Department of Statistics

Graduate Student Handbook

Academic Year 2026-2027

Last revised July 20, 2026

Table of Contents

Chapter 1 - Introduction

Welcome to the Department of Statistics! We are glad you have chosen Rice to pursue your graduate studies in statistics.

This guide to graduate study in the Department of Statistics (STAT) contains information about exams, financial support, required and recommended courses, and *rules and regulations* for the various degree programs. It is intended to supplement the Rice University General Announcements (http://ga.rice.edu/) by providing a more detailed description of the STAT graduate program.

This handbook is the result of an ongoing attempt by the faculty to codify and make readily available to students the rules, requirements, and general approach to the graduate education of our department. Please do not hesitate to notify the faculty about areas that need clarification or strengthening.

Huixia Judy Wang, Chair
Department of Statistics

Mission Statement

The Department of Statistics is dedicated to the advancement of the scientific discipline of statistics, the innovative application of statistics to meet modern scientific, engineering and societal challenges, the expert education of students in statistics and other disciplines, and statistical leadership in the local, national and international communities.

Research

To achieve this mission, faculty maintain leading methodological and computational research programs in modern areas of statistical science and data science that address massive data and complex structures and pursue a range of research interests in applied statistics related to engineering, natural sciences, business, medicine, and social sciences. The Department supports a modern statistics curriculum for students in Statistics and the larger Rice community. Close working relationships between faculty and students provide rigorous training in both theoretical statistics and applied research.

Current research of the core Department Faculty includes:

- Foundations of statistics both theoretical and computational
- Bayesian methods
- Hierarchical models and networks
- Statistical and Machine Learning, Multivariate Analysis
- Functional data, nonparametric methods, categorical and mixed data methods
- Topological data analysis
- Applied probability, stochastic analysis, stochastic processes
- Spatial and temporal processes, dependent data
- Sampling and experimental design
- Statistical computing, simulation and graphics
- Quantitative finance and risk management
- Biosciences, neuroscience, bioinformatics, environmental science

History

The Department of Statistics at Rice University was established in 1987 and represents a significant and leading presence in the international statistics community. The Department is home to 19 core faculty, 11 of which are tenured or tenure track. We also have 5 joint faculty and 25 adjunct faculty. The Department hosts a student population of approximately 50 doctoral students, 40professional master's students and 196 undergraduate students. We regularly host visitors from all over the world and we maintain an active post-doctoral program through NSF and NIH sponsorship.

Department of Statistics, 2026-2027

Huixia Judy Wang, Chair

Core Faculty

Edgar Gauna Avalos, RCEL Lecturer	ea37@rice.edu	N/A
Arko Barman, Associate Teaching Professor, D2K	arko.barman@rice.edu	N/A
Roberto Bertolusso, Senior Pfeiffer Lecturer	rbertolusso@rice.edu	713-348-2695
Dennis Cox, Professor Emeritus	dcox@rice.edu	713-348-6007
Katherine B. Ensor, Noah Harding Professor	ensor@rice.edu	713-348-4687
Rudy Guerra, Professor	rguerra@rice.edu	713-348-5453
Loren Hopkins, Professor in the Practice	hopkins@rice.edu	713-348-3020
Michael Jackson, MSTAT Director, Lecturer	mdj3@rice.edu	713-348-5681
Marek Kimmel, Professor	kimmel@rice.edu	713-348-5525
Xinjie Lan, Assistant Teaching Professor, D2K	xl116@rice.edu	N/A
Meng Li, Associate Professor and Associate Chair	meng@rice.edu	713-348-3901
Hengrui Luo, Dobelman Family Assistant Professor	hengrui.luo@rice.edu	713-348-2797
Lorenzo Luzi, Assistant Teaching Professor, D2K	ll65@rice.edu	N/A
Elizabeth McGuffey, Associate Teaching Professor	elizabeth.mcguffey@rice.edu	713-348-5859
Erzsébet Merényi, Research Professor	erzsebet@rice.edu	713-348-3595
Christine Peterson, Associate Professor	cbp2@rice.edu	N/A
Leif Peterson, Lecturer	leif.peterson@rice.edu	N/A
Gina Pizzo, Lecturer	gp70@rice.edu	N/A
David Scott, Noah Harding Emeritus	scottdw@rice.edu	N/A
Chad Shaw, D2K Director, Joint Professor	chuds@rice.edu	713-348-6037
Marina Vannucci, Noah Harding Professor	marina@rice.edu	713-348-6288
Frederi Viens, Professor	frederi.viens@rice.edu	713-348-5633
Huixia Judy Wang, Professor and Chair	jw322@rice.edu	713-348-4223
Jiaqi Li, Assistant Professor	jiaqi.li@rice.edu	N/A

Joint Appointment and Adjunct Faculty: see https://statistics.rice.edu/people/faculty

Post-Doctoral: see https://statistics.rice.edu/people/postdoctoral-researchers

Administrative Staff

Lisa Giron
Senior Department Administrator
Maxfield 127
713.348.4166
egg2@rice.edu

Hannah Wilkes
Graduate and Undergraduate Program Administrator
Maxfield 128
713.348.6032
haw2@rice.edu

Jocelyn Dayao
Academic Administrator III
Maxfield 126
713.348.5839
jcd8@rice.edu

Margaret Poon
Department Coordinator
Maxfield 122
713.348.2057
poon@rice.edu

Nghi Bui
Financial and Budget Analyst
Maxfield 122
713.348.3059
nb66@rice.edu

Brittiney Chambers
D2K Program Administrator II
Duncan Hall 1041
713.348.5997
BChambers@rice.edu

IT and Systems Administration
General Assistance
helpdesk@rice.edu

Staff Assignments

Lisa Giron: *Senior Department Administrator*. Serves as the primary business manager of the research, academic, fiscal and administrative functions of the Department of Statistics and Data to Knowledge (D2K). Oversees the management of the administrative staff.

Hannah Wilkes: *Graduate and Undergraduate Program Administrator*. Manages undergraduate and graduate student administration, including degree policies, course scheduling, registration, TA's, graders, and labbies. Graduate student matters include admissions, orientation, academics, TA assignments, registration, payroll, the Ph.D. qualifying exam, and provides information on policy, procedure, and required paperwork for Ph.D. candidacy and graduation.

Jocelyn Dayao: *Academic Administrator III*. This position serves as a problem-solving point person for a wide variety of matters in the Department of Statistics. It manages HR and visa processing, plans and coordinates departmental Colloquia and special seminars, assists in graduate student assignments and student labor distributions in iO, assists in faculty recruitment, assists in promotion and tenure cases, and handles frequent special projects as directed by the Department Chair or senior department Administrator.

Nghi Bui: *Financial and Budget Analyst*. This position serves as the liaison to external departments and agencies in a variety of financial matters in the Department of Statistics and Data to Knowledge (D2K). Duties include, but are not limited to: creating, updating, and reviewing expense reports, all post award support to faculty, budgets, purchase orders, and contracts, as well as analyzing financial transactions for financial reporting, labor distributions, and reconciliations. Analyst produces monthly balances and future forecast and compliance support.

Margaret Poon: *Department Coordinator*, (part time). Manages and maintains department inventory, alumni data base and space database, assists with ordering office supplies and equipment purchases, responsible for department space management, and assists with special projects and events.

Brittiney Chambers: *Program Administrator II, D2K.* Provides support to the D2K Director and manages the day-to-day academic operations of the D2K program, including admissions, recruitment, course scheduling, curriculum administration, student employment, and reimbursements. Supports the D2K Director in sponsor outreach and development activities. Serves as the communications and marketing liaison for D2K and Statistics, as well as the department's liaison with the Dean's Office. Coordinates major program events, serves as managing editor of the *Monthly Mean* newsletter, and is the staff advisor for the RDS student club.

STAT Faculty Advisors

PhD First-Year:	Meng Li	meng@rice.edu
MSTAT:	Michael Jackson	mdj3@rice.edu
Undergraduate:	Elizabeth McGuffey	elizabeth.mcguffey@rice.edu
	Meng Li	meng@rice.edu

Graduate Student Association (GSA) Representative

TBD

STAT Graduate Student Representative

1st Year:	TBD	
2nd Year:	Evgeniia (Jane) Selezneva	es152@rice.edu
3rd Year:	Yangqianzi Jiang	yj50@rice.edu
4th Year:	Nick Di	nd56@rice.edu
5th Year:	Kevin McCoy	kmccoy1@rice.edu

Beyond the Department of Statistics - Professional Associations

It is wise to begin your professional career with membership in one of the professional societies; it helps with networking and peer-to-peer recognition. The following associations are worth considering.

