Statistics, BS

Academic Plans

Four-Year Graduation Plan

The following checkpoints list the minimum requirements students must complete by certain semesters in order to stay on the university's Four-Year Graduation Plan. Courses in the major are those required to complete the major; they may be offered by departments other than the major department.

Much of the coursework in statistics is sequential, so students must begin requirements for the major as soon as possible. Individual study plans must be made carefully. Students who first enroll for a spring semester must consult their advisor to confirm a four-year plan.

Courses must be taken in sequence, so students must begin work early.

Before the fifth semester begins: at least four courses in the major, including MATH:1850 Calculus I, MATH:1860 Calculus II, and STAT:2010 Statistical Methods and Computing.

Before the seventh semester begins: seven or eight courses in the major and at least 90 s.h. earned toward the

Before the eighth semester begins: nine or ten courses in the major.

During the eighth semester: enrollment in all remaining coursework in the major, all remaining GE CLAS Core courses, and a sufficient number of semester hours to graduate.

Sample Plans of Study

Sample plans represent one way to complete a program of study. Actual course selection and sequence will vary and should be discussed with an academic advisor. For additional sample plans, see MyUI.

Statistics, BS

Course

- · Statistics in Business, Industry, Government and Research Track [p. 1]
- Statistical Computing and Data Science Track [p. 2]
- Mathematical Statistics Track [p. 3]

Statistics in Business, Industry, **Government and Research Track**

	11410	
Academic Care	er	
Any Semester		
GE CLAS Core: S	ustainability ^a	
	Hours	0
First Year		
Fall		
CS:1210	Computer Science I: Fundamentals	4
MATH:1850	Calculus I ^c	4
RHET:1030 or ENGL:1200	Rhetoric or The Interpretation of	3 - 4

Literature GE CLAS Core: World Languages First Level

Proficiency or elective course

Hours

CSI:1600	Success at Iowa	2
	Hours	17-19
Spring		
STAT:2010	Statistical Methods and Computing	3
MATH:1860 MATH:2700	Calculus II	4 4
	Introduction to Linear Algebra iversity and Inclusion ^e	3
	orld Languages Second Level	4 - 5
Proficiency or ele	ective course d	
	Hours	18-19
Second Year Fall		
STAT:3100	Introduction to Mathematical	3
3171.3100	Statistics I f	3
STAT:3200	Applied Linear Regression	3
	atural Sciences with Lab ^e	4
GE CLAS Core: W	orld Languages Third Level ective course ^d	4 - 5
Tronciency or ele	Hours	14-15
Spring		
STAT:3101	Introduction to Mathematical Statistics II ^g	3
RHET:1030	Rhetoric	3 - 4
or ENGL:1200	or The Interpretation of Literature	
	istorical Perspectives ^e	3
GE CLAS Core: W	orld Languages Fourth Level ective course ^d	4 - 5
Proficiency or ele		12.15
Third Year	Hours	13-15
Fall		
STAT:5810	Research Data Management h	3
MATH:2850	Calculus III	4
	iternational and Global Issues ^e	3
	atural Sciences without Lab ^e	3
Elective course i	Harris	3
Spring	Hours	16
STAT:3210	Experimental Design and Analysis	3
	g	3
Major: upper-leve	el statistics course ^h	3
	terary, Visual, and Performing Arts	3
GE CLAS Core: Se	ocial Sciences ^e	3
Elective course '		3
Fourth Year	Hours	15
Fall		
	el statistics course ^h	3
Elective course i		3
Elective course i		3
Elective course		3
Elective course '		3
Spring	Hours	15
	el statistics course ^h	3
	alues and Culture ^e	3
Elective course i		3

Hours	15
Degree Application: apply on MyUI before deadline (typically in February for spring, September for fall) ^j	
Elective course ^I	3
Elective course	3

