STATISTICS: BIOSTATISTICS, PhD

This is a named option in the Statistics PhD. (https://stat.wisc.edu/graduate-admissions/)

ADMISSIONS

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/).

<table>
<thead>
<tr>
<th>Requirements</th>
<th>Detail</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fall Deadline</td>
<td>December 1</td>
</tr>
<tr>
<td>Spring Deadline</td>
<td>The program does not admit in the spring.</td>
</tr>
<tr>
<td>Summer Deadline</td>
<td>The program does not admit in the summer.</td>
</tr>
<tr>
<td>GRE (Graduate Record Examinations)</td>
<td>Not Required.</td>
</tr>
<tr>
<td>English Proficiency Test</td>
<td>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: <a href="https://policy.wisc.edu/library/UW-1241/">https://policy.wisc.edu/library/UW-1241/</a> (<a href="https://policy.wisc.edu/library/UW-1241/">https://policy.wisc.edu/library/UW-1241/</a>).</td>
</tr>
<tr>
<td>Other Test(s) (e.g., GMAT, MCAT)</td>
<td>n/a</td>
</tr>
<tr>
<td>Letters of Recommendation Required</td>
<td>3</td>
</tr>
</tbody>
</table>

Individuals 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

FUNDING

GRADUATE SCHOOL RESOURCES

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.

PROGRAM RESOURCES

Each option within Statistics has different funding policies and opportunities for students. Please see each option for details.

- Statistics: Biostatistics, MS (http://guide.wisc.edu/graduate/statistics/statistics-ms/statistics-biostatistics-ms/)

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>No</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

<table>
<thead>
<tr>
<th>Requirement</th>
<th>Detail</th>
</tr>
</thead>
<tbody>
<tr>
<td>Minimum</td>
<td>51 credits</td>
</tr>
<tr>
<td>Credit</td>
<td>Requirement</td>
</tr>
</tbody>
</table>
### REQUIRED COURSES

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>STAT/B M I 641</td>
<td>Statistical Methods for Clinical Trials</td>
<td>3</td>
</tr>
<tr>
<td>STAT/MATH 709</td>
<td>Mathematical Statistics</td>
<td>4</td>
</tr>
<tr>
<td>STAT/MATH 710</td>
<td>Mathematical Statistics</td>
<td>4</td>
</tr>
<tr>
<td>STAT/MATH 733</td>
<td>Theory of Probability I</td>
<td>3</td>
</tr>
<tr>
<td>or STAT 771</td>
<td>Statistical Computing</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>

Additionally four elective courses (12 credits) numbered 642 or higher must be taken, EXCLUDING above and STAT 609, 610, 699, and STAT 990.

The chosen electives must contain AT LEAST two of three Biostatistics specialized courses:

- STAT/B M I 642: Statistical Methods for Epidemiology
- STAT/B M I 741: Survival Analysis Theory and Methods
- STAT/B M I 877: Statistical Methods for Molecular Biology

A twelfth course is required (3 credits) from an approved list of Biological Sciences courses.

- GENETICS 466: Principles of Genetics
- ZOOLOGY 570: Cell Biology
- POP HLTH 795: Principles of Population Health Sciences

Approval of other biological sciences courses is at the discretion of the program Committee.

STAT 992 may only be used once for the same topic

Sufficient credits from any UW Madison courses including STAT 990 to reach the 51-credit minimum

Total Credits 51

### Collaborative Research Experience

This unique aspect of the Statistics: Biostatistics named option program provides the student with experience in interdisciplinary collaborative research under the supervision of a faculty trainer. Students can accomplish this requirement by rotating through directed study/research credits with various faculty trainers.

- Lab rotations should be completed during the first three years of the program.
- Lab rotations need to be established at the beginning of the semester, plan accordingly!
- Students must give a presentation of their research at the end of the same semester.

### 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 doctoral 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 the minimum graduate degree credit requirement. Coursework earned ten or more years prior to admission to a doctoral 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 15 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 are taken to meet the requirements of a capstone certificate and has the “Grad 50%” attribute may also transfer toward the minimum graduate coursework (50%) requirement. Coursework earned ten or more years prior to admission to a doctoral 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
Students must pass the PhD qualifying examination within six semesters from the first fall semester of registration as a graduate student in the department. Students who complete a master’s in the department and then are admitted to the PhD program must pass the PhD qualifying examination within four semesters after entering the PhD program.

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://employeedisabilities.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/departmental or school/college 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.

PEOPLE

PEOPLE

FACULTY
Cecile Ane (https://stat.wisc.edu/staff/ane-cecile/), Professor
Joshua Cape (https://stat.wisc.edu/staff/cape-joshua/), Assistant Professor
Richard Chappell (https://stat.wisc.edu/staff/chappell-rick/), Professor
Peter Chien (https://stat.wisc.edu/staff/chien-peter/), Professor
Jessi Cisewski-Kehe (https://stat.wisc.edu/staff/cisewski-kehe-jessi/), Assistant Professor
Sameer Deshapande (https://stat.wisc.edu/staff/deshpande-sameer/), Assistant Professor
Rishabh Dudeja (https://stat.wisc.edu/staff/dudeja-rishabh/), Assistant Professor
Nicolas Garcia Trillos (https://stat.wisc.edu/staff/trillos-nicolas-garcia/), Assistant Professor
Chris Geoga (https://stat.wisc.edu/staff/geoga-chris/), Assistant Professor
Yongyi Guo (https://stat.wisc.edu/staff/guo-yongyi/), Assistant Professor
Yinqiu He (https://stat.wisc.edu/staff/he-yinqiu/), Assistant Professor
Hyunseung Kang (https://stat.wisc.edu/staff/kang-hyunseung/), Associate Professor
Matthias Katzfuss (https://stat.wisc.edu/staff/katzfuss-matthias/), Professor
Sunduz Keles (https://stat.wisc.edu/staff/keles-sunduz/), Professor
Statistics: Biostatistics, PhD

Bret Larget (https://stat.wisc.edu/staff/larget-bret/), Professor

Keith Levin (https://stat.wisc.edu/staff/levin-keith/), Assistant Professor

Wei-Yin Loh (https://stat.wisc.edu/staff/loh-wei-yin/), Professor

Michael Newton (https://stat.wisc.edu/staff/newton-michael/), Professor

Vivak Patel (https://stat.wisc.edu/staff/patel-vivak/), Assistant Professor

Alejandra Quintos (https://stat.wisc.edu/staff/quintos-alejandra/), Assistant Professor

Garvesh Raskutti (https://stat.wisc.edu/staff/raskutti-garvesh/), Associate Professor

Karl Rohe (https://stat.wisc.edu/staff/rohe-karl/), Professor

Kris Sankaran (https://stat.wisc.edu/staff/sankaran-kris/), Assistant Professor

Jun Shao (https://stat.wisc.edu/staff/shao-jun/), Professor

Miaoyan Wang (https://stat.wisc.edu/staff/wang-miaoyan/), Assistant Professor

Yahzen Wang (https://stat.wisc.edu/staff/wang-yazhen/) (chair), Professor

Chunming Zhang (https://stat.wisc.edu/staff/zhang-chunming/), Professor

Yiqiao Zhong (https://stat.wisc.edu/staff/zhong-yiqiao/), Assistant Professor

Jun Zhu (https://stat.wisc.edu/staff/zhu-jun/), Professor