular seminar series include:

- Analysis
- Geometry
- Topology
- Groups and Dynamics
- Mathematical Physics
- Geometry and String Theory
- Mathematical Finance
- Numerical Analysis

Students are also welcome to attend seminars elsewhere in UT, for instance at the Oden Institute for Computational Science, Engineering and Mathematics and in the Physics Department.

These seminars feature researchers ranging from leading figures in the national and international mathematical scene to postdocs and graduate students with exciting results to report.

There is also a regular colloquium, that is, a series of lectures aimed at a general mathematical audience rather than at specialists in a particular field.

There are also junior seminars, run by and for Ph.D. students, including

- Junior Analysis
- Junior Topology
- Junior Geometry
- Junior Geometry and String Theory
- Sophex (a friendly, introductory seminar series run by and for first-year Ph.D. students)

Ph.D. students are strongly urged to participate and present regularly at junior seminars. Learning to present mathematics effectively is an important skill, but one that takes practice. Junior seminars provide a friendly environment in which to acquire this skill, as well as to hear about interesting topics and learn about what your peers are working on.

Students are also encouraged to participate in the ‘senior’ seminars, asking questions without worrying about whether they are too ‘elementary’. Speakers are generally very open to questions from students learning about their field. You will probably find that senior seminars become gradually more useful as you develop from a beginner in a field to an expert in your own right. Once you have a core of knowledge in a particular field, seminars are a very effective way of adding to that core and hearing about recent developments.

Other student-run seminars include:

- Learning seminars (recent topics include algebraic geometry, mapping class groups)
- STEM inequity seminar

The department supports a long-running **Distinguished Women in Mathematics Lecture Series**; since 2020 it has been complemented by a Distinguished Mathematicians of Color Series. Both provide opportunities for Ph.D. students to meet the speakers and learn about their experiences.



# 11. Teaching Assistantships

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## 1. Mathematics teaching at UT Austin

Almost all our Ph.D. students are employed as Teaching Assistants (TAs) during some Fall and Spring and semesters. Some students are also employed as TAs for one or more Summers. The section on Financial Support contains information about how TA employment is determined; this section describes the role of TAs.

Teaching undergraduates is a central part of UT's mission. In 1997, the Texas State Legislature passed a law which requires the University of Texas to offer admission to the top 10% of students in every Texas high school class, irrespective of SAT scores, AP qualifications, etc. As the state's population has grown, the law has been adjusted. Currently, UT Austin admits the top 6% of each class, and this mechanism accounts for 75% of the undergraduate student population. Our studentship therefore comprises students with high academic potential from every corner of the state and from a wide variety of socio-economic and demographic backgrounds.

Thousands of students take Mathematics classes offered by the department every year. Some arrive with advanced mathematical training acquired at specialist high schools; many more arrive from high schools that offered limited opportunities for mathematical training. Our task as educators—instructors and TAs—is to help as many as possible to realize their potential. UT has a multiplicity of programs aimed specifically at doing so; the work of the Dana Center gives a nationally recognized example, see <https://www.utdanacenter.org/>.

## 2. Mathematics TAs

TAs play a vital role in the running of mathematics courses, from introductory calculus through to advanced undergraduate courses and the graduate Prelim courses. We expect you to approach your work as a TA responsibly and with dedication. We highly urge you to approach your work with passion: you will then find your work rewarding, and your enthusiasm will be reciprocated in students' appreciation on your efforts. For those planning academic careers, working as a TA is an important part of your training as a teacher of mathematics.

You will need, however, strike a balance between time spend on TA work, coursework and research activities. Our TA policies are designed to facilitate this.

Cash prizes are awarded annually for outstanding TA work.

### 3. Training

In your first semester at UT, or, at latest, in the first semester of TA employment, you must enroll in course 398T, Supervised Teaching of Mathematics, which provides training for your work as a TA.

### 4. Appointment

Most TA appointments are for 20 hours per week. In some cases, more than one course is assigned, and the 20-hour appointment is split equally between them. Each course will involve recurring duties assigned by the instructor in line with the **guideline document**. The recurring duties should account for around **two-thirds** of the appointment time. The remaining time is reserved for occasional and incidental duties.

Students who have concerns about their TA duties—for example, students who believe they are being asked by the instructor to expend more time than expected—should bring their concerns to the Graduate Advisor. Likewise, instructors who have concerns about the work of their TA report them to the Graduate Advisor.

The Graduate Advisor has supervisory responsibility over TAs for Mathematics courses.

### 5. Duties

TA duties vary from course to course, but there are detailed descriptions **here**. In some courses, such as the M408C-D Calculus sequence, and M408J Differential Equations and Linear Algebra, the TA's most important responsibility is conducting *discussion sessions* with the students. Typically, the class is divided into two sections, and each section meets the TA twice a week.

In certain calculus classes you will assist students in flipped classrooms. For some classes, such as M340L Linear Algebra and Matrix Theory, M365C Real Analysis, and the graduate prelim courses, the TA's main duties are grading homework and holding office hours.

Committed TAs will find opportunities to work with faculty who are noted leaders in inclusive mathematics education, on innovative teaching projects, and in classes based on Inquiry-Based Learning (IBL).

