

MASTER'S DEGREE REGULATIONS

University of Wisconsin-Madison – Department of Statistics

Revised August 2018 - Effective for students entering the program in Fall 2018 or later

The objective of the Master's degree (MS) requirement is to satisfy the Department that the candidate has the potential to be a practicing statistician, it being understood that a practicing statistician must also have a proper grasp of statistical theory.

The Master's degree and PhD programs are distinct. The student can obtain a PhD without first obtaining a Master's degree. A Master's degree is regarded as evidence of having the skills of a practicing statistician. It confers a specific status on the recipient and it is hoped that most students will obtain a Master's degree, regardless of whether or not they proceed to a PhD.

The requirements for a Master's degree in Statistics are:

- (a) Satisfaction of University requirements.
- (b) Adequate course performance. A grade of B or better must be received in any course used to fulfill the required and elective course requirements.
- (c) Passing a competency test of the candidate's potential as a practicing statistician (again, bearing in mind that this may include testing of theoretical competence).

1. Course Requirements (30 credits)

- Stats 609 (3 cr) or 709 (4 cr)
- Stats 610 or 710 (4 cr)
- Stats 849 (3 cr)
- Stats 850 (3 cr)
- Stats 998 (3 cr)
- Six or more elective credits from statistics courses numbered 600 or higher (with the exception of 601, 602, 609, 610, 628, 678, 699, 709, 710, 849, 850, or 998)
- The following will also be allowed to count towards the 30-credit minimum for the Master's degree (with permission of the Curriculum and Degree Requirement Committee)
 - Up to six credits from statistics courses numbered 303, 304, 305, 349, 351, 411, 421, 433, 443, 451, 456, 461, 471, 475, 479, 525, or 575 (courses that cover the same or similar topic at the undergraduate and graduate level may both be used towards the MS requirements. If both courses are to be used, the undergraduate level course must be completed first for both courses to be counted. Otherwise only the graduate level course will be counted. Please note that this policy does not preclude students from taking just the undergraduate or just the graduate version of a topic. These combinations would include 349 and 701, 351 and 809, 456 and 760, 443 and 761, 451 and 615, 471 and 771. This will also apply to special topics courses that have similar topics between
 - Up to six credits of research (699)
 - Up to six credits of graduate courses in other departments complementary to the student's interest areas
 - Up to six credits of statistics coursework at the 600-level or above, taken while an undergraduate or special student at UW-Madison, provided that the work was completed no more than five years prior to admission to the Master's degree (with permission of the chair of the Master's Examination Committee). If the work was completed as a special student, the student must also pay the difference between special student and graduate tuition.

- If completing the Biostatistics option, six credits must include three credits of Stat 641 and three credits of either Stat 642, 741, or 877.

2. Competency Test

The Master's degree competency test (examination) will be the responsibility of an Examination Committee of faculty members (usually four) appointed by the faculty. Typically, the appointment will be for two years and half the committee will be reappointed each year to provide overlap and continuity.

After the candidate successfully completes 998 or the semester in which 998 is taken, the candidate must demonstrate to the Examination Committee the potential to be a practicing statistician. The committee is given latitude to decide the details on each occasion as to how this will be done. However, the general form of the competency test (examination) will be as follows:

- (a) The candidate will be presented with one or more written problems or projects and asked to provide a brief written report involving a suitable statistical analysis seven days later.
- (b) The candidate will meet briefly with the clients related to the projects early in the examination period.
- (c) After a further period of time, not to exceed ten days, the candidate will go before the Examination Committee for an oral examination based on questions arising from the above problems or projects. It is understood that the area of questioning may be extended to cover additional aspects of the candidate's theoretical or practical background on which satisfaction of competence is considered desirable by the committee.

A candidate may attempt the competency test at most twice. If a candidate initially attempts the MS degree exam in the fall and does not pass, a second attempt must be made in the following spring or fall. If a candidate initially attempts the MS degree exam in the spring and does not pass, a second attempt must be made in the following fall or spring. A candidate desiring to take this exam must register with the Examination Committee prior to the exam date. Picking up the exam constitutes an attempt *regardless of whether or not the examination is submitted for grading.*

3. Graduate School Higher Learning Commission Requirements

- A Master's degree requires 30 credits (not including audits or pass/fail). [*Minimum Graduate Degree Credit Requirement*]
- At least 16 of these credits must be taken in-residence at UW-Madison. [*Minimum Graduate Residence Credit Requirement*]
- Half of the degree course work (15 credits out of 30 total credits) must be completed in Statistics courses numbered 600 or higher (which our department considers to be graduate courses). [*Minimum Graduate Course Work (50%) Requirement*]
- With program approval, students are allowed to count no more than 9 credits of graduate course work from other institutions toward the graduate degree credit and graduate course work (50%) requirements. Course work earned five or more years prior to admission to a Master's degree is not allowed to satisfy requirements. [*Prior Course Work Requirement*]
- With program approval, up to 6 statistics credits from a UW-Madison undergraduate degree at the 600 level or above are allowed to count toward minimum graduate degree credits. Course work earned five or more years prior to admission to a Master's degree is not allowed to satisfy requirements. [*Prior Course Work Requirement*]

- With program approval, and payment of the difference between special and graduate tuition, up to 15 statistics credits completed at UW-Madison while a University Special Student at the 300 level or above are allowed to count toward minimum graduate degree and graduate residence credit requirements. Of these credits, those at the 700-level or above may also count toward the minimum graduate course work (50%) requirement. Course work earned five or more years prior to admission to a Master's degree is not allowed to satisfy requirements. *[Prior Course Work Requirement]*