

BUSINESS: INSURANCE ECONOMICS AND ACTUARIAL ANALYTICS, PHD

The Business: Insurance Economics and Actuarial Analytics PhD is offered by the Risk and Insurance Department at the School of Business. We aim to train students to produce scholarship advancing the frontier of insurance economics and actuarial analytics.

Our faculty are leaders in their fields. Within our four core fields of actuarial science, insurance, risk management, and decision making under uncertainty, our specific areas of expertise include the regulation and financial management of insurance, corporate risk management, behavioral economics, predictive modeling and statistical methods development, and the analytics and economics of the health care sector, among other areas. More information about faculty research contributions is available here (<https://business.wisc.edu/faculty-research/risk-insurance/>).

We are a nationally recognized Center of Actuarial Excellence (<https://www.soa.org/cae/>). We maintain close contact with industry which is reflected, among other ways, in grant support for industry-related research projects, as well as our leadership in the Creative Destruction Lab Risk Stream.

ADMISSIONS

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Requirements	Detail
Fall Deadline	December 15
Spring Deadline	This program does not admit in the spring.
Summer Deadline	This program does not admit in the summer.
GRE (Graduate Record Examinations)	Required.

English Proficiency Test All domestic (including Puerto Rico) and international applicants whose native language is not English must submit scores from the Test of English as a Foreign Language (TOEFL). A recommended minimum TOEFL score of 106 (New iBT) and 27 Speaking, obtained within two years of the intended starting term, is needed for admission consideration. The school also accepts IELTS scores with a recommended minimum score of 7.5. The school accepts the Pearson Test of English as a substitute.

International applicants who have completed a four-year bachelor's degree in a country where the official language is English may request a waiver of the English Proficiency Test requirement. A master's degree from an English-speaking institution does not qualify for a waiver of the requirement, unless you have completed a minimum of 4 years of education (undergrad and graduate) in a country where English is the native language.

Being a citizen or permanent resident of the United States does not automatically exempt an applicant from the test requirement. The English Proficiency Test requirement may be waived if the applicant has studied full time for eight semesters or more at a college or university where the sole language of instruction is English in a country where English is the primary spoken language. A master's degree alone from an English-speaking institution DOES NOT qualify for a waiver of the test requirement.

Other Test(s) (e.g., GMAT, MCAT)	The GMAT is accepted as an alternative to the GRE.
Letters of Recommendation Required	3

Admission consideration requires a four-year undergraduate degree or the equivalent, in any discipline, from an accredited institution. Work experience is not required. Applicants should have an undergraduate minimum grade point average (GPA) of 3.0 or higher on a 4.0 scale. In addition to academic credentials, test scores, personal achievements, motivation, communication skills (written and oral) and recommendation letters are considered in the admission process at both the master's and doctoral levels.

Please note: The Graduate Management Admission Test (GMAT) or the Graduate Record Exam (GRE), taken within five years of the starting term, is required of all applicants to the School of Business PhD and MS programs.

To learn more about the application and admissions process, visit PhD Admission Requirements (<https://wsb.wisc.edu/programs-degrees/doctoral-phd/admissions/admissions-requirements/>).

HOW TO APPLY

Students interested in business degrees do not apply through the Graduate School application system and should instead refer to the School of Business Admissions page. (<https://admissions.wsb.wisc.edu/Phd/>)

REQUIREMENTS

MINIMUM GRADUATE SCHOOL REQUIREMENTS

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

MAJOR 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	33 credits
Minimum Graduate Coursework Requirement	26 credits must be graduate-level coursework. Refer to the Graduate School: Minimum Graduate Coursework (50%) Requirement policy: https://policy.wisc.edu/library/UW-1244 (https://policy.wisc.edu/library/UW-1244/).
Overall Graduate GPA Requirement	3.20 GPA required.

Other Grade Requirements n/a

Assessments and Examinations Doctoral students are required to pass a comprehensive preliminary examination after they have cleared their record of all Incomplete and Progress grades (other than research and thesis). An additional oral component is also required for all doctoral students. Deposit of the doctoral dissertation in the Graduate School is required.

Language Requirements There are no curricular language requirements for Business PhD students.

Graduate School Breadth Requirement A doctoral minor or graduate/professional certificate is not required; breadth is achieved in other ways.

REQUIRED COURSES

The course sequence is customized to fit each student's unique research interests and background. During your first two years of study, you will work with a PhD faculty advisor to set an appropriate course sequence, consisting of a combination of courses within the School of Business and a set of advanced courses that form a coherent package and enhance your research skills from outside of the School of Business. In addition to the required courses listed below, all PhD students are required to participate in the Teaching Improvement Program and Graduate Assistant Equity Workshop.

Code	Title	Credits
Economic Theory Requirement		
Select one of the following sequences:		6
ECON 711 & ECON 713	Economic Theory–Microeconomics Sequence and Economic Theory: Microeconomics Sequence	
ECON 712 & ECON 714	Economic Theory–Macroeconomics Sequence and Economic Theory: Macroeconomics Sequence	

Code	Title	Credits
Econometrics Requirement		
Select one of the following sequences:		6–8
A A E 636 & A A E 637	Applied Econometric Analysis I and Applied Econometric Analysis II	
ECON 709 & ECON 710	Economic Statistics and Econometrics I and Economic Statistics and Econometrics II	
STAT 849	Advanced Statistical Methods	
and an additional STAT course to be selected with advisor approval		

Code	Title	Credits
Other Requirements		
GEN BUS 933	Beginning a Research Career in Business	1
R M I 765	Contemporary Topics (Current Topics: RMI)	3
R M I 920	Seminar in Actuarial Science, Risk Management & Insurance I	3

Breadth Requirement

During the first two years of study, students work with a PhD faculty advisor to set an appropriate course sequence, consisting of a combination of courses within the School of Business and a set of advanced courses that form a coherent package and enhance research skills from outside of the School of Business.

