

**ACTUARIAL SCIENCE WORKSHEET: College of Arts & Sciences, General Education Requirements: BS Degree**

**H.S. Entrance Requirements:** 4 units of English (All units must include intensive reading and writing experience.), 4 units of mathematics (Must include Algebra I, II, geometry and one additional unit that builds on the knowledge of algebra or geometry.), 3 units of natural science (Including at least 2 units selected from biology, chemistry, physics, and earth sciences. One of the units must include laboratory instruction.), 3 units of social studies (At least one unit of American and/or world history and one additional unit of history, American government, and/or geography.), and 2 units of the same foreign language.

**Total Hours Required for Degree:** 125 or 130 minimum (30 hrs above 299) (depends on language entrance deficiency)

**Note:** Degree requirements are more specifically outlined in the College of Arts & Sciences section in the Undergraduate Bulletin.

**ACHIEVEMENT CENTERED EDUCATION+ (ACE)**

**ACE 1: Written Texts Incorporating Research and Knowledge Skills - 3 hrs.**

Course	Hrs	Grade
ENGL 101, 150, or 151	3	

**ACE 2: Communication Studies - 3 hrs.**

Course	Hrs	Grade
COMM 286	3	

**ACE 3: Math, Computational, Statistical or Formal Reasoning Skills - 3 hrs.**

Course	Hrs	Grade
MATH 106	5	

**ACE 4: Study of Scientific Methods and Knowledge of Natural and Physical World - 3 hrs.**

Course	Hrs	Grade
Any listed for ACE 4	3	

**ACE 5: Study of Humanities - 3 hrs.**

Course	Hrs	Grade
Any listed for ACE 5	3	

**ACE 6: Study of Social Sciences - 3 hrs.**

Course	Hrs	Grade
ECON 211 (CAS/SOA VEE*)	3	

**ACE 7: Study of the Arts to Understand Their Context and Significance - 3 hrs.**

Course	Hrs	Grade
Any listed for ACE 7	3	

**ACE 8: Ethical Principles, Civics and Stewardship and Their Importance to Society - 3 hrs.**

Course	Hrs	Grade
ECON 212 (CAS/SOA VEE*)	3	

**ACE 9: Global Awareness or Knowledge of Human Diversity through Analysis of an Issue - 3 hrs.**

Course	Hrs	Grade
Any listed for ACE 9; Econ 321 recommended	3	

**ACE 10: Integration of Abilities and Capacities in a Creative or Scholarly Product - 3 hrs.**

Course	Hrs	Grade
ACTS 475	3	

+For more detailed information concerning the ACE General Education Program, including a complete list of UNL courses approved for ACE Learning Outcomes 1-10, visit <http://ace.unl.edu>; \*CAS/SOA VEE denotes courses approved for credit from the professional actuarial organizations if achieve a grade of B- or better.

**COLLEGE DISTRIBUTION REQUIREMENTS++ (CDR)**

**CDR A: Written Communication - 3 hrs.**

To be selected from courses approved for ACE Outcome 1

Course	Hrs	Grade
JGen 220	3	

**CDR B: Natural, Physical and Mathematical Sciences - 7 hrs.**

From 2 different departments, including at least 1 lab science course from the Natural or Physical sciences. Lab courses may be selected from Biochemistry, Biological Sciences, Chemistry, Geology, Meteorology, Physics and Astronomy, Geography and Anthropology (see degree audit or College of Arts & Sciences advisor for approved Geography and Anthropology lab Courses). All other courses select from: Biochemistry, Biological Sciences, Chemistry, Computer Science and Engineering, Geology, Meteorology, Mathematics, Physics & Astronomy, and Statistics.

