BUSINESS: INSURANCE ECONOMICS AND ACTUARIAL ANALYTICS, PH.D.

The Business: Insurance Economics and Actuarial Analytics, Ph.D. is offered by the Risk and Insurance Department at the School of Business.

We are a nationally recognized Center of Actuarial Excellence (https://www.soa.org/cae/). We have received grants to support a variety of industry-related research projects and the introduction of our Technology-Enhanced Learning initiative.

Student research is supported by faculty in four core areas including actuarial science, risk management, insurance and decision – making under risk and uncertainty.

Our faculty have specific areas of expertise in microinsurance, insurance regulation, financial management of insurance organizations, corporate risk management, behavioral economics, predictive modeling, healthcare analytics, health services management, and statistical methods development.

Our faculty members contribute to significant advancements in the field, as evidenced by our recently published journal articles (https://business.wisc.edu/faculty-research/risk-insurance/).

ADMISSIONS

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 Ph.D. and M.S. programs. Also, 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. 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 TOEFL requirement. A master's degree from an English-speaking institution does not qualify for a waiver of the TOEFL, unless you have completed a minimum of 4 years of education (undergrad and graduate) in a country where English is the native language. The school accepts IELTS and Pearson Test of English as substitutes for TOEFL.

To learn more about the application and admissions process, visit Ph.D. 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 academic progress and degree requirements (http://guide.wisc.edu/graduate/#policiesandrequirementstext), 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 51 credits
Credit
Requirement
Minimum 33 credits
Residence

Credit Requirement

Minimum 26 credits must be graduate-level coursework. Details can Graduate be found in the Graduate School's Minimum Graduate Coursework (50%) 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	preliminary examination after they have cleared their
Language Requirements	There are no curricular language requirements for Business Ph.D. students.
Graduate School Breadth	A doctoral minor or graduate/professional certificate is not required; Breadth is achieved in other ways.

REQUIRED COURSES

Requirement

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 Ph.D. 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 Ph.D. students are required to participate in the Teaching Improvement Program and Graduate Assistant Equity Workshop.

Code	Credits			
Economic Theory Requirement 6				
Select one of the fol				
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			
Econometrics Req	uirement	6-8		
Select one of the fol	lowing sequences:			
ECON 709 & ECON 710	Economic Statistics and Econometrics I and Economic Statistics and Econometrics II			
STAT 849 & STAT 850	Theory and Application of Regression and Analysis of Variance I and Theory and Application of Regression and Analysis of Variance II			
A A E 636 & A A E 637	Applied Econometric Analysis I and Applied Econometric Analysis II			
Other Requirements				
GEN BUS 806	Panel Data Analysis	3		
GEN BUS 933	Beginning a Research Career in Business	1		

R M I 920	Seminar in Actuarial Science, Risk Management & Insurance I	3
RMI930	Seminar in Actuarial Science, Risk Management & Insurance II	3
Breadth Requiren	6	
Additional Course	21-23	
Total Credits		51

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This could include the following courses: R M I 990 Risk & Insurance Independent Research PhD Thesis, R M I 999 Reading and Research-Risk Management and Insurance PhD, and other non-research coursework decided with their advisor.

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.

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

UW-Madison Undergraduate

No credits from a UW–Madison undergraduate degree are allowed to count toward the degree.

UW-Madison University Special

With program approval students are allowed to count no more than 9 credits of coursework numbered 300 or above taken as a UW–Madison special student. Coursework earned ten or more years prior to admission to a doctoral degree is not allowed to satisfy requirements.

PROBATION

This program follows the Graduate School's Probation policy (https://policy.wisc.edu/library/UW-1217/).

ADVISOR / COMMITTEE

This program follows the Graduate School's Advisor policy (https://policy.wisc.edu/library/UW-1232/) and Committees policy (https://policy.wisc.edu/library/UW-1201/).

CREDITS PER TERM ALLOWED

15 credits

TIME LIMITS

Doctoral degree students who have been absent for ten or more consecutive years lose all credits that they have earned before their absence. Individual programs may count the coursework students completed prior to their absence for meeting program requirements; that coursework may not count toward Graduate School credit requirements.

A candidate for a doctoral degree who fails to take the final oral examination and deposit the dissertation within five years after passing the preliminary examination may be required to take another preliminary examination and to be admitted to candidacy a second time.

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, postdoctoral 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 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 whom the complaint is directed against 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:

- 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 Diversity and Inclusion 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, 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.

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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 Ph.D. 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.