BUSINESS: ACTUARIAL SCIENCE, BBA

REQUIREMENTS

UNIVERSITY GENERAL EDUCATION REQUIREMENTS

All undergraduate students at the University of Wisconsin–Madison are required to fulfill a minimum set of common university general education requirements to ensure that every graduate acquires the essential core of an undergraduate education. This core establishes a foundation for living a productive life, being a citizen of the world, appreciating aesthetic values, and engaging in lifelong learning in a continually changing world. Various schools and colleges will have requirements in addition to the requirements listed below. Consult your advisor for assistance, as needed. For additional information, see the university Undergraduate General Education Requirements (http://guide.wisc.edu/undergraduate/#requirementsforundergraduatestudytext) section of the *Guide*.

General Education

- Breadth–Humanities/Literature/Arts: 6 credits
- Breadth–Natural Science: 4 to 6 credits, consisting of one 4- or 5-credit course with a laboratory component; or two courses providing a total of 6 credits
- Breadth–Social Studies: 3 credits
- Communication Part A & Part B *
- Ethnic Studies *
- Quantitative Reasoning Part A & Part B *

* The mortarboard symbol appears before the title of any course that fulfills one of the Communication Part A or Part B, Ethnic Studies, or Quantitative Reasoning Part A or Part B requirements.

SCHOOL OF BUSINESS REQUIREMENTS

The Wisconsin Bachelor of Business Administration (BBA) degree program is based on a broad educational foundation combined with courses in business and economics. This curriculum is designed for those students who wish to prepare for careers in business. Students completing any School of Business major (http://guide.wisc.edu/undergraduate/business/#requirementstext) are required to satisfy a common set of Pre-Business Requirements, Liberal Studies Requirements, Business Preparatory Requirement, Business Core Requirement, Business Breadth Requirement, and Credits for BBA Degree.

Code	Title	Credits
School of Business BBA Requirements		
Complete requirements: (http://guide.wisc.edu/undergraduate/business/#requirementstext)		
Pre-Business		
Liberal Studies		
Business Prep		
Business Core		
Business Breadth		

ACTUARIAL SCIENCE MAJOR REQUIREMENTS

The following courses are required for actuarial science majors. The Risk and Insurance Department also has course sequence information. Please be aware of stated prerequisites for major courses (including business core courses) that need to be completed before taking the course. Specific prerequisites can be found by clicking on the course number below.

Code	Title	Credits
MATH/STAT 431	Introduction to the Theory of Probability [1]	3
or STAT/MATH 309	Introduction to Probability and Mathematical Statistics I	
or STAT 311	Introduction to Theory and Methods of Mathematical Statistics I	
STAT/MATH 310	Introduction to Probability and Mathematical Statistics II [1]	3
or STAT 312	Introduction to Theory and Methods of Mathematical Statistics II	
ACT SCI 300	Actuarial Science Methods I	1
ACT SCI 301	Actuarial Science Methods II	1
ACT SCI 303	Theory of Interest	3
ACT SCI 650	Actuarial Mathematics I	3
ACT SCI 652	Loss Models I	3
ACT SCI 651	Actuarial Mathematics II	3
or ACT SCI 653	Loss Models II	
ACT SCI 654	Regression and Time Series for Actuaries [1]	3
or ACT SCI 655	Health Analytics	
or GEN BUS 656	Machine Learning for Business Analytics	
Total Credits		**23**

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The probability, statistics and regression/analytics requirements above for the actuarial science major also fulfill the business analytics requirement found in the BBA Business Preparatory Requirements.

RECOMMENDED ELECTIVES

Code	Title	Credits
MATH 234	Calculus--Functions of Several Variables	4
MATH 340	Elementary Matrix and Linear Algebra	3
R M I 300	Principles of Risk Management	3
FINANCE/ECON 320	Investment Theory	3
COMP SCI 220	Data Science Programming I [1]	4
STAT 303 & STAT 304 & STAT 305	R for Statistics I and R for Statistics II and R for Statistics III	3

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Recommended to take either COMP SCI 220 or the STAT 303, STAT 304, STAT 305 sequence.

Students are encouraged to take MATH 234 Calculus--Functions of Several Variables before taking probability (MATH/STAT 431 Introduction to the Theory of Probability, STAT/MATH 309 Introduction to Probability and Mathematical Statistics I , or STAT 311 Introduction to Theory and Methods of Mathematical Statistics I), courses in risk management and insurance; finance; and computer science.

UNIVERSITY DEGREE REQUIREMENTS

Total Degree	To receive a bachelor's degree from UW–Madison, students must earn a minimum of 120 degree credits. The requirements for some programs may exceed 120 degree credits. Students should consult with their college or department advisor for information on specific credit requirements.
Residency	Degree candidates are required to earn a minimum of 30 credits in residence at UW–Madison. "In residence" means on the UW–Madison campus with an undergraduate degree classification. “In residence” credit also includes UW–Madison courses offered in distance or online formats and credits earned in UW–Madison Study Abroad/Study Away programs.
Quality of Work	Undergraduate students must maintain the minimum grade point average specified by the school, college, or academic program to remain in good academic standing. Students whose academic performance drops below these minimum thresholds will be placed on academic probation.