Hours	15
Total H	lours 123-129

- a Sustainability must be completed by choosing a course that has been approved for Sustainability AND for one of these General Education areas: Natural Sciences; Quantitative and Formal Reasoning; Social Sciences; Historical Perspectives; International and Global Issues; Literary, Visual, and Performing Arts; or Values and Culture.
- b Enrollment in this course requires completion of a placement exam.
- c Enrollment in math courses requires completion of a placement exam.
- d Students who have completed four years of a single language in high school have satisfied the GE CLAS Core World Languages requirement. Enrollment in world languages courses requires a placement exam, unless enrolling in a first-semester-level course.
- e GE CLAS Core courses may be completed in any order unless used as a prerequisite for another course. Students should consult with an advisor about the best sequencing of courses.
- f Typically this course is offered in fall semesters only. Check MyUI for course availability since offerings are subject to change.
- g Typically this course is offered in spring semesters only. Check MyUI for course availability since offerings are subject to change.
- h Students must complete STAT:5810 and 9 s.h. from approved courses for the Statistics in Business, Industry, Government and Research emphasis track.
- i Students may use elective courses to earn credit towards the total s.h. required for graduation or to complete a double major, minors, or certificates.
- j Please see Academic Calendar, Office of the Registrar website for current degree application deadlines. Students should apply for a degree for the session in which all requirements will be met. For any questions on appropriate timing, contact your academic advisor or Graduation Services.

Statistical Computing and Data Science Track

Course	Title	Hours
Academic Ca	reer	
Any Semeste	er	
OF OLAC O	c a	

GE CLAS Core: Sustainability ^a		
	Hours	0
First Year Fall		
CS:1210	Computer Science I: Fundamentals	4
MATH:1850	Calculus I ^c	4
RHET:1030 or ENGL:1200	Rhetoric or The Interpretation of Literature	3 - 4
GE CLAS Core: W Proficiency or ele	orld Languages First Level ective course ^d	4 - 5

