The program requirements for the Bachelor of Science degree with a major in **Statistics** are given below. A minimum of 50 credit hours (excluding prerequisites and GE and college requirements) and a minimum of 105 credit hours in total are required for the major; 121 hours are required for graduation.

1. Statistics Major Core Requirements

Course Number	Course Title	Credit Hours	Credit Hours Counted Toward Major
Prerequisites[a]			
CSE 1221, 1222, 1223, or 1224	Intro to Computer Programming in { Matlab, C++, Java, Python }	3	0
Math 1152	Calculus II	5	0
Required Core			
Math 2153	Calculus III	4	4
Math 2568	Linear Algebra	3	3
Choice of			
(1) Math 3345	Foundations of Higher Mathematics	3	3
Math 4547	Introductory Analysis I	3	3
OR			
(2) 6 hours in	Mathematics at the 2000-level or higher[b]	6	6
Stat 3201	Intro Prob Data Analytics	3	3
Stat 3202	Intro Stat Inf Data Analytics	4	4
Stat 3301	Stat Modeling for Discovery I	3	3
Stat 3302	Stat Modeling for Discovery II	3	3
Stat 3410	Principles of Data Collection and Analysis	3	3
Stat 4301	Advanced Statistical Inference	3	3
Stat 4302	Computational Statistics	3	3
Total		43	35

[a] Students are encouraged, but not required, to take a 1000–2000 level Statistics course (1350, 1430, 1430H, 2450 or 2480) as a prerequisite introduction to the major.
[b] Approved courses include Math 2255, 2415, 3345, 3350, 3607, 4350, 4507, 4547, 4548, 4556, 4557, 4575, and 4578.

2. <u>Statistics Major Electives</u>

Students must complete an additional 15 hours of electives. This must include 9 hours in Statistics at the 3000-level or higher (Category I: selected from the courses: Stat 3303, 4620, 5510[c], 5550, 5730, 5740) and 6 hours in Statistics or Mathematics at the 2000-level or higher (Category II: selected from the previous list of Statistics courses and the following Mathematics courses: Math 2255, 2415, 3345, 3350, 3607, 4350, 4507, 4547, 4548, 4556, 4557, 4575, 4578). Students wishing to pursue graduate work in Statistics may wish to take 6 of these hours from the Mathematics Department in order to prepare for more theoretically-oriented graduate work. In particular, the sequence Math 3345, Math 4547, and Math 4548 is recommended for students planning to attend graduate school.

3. <u>General Education & College of Arts and Sciences Requirements</u>

Students must satisfy the General Education requirements for the Bachelor of Science degree in the College of Arts and Sciences. Math 1151[d] is required for the major core curriculum; it is suggested that students use this course to satisfy the category indicated in the table below. Students in the Statistics major satisfy the GE's embedded literacy requirements by taking Stat 3301 (embedded literacy in data analysis) and Stat 3302 (embedded literacies in advanced writing and technology).

GE Category[e]	Suggested Course	Category Credit Hours
Launch Seminar (AcadAff 1201)		1
F: Writing and Information Literacy		3
F: Mathematical & Quantitative Reasoning/Data Analysis	Math 1151[d] (5 cr. hrs.)	3–5
F: Literary, Visual and Performing Arts		3
F: Historical & Cultural Studies		3
F: Natural Science		4–5
F: Social & Behavioral Sciences		3
F: Race, Ethnic and Gender Diversity		3
T: Citizenship for a Diverse & Just World		4–6
T: Student Choice		4–6
Reflection Seminar (AcadAff 4001)		1
World Languages		12
ASC/NMS Survey		1
Minimum Total Credit Hours (w/Math 1151)		47

[c] Stat 5510 is not offered regularly and students should not plan on it being offered before they expect to graduate.
[d] Math 1151 may be replaced by Math 1140 and 1141.
[e] F: GE Foundations; T: GE Theme.

4. Sample Four-Year Curriculum

Year	Autumn		Spring	
	Course	**Hours**	**Course**	**Hours**
1	ASC 1100	1	1000-2000 level Intro Stat	3
	Math 1151: Calc I	5	Math 1152: Calc II	5
	GE Hist. & Cult. Studies	3	GE Writing & Inform. Lit.	3
	GE World Languages	4	GE World Languages	4
	Elective	2	AcadAff 1201	1
		Total: 15		Total: 16
2	Math 2153: Calc III	4	Math 2568: Linear Algebra	3
	Stat 3201: Intr Prob for DA	3	Stat 3202: Intr Stat Inf DA	4
	GE Natural Science	4–5	CSE 122x: Intr Comp Prog	3
	GE World Languages	4	Elective	3
			GE Race, Ethnic and Gender Diversity	3
		Total: 15		Total: 16
3	Stat 3301: Stat Model Disc I	3	Stat 3302: Stat Model Disc II	3
	Stat 3410: Prin Data Collect	3	Stat elective[f]	3
	Math 3345: Found Higher Math[g]	3	Math 4547: Intro Analysis I[g]	3
	Elective	3	GE Theme: Student Choice[h]	3
	GE Theme: Citizenship for a Diverse & Just World	3	GE Literary, Visual and Performing Arts	3
		Total: 15		Total: 15
4	Stat 4301: Adv Stat Inf	3	Stat 4302: Comp Stat	3
	Stat elective[f]	3	Stat elective[f]	3
	Stat/Math Elective[i]	3	Stat/Math Elective[i]	3
	GE Social & Behavioral Sciences	3	GE Theme: Student Choice[h]	3
	GE Theme: Citizenship for a Diverse & Just World	3	Elective	3
			AcadAff 4001	1
		Total: 15		Total: 16

[f] Category I Stat Elective: Choice of any of the following Stat classes: Stat 3303, 4620, 5510 (not offered regularly), 5550, 5730, 5740.

[g] The sequence Math 3345 - Math 4547 is one option; this can be replaced with two Math courses at the 2000-level or higher selected from a list of approved electives (see page 1).

[h] The 4–6 GE Thematic Pathway credit hours must be taken in the same theme.

[i] Category II Stat/Math Elective: Choice of any of the following Stat or Math classes: Stat 3303, 4620, 5510 (not offered regularly), 5550, 5730, 5740; Math 2255, 2415, 3345, 3350, 3607, 4350, 4507, 4547, 4548, 4556, 4557, 4575, 4578.