

MA in Statistics

Degree Requirements

The general requirements for receiving a master's degree are at least 30 semester hours of course work at the 7000 level or higher, of which at least 18 hours must be from the Department of Statistics at MU.

At least 15 semester hours of course work at the 8000 level or above must be taken from the Department of Statistics at MU. The 15 semester hours cannot include more than a total of three hours of STAT 8090.

Required Courses

STAT 8310	Data Analysis I	3
STAT 8320	Data Analysis II	3
STAT 8710	Intermediate Mathematical Statistics I	3
STAT 8720	Intermediate Mathematical Statistics II	3

Courses that cannot be used to fulfill the 30 hours for the master's

STAT 7006	Topics in Statistics-Mathematics	1-5
STAT 7020	Statistical Methods in the Health Sciences	3
STAT 7050	Connecting Statistics to Middle and Secondary Schools	3
STAT 7070	Statistical Methods for Research	3
STAT 7085	Problems in Statistics for Non-majors	1-99
STAT 7510	Applied Statistical Models I	3
STAT 7520	Applied Statistical Models II	3
STAT 7530	Analysis of Variance	3
STAT 7710	Introduction to Mathematical Statistics	3

Remedial Courses

The following course is required if equivalent courses were not taken as an undergraduate: MATH 7140.

Required Core Courses

Students must complete the following statistics courses: STAT 8710 and STAT 8720 (Mathematical Statistics I and II) and STAT 8310 and STAT 8320 (Data Analysis I and II).

A candidate for the MA degree may choose either an exam or a thesis option in order to satisfy the main requirement for the Master's degree.

Exam Option

A candidate may choose to take the qualifying exam, instead of writing a thesis and presenting it. (The same exam as Ph. D. candidates. See Doctorate of Statistics requirements for more details).

Thesis Option

Original Written Work

Under this option all candidates must submit a written report on an independent effort toward producing original work. This report may, with the advisor's consent, take the form of a thesis, a written review on a set of papers in statistics, or a written report on an independent study project which may include an original application of statistics. For this work, a student must register for at least three semester hours of STAT 8090.

Presenting the Work

under the thesis option, all candidates are required to present an open seminar on the results of the written report. The report should be made

available for public review, through the Department of Statistics office, for at least one week before the examination.

Examination

Under the thesis option, the MA examination covers material presented in the written report and the seminar and may also cover course work.

Accelerated Masters of Arts Degree and Admissions

To be considered for admission to the accelerated MA program in statistics, a student must:

- Have completed at least 90 credit hours toward a bachelor's degree with an overall GPA of at least 3.0.
- Have at least one (preferably two) semesters of undergraduate enrollment remaining before completion of a bachelor's degree.
- Have completed the following courses each with grades of "B" or higher (a "B minus" is not sufficient):
 - The calculus sequence (MATH 1500, MATH 1700, and MATH 2300 or equivalent).
 - A course in matrix theory (MATH 4140 or equivalent).
 - A calculus-based course covering statistical inference (STAT 4710 or STAT 4760 or equivalent).
 - A course in statistical modeling (STAT 3500 or STAT 4510 or equivalent).
- Have a GPA of at least 3.0 in all math and statistics courses completed and have earned at least a "B" (not "B minus") in each statistics course completed. (NOTE: It is expected that the vast majority of an applicant's math and statistics course work will have been completed in residence at MU. Students who have transferred a substantial amount of math and statistics credit from other universities may still apply to the program. These students will be evaluated individually based on both the grades earned in the transferred course and the stature of the university from which the courses were transferred.)
- Have produced an academic record that suggests the student will likely complete an MA degree in statistics.

Satisfactory Progress

Length of Study

A master's candidate is expected to complete the master's degree within three calendar years beginning with the first semester of enrollment unless approval is obtained from the graduate faculty of the Department of Statistics.

Grade Requirements

Any student, while a graduate student in this program, who receives a grade of F in a three-hour course, or a grade of C or lower in six or more hours of courses offered by the Department of Statistics, or a grade of C or lower in nine or more hours of all courses taken will be dismissed from the graduate program unless contrary action is taken by the graduate faculty of the department.

For each credit hour over three hours with a grade of C or lower in courses offered by the Department of Statistics at the 7000 level and above, the student must receive a credit hour with a grade of A in courses offered by the department at the 7000 level and above.

Admission Criteria

- Minimum GPA: 3.0 to enter Master's or PhD program
- Bachelor's degree from accredited college or university in related area
- Minimum TOEFL scores: Internet Based Test (IBT): 80, Paper Based Test (PBT): 535
- (*International applicants*): TOEFL: 80 and above (20, 20, 20, 20) or IELTS: 6.5 and above

Undergraduate courses in statistics are recommended but not required. Consideration also is given to rank in graduating class, trends in grade records, maturity and experience, and other criteria bearing on qualifications.

Before entering the graduate program, a student should have a background that includes three semesters of calculus (or equivalent), one semester of matrix theory, and at least one post-calculus course in probability and statistics. Some required courses at the 7000 level not taken as an undergraduate may be taken for graduate credit as part of the graduate program.

Required Application Materials

Submit all materials electronically using the Graduate School website at *the Graduate School*.

- All required Graduate School documents and
- 3 letters of recommendation
- Letter of intent