## 6. Title IX and reporting

The university's Title IX office handles reports of sexual assault, interpersonal violence (including domestic and dating violence), stalking, sexual harassment, and sex discrimination.

If you are a victim of such an action you are encouraged to report it to the Title IX office but are not obliged to do so.

As a TA, you are considered a responsible UT employee, and therefore a mandatory Title IX reporter. That means that you **must** promptly report any violations of which you become aware while acting within the scope of your duties as an employee, including incidents that are reported to you by students in your class. Failure to do so is an offense under Texas criminal law and is contrary to strict university policy.

Further details can be found on the webpage of the Title IX office at <https://titleix.utexas.edu/>.

Reports can be filed with the Title IX Coordinator, via email at [titleix@austin.utexas.edu](mailto:titleix@austin.utexas.edu) via mail at PO Box 8118, Austin, TX 78713-8118, or by calling 512-232-3992, regardless of whether the person reporting is the person alleged to be subject to the complained-of behavior. Also, any person may report incidents anonymously via **an online reporting form**.

## 7. International TAs

To be appointed a TA, you must be fluent in English: this is a requirement of Texas state law. It is demonstrated by international students by passing an oral English assessment exam administered by the University (see <https://global.utexas.edu/english-language-center/resources/international-teaching-assistants>); there are exemptions for those with high TOEFL or IELTS scores and for those from English-speaking countries.

## 8. Other teaching opportunities

There are a number of opportunities for optional teaching at UT:

- **The Directed Reading Program** pairs undergraduates with Ph.D. students in reading courses. The Ph.D. students receive a stipend for their work.
- **The Sanger Learning Center** employs Mathematics Ph.D. students to lead calculus reviews and refreshers.

- Ph.D. students with extensive TA experience and an outstanding track-record are occasionally appointed as Assistant Instructors (AIs): they are then the instructor for a course.
- **The Dana Center** has opportunities for students passionate about mathematics education and equity.
- The Sunday Morning Math Group is an outreach program targeting local middle school students. Leading this program is a TA appointment; volunteers assist at events.
- An outreach program targeting underserved and vulnerable populations in local middle and high schools is under development by Mathematics Ph.D. students.

There are also opportunities outside UT; for instance, a few of our students volunteer at the **Texas Prison Education Initiative**.

## 12. Financial Support

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*The Mathematics Department provides five years—ten Fall or Spring semesters—of financial support to all Ph.D. students who are making satisfactory progress towards their degrees.*

If you are accepted for admission to our Ph.D. program, you will automatically be considered for financial assistance; a separate application for financial assistance is not required.

(Contractually, there is a clause allowing for an exception to this rule in case of severe financial crisis. At time of writing, there is no expectation that this clause will be invoked in the foreseeable future.)

*We also provide financial support to some Actuarial Master's degree students, when sufficient funds are available.*

### 1. Timeline

As a Ph.D. student, you are expected to plan for a five-year path to graduation. There is no guarantee of support for a sixth year. However, in certain circumstances, and providing that the departmental budget permits, you may be allowed a sixth year, with financial support.

To be considered for a sixth year you will need to contact the Graduate Advisor early in Year 5. It is expected that you will have made *substantial progress on your research* and to have *a clear path to completion* of the degree within the next year. You also need either strong academic reasons, or compelling non-academic reasons, to ask for more time. You will be expected to graduate in year 6.

In this section, Fall/Spring support will be explained; an explanation of Summer support is provided below.

### 2. Forms of financial support

Your financial support in a given Fall or Spring semester, will generally take one of the following forms:

- (1) a Teaching Assistantship;
- (2) a Graduate Research Assistantships; or
- (3) a Fellowship.

All support is contingent upon meeting the scholastic requirements for eligibility established by the Graduate School, (see <https://gradschool.utexas.edu/academics/policies/grades-and-credit>); providing satisfactory service to the Department; and complying with all applicable University policies. Additionally, please note that final decisions regarding reappointment take into account the availability of resources.

### **3. Teaching Assistantships**

The most common form of financial support is appointment as a Teaching Assistant (TA). It is also the default form of support: if you do not have access to a Graduate Research Assistantship or Fellowship in a given Fall/Spring semester, you will be employed as a TA.

See the section on Teaching Assistantships for more information, and contact the Graduate Coordinator if you have questions about TA appointments.

### **4. Graduate Research Assistantships**

A Graduate Research Assistantship (GRA) is an appointment to work on a research project, or to train for such work. They are usually appointments of 20 hours per week.

GRAs are most often funded by external grants.

Many of our faculty are Principal Investigators (PIs) for individual grants awarded by the National Science Foundation (NSF), and these often provide funds for GRA support for one or more students working on the project supported by the grant for Summer or, less commonly, for long semesters. International students are eligible for such support. Certain faculty, especially those working in applied or interdisciplinary areas, are PIs for grants from other agencies, such as the Department of Energy or the National Institutes of Health; these may also provide for GRA funding.