The American Statistical Association (ASA). Promotes the practice and profession of Statistics. There are student memberships available ($30 per year), which entitle the member access to a lot of useful information, publications, activities, networking, job searching and much more. For more information on an individual student membership, please see http://www.amstat.org.

The American Statistical Association Rice Student Chapter (STAT-ASA). This is a student-run organization for both graduate and undergraduate students interested in the study of statistics in the broadest sense. The purpose of STAT-ASA, according to the ASA, is "to provide opportunities for students to connect with other students interested in statistics and interact with prominent statisticians locally and at national meetings. It also encourages students to continue studying statistics and provides career information in the statistical sciences." Visit the STAT-ASA website or get connected via Slack for more information.

Houston Area Chapter of the American Statistical Association (HACASA). For Chapter Officers and activities, including a schedule of monthly meetings, see its website: http://community.amstat.org/Houston/home.

The Institute of Mathematical Statistics (IMS). This is an international professional and scholarly society devoted to the development, dissemination, and application of statistics and probability. Student membership is ***FREE!*** https://www.imstat.org/free-student-membership/.

Center for Career Development (CCD)

The Center for Career Development (CCD) supports graduate students at every stage of their career journey, from identifying professional goals to navigating the job market. CCD services include one-on-one career coaching, resume and CV review, interview preparation, and access to Rice's global alumni and employer network. Graduate students are encouraged to explore programming designed specifically for academic and non-academic career paths.

Chapter 2 - Being a Graduate Student

Using the Handbook

(1) The information in this handbook pertains to both master and doctoral students in the Department of Statistics. Special references to guidelines or policies for Ph.D. students are found throughout chapters 2-5. Please refer to chapter 6 for specific procedures and policies for the Professional Master's in Statistics (MSTAT) program.

(2) Department of Statistics Supplemental Degree Requirements (SDR) for PhD Students

In addition to the degree requirements given in the General Announcements (GA), doctoral students must satisfy additional supplemental degree requirements specified by the Department of Statistics. The SDR requirements are given in the *Statistics Graduate Student Handbook* and may be revised in any given year. Students must satisfy the SDR to graduate. As they may change in any given year, students satisfy the SDR by following those in effect when they first matriculated at Rice or those in effect in their year of graduation. Special exceptions or substitutions may be requested in writing to the department chair. SDR are given in chapters 4 and 5. The following is taken from the 2026-2027 General Announcements (GA). General Announcements (GA).

All graduate students must meet the minimum university requirements for the academic credential, in addition to any program specific requirements. The official certifier of the graduate degree, may petition the dean of graduate and postdoctoral studies, or the delegate to allow substitutions or waivers to the degree requirements when academically appropriate. Doctoral and thesis master's official certifiers may petition for substitutions and waivers to program-specific degree requirements. Non-thesis graduate programs may petition to allow substitutions to program-specific degree requirements.

Students enrolled in graduate programs at Rice may decide whether to follow the graduation general and degree program requirements in effect when they first matriculated at Rice or those in effect when they graduate. Graduate program degree requirements may vary from year to year during the period between a student's matriculation and graduation. The graduate program may, at its discretion, make any of these variations available to a student for completion of the degree requirements but must allow a student to graduate under requirements articulated at the time of their matriculation. If a new academic credential is created during the student's time at Rice, the new program will be available to the student as if the program appeared in the General Announcements at the time of matriculation.

If a student has been separated from the university due to a voluntary or involuntary withdrawal, students must graduate under the regulations in effect at the time of their last readmission or those in effect when they graduate unless granted an exception by the dean of graduate and postdoctoral studies. An archive of General Announcements is available online here.

Arrival

Prior to arriving on campus, new students will receive email communications from Hannah Wilkes, the Undergraduate and Graduate Program Administrator (or Student Administrator), regarding required onboarding tasks and important information for the start of the program. After arriving in Houston, students should schedule a meeting with Hannah Wilkes (haw2@rice.edu). This meeting serves as a final onboarding checkpoint to confirm that all required items have been completed, answer any remaining questions, and ensure students are prepared for orientation and the first week of classes.

Advising

Each year, a single faculty member - the *Graduate Advisor* - serves as interim advisor for all first-year Ph.D. students and all other Ph.D. students without a thesis advisor. Each first-year Ph.D. student meets with the Graduate Advisor at orientation and then again early in the fall and spring semesters to discuss curriculum choices, examinations, and general progress through the first year. ***First-year students are required to discuss their curriculum choices with the Graduate Advisor*** to help ensure that the student's choices and plans are in line with the various requirements

of the degree program. Students continue to meet with the Graduate Advisor until a thesis advisor is selected. The Graduate Advisor for the 2026-2027 year is Dr. Meng Li.

After a thesis advisor has been acquired, typically not later than the end of the third semester (i.e., the first semester of the second year), the thesis advisor takes over the Graduate Advisor's role. In case a change of thesis advisor is needed, the current and new advisor will coordinate with the department Chair to effect the change. PhD students submit an annual progress report to the Graduate Committee (see Chapter 4).

Thesis Advisor

It is recommended that students select their PhD thesis advisor after passing the qualifying exams and *no later than the end of the third semester*. Students might consider pre-thesis projects with individual faculty as a way to gauge mutual interest. However, consideration should be given to the possible impact of such projects on the student's progress toward degree completion, especially course requirements, and TA responsibilities. Students are encouraged to begin research sooner rather than later, but it is important to balance other responsibilities, such as course work and TA work. Getting advice from the Graduate Advisor on a pre-thesis research project is highly recommended. The department does not have a formalized rotation system for research projects. Students interested in non-thesis research should approach faculty of interest.

Registration

New students register for the fall term during orientation week, all other graduate students must register by the fall or spring enrollment deadline set by the Academic Calendar to avoid paying a late fee. Registration is performed using the Rice University student and faculty self-service system called ESTHER, which can be accessed by all students and faculty via the web at http://esther.rice.edu. Access information for ESTHER will be provided to incoming graduate students prior to their arrival at Rice.

Courses can be added without a fee throughout the first two weeks of each semester. Students will not be allowed to add classes after the second week. Classes can be dropped throughout the first seven weeks of each semester; consult the current academic calendar for EXACT dates. Therefore, a student's schedule established in the first week is not written in stone and can be adjusted for quite a while. The semester is only 15 weeks long, so it is encouraged not to take too long in the selection process. The Graduate Advisor and the course instructor should approve any course that first-year students wish to add/drop.

Students must be registered for 9 or more credit hours in order to receive a stipend through Rice fellowships. Students are expected to participate regularly in the on-campus academic community unless specifically granted permission by their graduate program. To receive Rice fellowships, graduate tuition scholarships, or assistantship aid, students must be engaged in full-time graduate study; part-time students and students who are not enrolled are not eligible for such aid.

Coursework

STAT has a system of required courses and distribution courses to which doctoral and MSTAT students must conform. The course system for PhD students is described in Chapter 4 and for MSTAT students in Chapter 6. The Department encourages students to take graduate-level courses in other departments. Up to *four* outside (non-STAT) courses at the graduate level may count toward the requirements of the PhD degree. An analogous policy applies to the MSTAT degree, for which up to *two* outside courses may count toward the degree. See the *General Announcements* and Chapter 6 of this document for more details on the MSTAT program. Students with an appropriate background may forego some of the introductory courses. For most students, however, the introductory courses are worthwhile, even if they have been previously taken. For example, STAT 518 and 519 are the basis for the A-exam (qualifying exam) and may be worth repeating even if you had similar material at another school, since instructors can emphasize different things. Additional background courses may be advisable for some students. Talk with the Graduate Advisor if you want or need additional background coursework; for example, mathematics courses.

Computers

Computers are essential for modern statistics and, thus, in the study of statistics. Every Ph.D. graduate student is provided with a fully networked desktop workstation or a laptop. In addition, graduate students have access to the various research computing facilities at Rice University; see Research Computing at http://it.rice.edu. Access to these facilities is typically provided in connection with a faculty sponsored research project. Additional information is given in the Appendix of this document.

