STATISTICS: STATISTICS, MS

This is a named option within the Statistics MS. (https://stat.wisc.edu/graduate-admissions/ms-program/) Find information about the traditional Statistics MS program requirements and policies here.

ADMISSIONS

Please consult the table below for key information about this degree program's admissions requirements. The program may have more detailed admissions requirements, which can be found below the table or on the program's website.

Graduate admissions is a two-step process between academic programs and the Graduate School. Applicants must meet the minimum requirements (https://grad.wisc.edu/apply/requirements/) of the Graduate School as well as the program(s). Once you have researched the graduate program(s) you are interested in, apply online (https://grad.wisc.edu/apply/).

Requirements | Detail
--- | ---
Fall Deadline | January 2
Spring Deadline | The program does not admit in the spring.
Summer Deadline | The program does not admit in the summer.
GRE (Graduate Record Examinations) | Not Required.
English Proficiency Test | Every applicant whose native language is not English, or whose undergraduate instruction was not exclusively in English, must provide an English proficiency test score earned within two years of the anticipated term of enrollment. Refer to the Graduate School: Minimum Requirements for Admission policy: https://policy.wisc.edu/library/UW-1241/.
Other Test(s) (e.g., GMAT, MCAT) | n/a
Letters of Recommendation Required | 3

Applicants holding a bachelor’s degree with a natural science, social science, or engineering major and strong mathematical background are encouraged to apply for admission to the graduate program in statistics. Applicants are advised to undertake graduate work in statistics only if their undergraduate grades in mathematics were uniformly high.

FUNDING

Resources to help you afford graduate study might include assistantships, fellowships, traineeships, and financial aid. Further funding information (https://grad.wisc.edu/funding/) is available from the Graduate School. Be sure to check with your program for individual policies and restrictions related to funding.

REQUIREMENTS

MINIMUM GRADUATE SCHOOL REQUIREMENTS

Review the Graduate School minimum academic progress and degree requirements (http://guide.wisc.edu/graduate/#policiesandrequirementstext), in addition to the program requirements listed below.

NAMED OPTION REQUIREMENTS

MODE OF INSTRUCTION

<table>
<thead>
<tr>
<th>Mode of Instruction</th>
<th>Face to Face</th>
<th>Evening/Weekend</th>
<th>Online</th>
<th>Hybrid</th>
<th>Accelerated</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td></td>
</tr>
</tbody>
</table>

Mode of Instruction Definitions

**Accelerated**: Accelerated programs are offered at a fast pace that condenses the time to completion. Students typically take enough credits aimed at completing the program in a year or two.

**Evening/Weekend**: Courses meet on the UW–Madison campus only in evenings and/or on weekends to accommodate typical business schedules. Students have the advantages of face-to-face courses with the flexibility to keep work and other life commitments.

**Face-to-Face**: Courses typically meet during weekdays on the UW-Madison Campus.

**Hybrid**: These programs combine face-to-face and online learning formats. Contact the program for more specific information.

**Online**: These programs are offered 100% online. Some programs may require an on-campus orientation or residency experience, but the courses will be facilitated in an online format.

CURRICULAR REQUIREMENTS

| Requirement | Detail
--- | ---
Minimum Credit Requirement | 30 credits
Minimum Residence Credit Requirement | 16 credits
Minimum Graduate Coursework Requirement | 15 credits must be graduate-level coursework. Refer to the Graduate School: Minimum Graduate Coursework (50%) Requirement policy: https://policy.wisc.edu/library/UW-1244/.
Overall GPA Requirement | 3.00 GPA required.
Graduate GPA Requirement | Refer to the Graduate School: Grade Point Average GPA (GPA) Requirement policy: https://policy.wisc.edu/library/UW-1203/.
Other Grade Requirement | A grade of B or better must be received in any course used to fulfill the required and elective course requirements.
Assessments
Students must pass a competency test containing both a
written and an oral component, demonstrating that they
have the potential to be a practicing statistician.

Language
No language requirements.