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Additional Coursework

This could include the following courses: R M I 990, R M I 999 and other non-research coursework decided with their advisor.

24-26

Total Credits

51

POLICIES

GRADUATE SCHOOL POLICIES

The Graduate School's Academic Policies and Procedures (<https://grad.wisc.edu/acadpolicy/>) serve as the official document of record for Graduate School academic and administrative policies and procedures and are updated continuously. Note some policies redirect to entries in the official UW-Madison Policy Library (<https://policy.wisc.edu/>). Programs may set more stringent policies than the Graduate School. Policies set by the academic degree program can be found below.

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

Undergraduate Credits Earned at Other Institutions or UW-Madison

No credits from an undergraduate degree are allowed to transfer toward the degree.

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 students are allowed to transfer no more than 9 credits of coursework numbered 300 or above taken as a UW-Madison University Special student. However, these credits are not allowed to count toward the 50% graduate coursework minimum unless numbered 700 or above or are taken to meet the requirements of a capstone certificate and has the "Grad 50%" attribute. Coursework earned ten or more years prior to admission to a doctoral degree is not allowed to satisfy requirements.

PROBATION

Refer to the Graduate School: Probation (<https://policy.wisc.edu/library/UW-1217/>) policy.

ADVISOR / COMMITTEE

Refer to the Graduate School: Advisor (<https://policy.wisc.edu/library/UW-1232/>) and Graduate School: Committees (Doctoral/Master's/MFA) (<https://policy.wisc.edu/library/UW-1201/>) policies.

CREDITS PER TERM ALLOWED

15 credit maximum. Refer to the Graduate School: Maximum Credit Loads and Overload Requests (<https://policy.wisc.edu/library/UW-1228/>) policy.

TIME LIMITS

Refer to the Graduate School: Time Limits (<https://policy.wisc.edu/library/UW-1221/>) policy.

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://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 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)

Any student who feels that they have been mistreated by a faculty or staff member has the right to lodge a complaint. Complaints may concern course grades, classroom treatment, program admission, or other issues. To ensure a prompt and fair hearing of any complaint and to protect both the student's rights and the person at whom the complaint is addressed, the grievance procedures below are used in the School of Business.

The person against whom the complaint is directed must be an employee of the School of Business. Any student or potential student may use these procedures unless other campus rules or contracts cover the complaint:

1. If the student feels comfortable/safe doing so, the student should first talk with the person against whom the grievance is directed. Most issues can be settled at this level. If the complaint is directed against a teaching assistant (TA) and the student is not satisfied after discussion of the grievance with the TA, the next step would be to talk to the TA's supervisor, who is usually the course professor. If the complaint is still not resolved satisfactorily, the student may continue to step 2.
2. If the complaint involves an academic department, the student should contact the chair of the department. The chair will attempt to resolve the problem informally. If this cannot be done to the student's satisfaction, the student may submit the grievance to the chair in writing. This must be done within 60 calendar days of the alleged unfair treatment.
 - a. If the complaint does not involve an academic department, the procedure outlined in Step 4 below should be followed.
3. On receipt of a written complaint, the chair will refer the matter to a departmental committee, which will obtain a written response from the person at whom the complaint is directed. This response shall be shared with the person filing the grievance. The chair will provide a written decision within 30 days to the student on the action taken by the committee.
4. If either party is not satisfied with the decision, they have five working days from receipt of the decision to contact the dean's office (at the number below), indicating the intention to appeal. If the complaint does not involve an academic department in the school, the student must contact the dean's office within 60 calendar days of the alleged unfair treatment.
5. In either case, there will be an attempt to resolve the issue informally by the appropriate associate dean. If this cannot be done, the complaint can be filed in writing with the Office of the Dean. This must be done within 10 working days of the time the appealing party was notified that informal resolution was unsuccessful.
6. On receipt of such a written complaint, the Chief Engagement, Culture, and Organizational Effectiveness Officer will convene a subcommittee of relevant stakeholders pending the nature of the issue. This subcommittee may ask for additional information from the parties involved and may hold a hearing at which both parties will be asked to speak separately. The subcommittee will then make a written recommendation to the dean of the School of Business who will render a decision. Unless a longer time is negotiated, this written decision shall be made within 20 working days from when the grievance was filed with the Office of the Dean.

Questions about these procedures can be directed to the School of Business, Office of the Dean, 4339 Grainger, 975 University Avenue, 608-262-7867.

State law contains additional provisions regarding discrimination and harassment. Wisconsin Statutes 36.12 reads, in part: "No student may be denied admission to, participation in or the benefits of, or be discriminated against in any service, program, course or facility of the system or its institutions or center because of the student's race, color, creed, religion, sex, national origin, disability, ancestry, age, sexual orientation, pregnancy, marital status or parental status." In addition, the UW System prohibits discrimination based on gender identity or gender expression. Students have the right to file discrimination and harassment complaints with the Office of Compliance, 361 Bascom Hall, 608-265-6018, uwcomplianceoffice@wisc.edu.

The Graduate School has procedures for students wishing to appeal a grievance decision at the school/college level. These policies are

described in the Graduate School's Academic Policies and Procedures: <https://grad.wisc.edu/documents/grievances-and-appeals/>

OTHER

Virtually all PhD students in business are funded at a level that guarantees a minimum of five years of the following: full tuition remission; scholarship funding; a monthly stipend; comprehensive family health insurance plan, travel funding for students presenting at academic conferences.