B.S. Degree – Statistics Major
Program Requirements

The Ohio State University
College of Arts and Sciences

The program requirements for the Bachelor of Science degree with a major in **Statistics** are given below. A minimum of 50 credit hours (excluding GE requirements and prerequisite) is required for completion of the major, and a minimum of 116 credit hours in total is 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
Prerequisite			
CSE 1221, 1222, or 1223	Intro to Computer Programming in { Matlab, C++, Java }	3	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[c]	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		38	35

[c] Approved courses include Math 2255, 2415, 3345, 3350, 3607, 4350, 4507, 4547, 4548, 4556, 4557, 4575, and 4578.

2. Statistics Major Electives

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, 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. General Education Requirements

Students must satisfy the General Education requirements for the Bachelor of Science degree in the College of Arts and Sciences. Note that Math 1151[a] and Math 1152 are required for the major core curriculum. It is suggested that students use these courses to satisfy the categories shown in the table below. Stat 1550 is suggested to satisfy Data Analysis requirement, as shown below.

GE Category	Suggested or Required Course	Minimum Course Credit Hours	Minimum Category Credit Hours
Writing			6
Literature			3
Arts			3
Mathematics	Math 1151[a]	5	5
Data Analysis	Stat 1550[b]		3
Natural Science			10
Historical Study			3
Social Science			6
Culture and Ideas or Historical Study			3
Language			12
Open Option 1	Math 1152	5	5
Open Option 2		3	3
ACS/NMS Survey			1
Total			63

[a] Math 1151 may be replaced by Math 1141.
[b] Stat 1550 may be replaced by Statistics 1000–2000 level GE data analysis courses (1350, 1430, 1430H, 1450, 2450, and 2480) or an upper-level elective if a student enters the program after their first year.

4. Sample Four-Year Curriculum

Year	Autumn		Spring	
	Course	**Hours**	**Course**	**Hours**
1	ASC 1100	1	Stat 1550: Stat Reasoning	3
	Math 1151: Calc I	5	Math 1152: Calc II	5
	GE Open Option	3	English 1110	3
	GE Foreign Language I	4	GE Foreign Language 2	4
	Elective	2		
		Total: 15		Total: 15
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 Physical Science (lab)	4	GE Writing Level 2	3
	GE Foreign Language 3	4	CSE 122(1,2,3): Matlab, C++, Java	3
			Elective	3
		Total: 15		Total: 16
3	Stat 3301: Stat Model Disc 1	3	Stat 3302: Stat Model Disc 2	3
	Stat 3410: Prin Data Collect	3	Stat elective[b]	3
	Math 3345: Found Higher Math[a]	3	Math 4547: Intro Analysis I[a]	3
	GE Social Sciences	3	GE Biological Sciences (lab)	4
	GE Natural Science	3	GE Social Sciences	3
		Total: 15		Total: 16
4	Stat 4301: Adv Stat Inf	3	Stat 4302: Comp Stat	3
	Stat elective[b]	3	Stat elective[b]	3
	Stat/Math Elective[c]	3	Stat/Math Elective[c]	3
	GE Historical Study	3	GE Cultural & Ideas or Hist. Study	3
	GE Arts	3	GE Literature	3
		Total: 15		Total: 15

[a] 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).

[b] Category I Stat Elective: Choice of any of the following Stat classes: Stat 3303, 4620, 5510, 5550, 5730, 5740.

[c] Category II Stat/Math Elective: Choice of any of the following Stat or Math classes: Stat 3303, 4620, 5510, 5550, 5730, 5740; Math 2255, 2415, 3345, 3350, 3607, 4350, 4507, 4547, 4548, 4556, 4557, 4575, 4578.