On arrival at Rice, every graduate student is assigned an account on the departmental computing system. The STAT system consists of several desktop workstations, servers, administrative computers (PC's or Macs), and peripherals (e.g., printers) linked by Ethernet and to the outside world through the campus fiber optic backbone. Wireless connections are available throughout campus. Software includes R, Python, Matlab, Mathematica, Maple, TEX in various forms, alternative compilers (e.g. GNU), and much more. If a student needs a specific software, they should let the Department Coordinator - (presently Margaret Poon) know.

English Proficiency and Technical Writing

The ability to write and speak English competently is *essential* for successful academic work, and, more generally, scientific careers. The Department reinforces its commitment to fostering communication skills in the following ways:

1. All non-native English speakers must meet the University's minimum requirement for TOEFL before admission.

2. All first-year students must participate in the course, STAT 600 *Graduate Seminar in Statistics*. This course introduces students to faculty research programs, including faculty from MDA. STAT 600 is typically offered in the fall semester.

3. The Rice Office of International Students & Scholars (OISS) http://oiss.rice.edu/ offers a number of free English and Culture classes. Additionally, Rice's ESL (English as a Second Language) Program http://esl.rice.edu/ offers non-native English speakers the opportunity to improve their language skills. Foreign students are strongly encouraged to take advantage of these opportunities.

4. Various programs host workshops on topics such as academic conversation skills, tips for academic writing, thesis boot camps, etc. Writing courses are offered by the Activate Engineering Communication Program (ENGI 501, ENGI 600, COMP 604), the Program in Writing and Communication (COMM 602), and the Rice Center for Engineering Leadership (ENGI 542, ENGI 600). Oral communication courses are offered by Activate Engineering Communication Program (ENGI 400, open to graduate students) and the Program in Writing and Communication (COMM 601), We highly encourage students to take advantage of these opportunities.

Time and Attendance

Graduate students are employees of the department. They should inform their advisors and the Undergraduate and Graduate Program Administrator when they will be off-campus for an extended period of time, such as for conferences, vacation, or illness. We will work with you as much as possible on these matters, but it is important to make sure that your official duties (e.g., TA responsibilities) will be covered while you are gone. Master's students working on campus are paid at an hourly rate and are required to clock-in and clock-out through an online system called, Imagine One. Students should coordinate with the Undergraduate and Graduate Program Administrator (presently, Hannah Wilkes) for any time off from working and clear this with the faculty member for whom they are working.

Physical and Mental Well-Being

There are many ways for students to maintain a healthy body and mind. Graduate studies can be very stressful and regular physical activity can help maintain wellness and balance. We encourage you to consider using the facilities and programs in the Gibbs Recreation and Wellness Center. Confidential health services are available for students on campus through the Rice Student Health Services. Additionally, a Student Wellbeing Office, among other programs, coordinates confidential mental health assistance through the Rice Counseling Center. Please visit the Rice Wellbeing and Counseling Center for any confidential help you might need.

Rice encourages any student who has experienced an incident of sexual, relationship, or other interpersonal violence, harassment or gender discrimination to seek support. There are many options available both on and off campus for all graduate students, regardless of whether the perpetrator was a fellow student, a staff or faculty member, or someone not affiliated with the university.

Students should be aware when seeking support on campus that most employees are required by Title IX to disclose all incidents of non-consensual interpersonal behaviors to Title IX professionals on campus who can act to support that student and meet their needs. The counselors at the Rice Counseling Center and the doctors at Student Health Services are confidential, meaning that Rice will not be informed about the incident if a student discloses to one of these Rice staff members. Rice prioritizes student privacy and safety, and only shares disclosed information on a need-to-know basis.

If you are in need of assistance or simply would like to talk to someone, please call (24/7) the Rice Wellbeing and Counseling Center, which includes Title IX Support: **(713) 348-3311.** Policies, including Sexual Misconduct Policy and Student Code of Conduct, and more information regarding Title IX can be found at safe.rice.edu.

Other helpful information on life as a graduate student can be found in the Graduate Student Association (GSA) yellow pages. The URL for GSA is https://gsa.rice.edu/ and here you can find out about housing, transportation, food, and other items concerning graduate life.

The student will also want to check out the Fondren library and Valhalla, the graduate student pub. The Rice University Student Handbook also contains a wealth of useful information.

Chapter 3 – PhD Program: Financial Support

Note: *Professional Master's in Statistics (MSTAT): Procedures and policies for MSTAT students are different than those for the PhD. Students. Please refer to chapter 6 for specific elements of MSTAT guidance.*

Rice is unusual in that relatively few graduate students support themselves entirely by teaching. Almost all STAT graduate students receive stipends and tuition waivers – either from the university, or from an external research grant awarded to a STAT faculty member, or from Graduate Fellowships awarded to the student. As a result, the main focus of our students is preparing for and learning to carry out research in statistics.

Departmental funding is available for most first and second year students and a few individuals in later years if they cannot identify research funding. Departmental support includes a stipend and tuition. In support of a department stipend, students are asked to perform some service – usually as a TA or grader. Your offer letter will indicate how many semesters of TA work you can expect. At the beginning of each semester, the department chair assigns most first-year students and some more advanced students as TAs or graders to various undergraduate or graduate courses. Being a TA carries important responsibilities, often including oversight of graders and/or labbies. Grading is also an important responsibility. Grading is not only a service, but also an important learning experience for graduate students. Failure to perform TA or grading duties adequately may jeopardize future support. If for some reason a student feels unable to perform their responsibilities in an assigned course, he or she should inform the instructor or department chair so that adjustments or changes might be made as soon as possible.

Since some evidence of teaching competence is a prerequisite for entry-level academic positions, STAT graduate students who wish to eventually become professors should take advantage of teaching opportunities to enhance their resumes in this important way. To this end, advanced graduate students interested in academic careers are encouraged to inquire about being a Graduate Instructor of Record (IOR). Introductory courses are a great entryway to being an independent instructor, such as STAT 280, 305, 310, 315. Graduate instructors must complete the Instructors of Record Orientation offered by the Center for Teaching Excellence and attend the New Faculty Orientation offered by the George R. Brown School of Engineering and Computing around the beginning of every fall semester. SoEC maintains guidelines for the selection and evaluation of graduate students and postdoctoral fellows serving as Instructors of Record.

The National Science Foundation, other government agencies, and foundations offer scholarships, fellowships, and other funding opportunities for graduate students. Some Rice based awards are on the George R. Brown School of Engineering and Computing webpage http://engr.rice.edu (Academics/Graduate/Student Awards & Scholarships). Graduate students are strongly encouraged to seek out these opportunities. The application process is a valuable learning experience. Being awarded one of these prestigious fellowships is a great enhancement to the student's resume, and many of these fellowships carry a higher stipend level than that offered by the STAT department. Faculty members, especially interim mentors and advisors, will provide guidance and help in the selection of appropriate opportunities and in the application process. Additionally, the Office of Proposal Development is available to assist with proposal applications.

First-year Support

First-year students receive a 12-month (beginning in the fall semester) stipend presently worth $37,000. As stated above, in support of a department stipend, students are asked to perform some service – usually as a TA or grader. As a recipient of a graduate stipend, you will also receive a full tuition waiver. Financial support beyond the first year is contingent upon satisfactory progress toward the degree and is normally provided for a period of five years. *Summer support is 40 hours per week for 3 months.* For first-year students, summer support carries obligations in the form of some combination of STAT faculty research and preparation for the A-exam (qualifying exam). First-year students should discuss a plan of research and A-exam preparation with their summer faculty advisors in advance of the summer term. First-year students should discuss their summer plans with the Graduate Advisor early in the Spring semester. Students interested in summer research with department faculty should approach individual faculty beginning early in the spring semester. In lieu of first-year summer support, students may elect to work in a paid internship. Please inform the Graduate Advisor or department chair, and the Undergraduate and Graduate Program Administrator (Hannah Wilkes) of any internship plans. Graduate study is usually a full-time and year-round activity. Summers allow for extremely valuable research time because there is the opportunity to perform research without the responsibilities of coursework, grading, etc. Of course, it is also important that students make time to relax and spend time away from the rigors of academics. To this end, students should discuss such breaks or vacation time with their summer faculty advisors.

