

Student's Name _____
Student's Matriculation Term _____

Milestones Agreement
Ph.D. in Statistics Program
Department of Mathematical Sciences
University of Texas at Dallas

Today's Date _____

Student's Name (Last, First, PRINTED) _____

Student's Current Advisor (Please PRINT) _____

This Advisor is the (encircle) *Graduate Advisor* *Dissertation Research Advisor*

Progress Milestones:

Began Program (term & year) _____

Passed Comprehensive Examination (month & year) _____ (normally within first year)

Passed Ph.D. Qualifying Examination (month & year) _____ (normally within first 2 years)

Passed Oral Candidacy Examination (month & year) _____ (normally within first 3 years)

Completed Organized Course Requirements (month & year) _____ (normally within first 4 years)

Anticipated Final Oral Examination (term & year) _____ (normally within 5 years)

Remarks:

This form is for the purpose of *informing* Ph.D. students in the Statistics program of the Department of Mathematical Sciences about the *academic milestones* and *timeline* that they will be expected to meet along the way to this degree. This form also constitutes an *agreement*, signed below by the student and filed with the Department with a copy to the student.

Satisfactory progress according to this agreement, and with good academic standing, is required during all stages of the Ph.D. program, for continuation in the program, and (if applicable) for continued financial support through a Graduate Teaching Assistantship, Graduate Teaching Associateship, or Graduate Research Assistantship.

Academic Advising

Upon entering the Ph.D. program in Statistics, students are assigned a Graduate Advisor in Statistics. The Graduate Advisor is appointed or elected from the department's tenured/tenure-track faculty and holds a doctorate and a research record in the field.

At the time that the student passes the Ph.D. Qualifying Examination and chooses a doctoral dissertation research advisor, that research advisor becomes the academic advisor on courses as well. However, the Graduate Advisor continues to conduct oversight of the student's progress in several strategic ways to ensure that the milestones and timeline are being met in a timely manner and that the student is being afforded the opportunities to meet these expectations.

Comprehensive, Qualifying, and Oral Candidacy Examinations

In order to validate a student's readiness and qualifications for doctoral studies, three examinations are used in the Department: a *Comprehensive Examination*, a *Qualifying Examination*, and an *Oral Candidacy Examination*.

Comprehensive Examination This exam is administered as the final exam in a designated course that is prerequisite to the core courses in the doctoral program. This exam must be passed with a *grade of B or better*. The designated course for Statistics major is STAT 6331 Statistical Inference I (or an appropriate alternative approved by the Graduate Advisor). Students failing the Comprehensive Examination must pass a second attempt with an approved alternate course in the 2nd semester, in order to continue in the program beyond the 1st year.

Qualifying Examination The Ph.D. Qualifying Examination in Statistics is a broad and timely diagnostic regarding a student's strengths and readiness for continuation into the protracted period of doctoral dissertation research.

- A. This examination comprises of the following three segments: Segment A (Statistical Inference and Linear Models); Segment B (Probability Theory); and Segment C (Statistical Methods). A student is required to take all the three segments together.
- B. A student will receive either a passing or a failing grade for the entire Qualifying Exams. There is no intermediate grade and no segment-specific grades will be given. The grade is decided in a meeting of tenured/tenure-track faculty of the entire department, and is communicated to the student by the Department Head or a designate. A student who receives a failing grade is terminated as a doctoral student unless a 2/3 majority of the faculty vote to permit a second attempt. The second attempt, if permitted, must be made at the next available opportunity but no later than one year after the first attempt. A student not taking the second attempt when permitted or failing in the second attempt is terminated from the program.
- C. The Qualifying Exams are offered twice a year – in January and in August before the start of the fall semester. On each occasion, the exam in each segment is offered on a separate day for 4 hours.
- D. In order to continue as a doctoral student or be eligible for financial support, a full-time student must pass the Ph.D. Qualifying Examination *before* starting the 5th long semester in the program. Upon passing this examination, the student becomes a Ph.D. candidate and is eligible to work on doctoral dissertation research under the supervision of a faculty member associated with the Statistics program. A student has to select a doctoral supervisor within 4 weeks of passing the Qualifying Examination and has 2 more weeks to form a dissertation committee.

