Idaho State University

Catalog Year 20XX-20XX
B.S., Statistics (Odd Fall Start)
The program starts in odd-numbered years.

(For internal use only)
☐ *No change*
☐ *UCC proposal*

A Major Academic Plan (MAP) is one way to complete a degree in a set number of semesters. The *example* below is only one strategy. Actual plans for individual students will vary based on advisor recommendations and academic needs. Official Program Requirements including Major, General Education, Electives, and university requirements (see pg.2) are based on Catalog Year.

Course Subject and Title	Cr.	Min. Grade	*GE, UU or UM	**Sem. Offered	Prerequisite	Co-Requisite
Semester One						
ENGL 1101 Writing and Rhetoric I (GE Objective 1)	3	C-	GE	F, S, Su	Appropriate placement score	
Math 1170 Calculus I (GE Objective 3)	4	C-	GE	F, S, Su	Appropriate placement score or Math 1144 or Math 1147	
CS 1181 (GE Objective 7)	3	C	GE	F, S	Math 1143 or Math 1147	
GE Objective 4	3		GE	F, S, Su		
Free Elective	3			F, S, Su		
Total	16					
Semester Two						
GE Objective 1: ENGL 1102 Writing and Rhetoric II	3	C-	GE	F, S, Su	ENGL 1101 or equivalent	
Math 1175 Calculus II	3	C-		F, S, Su	Math 1170	
Math 3350 Statistics for Scientists	3	C-	UM	F, S	Math 1170	
GE Objective 4	3		GE	F, S, Su		
Free Elective	3					
Total	15					
Semester Three						
Math 2240 Linear Algebra***	3	C-		F, S, Su	Math 1170	
Math 3352 Introduction to Probability	3	C-	UM	F, S	Math 1175 or permission	
Math 2287 Foundations in Mathematics (Recommended)	3		GE	F, S, Su		
GE objective 6	3		GE	F, S, Su		
Free Elective	3					
Total	15					
Semester Four						
Math 3326 Elementary Analysis	3	C-	UM	F, S	Math 1175 and either MATH 2240 or MATH 2287	
GE Objective 5	3		GE	F, S, Su		
GE Objective 6	3		GE	F, S, Su		
Math 2275 Calculus III	4					
Total	13					
Semester Five						
Math 4450 Mathematical Statistics I	3	C-	UM	OF	Math 3326 and Math 3352	
Statistics Elective (see list)	3		UM		(See list)	
GE Objective 5 (Lecture + lab)	4		GE	F, S, Su		
GE Objective 9	3		GE	F, S, Su		
Free Elective	3					
Total	16					
Semester Six						
Math 4451 Mathematical Statistics II	3		UM	ES	Math 4450	
Statistics Elective (see list)	3		UM		(see list)	
Free Electives	9					
Total	15					
Semester Seven						
Math 4457 Applied Regression Analysis	3		UM	EF	Math 3350 or Math 3352	
Statistics Elective (see list)	3		UM		(see list)	
Free Electives	6					
GE Objective 2	3					
Total	15					
Semester Eight						
Math 4459 Applied Multivariate Analysis	3			OS	Math 2240 and one of the following: MATH 3350, 4457, 4458	
Free Electives	12					
Total	15					

*GE=General Education Objective, UU=Upper Division University, UM= Upper Division Major
**See Course Schedule section of Course Policies page in the e-catalog (or input F, S, Su, etc.)

Major Requirements	CR
MAJOR REQUIREMENTS	
Mathematics Core	**14**
Math 1170 Calculus I (GE Objective 3)	-
Math 1175 Calculus II	4
Math 2275 Calculus III	4
Math 2240 Linear Algebra	3
Math 3326 Elementary Analysis	3
CS 1181 Computer Science and Programming I^ (GE Objective 7)	-
Statistics Major Requirements	**18**
Math 3350 Statistics for Scientists	3
Math 3352 Introduction to Probability	3
Math 4450 Mathematical Statistics I (Odd Fall)	3
Math 4451 Mathematical Statistics II (Even Spring)	3
Math 4457 Applied Regression Analysis (Even Fall)	3
Math 4459 Applied Multivariate Analysis (Odd Spring)	3
Choose 9 Upper Division credits from approved major list:	**9**
MATH 3310 Mathematical Modeling (Spring)	3
MATH 3327 Vector Analysis (Even Fall)	3
MATH 3360 Differential Equations (Fall, Spring)	3
MATH 4406 Advanced Linear Algebra (Odd Fall)	3
MATH 4423 Introduction to Real Analysis I (Fall)	3
MATH 4424 Introduction to Real Analysis II (Odd Spring)	3
MATH 4441 Introduction to Numerical Analysis I (Odd Fall)	3
MATH 4442 Introduction to Numerical Analysis II (Even Spring)	3
MATH 4453 Topics in Statistics^^	1-3
MATH 4458 Experimental Design (D)	3

Additional electives may be approved potential statistics elective, pending faculty advisor approval. Such courses may include: MATH 3332 (Data Science and Applied Machine Learning), MATH 4405 (Numeric Linear Algebra), MATH 4445 (Optimization Methods and Their Applications), MATH 4477 (Theoretical Foundations of Deep Learning).

GENERAL EDUCATION OBJECTIVES Satisfy Objectives 1,2,3,4,5,6 (7 or 8) and 9		36 cr. min
1. Written English (6 cr. min)	ENGL 1101	3
	ENGL 1102	3
2. Spoken English (3 cr. min)	BIOL 1104 or COMM 1101	3
3. Mathematics (3 cr. min)	MATH 1170	4
4. Humanities, Fine Arts, Foreign Lang. **(2 courses; 2 categories; 6 cr. min)**		
5. Natural Sciences **(2 lectures-different course prefixes, 1 lab; 7 cr. min)**		
6. Behavioral and Social Science **(2 courses-different prefixes; 6 cr. min)**		
One Course from EITHER Objective 7 OR 8 **(1course; 3 cr. min)**		
7. Critical Thinking **CS 1181**		3
8. Information Literacy		
9. Cultural Diversity **(1 course; 3 cr. min)**		
General Education Elective to reach 36 cr. min. **(if necessary)**		
Total GE		**38**

Undergraduate Catalog and GE Objectives by Catalog Year
http://coursecat.isu.edu/undergraduate/programs/

MAP Credit Summary	**CR**
Major	41
General Education	38
Upper Division Free Electives to reach 36 credits	6
Free Electives to reach 120 credits	35
TOTAL	120

Graduation Requirement Minimum Credit Checklist	**Confirmed**
Minimum 36 cr. General Education Objectives (15 cr. AAS)	
Minimum 15 cr. Upper Division in Major (0 cr. Associate)	
Minimum 36 cr. Upper Division Overall (0 cr. Associate)	
Minimum of 120 cr. Total (60 cr. Associate)	

Advising Notes

Student must select additional Upper Division credits to reach 36.
^Two courses (ME 1165 & 2266) may be substituted for CS 1181.
^^ MATH 4453 may be repeatable up to 3 credits.
***Regularly offered over the summer, useful to avoid 3 math classes. Statistic Electives courses should be discussed with the statistics advisor. These courses are taught infrequently, and many require additional prerequisites.

MAP Completion Status (for internal use only)

	Date
CAA or COT:	

Complete College American Momentum Year
Math and English course in first year-Specific GE MATH course identified
9 credits in the Major area in first year
15 credits each semester (or 30 in academic year)
Milestone courses

Form Revised 5.12.2026