Course	Hrs	Grade
Lab course from Natural or Physical Sciences	4	
CSCE 101 and 101L	4	

**CDR C: Humanities - 6 hrs.**

From 2 different departments, select from Classics\*, English, History, Modern Languages & Literatures\*, Philosophy, and Religious Studies Language courses numbered 210 or below apply only for the Foreign Language requirement

Course	Hrs	Grade
Any from an appropriate department	3	
Any from a second appropriate department	3	

**CDR D: Social Science - 3 hrs.**

Select from Anthropology, Communication Studies, Geography, Political Science, Psychology, or Sociology

Course	Hrs	Grade
Any from an appropriate department	3	

**CDR E: Languages Classical and Modern – 0-6 hrs.**

Fulfilled by the completion of 6 credit hours at the 200-level or above in a single foreign language in one of the following departments: Classics and Religious Studies, Modern Languages and Literatures, or Anthropology. Instruction is currently available in Biblical Hebrew, Chinese, Czech, French, German, Greek, Japanese, Latin, Omaha, Russian, and Spanish. A student who has completed the fourth-year level of one foreign language in high school is exempt from the languages requirement.

Course	Hrs	Grade
As necessary	3	
As necessary	3	

++All requirements are in addition to ACE requirements. A student may not use a single course to satisfy more than one of the 5 Distribution Requirements. A student cannot use a single course to satisfy both an ACE outcome and a College Distribution Requirement. Independent study and internships cannot be used. Courses from interdisciplinary programs will count in the same area as courses from the home/cross-listed department(s). Review degree audit for courses or see

<http://ascweb.unl.edu/academics/depts.html> for a complete list.

**SCIENTIFIC BASE - 60 HRS IN MATHEMATICS AND NATURAL SCIENCES INCLUDING 1 HR. OF LAB.**

Course	Hrs	Grade
Math 106	5	
Math 107	5	
Math 208	4	
Stat 380	3	
Stat 462	4	
Stat 463	4	
Computer Science 101, 101L	4	
Lab course from Natural or Physical Sciences	4	
Actuarial Science Major courses	22	
Other Actuarial Science or Math Courses	5*	
*Excess beyond 5 reduces the number of additional electives required		

**SUGGESTED ACTUARIAL SCIENCE COURSES- 22 HOURS REQUIRED**

Course	Hrs	Grade
At least one of: 410, Introduction to Credibility, Smoothing of Data and Simulation; 425, Survival Models; 450, Stochastic Process for Actuaries	3	
430 – Actuarial Applications of Applied Statistics (CAS/SOA VEE*)	3	
440 – Financial Mathematics	4	
470 – Life Contingencies I	3	
471 – Life Contingencies II	3	
473 – Introduction to Risk Theory	3	
475 – Actuarial Applications in Practice (ACE 10 Course)	3	

**ADDITIONAL ELECTIVES APPLICABLE TOWARD TOTAL HOURS:  
28 (for 130 total, including 6 hours of language)-29 (for 125 total)**

Course – SUGGESTED	Hrs	Grade
ACCT 201-202	6	
FINA 307 or FINA 338 (REQUIRED FOR ACTS 475)	3	
FINA 363 (REQUIRED FOR FINA 461)	3	
FINA 461 (REQUIRED FOR CAS/SOA VEE*)	3	
FINA 467, Options, Futures, Derivative Securities (FOR CAS/SOA EXAM MFE)	3	
CTS (problem labs and course(s) not taken for major), One of {FINA 407; FINA 412; FINA 420; FINA 438; and ECON 413} (not regularly offered), OR other courses such as FINA 463 OR ACCT 306 (requires junior standing) or ACCT 201 and ACCT 202	10-11	

**ARTS & SCIENCES ADVISING CENTER, 107 OLDFATHER HALL, 402-472-4190. THIS FORM IS USED FOR ADVISING PURPOSES ONLY BASED ON INFORMATION AVAILABLE AT THE TIME COMPLETED. STUDENTS ARE RESPONSIBLE FOR KNOWING AND COMPLETING ALL REQUIREMENTS AS STATED IN THEIR BULLETIN.**