CSI:1600	Success at Iowa	2
C31.1000	Hours	17-19
Spring	110413	1, 13
STAT:2010	Statistical Methods and Computing	3
MATH:1860	Calculus II	4
MATH:2700	Introduction to Linear Algebra	4
GE CLAS Core: [Diversity and Inclusion ^e	3
GE CLAS Core: \	World Languages Second Level	4 - 5
Proficiency or el	ective course ^a	
	Hours	18-19
Second Year		
Fall	A 1' 11' B	2
STAT:3200	Applied Linear Regression	3
CS:2210	Discrete Structures ^f	3
	Historical Perspectives ^e Natural Sciences without Lab ^e	3
	Norld Languages Third Level	4 - 5
Proficiency or el		4 - 3
	Hours	16-17
Spring		
CS:2230	Computer Șcience II: Data	4
	Structures ^f	
ENGL:1200	The Interpretation of Literature	3 - 4
or RHET:1030		
	Natural Sciences with Lab ^e	4
Proficiency or el	Norld Languages Fourth Level	4 - 5
Troncicity of Ci	Hours	15-17
Third Year	110413	15-17
Fall		
STAT:3100	Introduction to Mathematical	3
	Statistics I ^g	
MATH:2850	Calculus III	4
	nternational and Global Issues ^e	3
	Social Sciences ^e h	3
Elective course		3
	Hours	16
Spring		
CT + T O		_
STAT:3101	Introduction to Mathematical Statistics II	3
STAT:3210	Statistics II ¹ Experimental Design and Analysis ⁱ	
STAT:3210	Statistics II 1	3
STAT:3210 GE CLAS Core: L	Statistics II ¹ Experimental Design and Analysis ⁱ	3
STAT:3210 GE CLAS Core: l Elective course	Statistics II ¹ Experimental Design and Analysis ⁱ	3 3
STAT:3210 GE CLAS Core: L	Statistics II ¹ Experimental Design and Analysis ⁱ Literary, Visual, and Performing Arts h	3 3 3
STAT:3210 GE CLAS Core: Le Elective course Elective course	Statistics II ¹ Experimental Design and Analysis ⁱ	3 3 3
STAT:3210 GE CLAS Core: l Elective course	Statistics II ¹ Experimental Design and Analysis ⁱ Literary, Visual, and Performing Arts h h Hours	3 3 3
STAT:3210 GE CLAS Core: le Elective course Elective course Fourth Year Fall STAT:5810	Statistics II Experimental Design and Analysis iterary, Visual, and Performing Arts h h Hours Research Data Management f	3 3 3 15
STAT:3210 GE CLAS Core: L Elective course Elective course Fourth Year Fall STAT:5810 Major: upper-lev	Statistics II Experimental Design and Analysis iterary, Visual, and Performing Arts h h Hours Research Data Management f yel statistics course f	3 3 3 15
STAT:3210 GE CLAS Core: Le Elective course Elective course Fourth Year Fall STAT:5810 Major: upper-level Elective course	Statistics II Experimental Design and Analysis iterary, Visual, and Performing Arts h h Hours Research Data Management f yel statistics course f	3 3 3 15
STAT:3210 GE CLAS Core: Le Elective course Elective course Fourth Year Fall STAT:5810 Major: upper-lev Elective course Elective course Elective course	Statistics II Experimental Design and Analysis iterary, Visual, and Performing Arts h h Hours Research Data Management f yel statistics course f	33 33 15
STAT:3210 GE CLAS Core: Le Elective course Elective course Fourth Year Fall STAT:5810 Major: upper-level Elective course	Statistics II Experimental Design and Analysis iterary, Visual, and Performing Arts h h Hours Research Data Management f yel statistics course f h h	33 33 15 33 33 33 33
STAT:3210 GE CLAS Core: I Elective course Elective course Fourth Year Fall STAT:5810 Major: upper-lev Elective course Elective course Elective course Elective course	Statistics II Experimental Design and Analysis iterary, Visual, and Performing Arts h h Hours Research Data Management f yel statistics course f	33 33 15 33 33 33 33
STAT:3210 GE CLAS Core: I Elective course Elective course Fourth Year Fall STAT:5810 Major: upper-lev Elective course Elective course Elective course Elective course	Statistics II Experimental Design and Analysis iterary, Visual, and Performing Arts h h Hours Research Data Management f yel statistics course f h h h Hours	3 3 3 15
STAT:3210 GE CLAS Core: Ie Elective course Elective course Fourth Year Fall STAT:5810 Major: upper-level Elective course	Statistics II Experimental Design and Analysis iterary, Visual, and Performing Arts h h Hours Research Data Management vel statistics course h h h Hours	3 3 3 15 3 3 3 3 3
STAT:3210 GE CLAS Core: Ie Elective course Elective course Fourth Year Fall STAT:5810 Major: upper-level Elective course	Statistics II Experimental Design and Analysis iterary, Visual, and Performing Arts h h Hours Research Data Management vel statistics course h h h Hours vel statistics course f //alues and Culture e	3 3 3 3 15 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3

Total Hours	127-133
Hours	15
Degree Application: apply on MyUI before deadline (typically in February for spring, September for fall)	j
Elective course h	3
Elective course h	3

- a Sustainability must be completed by choosing a course that has been approved for Sustainability AND for one of these General Education areas: Natural Sciences; Quantitative and Formal Reasoning; Social Sciences; Historical Perspectives; International and Global Issues; Literary, Visual, and Performing Arts; or Values and Culture.
- b Enrollment in this course requires completion of a placement exam.
- c Enrollment in math courses requires completion of a placement exam.
- d Students who have completed four years of a single language in high school have satisfied the GE CLAS Core World Languages requirement. Enrollment in world languages courses requires a placement exam, unless enrolling in a first-semester-level course.
- e GE CLAS Core courses may be completed in any order unless used as a prerequisite for another course. Students should consult with an advisor about the best sequencing of courses.
- f Students must complete five courses for the Statistical Computing and Data Science emphasis track.
- g Typically this course is offered in fall semesters only. Check MyUI for course availability since offerings are subject to change.
- h Students may use elective courses to earn credit towards the total s.h. required for graduation or to complete a double major, minors, or certificates.
- i Typically this course is offered in spring semesters only. Check MyUI for course availability since offerings are subject to change.
- j Please see Academic Calendar, Office of the Registrar website for current degree application deadlines. Students should apply for a degree for the session in which all requirements will be met. For any questions on appropriate timing, contact your academic advisor or Graduation Services.

