

COLLEGE OF SCIENCE & MATHEMATICS

MAJOR: STATISTICS

ACADEMIC YEAR: 2013-2014

DEGREE TYPE: B.A. or B.S.

REQUIRED DEGREE CREDITS TO GRADUATE: 122

GENERAL EDUCATION REQUIREMENTS – 40 CREDITS

Lower Division Requirements – 37 Credits

First Year Experience (F) - 1 Credit

UNIV	189	Skills for Academic Success	1 cr
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Students transferring in 24 or more credits do not need to take UNIV 189.

Communication (C) - 9 Credits

ENGL	110	College Composition I	3 cr
ENGL	120	College Composition II	3 cr
COMM	110	Fund of Public Speaking	3 cr

Quantitative Reasoning (R) - 3 Credits

MATH	165	Calculus I	4 cr
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Science & Technology (S) - 10 Credits

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 courses www.ndsu.edu/registrar/gened/

Humanities & Fine Arts (A) - 6 Credits

Select from current general education courses www.ndsu.edu/registrar/gened/

Social & Behavioral Sciences (B) - 6 Credits

Select from current general education courses www.ndsu.edu/registrar/gened/

Wellness (W) - 2 Credits

Select from current general education courses www.ndsu.edu/registrar/gened/

Cultural Diversity (D)

Select from current general education courses www.ndsu.edu/registrar/gened/

Global Perspectives (G)

Select from current general education courses www.ndsu.edu/registrar/gened/

Upper Division Requirements - Writing – 3 Credits

Select from current general education courses www.ndsu.edu/registrar/gened/

DEPARTMENT AND COLLEGE REQUIREMENTS:

- Except for courses offered only as pass/fail grading, no course may be taken Pass/Fail.

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.

STATISTICS MAJOR REQUIREMENTS – 38 CREDITS

- A grade of 'C' or better is required in ALL courses used toward the major.

MATH	129	Basic Linear Algebra	2 cr
MATH	166	Calculus II	4 cr
MATH	265	Calculus III	4 cr
STAT	367	Probability	3 cr
STAT	368	Statistics	3 cr
STAT	461	Applied Regression Models	3 cr
STAT	462	Intro/Experimental Design	3 cr
STAT	476 or 491	Actuary Exam Study II Capstone Seminar	1 cr

Electives – 15 Credits (Can choose only one CSCI course)

CSCI	161	Computer Science II	4 cr
CSCI	228	Computing Fundamentals II	3 cr
CSCI	418	Simulation Models	3 cr
MATH	429	Linear Algebra	3 cr
STAT	450	Stochastic Processes	3 cr
STAT	451	Bayesian Stat Dec Theory	3 cr
STAT	460	Applied Survey Sampling	3 cr
STAT	463	Nonparametric Statistics	3 cr
STAT	464	Discrete Data Analysis	3 cr
STAT	465	Meta-Analysis Methods	3 cr
STAT	467	Probability & Math Statistics I	3 cr
STAT	468	Probability & Math Statistics II	3 cr
STAT	469	Introduction to Biostatistics	3 cr
STAT	470	Stat SAS Programming	3 cr
STAT	471	Introduction to the R Language	3 cr
STAT	472	Time Series	3 cr
STAT	477	Intro to Survival & Risk Analysis I	3 cr
STAT	478	Intro to Survival & Risk Analysis II	3 cr

RELATED REQUIRED COURSES – 6-7 CREDITS

Choose 1 of the following:

CSCI	126	Beginning FORTRAN	3 cr
CSCI	160	Computer Science I	4 cr
CSCI	227	Computing Fundamentals I	3 cr

Choose 1 of the following:

CSCI	222	Discrete Mathematics	3 cr
MATH	270	Intro/Abstract Math	3 cr

Minor Requirement -

A minor is required in one of the following: Social Science, Physical Science, Biological Science, Business, Mathematics, or Computer Science.

DEGREE REQUIREMENTS– UP TO 31 CREDITS TO REACH 122

*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.