Additionally, some faculty have access to internal UT funds—such as start-up funds for recently-arrived faculty, or discretionary funds attached to endowed chairs—and may choose to use these funds for GRA support.

The NSF also funds Research Training Grants (RTGs) which support a wide range of activities in a specific research group for five-year period. These grants are highly competitive; at the time of writing, the Mathematics Department of UT is one of a select few US mathematics departments with two active RTGs. These are in *Analysis and PDE*

and in *Groups and Dynamics*. Both provide GRA support for students working in the area supported by the grant. Only US citizens and permanent residents are eligible.

*Note that GRA support is offered at the discretion of the relevant faculty member(s)—not the department—and only when applicable funds are available. Use of grant funds must be compatible with the rules of the funding agency and the parameters of the particular grant.*

If you have questions about GRA appointments, contact the Graduate Coordinator.

## **5. Fellowships**

The third source of financial support is through Fellowships. These are funded by the university, or through an award to an individual student by an external agency, as in the case of the NSF's Graduate Research Fellowship Program. Fellowships are designed to allow for concentrated work on coursework and research.

According to Graduate School rules, students supported by a fellowship are not allowed to take on additional employment. Exemptions may be granted by the Graduate School, following a petition by the Graduate Advisor/Graduate Coordinator, in cases where the employment is directly related to the student's training.

During the admissions process, especially competitive recruits may be offered fellowship packages supported by the Graduate School or the College of Natural Sciences. All admitted students are considered carefully for such fellowships, but only a small number are available.

The department nominates two students each year for a University Continuing Fellowship which provides 12-month support for the subsequent academic year. These are awarded competitively across the university. All Ph.D. students who have established an advisor and do not already have fellowship support are considered for nomination; no application is required. To be competitive, students should be in year 1-5 at the time of nomination (years 1-4 are preferred); should already have completed a research project while in the Ph.D. program—it is strongly recommended that there should be a completed paper; should be in candidacy or planning to enter candidacy in the near future; and should have enthusiastic support from their advisor.

The most noteworthy external fellowship available to Ph.D. students who are US citizens or permanent residents is the NSF's prestigious Graduate Research Fellowship Program. Advanced undergraduates may apply, concurrently with their graduate program applications. Ph.D. students may also apply during their first or second year, but not both. All US students are advised to seriously consider applying; the Graduate Advisor can provide advice and support.

## 6. Summer support

Students may receive summer financial support in the form of GRA appointments, fellowships or TA appointments.

Admitted students are usually offered a first-year Summer Fellowship (note that the program begins in the Fall, so the Summer Fellowship is at the end of the first year).

In subsequent years, many students are supported as GRAs, funded by grants, such as NSF grants to individual faculty and RTGs, or by applicable internal UT funds. As noted in the section on GRA support above, such support is contingent on the availability of funds and on the discretion of the PIs of the relevant grants.

A number of fellowships are available each summer, including Graduate School Summer-Only Fellowships and, when funds are available, departmental fellowships. All students who do not have other fellowship/GRA support are considered for nomination for these fellowships, which are awarded competitively. Occasionally, the department is able to fund summer Fellowships for academically-deserving students without GRA or other Fellowship support.

The department can appoint a small number of TAs each Summer. In a given Summer, around 10% of students are appointed as a TA. The appointment may require intense work during one of the two 6-week Summer sessions, or less intense work in both.



## 13. Academic Integrity

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(From the Dean of Students website

<https://deanofstudents.utexas.edu/conduct/academicintegrity.php>)

A fundamental principle for any educational institution, academic integrity is highly valued and seriously regarded at The University of Texas at Austin. More specifically, you and other students are expected to maintain absolute integrity and a high standard of individual honor in scholastic work undertaken at the University. This is a very basic expectation that is further reinforced by the University's Honor Code. At a minimum, you should complete any assignments, exams, and other scholastic endeavors with the utmost honesty, which requires you to:

- acknowledge the contributions of other sources to your scholastic efforts;
- complete your assignments independently unless expressly authorized to seek or obtain assistance in preparing them;
- follow instructions for assignments and exams, and observe the standards of your academic discipline; and
- avoid engaging in any form of academic dishonesty on behalf of yourself or another student.

For the official policies on academic integrity and scholastic dishonesty, please refer to Chapter 11 of the Institutional Rules on Student Services and Activities.

You may see or hear of other students engaging in some form of academic dishonesty. If so, do not assume that this misconduct is tolerated. Such violations are, in fact, regarded very seriously, often resulting in severe consequences. Consequences for engaging in Academic Dishonesty include:

- A Grade Related Sanction
- A Status-Based Sanction (Academic Integrity Probation, Deferred Suspension, Suspension etc.)
- An Educational Sanction (Complete reflective assignment, attend a workshop, mentoring opportunity etc.)

Engaging in dishonest behavior is simply not worth the risks of jeopardizing your academic career and gambling with your future!

The value of a University of Texas degree is also inherently connected to the prestige of this institution and its academic units - colleges and schools, departments and individual degree programs. So, the accrued costs of any damage to their earned

reputations can adversely affect you and other students who someday will compete for jobs and/or admission into graduate programs or professional schools.