Students can pursue various types of financial support in subsequent years of graduate study beyond the first-year. However, in general, students in the STAT department obtain their financial support from faculty research support (e.g., grants) after they have completed their TA obligations to the Department. The opportunity to do research is an integral part of graduate training. Each student is responsible for identifying this opportunity, deciding which of the faculty to work with and approaching him/her about a project and support. While the department is not in a position to guarantee a research project with any given faculty member, STAT has been very successful in placing students with professors throughout its history. Professors always have projects underway; therefore, more often than not, they are looking for research assistants. The coursework over the first two or three years will help familiarize students with professors and vice-versa. Enthusiastic participation in a student's classes is by far the best way to find a faculty member (or to have him/her find you) who will direct the student's initiation as a research statistician.

As a matter of university policy, Rice does not offer financial support to non-thesis ("professional" or MSTAT) students. Accordingly, transfer from the Ph.D. program to the non-thesis master's program implies repayment of any financial aid received from Rice. This restriction does not apply in case of transfer to the thesis master's

program (MA degree). Students who choose to transfer from the Ph.D. program to the MA (master's with thesis) program will not be subject to repayment of previous financial aid.

At the beginning of each academic year, students are required to pay certain fees. They are required to have health insurance, which they may choose to purchase from Rice. They may also choose to pay for parking.

Important changes to student health insurance take effect on Aug. 1, 2025. There will be one Aetna plan for all students, developed after extensive analysis of student experiences and insurance plan designs. By having one plan with Aetna, Rice secures a better overall package for all of our students. For eligible doctoral students who receive a subsidy, Rice will pay the full cost (100%) of the student's premium. Dependents will continue to receive a 25% subsidy for their premiums.

If financial aid beyond what the department has arranged is needed, the student may contact the Financial Aid office for information about loan programs for graduate students.

Chapter 4 - The STAT PhD Curriculum

Note: *Procedures and policies for MSTAT students are different than those for the Ph.D. students; please refer to chapter 6 for specific elements of MSTAT guidance.*

The STAT PhD Graduate Curriculum

Statistics is a rapidly evolving and essentially interdisciplinary field. The most fascinating work in STAT often involves combinations of ideas from various parts of mathematics, probability, statistics, computer science, physical sciences, and engineering, as well as many other disciplines.

The Department has established a PhD curriculum that includes core courses, advanced graduate courses, and required professional development courses. These courses are designed to ensure breadth of exposure to all areas of statistics, as represented by the Rice faculty and depth of preparation in a disciplinary area. Both the core and the disciplinary curricula evolve as faculty and student interests change.

General requirements for the PhD:[1]

- A minimum of 90 graduate semester credit hours of study at the 500-level and above (including thesis credit hours).
- A minimum of one-third of the required credit hours must be completed at Rice.
- Doctoral students must complete at least four full fall and/or spring semesters in full-time study at Rice University.
- An original investigation that is formalized in an approved thesis.
- As final evidence of preparation for a degree, a public oral examination prior to submitting the approved thesis to the Office of Graduate and Postdoctoral Studies.

General requirements for the Ph.D. in Statistics:

- A minimum of 90 credit hours of approved coursework beyond the bachelor's degree and a minimum of 60 hours beyond a master's degree.
- A satisfactory performance on qualifying and thesis proposal examinations, and an original thesis with a public oral defense.

[1] The General Announcements (GA) is the official Rice curriculum. In the event that there is a discrepancy between the GA and any other websites or publications, the GA shall prevail as the authoritative source. (https://ga.rice.edu/)

Specific Ph.D. program requirements:

General Course of Study: It is expected that the first year in the program will be spent mostly on courses, but by the end of year 2, students should be conducting significant research. By the end of the third year, successful students will have completed courses and started on full-time thesis research.

A-exam (Qualifying) Exams: Comprehensive exams in probability and statistics are required for the Ph.D. degree. The exams cover master's level material and the conventional timeline is for rising second-year students to take the exam in August, before the beginning of the fall semester of the second year. Students with appropriate prior graduate education in probability and statistics are encouraged to take the exams upon entering the PhD program, in August before the beginning of the first year fall semester. More information is given in Chapter 5.

Ph.D. Course Requirements: Ph.D. students are required to take 12 *advisor approved* non-thesis courses (36 credit hours as most courses are worth 3 hours of credit); 8 of the 12 courses must come from the Advanced Graduate curriculum. Courses taken outside the Department should complement your studies in probability, statistics, and data science.

Core Courses: 4 of the 12 approved courses are specified and define a *core* set of courses as given below.

The course selection of first-year and other students without thesis advisors must be approved by the Department's Graduate Advisor. Students with a thesis advisor should discuss their course selection with their advisor.

Core Curriculum (required): The core curriculum for the doctoral program in Statistics includes a two-semester sequence on the foundations of statistics, at least one course in advanced probability and one course **or** demonstrated proficiency in computing. Specifically, the required core courses are:

- STAT 532 Foundations of Statistical Inference I
- STAT 533 Foundations of Statistical Inference II
- STAT 581 Probability Theory or STAT 552 Applied Stochastic Processes
- Advisor approved demonstrated proficiency in computing, such as STAT 605 or an approved course outside the department. Courses taken to fulfill this requirement will be counted toward the Ph.D. Designated Courses or from outside the department. This requirement must be approved by the Graduate Advisor or a student's thesis advisor.

Advanced Graduate Courses
Advanced applied, methodology, and theory courses 502, 525, 530, 532 (required), 533 (required), 541, 542, 545, 547, 549, 550, 551, 552 or 581 (required), 582, 590[2], 591[2], 602, 607, 613, 616, 620, 621, 623, 625, 630, 648, 649, 650, 677, 686. This list evolves with graduate faculty foci, keeping our curriculum current.

Additional PhD Program Requirements: Outside of the required 12 courses, Ph.D. students are required to participate in our two graduate seminar STAT courses, STAT 600 and 601, for a total of 6 semesters. Each course is worth 1 credit hour and thus a total of 6 credit hours are required. *Students are required to take 1 hour of STAT 600 and 5 hours of STAT 601. STAT 600 should be taken in the first semester of study year.*

Department Colloquia: In addition to the program of course work detailed above, department colloquia and seminars form an essential part of graduate education. All students are required to attend the regular department colloquia, whether or not they are enrolled in the graduate seminar course, STAT 601. The department colloquia

[2] STAT 590 and 591 are independent study courses. With approval from the Graduate Advisor or faculty thesis advisor, students may count 3 credit hours of independent study work as *one* course (Advanced Graduate Course) toward the 12 course requirement.

series provides a window to the frontiers of statistics and the breadth of the discipline. Ph.D. students are provided an opportunity to meet with the visiting speakers.

Department Responsibilities: All statistics graduate students are assigned a limited amount of teaching and department service as part of their graduate education. The actual work assignment for a particular course depends on the course instructor. TAs may be expected to work up to 20 hours per week. Exact responsibilities will be determined by the department.

Exceptions: In some cases, the above requirements may not be appropriate, because of prior equivalent course work. The department chair, in consultation with relevant advisors, will consider such exceptions as they arise. Our intent is not to construct rigid constraints, but rather to ensure that every STAT Ph.D. student has a broad grounding in the foundations and applications of statistics.

Should a transfer credit, course waiver, or course substitution be approved, all students are still required to complete the minimum credit hours required for degree as outlined in the General Announcements. Students pursuing a PhD degree in the field of Statistics must complete:

- A minimum of 90 credit hours of approved coursework beyond the bachelor's degree and a minimum of 60 hours beyond a master's degree.
- A satisfactory performance on a required qualifying examination and an original thesis with a public oral defense.

No more than a total of 3 courses (9 credit hours) of combined transfer credit and/or course substitutions may apply toward a graduate degree. Evaluation of the previous courses will require an interview with an appropriate faculty member.

Transfer Credit

Courses used to satisfy a previous degree are not eligible for credit transfer but may be used to waive course requirements. Graduate students seeking transfer credit for Rice equivalent courses must ensure that the transfer courses meet the following criteria:

- All transfer courses must meet Rice transfer credit guidelines
- Courses used toward a degree at another institution are not eligible for transfer
- Courses must have been taken at the graduate level at the transfer credit institution

For transfer credit requests, you must submit the Registrar Graduate Request for Transfer Credit form to the Statistics department in conjunction the Statistics Graduate Student Petition form.