Hours

Mathematical Statistics Track Title

Course

Academic Career

ricadonnie dare	··	
Any Semester		
GE CLAS Core: Si	ustainability ^a	
	Hours	0
First Year		
Fall		
CS:1210	Computer Science I: Fundamentals	4
MATH:1850	Calculus I ^c	4
RHET:1030 or ENGL:1200	Rhetoric or The Interpretation of Literature	3 - 4
GE CLAS Core: World Languages First Level Proficiency or elective course		4 - 5
CSI:1600	Success at Iowa	2
	Hours	17-19

Spring		
STAT:2010	Statistical Methods and Computing	3
MATH:1860	Calculus II	4
MATH:2700	Introduction to Linear Algebra Diversity and Inclusion ^e	4
	Norld Languages Second Level	3 4 - 5
Proficiency or el	ective course ^u	
Coord Voor	Hours	18-19
Second Year Fall		
STAT:3100	Introduction to Mathematical Statistics I	3
ENGL:1200 or RHET:1030	The Interpretation of Literature Or Rhetoric	3 - 4
	Historical Perspectives ^e	3
GE CLAS Core: \ Proficiency or el		4 - 5
C	Hours	13-15
Spring STAT:3101	Introduction to Mathematical Statistics II ⁹	3
STAT:3200	Applied Linear Regression	3
MATH:2850	Calculus III	4
GE CLAS Core: \	Norld Languages Fourth Level	4 - 5
Proficiency or el	Hours	14-15
Third Year	nouis	14-13
Fall		
MATH:3770	Fundamental Properties of Spaces and Functions I	4
	vel statistics course ^{h, i}	3
	nternational and Global Issues ^e	3
GE CLAS Core: l	Literary, Visual, and Performing Arts	3
Elective course	j	3
	Hours	16
Spring		
STAT:3210	Experimental Design and Analysis	3
	Natural Sciences without Lab ^e	3
	Social Sciences ^e	3
Elective course Elective course		3
Elective course	Hours	
Fourth Year	nours	13
Fall Major: upper-lev	vel statistics course ^{h, i}	3
GE CLAS Core: N	Natural Sciences with Lab ^e	4
	Values and Culture e	3
Elective course	j	3
Elective course	J	3
_	Hours	16
Spring Major upper lev	vol statistics source h, i	2
Major: upper-lev	vel statistics course ^{h, i} j	3
Elective course		3
Elective course		
	,	3
Elective course		3

Degree Application: apply on MyUI before deadline (typically in February for spring, September for fall)

Hours 15 Total Hours 124-130

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- b Enrollment in this course requires completion of a placement exam.
- c Enrollment in math courses requires completion of a placement exam.
- d Students who have completed four years of a single language in high school have satisfied the GE CLAS Core World Languages requirement. Enrollment in world languages courses requires a placement exam, unless enrolling in a first-semester-level course.
- e GE CLAS Core courses may be completed in any order unless used as a prerequisite for another course. Students should consult with an advisor about the best sequencing of courses.
- f Typically this course is offered in fall semesters only. Check MyUI for course availability since offerings are subject to change.
- g Typically this course is offered in spring semesters only. Check MyUI for course availability since offerings are subject to change.
- h Students must complete MATH:3770 and 9 s.h. from approved courses for the Mathematical Statistics emphasis track
- i Students who use STAT:4100 and STAT:4101 to satisfy the core requirements may not use those courses to satisfy the track requirement. Typically STAT:4100 is offered in fall semesters only and STAT:4101 is offered in spring only. Check MyUI for course availability since offerings are subject to change.
- j Students may use elective courses to earn credit towards the total s.h. required for graduation or to complete a double major, minors, or certificates.
- k Please see Academic Calendar, Office of the Registrar website for current degree application deadlines. Students should apply for a degree for the session in which all requirements will be met. For any questions on appropriate timing, contact your academic advisor or Graduation Services.