

# STATISTICS: STATISTICS, PH.D.

This is a named option within the Statistics Ph.D. (<http://guide.wisc.edu/graduate/statistics/statistics-phd/>) Find information about the traditional Statistics Ph.D. 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	December 1
Spring Deadline	The program does not admit in the spring.
Summer Deadline	The program does not admit in the summer.
GRE (Graduate Record Examinations)	Required. *
English Proficiency Test	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> ).
Other Test(s) (e.g., GMAT, MCAT)	n/a
Letters of Recommendation Required	3

\*  
Due to COVID-19, there have been challenges for students attempting to take the GRE. Currently, the GRE requirement is waived. 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.

## 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.

## REQUIREMENTS

### MINIMUM GRADUATE SCHOOL REQUIREMENTS

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

### NAMED OPTION REQUIREMENTS MODE OF INSTRUCTION

Face to Face	Evening/ Weekend	Online	Hybrid	Accelerated
Yes	No	No	No	No

#### 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	51 credits
Minimum Residence Credit Requirement	32 credits

Minimum Graduate Coursework Requirement	Half of degree coursework (26 credits out of 51 total credits) must be completed graduate-level coursework; courses with the Graduate Level Coursework attribute are identified and searchable in the university's Course Guide ( <a href="http://my.wisc.edu/CourseGuideRedirect/BrowseByTitle">http://my.wisc.edu/CourseGuideRedirect/BrowseByTitle</a> ( <a href="http://my.wisc.edu/CourseGuideRedirect/BrowseByTitle">http://my.wisc.edu/CourseGuideRedirect/BrowseByTitle</a> )).
Overall Graduate GPA Requirement	3.00 GPA required.
Other Grade Requirements	A grade of B or better must be received in any course used to fulfill the required and elective course requirements.
Assessments and Examinations	Students must pass the Ph.D. qualifying examination, an oral preliminary examination on a topic selected with the approval of the student's advisor, and a dissertation defense.
Language Requirements	No language requirements.
Doctoral Minor/Breadth Requirements	Statistics doctoral students are not required to complete a minor by the Graduate School. The program does require students to meet the breadth requirement in one of three ways: <ul style="list-style-type: none"> <li>1) Complete an Option A (external) minor</li> <li>2) Complete an Option B (distributed) minor consisting of at least 9 credits outside the Department of Statistics, at least 3 credits of which must be from course(s) numbered 600 or higher.</li> <li>3) Complete a Breadth Option (called "Option C" in the statistics department) consisting of at least two of the following three: participatory seminar experience, collaborative research experience, and/or a breadth course.</li> </ul> <p>See the program website (<a href="https://stat.wisc.edu/graduate-studies/phd-program">https://stat.wisc.edu/graduate-studies/phd-program</a> (<a href="https://stat.wisc.edu/graduate-studies/phd-program/">https://stat.wisc.edu/graduate-studies/phd-program/</a>)) for more details.</p>

## REQUIRED COURSES

Code	Title	Credits
<b>Required Courses:</b>		
STAT/MATH 709	Mathematical Statistics	4
STAT/MATH 710	Mathematical Statistics	4
STAT/MATH 733 or STAT 771	Theory of Probability I Statistical Computing	3
STAT 849	Theory and Application of Regression and Analysis of Variance I	3
STAT 850	Theory and Application of Regression and Analysis of Variance II	3
STAT 998	Statistical Consulting	3
<b>Elective Courses:</b>		
<i>Eighteen or more elective credits from Statistics Courses, including:</i>		<i>18-31</i>
STAT/B MI 641	Statistical Methods for Clinical Trials	3
STAT/B MI 642	Statistical Methods for Epidemiology	3

or 700 or higher<sup>1</sup>

If STAT 992 is used to fulfill the elective requirement, only 3 credits from any one topic is allowed

### Sufficient credits of STAT 990 to reach the 51-credit minimum

#### Total Credits

**44-57**

1

Courses that do not count in this requirement: STAT 609 Mathematical Statistics I, STAT 610 Introduction to Statistical Inference, STAT 699 Directed Study, STAT/MATH 709 Mathematical Statistics, STAT/MATH 710 Mathematical Statistics, STAT 849 Theory and Application of Regression and Analysis of Variance I, STAT 850 Theory and Application of Regression and Analysis of Variance II, STAT 990 Research,

## 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 five 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 five 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 five 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 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://facstaff.provost.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

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

Deshpande, Sameer (<https://skdeshpande91.github.io/>), Assistant Professor

Nicolas Garcia Trillos (<https://stat.wisc.edu/staff/trillos-nicolas-garcia/>), Assistant Professor

Yinqiu He (<https://stat.wisc.edu/staff/he-yinqiu/>), Assistant Professor

Hyunseung Kang (<https://stat.wisc.edu/staff/kang-hyunseung/>), Associate 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-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

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