REQUIRED COURSES

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>STAT 609</td>
<td>Mathematical Statistics I</td>
<td>3</td>
</tr>
<tr>
<td>or STAT/ MATH 709</td>
<td>Mathematical Statistics</td>
<td></td>
</tr>
<tr>
<td>STAT 610</td>
<td>Introduction to Statistical Inference</td>
<td>4</td>
</tr>
<tr>
<td>or STAT/ MATH 710</td>
<td>Mathematical Statistics</td>
<td></td>
</tr>
<tr>
<td>STAT 849</td>
<td>Theory and Application of Regression and Analysis of Variance I</td>
<td>3</td>
</tr>
<tr>
<td>STAT 850</td>
<td>Theory and Application of Regression and Analysis of Variance II</td>
<td>3</td>
</tr>
<tr>
<td>STAT 998</td>
<td>Statistical Consulting</td>
<td>3</td>
</tr>
</tbody>
</table>

Select 6 or more elective credits of STAT courses numbered 600 or higher.

The following will also be allowed to count toward the 30-credit minimum for the master’s degree (with permission of the Director of Graduate Studies)

Up to 6 credits from STAT Courses Numbered: 0-6

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>STAT 303</td>
<td>R for Statistics I</td>
</tr>
<tr>
<td>STAT 304</td>
<td>R for Statistics II</td>
</tr>
<tr>
<td>STAT 305</td>
<td>R for Statistics III</td>
</tr>
<tr>
<td>STAT 349</td>
<td>Introduction to Time Series</td>
</tr>
<tr>
<td>STAT 351</td>
<td>Introductory Nonparametric Statistics</td>
</tr>
<tr>
<td>STAT 411</td>
<td>An Introduction to Sample Survey Theory and Methods</td>
</tr>
<tr>
<td>STAT 421</td>
<td>Applied Categorical Data Analysis</td>
</tr>
<tr>
<td>STAT 433</td>
<td>Data Science with R</td>
</tr>
<tr>
<td>STAT 443</td>
<td>Classification and Regression Trees</td>
</tr>
<tr>
<td>STAT 451</td>
<td>Introduction to Machine Learning and Statistical Pattern Classification</td>
</tr>
<tr>
<td>STAT 453</td>
<td>Introduction to Deep Learning and Generative Models</td>
</tr>
<tr>
<td>STAT 456</td>
<td>Applied Multivariate Analysis</td>
</tr>
<tr>
<td>STAT 461</td>
<td>Financial Statistics</td>
</tr>
<tr>
<td>STAT/ COMP SCI 471</td>
<td>Introduction to Computational Statistics</td>
</tr>
<tr>
<td>STAT/COMP SCI/ MATH 475</td>
<td>Introduction to Combinatorics</td>
</tr>
<tr>
<td>STAT 479</td>
<td>Special Topics in Statistics</td>
</tr>
<tr>
<td>STAT/COMP SCI/ I SY E/MATH 525</td>
<td>Linear Optimization</td>
</tr>
<tr>
<td>STAT 575</td>
<td>Statistical Methods for Spatial Data</td>
</tr>
</tbody>
</table>

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 STAT 349 and STAT 701; STAT 351 and STAT 809; STAT 456 and STAT 760; STAT 443 and STAT 761; STAT 451 and STAT 615; and STAT/COMP SCI 471 and STAT 771. This will also apply to special topics courses that have similar topics between the undergraduate and graduate level.

Up to 6 credits of graduate courses outside of STAT in consultation with advisor. 0-6

Up to 6 credits of STAT 699 in consultation with advisor. 0-6

Total Credits 30


POLICIES

GRADUATE SCHOOL POLICIES

The Graduate School’s Academic Policies and Procedures (https://grad.wisc.edu/acadpolicy/) provide essential information regarding general university policies. Program authority to set degree policies beyond the minimum required by the Graduate School lies with the degree program faculty. Policies set by the academic degree program can be found below.

