

Mathematics and Statistics 2014

Major: Mathematics & Statistics

Degree Type: B.A. or B.S.

Required Degree Credits to Graduate: 127

General Education Requirements

First Year Experience (F):

UNIV 189	Skills For Academic Success	1
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Communication (C):

ENGL 110	College Composition I	3
ENGL 120	College Composition II	3
One course in Upper Level Writing: Select one course from the current general education list		3
COMM 110	Fundamentals of Public Speaking	3

Quantitative Reasoning (R):

MATH 165	Calculus I	4
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Science & Technology (S): 10

A one-credit lab must be taken as a co-requisite with a general education science/technology course unless the course includes an embedded lab experience equivalent to a one-credit course. Select from current general education list

Humanities & Fine Arts (A): Select from current general education list 6

Social & Behavioral Sciences (B): Select from current general education list 6

Wellness (W): Select from current general education list 2

Cultural Diversity (D): Select from current general education list

Global Perspectives (G): Select from current general education list

Total Credits	41
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College Requirements

Bachelor of Science (BS) Degree – An additional 6 credits in Humanities or Social Sciences*

Bachelor of Arts (BA) Degree – An additional 12 credits Humanities and Social Sciences* and proficiency at the second year level in a modern foreign language.

* Humanities and Social Sciences may be fulfilled by any course having the following prefix: ADHM, ANTH, ARCH, ART, CJ, CLAS, COMM, ECON, ENGL, FREN, GEOG, GERM, HDFS, HIST, LA, LANG, MUSC, PHIL, POLS, PSYC, RELS, SOC, SPAN, THEA, WGS, or any course from the approved list of general education courses in humanities and social sciences (general education categories A and B). These credits must come from outside the department of the student's major.

Mathematics & Statistics Major Requirements

A grade of 'C' or better is required in all MATH and STAT prefix courses.

General Education Requirements 40

Science and Mathematics College Requirement 6-12

Math Major Core Requirements

MATH 166	Calculus II	4
MATH 265	Calculus III	4
MATH 266	Introduction to Differential Equations	3
MATH 270	Introduction to Abstract Mathematics	3
MATH 420	Abstract Algebra I	3
MATH 429	Linear Algebra	3
MATH 450	Real Analysis I	3
MATH 451	Real Analysis II	3
MATH 491	Seminar	2

Statistics Major Requirements

STAT 330	Introductory Statistics	3
STAT 461	Applied Regression Models	3
STAT 462	Introduction to Experimental Design	3
STAT 467	Probability and Mathematical Statistics I	3
STAT 468	Probability and Mathematical Statistics II	3
STAT 476	Actuary Exam Study II	1
or STAT 491	Seminar	
Statistics Electives	400 level other than those listed above	12

Related Required Courses:

Computer Science		
CSCI 160	Computer Science I	4
CSCI 161	Computer Science II	4
Choose 2 courses from the following:		6

CSCI 345	Topics on Personal Computers
CSCI 372	Comparative Programming Languages
CSCI 373	Assembly Programming
CSCI 458	Microcomputer Graphics

Lecture/Lab Sequence + 2 Credit Elective: Select one of the five groups listed below. Each group includes a two credit elective. 10

Group One:

BIOL 111 & 111L	Concepts of Biology and Concepts of Biology Lab
BIOL 315 & 315L	Genetics and Genetics Laboratory
Two Credit Science Elective	

Group Two:

BIOL 126 & 126L	Human Biology and Human Biology Laboratory
BIOL 220 & 220L	Human Anatomy and Physiology I and Human Anatomy and Physiology I Laboratory
Two Credit Science Elective	

Group Three:

CHEM 121 & 121L	General Chemistry I and General Chemistry I Laboratory
CHEM 122 & 122L	General Chemistry II and General Chemistry II Laboratory
Two Credit Science Elective	

Group Four:

CHEM 150 & CHEM 160	Principles of Chemistry I and Principles of Chemistry Laboratory I
CHEM 151 & CHEM 161	Principles of Chemistry II and Principles of Chemistry Laboratory II
Two Credit Science Elective	

Group Five: (this group may be used as Sci & Tech for Gen Ed)

PHYS 251 & 251L	University Physics I and University Physics I Laboratory
PHYS 252 & 252L	University Physics II and University Physics II Laboratory

 Total Credits

127-133