Altogether, these and other concerns reinforce and assure the University's serious interest in confronting academic dishonesty and holding students accountable for any such violations.

## **Avoiding Academic Dishonesty**

This section provides important general tips to assist you in avoiding scholastic dishonesty.

Seek clarification from your instructors regarding class policies; do not rely on other students for such information.

Carefully read your course syllabus and follow instructions for completing assignments and ask your instructors to clarify the guidelines. For example, to what extent is working together on an assignment allowed, if at all? Know exactly where the line is and do not cross over it.

Always assume that you are expected to complete assignments independently unless your instructors indicate otherwise.

Plan ahead so that you will be more adequately prepared. If you think that you may need tutoring in a particular course, arrange for that assistance early in the semester. Several helpful academic assistance programs on campus include the **Sanger Learning and Career Center**, the **Graduate Student Writing Service**, and the **Undergraduate Writing Center (UWC)**.

Because desperation clouds judgment and often leads to poor decision making, avoid waiting until the last minute to study for exams or complete assignments.

Allow sufficient time to review your drafted assignments before completing and submitting them, and be sure to credit the sources of any borrowed material properly, using the types of citations specified by your instructors.

Remember, perceived "shortcuts" can actually be forms of scholastic dishonesty!

More info on the [\*\*website of the Office of the Dean of Students\*\*](#)

## 14. Annual Assessment

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By Graduate School policy, Graduate students are required to participate in an Annual Assessment.

Early in the Fall semester, you will be asked to complete an electronic form which will ask about your activities and progress over the past year, your plans, and difficulties you may have encountered. Once you have an agreed academic advisor, your assessment form will be shared with that person. The advisor is asked to comment on your progress and/or check a box that describes your progress as excellent/typical/adequate/inadequate. You will be able to see the advisor's input. The completed form will then be reviewed by the Graduate Advisor and Graduate Coordinator.

We strongly recommend that, around the time that the Annual Assessment is completed, you have a conversation with your advisor about your progress and concerns. This helps avoid situations where expectations are mismatched, or where concerns fester.

The Annual Assessment is used as a record of your progress — for example, your identification of an advisor — and your achievements, such as the completion of research papers. It may be used as a reference in decisions about opportunities such as fellowship nominations. Note that in making such decisions, we are mindful of the fact that different advisors may calibrate their ratings and comments differently. It also helps identify students experiencing difficulties; in such cases, our priority is to help you solve the problems.

You may have concerns which you do not think are appropriately addressed on the Annual Assessment form. For some such concerns, conversation with your advisor is more appropriate. If you have concerns that you wish to keep confidential from your advisor, you may bring them confidentially to the Graduate Advisor or Graduate Coordinator.

In rare instances, Annual Assessments may be viewed by the department chair or ASGSC; still more rarely, by officials from the Graduate School.

# 15. Course Registration and Grades

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## 1. Full-Time Student Status & Course Load

Full-time registration for a graduate student is nine hours (3 three-hour courses) in the Fall and Spring. For the Summer, full-time registration is three hours (1 three-hour course) in any Summer session.

The minimum number of hours for a graduate student to be registered is three hours during a long semester. International students and students who hold an academic position (Teaching Assistant, Assistant Instructor, or Graduate Research Assistant) are required to be registered full-time. University and department fellowships, as well as some outside fellowships, all require full-time registration. After advancing to candidacy, students must remain continuously registered in the dissertation course every long semester (Fall and Spring) until they graduate.

Students who have advanced to candidacy do not have to register for Summer sessions unless they are employed as a TA, AI, or GRA or unless they are planning to graduate in August.

It is unusual for students to register for more than nine hours (Fall/Spring) or three hours (Summer), and only warranted in special circumstances. The **maximum** course load for a graduate student is *fifteen* semester hours in a long-session semester, *twelve* semester hours in a twelve-week summer session, or six semester hours in a first or second term of the summer session. A heavier course load must have the recommendation of the Graduate Adviser and approval of the Graduate Dean.

## 2. Continuous registration

All graduate students must be “continuously registered” for all long semesters (Fall and Spring) until completion of the degree. You must obtain advance authorization from the Graduate Adviser for a leave of absence. In addition, Ph.D. students in candidacy must also obtain authorization from the Graduate Dean.

Failure to secure a leave of absence in advance of the semester for which you will be on leave means that you: (1) Will not be guaranteed readmission, and (2) will be subject to a \$40 application for readmission fee.

If a new student registers and withdraws before the 12th class day of the first semester, she or he must reapply for admission to the Graduate School or have her/his original admission extended by petition from the Graduate Adviser to the Dean of the Graduate School.

### 3. GPA Requirement

Students must maintain a grade point average of 3.0 or higher (B or higher)). Students whose GPA falls below 3.0 need to meet with the Graduate Advisor concerning a remediation plan.

### 4. Warning Status and Academic Dismissal

To continue in the Graduate School beyond the first semester or summer session, the student must:

- Make satisfactory progress in fulfilling any **admission conditions** that were imposed;
- Meet any requirements imposed in writing by the Graduate Studies Committee;
- Maintain a **grade-point average** of at least 3.00; and
- Have approval of the Graduate Studies Committee.