The students can take elective courses before passing the Qualifying Examination but without dropping emphasis on the core courses preparatory to this examination. This enables students to explore working with faculty members on research possibilities prior to choosing a doctoral advisor, but this does not entail long-range commitments. Of course, students entering the program with unusually advanced relevant background are able to accelerate their involvement in research and, in some cases, even pass the Qualifying Examination in the 1st year and then proceed to doctoral research; but even these students have to satisfy the specific Organized Course Requirements listed below.

Oral Candidacy Examination This exam consists of a presentation by the student before the department faculty followed by a Q&A session. The duration of the presentation should be 30-40 minutes. The topic for presentation is specified by the student's Ph.D. supervisor. Examples include but are not limited to the student's own dissertation topic or a review of the literature on a relevant topic. The Q&A session may also include questions related to broader knowledge and understanding of the corresponding field. A pass/fail grade for this exam is assigned by the supervisory committee of the student based on input provided by the faculty members present at the exam. To continue in the Ph.D. program or be eligible for financial support, a full-time student has to pass this exam within two long semesters of passing the Qualifying Exams. A student must apply for this exam by providing the department the following information at least two weeks in advance of the scheduled presentation: title and abstract of presentation, composition of supervisory committee, and time, date, and place of presentation. If a student fails this exam in the first attempt, a second attempt can be granted by the department at the request of the student. An additional long semester may be provided for the second attempt. However, for a supported student, this exam (including the retake) must be passed before beginning the 7th long semester in the program.

Organized Course Requirements

The student must arrange a course program with the guidance and approval of the Graduate Advisor. A minimum of 75 semester credit hours beyond the bachelor's degree is required.

The following six courses have to be taken by each student: STAT 6331 Statistical Inference I; STAT 6332 Statistical Inference II; STAT 6337 Advanced Statistical Methods I; STAT 6338 Advanced Statistical Methods II; STAT 6339 Linear Statistical Models; and STAT 6344 Probability Theory I.

Each student also needs to take at least three courses approved by the advisor from the following list: STAT 7330 Decision Theory and Bayesian Inference; STAT 7331 Multivariate Analysis; STAT 7334 Nonparametric and Robust Statistics Statistical Methods; STAT 7338 Time Series Modeling and Filtering; and STAT 7345 Advanced Probability and Stochastic Processes.

In addition, each student should take 6-8 organized courses as electives, according to a degree plan designed by the student and the Graduate Advisor (or the student's PhD advisor). This plan is subject to approval by the Department Head.

Graduate Advisor's Roles

The Graduate Advisor's general roles with Ph.D. students are:

- During the 1st two years: Mentoring, advising, and guiding toward undertaking the Ph.D. Qualifying Examination.
- Just after the Ph.D. Qualifying Examination has been passed: Mentoring in the selection of a doctoral dissertation research supervisor.
- During the student's period of doctoral research: Maintaining oversight on progress according to the milestones and timeline of the Ph.D. program, and ensuring that the student is being afforded every opportunity to meet them.

These roles are implemented in a variety of ways, including:

- Holding orientation meetings with incoming students to cover the structure and elements of the Ph.D. program and to clarify the milestones and timetable.
- Meet with students to set up their initial degree plans and register them for courses in 1st and subsequent semesters until the student passes the Ph.D. Qualifying Examination and chooses a dissertation advisor.
- Meet with students, as appropriate, to provide additional insight into the program in terms of research opportunities with faculty, to discuss doctoral dissertation research opportunities, and to initiate thinking about selection of a dissertation research advisor.
- Immediately after a student has passed the Ph.D. Qualifying Examination, conducting individual meetings with each student to assist and advise regarding timely selection of a doctoral research advisor.
- Reviewing and modifying the degree program at each time of registration for courses, until the student has passed the Ph.D. Qualifying Examination and begun with a research advisor.
- Being available for individual meetings with students on any questions or concerns that may arise regarding the courses, milestones, timetable, and goals of the Ph.D. program.

