

ACTUARIAL SCIENCE, CAPSTONE CERTIFICATE

REQUIREMENTS

- Must have a minimum GPA of 2.000
- Must complete 15 credits of coursework from the courses listed below. Students can elect to take courses that meet the SOA/CAS Validation by Educational Experience (VEE) requirements with approval from the capstone director.

The Capstone Certificate coursework requires that students have background in mathematical probability. Applicants who do not have this background are encouraged to apply and will be expected to study mathematical probability within the first semester of the program.

Code	Title	Credits
Required Classes		
ACT SCI 303	Theory of Interest	3
ACT SCI 650	Actuarial Mathematics I	3
ACT SCI 652	Loss Models I	3
Specialization Core		
Choose at least one of:		
ACT SCI 651	Actuarial Mathematics II	3
ACT SCI 653	Loss Models II	3
Choose at least one of:		
ACT SCI 654	Regression and Time Series for Actuaries	3
ACT SCI 655	Health Analytics	3
GEN BUS 656	Machine Learning for Business Analytics	3

OPTIONAL SUPPORTING COURSES

Code	Title	Credits
Courses recommended as preparation for an actuarial career:		
MATH/STAT 431	Introduction to the Theory of Probability	3
MATH/STAT 309	Introduction to Probability and Mathematical Statistics I	3
STAT 311	Introduction to Theory and Methods of Mathematical Statistics I	3
MATH/STAT 310	Introduction to Probability and Mathematical Statistics II	3
STAT 312	Introduction to Theory and Methods of Mathematical Statistics II	3
ECON 101	Principles of Microeconomics	4
ECON 102	Principles of Macroeconomics	3-4
ECON 111	Principles of Economics- Accelerated Treatment	4

FINANCE/ ECON 300	Introduction to Finance	3
FINANCE/ ECON 320	Investment Theory	3
Review courses for actuarial examinations:		
ACT SCI 300	Actuarial Science Methods I	1
ACT SCI 301	Actuarial Science Methods II	1

MINIMUM REQUIREMENTS FOR CAPSTONE CERTIFICATE COMPLETION

- Students must earn a minimum grade of C in each course used to meet Capstone Certificate requirements.
- Courses in which a student elects the pass/fail or audit option will not count toward completion of Capstone Certificate requirements.
- All of the Capstone Certificate credits must be earned "in residence" (which includes on campus and distance-delivered courses) at UW-Madison.
- All of the Capstone Certificate credits must be earned while enrolled in the Capstone Certificate program.

Individual Capstone Certificate programs may have additional requirements for completion, which will be listed above as/if applicable.