#### Warning status

A student whose graduate grade-point average falls below 3.0 at the end of any semester or summer session will be warned by the Graduate School that their continuance in the Graduate School is in jeopardy. During the next semester or summer session for which the student is registered, he or she must attain a grade-point average of at least 3.0 or be subject to dismissal. During this period, the student may not drop any course or withdraw from the university without the approval of the graduate adviser and the graduate dean.

More info: <https://gradschool.utexas.edu/academics/policies/warning-status-academic-dismissal>

### 5. Credit/No Credit Courses

Courses taken on a Credit/No Credit basis are not computed in the GPA. At most, 20 percent of the hours on the master's Program of Work may have been taken on the Credit/No Credit basis, and no more than a comparable portion of the Program of Work for a doctoral degree. The 20 percent Credit/No Credit limitation does not include dissertation, treatise, thesis, report or master's recital courses.

A student who wishes to take a course or courses for Credit/No Credit may elect this option at the time of registration. Between the first- and fourth-class day in a long term, or the first and second day in a summer term, students may change the grade status of a course online. Between the fifth and 12th class day in a long term, or the third and fourth day in a summer term, students may change the grade status of a course in the department offering the course. Changes in grade status between the 13th class day and the published deadline in a long term, or the fifth day and the published deadline in a

summer term, require a completed Graduate Add/Drop form signed by the graduate advisor.

See the Graduate Program Administrator for more details.

Note that it is expected that Prelim courses will be taken for a letter grade, and that a letter grade of at least B is needed to satisfy the prelim requirements. Students wishing to take a Prelim course Credit/No Credit should be prepared to explain to the Graduate Advisor why the circumstances warrant this.

## **6. Auditing Graduate Courses**

As a Mathematics graduate student, you may occasionally find it worthwhile to audit a course without registering. This requires approval from the instructor; such approval is subject to available class space and the instructor's discretion. You are also encouraged to seek input from the Graduate Advisor. Permission to audit a course entitles the student to attend class but not to hand in papers, take part in discussions, or receive evaluations. An auditor does not receive University credit for the course audited. More info: <https://catalog.utexas.edu/general-information/registration-tuition-and-fees/auditing-a-course/>

## **7. Adding & Dropping Courses**

Procedures for dropping and adding courses are outlined in the Course Schedule. You may not drop a course after the final examination period has begun. See the Graduate Adviser or Graduate Program Coordinator if you have questions about dropping and adding courses. More info:

<https://gradschool.utexas.edu/academics/policies/adding-and-dropping-courses>

## **8. Grading Basis for Graduate Students**

Conference courses and dissertation hours are evaluated on a Credit/No Credit basis. Prelim and topics courses are evaluated on a letter-grade basis. Occasionally you may wish to have a topics course evaluated on a Credit/No Credit basis; see the Graduate Coordinator for the form requesting the change, which requires the agreement of the instructor and Graduate Advisor. A graduate student must receive the equivalent grade of 'C' or better to receive a grade of "Credit" for a course; however, you should consult the instructor about what exactly will be required for Credit.

No more than 20% of the courses that count toward a graduate student's Program of Work for the graduate degree may be taken on a credit/no credit grading basis. Dissertation courses do not count toward the 20% Program of Work limit.

## **9. Incomplete Work, or X grades**

Occasionally a graduate student may be unable to complete the required work by the end of the semester, typically because of illness, family emergency, or some other serious difficulty.

The student should discuss this situation with their professor (but need not disclose any confidential personal information). The professor may consider whether it is appropriate to assign a temporary grade of “X,” or temporary incomplete for the course. The student must complete the work before the end of the following long (Fall or Spring) semester.

Note: If the student does not complete the work, the grade of “X” will automatically become a grade of “I” (permanent incomplete) and may impact the student’s ability to be employed as a TA, AI or GRA.

More info: <https://gradschool.utexas.edu/academics/policies/grades-and-credit>

# 16. Student Engagement

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## 1. Student Organizations in Mathematics

### *Graduate Student Committee*

A 10-person committee of math grad students at UT Austin, who have been democratically elected to represent all grad students in the department. **The Graduate Student Committee** meet regularly to discuss issues that arise in the department, and affect you as a math grad. Their goal is to offer support, and improve the grad experience by advocating for student needs and interests, and providing solutions and resources to those.

### *Mathematicians of Color Alliance of Texas (MoCAT)*

The **Mathematicians of Color Alliance of Texas** is a student-run organization open to anyone interested in promoting the mathematical development and achievements of underrepresented groups. Their goal is to create a community of undergraduate and graduate math students of color through social events, mentoring, and tutoring to recruit, retain, support, and empower underrepresented students within the field of math.

### *Direct Reading Program*

The **Directed Reading Program (DRP)** is an RTG program of the Department of Mathematics at the University of Texas at Austin. DRP pairs undergraduate students with graduate student mentors to undertake independent projects in mathematics. Any undergraduate student may apply for DRP and, if accepted, will be assigned an appropriate graduate mentor. The student and the mentor will agree on a project. It can be based on reading through a book or an article, but the project is not limited to such things.