Waiver

The General Announcements provide minimum requirements (including courses) for degree programs. However, in certain instances, requirements that are not officially listed in the General Announcements may be waived upon approval of the program's academic advisor or, where applicable, the department or program's Director of Graduate Studies. Transfer credit does not apply to course waivers.

For example: A student enters the PhD program with a Master's degree, having already taken an equivalent course to STAT 532 at their previous institution. The credit for STAT 532 cannot be transferred because it was used to satisfy the MA degree. STAT 532 is listed in the Graduate Student Handbook (this document) as a department requirement of the PhD program. However, since this requirement does not appear as PhD requirement in the GA, the student may request a waiver for STAT 532. If approved, the student will not be required to take STAT 532 in the Rice doctoral program, but will still be required to complete 36 credit hours.

Substitution
In certain instances, courses (or requirements) not officially listed in the General Announcements may be substituted upon approval of the program's academic advisor or, where applicable, the department or program's Director of Graduate Studies.

For example: The Statistics department is not currently offering STAT 547-Survival Analysis, which is a Ph.D. Designated Course in the student handbook. A student identifies a similar Survival Analysis course that has just become available in another department. The student can request that this new Survival Analysis course be used to substitute STAT 547. The substitution will count toward the 36 credit hour requirement.

Inter-Institutional Credit Transfer
Rice has inter-institutional enrollment agreements with the following institutions: Baylor College of Medicine, Texas A&M Health Science Center, University of Houston, University of Texas Health Science Center at Houston, and the University of Texas Medical Branch at Galveston.

Please follow the instructions here to submit an Inter-Institutional Credit Transfer through the Office of the Registrar.

School of Engineering and Computing Teaching Assistant Policy: As of Fall 2021, **TA training is *required*** of all graduate teaching assistants in the George R. Brown School of Engineering and Computing who are responsible for grading, teaching or assisting in teaching laboratory or lecture courses, holding office hours and/or leading recitation sessions. TA training is to ensure that all graduate TAs are aware of institutional policies, federal regulations, and best teaching practices. The required training is through the course, Engineering TA training Canvas Course, which is to be completed within the first two weeks of classes or within the first week of interaction with students if hired after this date. This course is offered online and can be completed asynchronously. The SOEC Program Administrator will notify you when you have been enrolled in the Engineering TA training Canvas Course. First-year students must also complete the CTE TA Training Canvas Course by October 15, as part of the new student online training requirement. If you have questions, please contact Hannah Wilkes (haw2@rice.edu).

Rice Responsible Conduct of Research (RCR): Rice University requires training in the Responsible Conduct of Research (RCR) for all graduate students and postdoctoral scholars, whether or not they are funded on sponsored grants. RCR training should be completed within sixty (60) days of when the individual begins work on the project. It is suggested that new students take this online course in the summer prior to their matriculation. If an individual is working on an NSF project for a short period of time, such as the summer, RCR training must be completed before the individual's work on the project ends. Please see https://research.rice.edu/integrity/rcr/faq for necessary information and FAQ's.

Incoming Ph.D. students who do not meet this requirement may not receive payments from Rice.

Academic Progress Review: The Office of Graduate and Postgraduate Studies (OGPS) as well as the SACSCOC requires a *written* annual review of PhD student progress. This will be conducted by a committee of faculty and will result in a written assessment, which will be accomplished at the end of each second semester of every year.

Each year, in the spring semester, every PhD student will submit a written progress report summarizing their progress toward degree completion since their last report. The following items or information are to be included in the report.

1. Transcripts, which can be printed from your ESTHER account.
2. Completion or planned dates and outcomes of the qualifying exam and thesis proposal.
3. MA in Statistics and/or Admission to PhD Candidacy status.
4. Research Productivity:
    a. A summary research statement highlighting accomplishments in the past year.
    b. A list of all research products, such as journal or archive papers, conferences papers, workshop and conference presentations and posters, software development, etc.

5. Awards, scholarships, fellowships or internships, including attempts, as well as successes.
6. Any other relevant information that might help the advisor and the Graduate Committee assess a student's progress.
7. Students should also discuss their plans for the next year, including an expected PhD graduation date. First and second year students should discuss progress toward finding an advisor.

Faculty advisors will review student reports and add brief written comments to the Graduate Committee regarding student progress and performance.

The Graduate Committee will review all progress reports by PhD students in the spring semester. The Graduate Committee will confer with the faculty advisor and the Department chair regarding any student presenting a concern, prior to issuing their written review.

Satisfactory Course Performance: For a satisfactory performance in their course work, graduate students enrolled in the STAT Ph.D. program are expected to maintain a B (3.00) average in the STAT required core and advanced statistics courses. Not maintaining the 3.0 GPA average will result in departmental action and a performance improvement plan may need to be generated for the student. In addition, Rice's rules specified in the General Announcements apply. The General Announcements (GA) is the official Rice curriculum. In the event that there is a discrepancy between the GA and any other websites or publications, the GA shall prevail as the authoritative source. The procedures for academic and judicial discipline, including academic probation, dismissal, disciplinary probation, suspension and expulsion, termination of financial support, and degree revocation, are found in the University General Announcements.

Probation, Dismissal and Appeals: A student who receives an Unsatisfactory assessment from the Graduate Committee will be placed on academic probation by the Department of Statistics. If a student is placed on probation, they must submit an updated progress report by a date specified by the Graduate Committee. If there is insufficient progress the student will be dismissed immediately from the Ph.D. program. Any student who receives two Unsatisfactory annual assessments will be dismissed from the Ph.D. program.

Any student who is dismissed can request a review of the decision by the faculty of the Department of Statistics.

Chapter 5 – Examinations, Ph.D. Candidacy, and MA Degrees

Note: *Professional Master's in Statistics (MSTAT): Procedures and policies for MSTAT students are different than those for the PhD students; please refer to chapter 6 for specific elements of MSTAT guidance.*

This chapter covers rules and regulations for the Ph.D. degree. Much of the discussion here is focused on the Department of Statistics. In addition, we recommend that you read related information on regulations and procedures for the doctoral degree as appears in the *General Announcements*.

Qualifying Examinations and Admission to PhD Candidacy

In addition to 90 credit hours of coursework (see p. 13), including research courses such as STAT 590 and STAT 800, the Ph.D. program in Statistics requires the following:

- Completion of required course work (12 courses or 36 credit hours) as specified above from the Ph.D. Course Requirements. This coursework satisfies at least 36 hours of credit toward the 90 credit-hour requirement of all Ph.D. programs.

- Satisfactory performance on a written and an oral Qualifying Examination, also traditionally known as the A-Exam. In some cases, parts of the oral examination may be waived based on performance on the written part of the qualifying exam. See "The Qualifying Exam" below for more information.

- Completion and defense of a Ph.D. thesis proposal. *After* successful completion of the Ph.D. thesis proposal the student may petition for Ph.D. Candidacy. Once approved, the student will be classified as a "Ph.D. Candidate." See "The PhD Thesis Proposal" below for more information.

- Completion and (public) defense of a Ph.D. dissertation.

Note the following important time boundaries:

Time To Candidacy

PhD students must be approved for candidacy before the beginning of the **9th semester** of their enrollment at Rice.

Time to Defense

PhD students must defend their thesis before the end of the **16th semester** of their enrollment at Rice.

Time to Thesis Submission

Candidates who successfully pass the oral examination in defense of the thesis must submit the thesis to the Office of Graduate and Postdoctoral Studies no later than six months from the date of the examination. Candidates must also adhere to all deadlines associated with the Academic Calendar for a given commencement.

Time to Degree

PhD and DMA students are required to complete their program, including thesis defense, within 10 years of initial enrollment in the degree program. This time boundary includes any period in which the student was not enrolled or enrolled part-time, for whatever reason. Failure to meet any university time to degree deadline may result in the student not being able to continue in their degree program.

The Qualifying Exam

The qualifying exam is aimed at testing basic knowledge in applied and theoretical statistics and probability. It consists of a written part, followed by an oral exam, as needed. The exam covers master's level statistical material. The list below indicates **typical** topics covered in the exam; an official list of topics in any given year will be made available by the Department. Presently, a student is expected to demonstrate knowledge of the exam topics at the level of *Statistical Inference* by Casella and Berger, which is the current text used in STAT 518 and 519. Change in textbook references are at the discretion of the Department. The current version of the written exam consists of two 3-hour parts (probability and statistics) before the first week of classes in the fall semester. The probability written exam is given on that Thursday and the statistics part on Friday. The exam should be taken by all students by no later than the 2nd year of the doctoral program. With appropriate background, the exam may be taken "early" by qualified new doctoral students before their first semester of study.