NAMED OPTION–SPECIFIC POLICIES

PRIOR COURSEWORK

Graduate Credits Earned at Other Institutions
With program approval, students are allowed to transfer no more than 9 credits of graduate coursework from other institutions toward the graduate degree credit and graduate coursework (50%) requirements. Coursework earned ten or more years prior to admission to a master’s degree is not allowed to satisfy requirements.

Undergraduate Credits Earned at Other Institutions or UW–Madison
With program approval, up to 6 Statistics credits from a UW–Madison undergraduate degree numbered 600 or above are allowed to transfer toward minimum graduate degree credits. Coursework earned ten or more years prior to admission to a master’s degree is not allowed to satisfy requirements.
Credits Earned as a Professional Student at UW-Madison (Law, Medicine, Pharmacy, and Veterinary careers)
Refer to the Graduate School: Transfer Credits for Prior Coursework (https://policy.wisc.edu/library/UW-1216/) policy.

Credits Earned as a University Special Student at UW-Madison
With program approval, up to 14 Statistics credits completed at UW-Madison while a University Special student numbered 300 or above are allowed to transfer toward the minimum graduate degree credit requirement. Of these credits, those numbered 700 or above or taken to meet the requirements of a capstone certificate and has the “Grad 50%” attribute may also transfer for the minimum graduate coursework (50%) requirement. Coursework earned ten or more years prior to admission to a master’s degree is not allowed to satisfy requirements.

PROBATION
Three consecutive reviews in which a student fails to meet the minimum criteria for satisfactory progress will result in the student being dropped from the program. Contact the program for more information.

ADVISOR / COMMITTEE
Students are required to meet with their advisor near the beginning of each semester to discuss course selection and progress.

CREDITS PER TERM ALLOWED
15 credits

TIME LIMITS
The competency test must be passed within six semesters after entering the department.

GRIEVANCES AND APPEALS
These resources may be helpful in addressing your concerns:

- Bias or Hate Reporting (https://doso.students.wisc.edu/bias-or-hate-reporting/)
- Graduate Assistantship Policies and Procedures (https://hr.wisc.edu/policies/gapp/#grievance-procedure)
- Hostile and Intimidating Behavior Policies and Procedures (https://hr.wisc.edu/hib/)
  - Office of the Provost for Faculty and Staff Affairs (https://facstaff.provost.wisc.edu/)
- Employee Assistance (http://www.eao.wisc.edu/) (for personal counseling and workplace consultation around communication and conflict involving graduate assistants and other employees, post-doctoral students, faculty and staff)
- Employee Disability Resource Office (https://employeeabilities.wisc.edu/) (for qualified employees or applicants with disabilities to have equal employment opportunities)
- Graduate School (https://grad.wisc.edu/) (for informal advice at any level of review and for official appeals of program/departamental or school/collegie grievance decisions)
- Office of Compliance (https://compliance.wisc.edu/) (for class harassment and discrimination, including sexual harassment and sexual violence)
- Office Student Assistance and Support (OSAS) (https://osas.wisc.edu/) (for all students to seek grievance assistance and support)
- Office of Student Conduct and Community Standards (https://conduct.students.wisc.edu/) (for conflicts involving students)
- Ombuds Office for Faculty and Staff (http://www.ombuds.wisc.edu/) (for employed graduate students and post-docs, as well as faculty and staff)
- Title IX (https://compliance.wisc.edu/titleix/) (for concerns about discrimination)

Students should contact the department chair or program director with questions about grievances. They may also contact the L&S Academic Divisional Associate Deans, the L&S Associate Dean for Teaching and Learning Administration, or the L&S Director of Human Resources.

OTHER
Students pursuing the general statistics and biostatistics options are considered for department financial support and may seek a dual degree if desired.

PROFESSIONAL DEVELOPMENT

PROFESSIONAL DEVELOPMENT
GRADUATE SCHOOL RESOURCES
Take advantage of the Graduate School’s professional development resources (https://grad.wisc.edu/pd/) to build skills, thrive academically, and launch your career.

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