## 2. Outreach Programs

### *Sunday Morning Math Group (SMMG)*

**The Sunday Morning Math Group (SMMG)** is a UT sponsored outreach program aimed at junior high and high school students, their teachers, and their parents. For each program, a background in beginning algebra and basic geometry is expected but is often unnecessary. Both programs are free and no pre-registration is required.



### ***Texas Prison Education Initiative***

**TPEI** is a volunteer-run organization at the University of Texas at Austin offering credit-bearing college courses through UT-Extension to incarcerated youth and adults at no cost to students. Since 2018, more than 130 incarcerated youths and students have enrolled in our pre-college, college, and enrichment courses, and 60 graduate students, postdocs, and faculty members volunteered with TPEI. We also work with local organizations including The Center for Students in Recovery, and the Travis County Re-Entry Roundtable to enable students to continue their education upon release.

# 17. Some University Policies and Procedures

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As a graduate student at The University of Texas at Austin, it is important that you conduct yourself and your studies in a manner that aligns with the University's **Honor Code** and its standard of **academic integrity**.

In addition, you must comply with university policy as defined here and in the Graduate and General Information **catalogs**, the **Handbook of Operating Procedures**, and elsewhere.

## 1. Email Account

Every student must provide the University with their official email address using the **online update form in UT Direct**. The student's official email address is the destination to which the University will send official email communications.

It is the responsibility of every student to keep the University informed of changes in their official email address. Consequently, email returned to the University with "User Unknown" is not an acceptable excuse for missed communication. All admitted and enrolled students may **claim an email address** at no additional cost as provided by Information Technology Services. ITS is responsible for providing centrally supported email servers and addresses that assist the University in sending official communications.

## 2. Faculty Advising

The **Graduate Adviser** advises graduate students about their program of study, certifies that students meet departmental and university requirements, and administers departmental admissions, departmental funding and annual review of all graduate students, and placement. Representing the Vice President and Dean of Graduate Studies in all matters pertaining to the graduate program in the Department, the Graduate Adviser is the principal liaison between the Department and the Graduate School. Graduate Adviser Tim Perutz will advise all PhD students by phone prior to registration for classes for the fall semester. Dr. Mark Maxwell will advise all Master's degree students. This schedule for advising is only applicable to new graduate students. Advising for current students occurs at a different time.

### **3. Research supervisors**

Research Supervisors are usually in a student's primary field of interest and provide specific advice about faculty, courses, research, and job placement in that field.

### **4. UT ID Card**

Every student is required to have a University photo identification card issued by the ID Center which is located on the first floor of the **Flawn Academic Center**. The proximity-enabled photo ID card is needed for many purposes, including use of the libraries and University Health Services and access to residence halls and other University buildings. ID cards may also be used for purchases at stores that accept Bevo Pay and for admission to athletic and other special events.

Website: **ID Center (UT EID login required)**

Email: **id\_center@utlists.utexas.edu**

### **5. Residency requirement for graduate degrees**

Please refer to the Office of Graduate Admissions website for details regarding residency at: **<http://www.utexas.edu/student/admissions/residency/>**

### **6. Leaves of Absence**

Graduate students at The University of Texas at Austin may apply for a leave of absence of no more than two semesters.

A student on leave may not use any university facilities nor is the student entitled to receive advice from any member of the faculty. A leave of absence does not alter the time limits for degrees or course work. If the student is in doctoral candidacy, the application for leave must be petitioned in advance by the Graduate Advisor to the Graduate Dean and will be approved only in rare and unusual circumstances.

More information **[here](#)**.

### **7. Withdrawals**

Students who drop their entire course load by definition withdraw from The University of Texas at Austin for the semester.

To withdraw from the Graduate School, the student must file a Withdrawal and Refund Request form, which may be obtained from the Graduate School by emailing **[GradStudentSvcs@austin.utexas.edu](mailto:GradStudentSvcs@austin.utexas.edu)** or contacting your program graduate coordinator. The form explains refund policies.

All requests for withdrawal must be accompanied by an acknowledgment from the student's graduate advisor and emailed to **[GradStudentSvcs@austin.utexas.edu](mailto:GradStudentSvcs@austin.utexas.edu)** for processing.

A student may withdraw through the last class day of the semester, but academic appointments may not extend beyond the effective date of a student's withdrawal.

A student may withdraw through the last class day of the semester, but academic appointments may not extend beyond the effective date of a student's withdrawal. More information [here](#).

## **8. Convocation/Commencement**

Master's and doctoral students nearing degree completion should begin to prepare for graduation from The University of Texas at Austin.

More info: <https://gradschool.utexas.edu/academics/graduation>

## **9. Grievances**

Graduate students at The University of Texas at Austin have the right to seek redress of any grievance related to academic or nonacademic matters.

### **Grade Disputes**

Grade disputes are to be filed with the department offering the course in question, and the dean of the college or school offering the course makes the final decision on an appeal of the departmental ruling.