Students will be informed of their performance on the written exam within a week following its administration. The results will typically be communicated through email and/or a meeting with a STAT faculty member. At that time, the necessity for a subsequent oral exam will be determined. Students performing inadequately on the qualifying exam may be asked to leave the program, retake the exam, or perform remedial work to improve their knowledge of certain basic material. An exam retake will have the same structure as the original exams and will be scheduled on a case-by-case basis, possibly at the next offering of the exam a year later.

A committee of faculty will participate in the design of the exams, but the final version of the exam and student performance evaluation will be done by the entire faculty. Students who successfully pass the Qualifying Exam will be provided with an A-Exam Results form.

Qualifying Exam Topics

Topics may change slightly from year to year. *An official list of topics in any given year will be made available by the Department*. The list is regularly reviewed by the Faculty and you can contact the Undergraduate and Graduate Program Administrator for the most recent version of the study guide. Previous qualifying exams are also available.

Probability: Axioms of probability; Independence and conditional probability; Univariate and multivariate random variables; Multivariate Normal Distributions; Expectation; Generating functions (moment, characteristic); Transformations; Common families of distributions; Sampling distributions; Limit theorems (modes of convergence, laws of large numbers, central limit theorem); Computer-generated pseudo-random variables.

Statistics: Applications and basic theory; Principles of data reduction; Point Estimation; Hypothesis Testing; Interval Estimation; Introductory Bayesian Inference; Basic Decision Theory; Large sample theory (asymptotic optimality of estimators, large sample methods for testing and confidence intervals); Ordinary least squares regression.

Preparation for the qualifying exam is ultimately at the discretion of the student. However, the Department provides materials and summer workshops to help in preparation. More information on materials and/or workshops are given to students at the end of each Spring semester or early summer. Students may contract the Undergraduate and Graduate Program Administrator, Hannah Wilkes, for additional information.

The Doctoral Thesis Committee

A Doctoral Thesis Committee should be formed soon after the selection of a Thesis Advisor, and no later than the beginning of the semester in which the Thesis Proposal (see below) is scheduled. The thesis committee administers the oral examination for the student's thesis defense and has final approval/disapproval authority and responsibility for the written thesis. More generally, the Thesis Committee can provide feedback on progress toward completion of a dissertation. Forming a Thesis Committee early on will allow for informal feedback to the student in a personalized manner to be discussed with the PhD Advisor. Formal feedback from the Thesis Committee is given at the Thesis Proposal (see below). The following is taken from the General Announcements and specifies thesis committee membership.

A thesis committee is composed of at least three members. Two, including the committee chair, must be members of the student's department faculty. In doctoral thesis committees one member must have his or her primary appointment in another department within the university. At least three members of the committee must meet one of the following requirements:

- *Tenured or tenure-track members of the Rice faculty*
- *Research faculty holding the rank of assistant research professor, associate research professor, or research professor*
- *Qualified individuals who have been certified as thesis committee members by the dean of graduate and postdoctoral studies*

The composition of the thesis committee must always meet the guidelines given above. Additional persons who may or may not be members of the Rice faculty may be added to the committee. If this option applies to you, discuss it with your advisor.

The PhD Thesis Proposal

After the student has been working with an advisor on a research topic, the PhD thesis proposal will be next on the horizon. The thesis proposal is a separate event from the thesis defense. A doctoral thesis committee will review the proposal and (later) preside at its defense, which is an oral presentation given to the student's entire thesis committee.

The thesis proposal is a written summary of research progress up to that point and future research plans. The document *should not exceed 10 pages* and should contain (at a minimum) the following sections:

- Abstract (not to exceed 250 words)
- Background and literature survey
- Research plans and methodology

- Any results obtained up to that point
- Proposed timeline for completion of thesis research.

The thesis advisor may, within reason, require additional information to be included. The thesis proposal must be distributed to the members of the thesis committee ***at least two weeks*** before the scheduled meeting. A copy should also be sent to the Undergraduate and Graduate Program Administrator in the Department of Statistics, for inclusion in the student's record. The student also prepares a presentation for the meeting, which is expected to last no more than 90 minutes, including questions and answers. Discuss details with your advisor.

At the Proposal, the thesis Committee should assess the student progress and knowledge of the research field, assure that the student has developed a coherent research plan, and provide input in time to incorporate useful suggestions in the thesis research. *The written proposal and the oral proposal defense should convey information on research plans, preliminary results and timeline in a way that allows the Thesis Committee to assess the direction of the research and whether the proposed plan and timeline are realistic.* Under normal progress toward the degree, *the proposal defense is typically scheduled after the fifth semester (in the third year) and should be held at least one semester prior to the completion of the thesis research* (excluding summers). The actual timing is at the discretion of the advisor and the thesis committee, in accordance with university regulations.

After the student has presented the thesis proposal, the thesis committee will deliberate, granting the student a pass or fail. The student should ensure that the committee completes the "PhD Thesis Proposal" form. To facilitate the Adobe e-signature process, the student should provide the names of their committee members to Hannah Wilkes following the proposal meeting. A copy of this form must be provided to the Undergraduate and Graduate Program Administrator for inclusion in the student's record.

Advancement to Candidacy

Candidacy marks a midpoint in the course of graduate education. PhD students must be approved for candidacy before the beginning of the **9th semester** of their enrollment at Rice. Achieving candidacy for the PhD signals that a graduate student has satisfied the following expectations:

1. completed required coursework (the 12 required courses discussed above under "Specific Program Requirements"),
2. passed the Qualifying Exam (demonstrating a comprehensive grasp of fundamental probability and statistics) and the Proposal Defense (demonstrating expertise in a specific subject area to pursue a thesis); the Proposal must be successfully defended before applying for Candidacy,
3. demonstrated the ability for clear oral and written communication, and
4. shown the ability to carry on scholarly work in a subject area (probability and/or statistics).

To advance to Ph.D. Candidacy, the student must submit the following to the Undergraduate and Graduate Program Administrator:

- C-2 Petition for Approval of Candidacy for Doctoral Degree
- Petition for Doctoral Candidacy for PhD in Statistics Checklist
- A-Exam Results form
- Approval of Thesis Proposal form
- Unofficial Transcript.

MA Degrees

Candidacy (or Automatic) MA Degree

The Candidacy MA Degree is a non-thesis master's degree. Students awarded the MA Candidacy degree in the field of Statistics should be aware that:

- The MA degree awarded in the field of Statistics is a non-thesis master's degree.
- The MA degree in the field of Statistics requires 30 credit hours of approved coursework as well as:

    - satisfactory performance on the PhD qualifying examinations, and the completion of a major project, *where the major project corresponds to the doctoral thesis proposal*.
- Ph.D. candidacy must have been approved prior to or in conjunction with submission of the Candidacy MA Petition.

To petition for the Candidacy MA Degree, the student must submit the following to the Undergraduate and Graduate Program Administrator:

- G-1 Petition for Candidacy Master's Degree
- Petition for Doctoral Candidacy for PhD in Statistics Checklist
- A-Exam Results form
- Approval of Thesis Proposal form
- Unofficial Transcript

Non-Thesis MA Degree
The Non-Thesis MA Degree is a non-thesis master's degree. Students awarded the Non-Thesis MA degree in the field of Statistics should be aware that:

- The MA degree awarded in the field of Statistics is a non-thesis master's degree.
- The MA degree in the field of Statistics requires 30 credit hours of approved coursework as well as:
    - satisfactory performance on the PhD qualifying examinations, and the completion of a major project.