Milestones and Deadlines for Ph.D. Program in Statistics

Milestone	Deadline
Maintenance of 3.0 GPA.	Each semester throughout.
For Graduate Teaching Assistants, or Graduate Teaching Associates, or Graduate Research Assistants: regular attendance in courses and at weekly Department Colloquium.	Each semester receiving support.
Passing of Comprehensive Examination.	1st semester of 1st year, or (in case of retake) 2nd semester of 1st year.
Passing of Ph.D. Qualifying Examination.	Before beginning 5th long semester in the program.
Selection of Dissertation Advisor and appointment of Doctoral Supervisory Committee.	Advisor: within 4 weeks of passing the Ph.D. Qualifying Examination; Supervisory Committee: within 2 more weeks.
Passing of Oral Candidacy Examination.	Before beginning 7th long semester in the program.
Completion of organized course requirements	Before graduating from the program.
Continued successful progress on dissertation, judged by Supervisory Committee and Graduate Advisor, reported to the Department Head. May be fulfilled by any of the following: a formal committee meeting; submitting or publishing a paper in a peer-reviewed journal; presenting a talk or a poster at a conference; or presenting a talk in the department colloquium or seminar.	Report submitted using the section below this table before registering for the 2nd fall semester after passing the Ph.D. Qualifying Examination and each subsequent fall semester thereafter. The report should provide relevant details of how this requirement is being fulfilled.
Approval by Supervisory Committee that the proposed dissertation is in satisfactory form for the purpose of the Final Oral Examination (Defense of Dissertation).	Committee members must receive the proposed dissertation at least 1 week before the date their approval is desired.
Request by Supervisory Committee for Graduate Dean to conduct the Final Oral Examination.	At least 2 weeks prior to the requested date of the Final Oral Examination.
Pass Final Oral Examination conducted by the Examination Committee (Supervisory Committee plus Outside Chair) appointed by Graduate Dean.	<i>Target:</i> Spring or Summer of 4th year, or Fall, Spring, or Summer of 5th year.

NOTE. For *part-time* doctoral students, deadlines are modified as appropriate. For students *supported as TAs or RAs*, timely progress according to the milestones is required for continued support.

Status/Progress of student’s dissertation research for Fall - Spring semesters:

(For doctoral students before registering for the 2nd fall semester after passing the Ph.D. Qualifying Examination and each subsequent fall semester thereafter)

- Progress is satisfactory in all aspects
- Quality of work is generally satisfactory, but student is falling behind the expected schedule; more effort is needed
- Progress is on schedule but quality of work needs to be improved to ensure an acceptable final product
- Work is sufficiently behind schedule that finishing within the support or time limits is unlikely
- Quality of work is below that expected for the degree; a big change is necessary in either the effort and result being obtained
or in the degree being attempted
- Student is committed but appears to not have the capacity to complete the degree and should be counseled to change majors
or to withdraw
- Other/additional comments _____

The above evaluation is based on (explain): _____

Checklist for Ph.D. Degree Completion

- Complete this *Milestones Agreement Form* upon enrollment in the Ph.D. program and ***annually*** thereafter.
- Pass the Comprehensive Examination in Statistics.
- Over the duration of the program, complete organized courses required for the major.
- Pass the Ph.D. Qualifying Examination in Statistics.
- Obtain a Doctoral Dissertation Advisor (in the field of Statistics) and form a Supervisory Committee.
- Pass the Oral Candidacy Examination.
- Enroll in required dissertation hours with the Dissertation Advisor.
- Complete development of a doctoral dissertation worthy of publication.
- Undertake and pass the Final Oral Examination (Defense of Dissertation).
- Submit required documentation to the Graduate Dean for completion and graduation.

Number of remaining organized courses required for degree completion: _____

How many doctoral hours will student have accumulated by the end of this semester _____

Currently how is the student supported? TA RA Self-supported

I have read this form and have discussed its information with my academic advisor. I understand the academic milestones and timeline that I am expected to follow in order to complete this doctoral program successfully.

Committee Members:

Supervising Professor (Print or type)

Student's Name (Last, First, PRINTED)

UTD ID #

Student's Signature

Date

Witnessed:

Advisor's Name (Last, First, PRINTED)

Advisor's Signature

Date