If your request to dispute a grade is denied by the instructor, you may prepare and submit a written appeal, within **30 calendar days** after the start of the following semester to the Graduate Adviser/Program Director of the graduate academic program in which the course originates. The academic programs will not accept any grade appeals, if not submitted within the 30 calendar days after the start of the following semester.

**Every effort should be made to resolve grievances informally between the student and the faculty member involved or with the assistance of the graduate adviser, Graduate Studies Committee chair or department chair. If the grievance cannot be resolved informally, students have recourse to formal grievance procedures. More information [here](#) and here: <https://policies.utexas.edu/policies/graduate-school>**

# 18. Some College- and University-wide Resources

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## 1. MyUT Portal

**MyUT:** All of UT's resources, all in one place. Download the official MyUT app from the App Store or Google Play.

**Student Resources** offers details and information about:

- Academic Tools and Support
- Course Registration and Grades
- Costs and Financial Aid
- Technology Tools
- Health and Safety
- Student Services
- Campus Resources
- Getting Involved
- Student Jobs

## 2. Recreational Sports

**UTRecSports** serves the campus community since 1916, Recreational Sports promotes physical fitness, healthy habits, and balanced behaviors through an array of recreation facilities, programs, services, special events, and student employment opportunities. Programs offered include Intramural Sports, Fitness/Wellness, Outdoor Recreation, Sport Clubs, Instructional, and Informal Recreation.

## 3. CNS Graduate Education Dean's Office

**The Office of Graduate Education in the College of Natural Sciences**, under the leadership of Associate Dean Dan Knopf, provides support for graduate students throughout the college. Graduate education is an integral part of the college's strategic goals to prepare the next generation of scientists, develop leaders, promote innovation, and strengthen state, national, and global communities. Graduate students play vital roles in the discovery of new knowledge and in helping our undergraduates share in those discoveries — making graduate students crucial to the College's research and teaching mission. **Various career and professional development services** are available to CNS graduate students

#### **4. Dean's Office Graduate Council**

The Dean's Office Graduate Council is a group of student volunteers representing each of the fifteen graduate programs in the College of Natural Sciences. The Council was created in spring 2015 to enhance bidirectional communication between students and the Office of Graduate Education. Together, we are sharing ideas to optimize the graduate school experience for students throughout the College. All students are encouraged to communicate ideas, questions, and concerns to the Council member representing their program.

More info: <https://cns.utexas.edu/graduate-education/graduate-council>

#### **5. CNS Career Services – Po-Tsan Ku**

Dr. Po-Tsan Ku is the CNS Career Development Specialist for graduate students. Dr. Ku has a PhD in cell and developmental biology, and also holds an MBA from the McCombs School of Business. He first came to Austin for his postdoctoral work, after which he started a corporate career at Ambion, Inc. He has thirteen years of experience in the biotechnology industry, and has held senior management positions in multiple companies.

Po-Tsan is available for individual consultations with graduate students and postdocs in all CNS disciplines. He can provide the following services:

- Career Exploration
- Creation of an Individual Development Plan (IDP)
- Non-Academic Job Search Strategies
- Academic Job Search Strategies (Faculty and Postdoc positions)
- Identifying Skills that Transfer to Industry
- Converting a CV to a Resume
- Resume Review and Editing
- Interview Preparation
- Salary Negotiation

More info: <https://cns.utexas.edu/graduate-education/professional-development-career-support>

#### **6. CNS Data-Science Training**

The **Department of Statistics and Data Sciences** provides free consulting to students working on their thesis, dissertation, research studies or journal articles. They provide assistance with study design, power analysis, model selection, software use, and interpreting results. Visit [here](#) to learn more or to schedule an appointment.

## 7. Graduate Student Assembly

**The Graduate Student Assembly's** mission is to advocate for graduate & professional student needs on the forty acres and beyond! To this end, they serve as the official voice of graduate students at the University of Texas at Austin to UT administrators, staff, and faculty, as well as to the Texas Legislature and UT Board of Regents. GSA provides a plethora of opportunities to enrich the graduate student experience here at UT.

## 8. Texas Global – International Student and Scholar Services

With more than 5,600 international students and 1,500 international scholars from more than 120 countries, UT is home to one of the largest international academic communities in the country. **International Student & Scholar Services (ISSS)** is a core part of Texas Global and internationalization at UT.

As their home away from home, the ISSS team provides an array of services to international students, faculty, and visitors on special programs. ISSS offers one-on-one advising appointments to address personal immigration, employment, health insurance and tax regulations. Appointments are available for students, scholars, staff and faculty and their dependents.

**Texas Global** advances UT Austin's academic mission by leading, supporting, and coordinating the university's international engagement efforts, fostering strategic partnerships on campus and abroad, welcoming a cadre of impressive international students and scholars to campus, and creating opportunities for students and faculty to engage with peers and institutions around the world.

## 9. Oden Institute for Computational Engineering & Sciences

**The Oden Institute for Computational Engineering and Sciences** is an organized research unit created to foster the development of interdisciplinary programs in computational sciences and engineering (CSE), mathematical modeling, applied mathematics, software engineering, and computational visualization. The Institute currently supports 12 research centers and alliances and nine research groups, and with additional units still in the planning stages.