To petition for the Non-Thesis MA Degree, the student must submit the following to the Undergraduate and Graduate Program Administrator:

- G-2 Petition for Certification of Non-Thesis Master's Degree
- A-Exam Results form
- Signed letter from Faculty Advisor confirming completion of a major project
- Unofficial Transcript

The PhD Dissertation and Defense: Students may spend 1-3 years completing their research and writing the thesis. After finalizing the research topic into the final dissertation, including feedback from the Thesis Committee given at the proposal defense, the student will present their dissertation in a public defense. Ordinarily, the dissertation will be a complete, separate document. For example, a dissertation may be composed of several chapters, each being a completed manuscript (i.e., a paper published or accepted in a peer-reviewed journal or conference proceedings, or a manuscript in pre-print format), and an introductory chapter covering background material and a layout of the thesis. A dissertation may also be written as a series of chapters covering a completed body of work and should contain original material suitable for publication. Other structures are possible, and the student should discuss the form with his or her advisor. The University provides general guidelines and templates for preparing the dissertation. A doctoral thesis committee will review the dissertation and preside at its defense. Check your General Announcements for regulations. It is the responsibility of the student to ensure that all the thesis committee members have a copy of the dissertation for review at least 14 days prior to the defense. Students should be prepared to provide a hard copy of the dissertation if so requested. Please see the Undergraduate and Graduate Program Administrator to receive an outline of the defense process.

Dispute Resolution: All requests for exceptions or variances from the policies outlined in this document should be addressed in writing to the department chair. The request should state precisely what exception or variance is requested and detailed reasons given to support the request. Either the department chair or the full faculty will decide the issue, as appropriate. Requests for exceptions to University policies are normally handled through the petitions and appeals process outlined at http://ga.rice.edu/Home.aspx?id=138#Petitions_and_Appeals; disputes in general and guidelines regarding petitions and appeals are addressed in the University General Announcements in the same section.

Degree Conferral (Graduation Procedure): It is the student's responsibility to initiate all paperwork needed for graduation prior to the established deadlines. This consists of the Petition for Approval of Candidacy for a Doctoral Degree, the Application for Degree, and other documents as required by the Office of Graduate and Postdoctoral

Studies. You should work with the Undergraduate and Graduate Program Administrator to ensure this is accomplished. Degree completion will not be conferred without the appropriate paperwork, and in some cases, graduation will be postponed. The deadline for December (Fall) Degree Conferral is in September and the deadline for May (Spring) Degree Conferral is in February.

Chapter 6 - Professional Master's in Statistics (MSTAT)

The Professional Master's in Statistics (MSTAT) is a non-thesis master's degree offered to help prepare the student for careers in industry, government, and academia. Statisticians make critical contributions in business, medicine, economics, defense, and engineering. The demand for statisticians at all education levels is one of the highest for any professional group. Rice's Professional Master in Statistics (MSTAT) Program prepares students for careers as professional statisticians. It includes a solid foundation in statistical computing, statistical modeling, experimental design, and mathematical statistics, plus electives in statistical methods and/or theory. Students have the opportunity to concentrate on theory, applications, or a combination of the two. It is a bridge to industry, designed to provide advanced learning and training in the applied aspects of statistics theory, methodology and techniques beyond the typical undergraduate program.

All of the material in the previous chapters of this graduate handbook generally apply to the MSTAT student. Specific departures are covered in this chapter. Keep in mind that the critical MSTAT requirements and guidance are found by reference in https://statistics.rice.edu.

MSTAT Advisor: Since the MSTAT degree is not a thesis program, there is no separate mentor/advisor process; Dr. Michael Jackson is the MSTAT advisor and as such advises on courses and other matters associated with the students' tenure of study. Each MSTAT student will meet with the MSTAT advisor early in each semester to discuss curriculum choices, MSTAT specializations, and so forth. This advisor will be present throughout the student's graduate career. ***Students are required to discuss their curriculum choices with the advisor*** to help ensure that the student's choices and plans are in tune with the various requirements for his or her degree program

Importance of Orientation: An entry orientation for MSTAT students is presented prior to the beginning of the incoming fall classes, and it is critical that all new MSTAT students attend this orientation. Due to the compressed timeframe in which the MSTAT degree is obtained, mistakes can be costly. Taking the wrong course without coordinating with the MSTAT advisor can result in your not graduating when you think you should. These errors and other guidance are addressed in the MSTAT orientation.

MSTAT Study Space: A study space for MSTAT students has been established in room B-13 of Maxfield Hall. The space is outfitted with a networked printer, Mac and Windows workstations, desk cubicles and secured lockers. Since the space is shared with over 40 MSTAT students, certain rules have been put in place regarding use of the MSTAT study room; they are posted on the wall, but can be summed up as:

- Maintain a professional environment at all times; leave the room neater than when you found it. Do not leave food or trash in the room.
- Be cordial to one another; only MSTAT students are permitted to use the space. The desks and lockers are to be shared on a daily basis.
- No overnight occupation.
- Respect each other's belongings.

Any questions on these rules should be addressed to the Undergraduate and Graduate Program Administrator or the MSTAT Advisor.

Finances: Since MSTAT students are expected to provide their own financing, mandatory grading and teaching assistant duties are not assigned. Some paid opportunities for grading arise from time to time in some of the larger courses; the Undergraduate or Graduate Program Administrator or MSTAT advisor will generally seek out appropriate students to assist in this.

At the beginning of each semester, the department chair may assign some master's students as TAs or graders to various courses. Grading is an important responsibility and is not to be taken lightly. Grading is not only a service, but also an important learning experience for graduate students. Failure to perform TA or grading duties adequately may jeopardize your position. If for some reason a student feels unable to TA or grade in the assigned course, he or she should inform the department chair so that adjustments or changes might be made.

There are a limited number of special awards and scholarships available for Engineering Professional Master's students. For more information see School of Graduate Engineering Awards and also Engineering Professional Master's awards.

The MSTAT Graduate Curriculum: The MSTAT track specializations and required courses are listed on the MSTAT website. Core (required) courses, track-specific and elective courses comprise the curriculum requirements. The student and MSTAT advisor will jointly develop the course of study needed to best meet the student's needs.

Course level is in accordance with current university requirements (that ALL 30 hours be completed at a course level of 500 or greater). Up to two courses outside the department may count as electives upon coordination with the MSTAT student advisor and courses outside the Department must be at the 500-level and above. PASS/FAIL grades are NOT PERMITTED for any courses used to satisfy the 30-hour MSTAT curriculum requirement. Certain optional courses are available, which are 1-hour courses, but most will not count toward the 30-hour graduation requirement. Some graduate courses in other departments may be listed at 5 hours, but only 3 hours will count toward the MSTAT degree.

Coursework in the MSTAT curriculum is not easy. You should plan on taking approximately 3 courses per semester, and no more than 4. Taking more than these can result in your inability to maintain good academic standing, which according to the current General Announcements is keeping your term GPA above 2.33. You should be concerned if your cumulative GPA falls below 3.0. If you find yourself in this position, contact the MSTAT advisor as soon as possible so that a course of action may be established. The procedures for academic and judicial discipline, including academic probation, dismissal, disciplinary probation, suspension and expulsion, termination of financial support, and degree revocation, are found in the University General Announcements at https://ga.rice.edu/graduate-students/academic-policies-procedures/regulations-procedures-all-degrees/#text

Transfer Credit (5th Year MSTAT Students): Advanced Rice undergraduate students may be accepted into a Rice graduate program prior to receiving their undergraduate degree. Their formal graduate program enrollment is deferred until after the bachelor's degree has been awarded, at which time the students will complete a minimum of one semester of residency as a Rice graduate student. With certain stipulations, undergraduate students may i.) begin work on their graduate degree at Rice prior to completing all degree requirements for their bachelor's degree, and ii.) must complete the requirements for a bachelor's degree and the master's degree independently of each other (i.e. no course may be counted toward the fulfillment of both degrees). Some students in the 5th year MSTAT program will need to transfer courses taken while a Rice undergraduate into the graduate program. A list of these courses is normally developed during negotiations for the 5th year MSTAT admission. Students enrolled in the 4+1 program may transfer up to two graduate-level courses (500-level or above) taken during their undergraduate studies at Rice University toward the Master of Statistics (MSTAT) degree. These courses must be selected from those that typically fulfill MSTAT program requirements. Regardless of the number of graduate courses completed as an undergraduate, students must fulfill the MSTAT program's minimum graduate residency requirement. While concurrently enrolled in a graduate program, in order not to jeopardize financial aid funding, Rice undergraduates should maintain enrollment in at least 12 credit hours of study to count toward the undergraduate degree and may be enrolled in no more than a total of 18 credit hours combined between the undergraduate and the graduate degrees. By default, all courses in which undergraduate students are enrolled count toward the undergraduate degree, regardless of the course number. To designate courses that will count toward the graduate degree, Rice undergraduates concurrently enrolled in a graduate program must submit an Undergraduate Student in Graduate Degree Program Special Registration Request Form as part of the registration process **each semester**. It is the responsibility of the student to coordinate with the Undergraduate and Graduate Program Administrator in a timely manner. Graduate level courses that exceed the 120 credit hours required for the undergraduate degree may be

considered for transfer toward the MSTAT program, subject to review and approval by the MSTAT advisor for eligibility.

