**STATISTICS: BIOSTATISTICS, PH.D.**

This is a named option in the Statistics Ph.D. (http://guide.wisc.edu/graduate/statistics/statistics-phd/#text)

**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>Required. *</td>
</tr>
<tr>
<td>English Proficiency Test</td>
<td>Every applicant whose native language is not English or whose undergraduate instruction was not in English must provide an English proficiency test score and meet the Graduate School minimum requirements (<a href="https://grad.wisc.edu/apply/requirements/#english-proficiency">https://grad.wisc.edu/apply/requirements/#english-proficiency</a>).</td>
</tr>
<tr>
<td>Other Test(s) (e.g., GMAT, MCAT)</td>
<td>n/a</td>
</tr>
<tr>
<td>Letters of Recommendation</td>
<td>Required</td>
</tr>
<tr>
<td>*</td>
<td>Due to COVID-19, there have been challenges for students attempting to take the GRE. For students applying for Fall 2021, the GRE requirement is optional. Regardless of whether GRE scores are submitted, all applications will be held in equal regard. Students 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. Students are advised to undertake graduate work in statistics only if their undergraduate grades in mathematics were uniformly high.</td>
</tr>
</tbody>
</table>

**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.

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 or STAT 771</td>
<td>Theory of Probability I or Statistical Computing</td>
<td>3</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>
<tr>
<td></td>
<td>Additionally four elective courses (12 credits) numbered 642 or higher must be taken, EXCLUDING above and STAT 609, STAT 610, STAT 699, and STAT 990:</td>
<td>12</td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>STAT/B M I 642</td>
<td>Statistical Methods for Epidemiology</td>
</tr>
<tr>
<td>STAT/B M I 741</td>
<td>Survival Analysis Theory and Methods</td>
</tr>
<tr>
<td>STAT/B M I 877</td>
<td>Statistical Methods for Molecular Biology</td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>GENETICS 466</td>
<td>Principles of Genetics</td>
</tr>
</tbody>
</table>

The unique aspect of the BDO 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

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 Work from Other Institutions

With program approval, students are allowed to count 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.

UW-Madison Undergraduate

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. Coursework earned ten or more years prior to admission to a doctoral degree is not allowed to satisfy requirements.

UW-Madison University Special

With program approval, 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 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 CONSTRAINTS
Students must pass the Ph.D. 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 Ph.D. program must pass the Ph.D. qualifying examination within four semesters after entering the Ph.D. 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://facstaffprovost.wisc.edu/)
• Dean of Students Office (https://doso.students.wisc.edu/) (for all students to seek grievance assistance and support)
• 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://employee-disabilities.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 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
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
Faculty:
Cecile Ane (https://stat.wisc.edu/staff/ane-cecile/), 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
Deshpande, Sameer (https://skdeshpande91.github.io/), Assistant Professor
Nicolas Garcia Trillos (https://stat.wisc.edu/staff/trillos-nicolas-garcia/), Assistant Professor
Hyunseung Kang (https://stat.wisc.edu/staff/kang-hyunseung/), Assistant Professor
Sunduz Keles (https://stat.wisc.edu/staff/keles-sunduz/), Professor
Bret Larget (https://stat.wisc.edu/staff/larget-bret/), Professor
Keith Levin (https://stat.wisc.edu/staff/levin-bret/), 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
Sebastian Raschka (https://stat.wisc.edu/staff/raschka-sebastian/), Assistant Professor
Garvesh Raskutti (https://stat.wisc.edu/staff/raskutti-garvesh/), Associate Professor
Karl Rohe (https://stat.wisc.edu/staff/rohe-karl/), Associate 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
Statistics: Biostatistics, Ph.D.

Brian Yandell (https://stat.wisc.edu/staff/yandell-brian/), Professor

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

Zhengjun Zhang (https://stat.wisc.edu/staff/zhang-zhengjun/), Professor

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