## 10. Faculty Innovation Center

The core of the **FIC's** mission is to partner with UT faculty, graduate-student instructors and the University's programs and leadership to create an environment focused on teaching for student learning and success.

- **Instructional Practice.** We meet faculty where they are by offering diverse offerings designed to enhance teaching and learning for the success of all UT students.
- **Graduate Student Development.** We curate communities and offer training aligned with graduate students' needs in instructional design and delivery. We prepare future faculty, providing opportunities to advance graduate students' pedagogical, academic, and professional progress.
- **Faculty Partnerships.** We support individuals and groups seeking to experiment with new teaching techniques and collaborate with colleagues across disciplinary boundaries. Our signature programs include the Provost's Teaching Fellows and Faculty Innovation Grants.

## 11. Emergency Information

[www.Emergency.utexas.edu](http://www.Emergency.utexas.edu) serves as a resource for communications about The University of Texas at Austin in the event that there is an emergency. It is part of the university's overall communications infrastructure for ensuring important information is available to the university community and the public in the event of a technical outage or emergency situation.

The website provides information on **emergency preparedness** at the university as well as **additional resources** for communications and information during a technical outage or university emergency. When the university's main website is unavailable, updated information will be provided here.

## 12. Help & Services – UT Police Department

From crime prevention and safety programs to providing security for special events, **UTPD** stands ready to assist our faculty, staff, students, and visitors. If we can't help, we probably know who can. Contact UTPD at **512-471-4441**.

## 13. UT Counseling and Mental Health Center

Your CARE Counselor in the College of Natural Sciences is **Nic Dahlberg**.

The CARE counselor is available to help with a variety of issues, such as stress, test anxiety, racing thoughts, feeling unmotivated and anything else that might be getting in your way. Nic is also available for consultation about student issues that arise in your role as a TA.

**UT Counseling and Mental Health Center** offers a wide variety of therapy groups, and therapeutic classes that address a range of student needs.



## 14. Services for Students with Disabilities

**SSD** ensures students with disabilities have equal access to their academic experiences at the University of Texas at Austin by determining eligibility and approving reasonable accommodations. They also engage in outreach across campus in order to make campus a more inclusive, accessible and welcoming environment for people with disabilities.

SSD is part of the **Division of Diversity and Community Engagement** and their office is located on the fourth floor of the **Student Services Building**. Take some time to browse through our website to find information on **how to register** with SSD, **guidelines for documentation**, and information about their **accommodations and services**. General resources for the UT community may be found on UT's **Disability Resource page**.

## 15. Student Emergency Services

**The Student Emergency Services** office helps students and their families during difficult or emergency situations. Assistance includes outreach, advocacy, intervention, support, and referrals to relevant campus and community resources. Please note that this office does not provide counseling services.

Emergency situations include but are not limited to:

- Missing Student
- Family Emergency
- Fire or Natural Disaster
- Student Death (current or former)
- Medical or Mental Health Concern
- Academic difficulties due to crisis or emergency situations
- Interpersonal Violence (stalking, harassment, physical and/or sexual assault)

512-471-5017 (Mon.-Fri., 8-4:30)

512-232-5050 (24/7) – **Behavior Concerns Advice Line**

## 16. University Ombuds Office

**The University Ombuds Office** is available to students, faculty and staff to listen to your concerns in a safe setting about life at the university and confidentially discuss interpersonal difficulties, university policies, university bureaucracy, and conflict resolution techniques. They help you identify options so you can seek resolution.

The Office of the Student Ombuds is always available as a resource.

### **17. University Health Services**

**University Health Services** is committed to providing high-quality care to patients of all ages, races, ethnicities, physical abilities or attributes, religions, sexual orientations, or gender identities/expression.

### **18. Charles A. Dana Center**

Improving equitable access to excellent math and science education. **The Charles A. Dana Center** at The University of Texas at Austin works to dismantle barriers in education systems to ensure all students—especially those from diverse backgrounds—have equitable access to an excellent education.

### **19. Sanger Learning Center**

**The Sanger Learning Center** empowers students to achieve their academic and professional goals by providing holistic, equity-driven learning support.

### **20. Title IX**

**The Title IX Office** is committed to supporting the University’s mission to create and maintain an educational and work environment free from all forms of sexual harassment, sexual discrimination, exploitation and intimidation in which all students, faculty and staff can learn, work and thrive.

### **21. Behavior Concerns Advice Line (512-232-5050)**

Are you worried about a student in your class, bothered that your roommate has been acting differently, or concerned about the behavior of a co-worker? If so, contact the Behavior Concerns Advice Line (BCAL) at 512-232-5050 or submit your concerns using the **online form**.

### **22. BE SAFE**

**Be Safe website** lists many resources and services available at your fingertips. These include but are not limited to SURE Ride, SURE Walk, Campus Text Alerts, Voices Against Violence (512-471-3515), and UTPD Resources.

### **23. LifeSafe App at UT Austin**

Available in the App Store and Google Play. UTPD has launched a free mobile app called **LiveSafe** at UT Austin giving the UT community and guests immediate access to police dispatch via the communication tool most frequently used—text.