In some special cases, students from other undergraduate institutions may be permitted to transfer up to 6 hours into the program. The student must complete documentation requirements to show that they are eligible.

Important: Please note that seeking a graduate degree while still a Rice undergraduate may have financial aid implications. Undergraduate students applying for graduate programs should consult with the Office of Financial Aid prior to accepting an offer of admission. Any undergraduate students enrolled in a graduate degree program will not be eligible to request a continuance of their federal financial aid beyond their eighth semester of study at Rice. Furthermore, students will not be eligible for any undergraduate financial aid after the completion of their undergraduate degree requirements. Once the undergraduate degree is conferred, students that have been concurrently enrolled will be classified as a graduate student. Students are only eligible for graduate loans if classified as a graduate student. Students are not classified as graduate students until they have successfully completed their undergraduate degree program. Policies regarding undergraduate-graduate concurrent enrollment are found in the University General Announcements.

Professional Communications and English Proficiency: English is the official language at Rice and the Department. It is strongly encouraged that all MSTAT students avail themselves of taking optional courses in engineering leadership and communications; these skills cannot be emphasized enough in the professional setting. Typical offerings include

ENGI 501	WORKPLACE COMMUNICATION
ENGI 505	ENG ECONOMICS & PROJECT MGMT
ENGI 510	TECHNICAL AND MANAGERIAL COMM
ENGI 529	ETHICS & ENGINRNG LEADERSHIP
ENGI 610	MGT FOR SCIENCE/ENGINEERING
ENGI 614	LEARNING HOW TO INNOVATE
ENGI 615	LEADERSHIP COACHING FOR ENGR
RCEL 501	ENGINEERING MGMT & LEADERSHIP
RCEL 504	ETHICAL-TECHNICAL LEADERSHIP
RCEL 505	LEADING ENGINEERING ECONOMICS
RCEL 542	PROFESSIONAL COMMUNICATION

While these courses presently DO NOT COUNT toward the MSTAT curriculum requirements, they are genuine Rice Courses and do contribute to the graduate transcript as well as your professional development and preparation. Check the curriculum planning website for the most recent enrichment course listing.

Academic Progress Review: The Office of Graduate and Postgraduate Studies (OGPS) as well as the SACS requires a written annual review of MSTAT student progress. For MSTAT purposes, the transcript is an adequate form of written assessment, which will be reviewed at the end of the second semester.

Internships for International Students: The MSTAT degree does not require an internship; however, it is recognized that many students will want to enhance their education with a related internship in industry, and we provide an independent study course structure under which the international student may accomplish this objective. International students under the jurisdiction of the Office of International Students and Scholars (OISS) cannot work, for salary or otherwise, without an approved Curricular Practical Training (CPT) plan on file. In order to do this the student must:

a. Obtain an offer letter from the company for which they have negotiated the internship.

b. Complete the form F-1 Curricular Practical Training and obtain necessary approval signatures.

c. Sign up for the STAT 540 Practicum in Statistics and Data Science course; note that this must be done within the Add/Drop deadlines declared in the Office of the Registrar's Academic Calendar

http://registrar.rice.edu/calendars/. Only 1 hour of course credit is permitted.

NOTE: If you have missed the add deadline for the course, you may take the course the following semester. If you are graduating and will be unable to defer the course, under OISS rules you will NOT be permitted to accept the internship. This is another reason especially that graduating MSTAT students should have any internships in hand prior to the course add deadline.

d. As a part of the independent study course, and in order to receive a grade, the student will be required to submit a 12-15 page summary of the work performed and how it dovetailed into their MSTAT degree. These internship reports are normally due about 1 month prior to the end of the semester in which the course is taken.

Additional information and international program information is available on the OISS website, http://oiss.rice.edu/studentwork/. Each student is expected to make themselves aware of all applicable polices and requirements for their visa status. The department coordinator is also available to assist you in this area.

Degree Conferral (Graduation Procedure): It is the student's responsibility to initiate all paperwork needed for graduation prior to the established deadlines. This consists of the Petition for Non-Thesis Master's, Application for Degree Form and other documents outlined in the Graduate Checklist. You should work with the department coordinator to ensure this is accomplished. Graduation/Diploma will not be conferred without the appropriate paperwork, and in some cases, graduation will be postponed.

Careers for the MSTAT Graduate: A good discussion of career options and strategy is found in the MSTAT webpage under "Career" (https://statistics.rice.edu/academics/graduate/master-statistics). It cannot be emphasized enough that you must begin preparation for the career (or internship) well in advance of your graduation. Waiting until April of the graduation year to start searching for jobs is going to result in failure; for the international student, this has serious ramifications. Expect many rejections, or being ignored, before hitting an interview invitation. The MSTAT placement record is impressive; an informal list of placements is available from Hannah (haw2@rice.edu).

Center for Career Development (CCD): The Center for Career Development (CCD) supports graduate students at every stage of their career journey, from identifying professional goals to navigating the job market. CCD services include one-on-one career coaching, resume and CV review, interview preparation, and access to Rice's global alumni and employer network. Graduate students are encouraged to explore programming designed specifically for academic and non-academic career paths.

Interaction with Other Graduate Students: You, as an MSTAT student, play an important role in the social environment at Rice. Maintaining an active involvement at Rice events and department functions like the Monday lunches, colloquia, parties, informal chats and other events will enhance everyone's enjoyment of his or her time as a graduate student. Be engaged, keep an eye out for activities which will be announced, make friends, and help others.

Appendix

STAT Policy on Student Computing

The STAT department provides computing resources to students for the purposes of research and education. The acquisition, operation, and maintenance of the computing resources are supported by university and faculty research funds. This policy provides students with guidelines on proper usage of the computing resources. Any doubts about appropriate usage should be resolved by query to the System Administrator or by visiting this link http://vpit.rice.edu/AUP.aspx

1. All graduate students in the MA, MSTAT, and PhD degree programs can have accounts on the STAT system. New graduate students should fill out a form, available from the department coordinator to request the creation of new computer accounts.

A faculty sponsor can request accounts for undergraduate students or non-STAT graduate students, who are involved in a faculty-sponsored research or educational project. To obtain such an account, a student must submit a request form with the signature of a faculty sponsor.

2. Students may use office desktop equipment to
    - Read and write email
    - Create and maintain a personal web page
    - Browse the Web for educational or research purposes
    - Log in to Owlspace for computational coursework
    - Perform teaching functions (grading, TA work, etc.)
    - Perform research on faculty-led projects (includes thesis research)

    In all cases, research-related use has priority.

3. Students may use non-desktop departmental equipment (printers, scanners, computing and file servers...) to:
    - Perform research on faculty-led projects (includes thesis research)
    - Perform teaching functions (grading, TA work, etc.)
    - Store small amounts of information unrelated to their research projects, including email and a personal web page.

4. Personal copying and printing on department machines are discouraged. Personal documents can be fulfilled at the RMC copy center or the Fondren Library.

5. Students **MAY NOT** use departmental equipment to:
    - Play computer games, chat online, and things of similar nature unrelated to the educational and research missions of the university.
    - Store, print, or process significant amounts of information of a purely personal nature or unrelated to the educational and research missions of the university.

6. Termination of computer accounts: A STAT graduate student's account will be terminated one year after the student's enrollment as a STAT student has ended. Former students who continue their collaboration with the faculty after graduation can retain their accounts upon the request of the faculty member. The account for an undergraduate student or a non-STAT graduate student will be terminated six months after the student's involvement in a faculty-sponsored project has ended.

7. In addition to the specific policies outlined above, students are bound by the Rice policy for Appropriate Use of Computer Resources, which can be found on the web at http://vpit.rice.edu/AUP.aspx, the system administrator will respond to infractions of these policies. Response to serious infraction may include closing of the offending party's account.