South Dakota State University

Bachelor of Science
Major: Mathematics
2021-2022 Sample 4-Year Plan
Total Degree Requirements: 120 credits

Student _____ **Student ID#** _____ **Student Phone #** _____

Advisor _____ **Minimum GPA** 2.00 **Minor/Career Interest(s)** _____

Students are not limited to this plan; it is meant to be used as a guide for planning purposes in consultation with your advisor. The sample schedule is one possible path to completing your degree within four years. For official program requirements, please refer to the Undergraduate Catalog.

First Year

Fall

Prefix + Number	Course Title	Prerequisites/Comments	Credits	Semester	Grade
ENGL 101	Composition I (SGR #1)	p. Placement	3		
INFO 101	Introduction to Informatics (SGR #6)		3		
MATH 123	Calculus I (SGR #5)	p. Placement	4		
MATH 198	The Mathematics Profession		1	F	
PHYS 111-111L or PHYS 211-211L or PHYS 213-213L or CHEM 106-106L or CHEM 112-112L or BIOL 151-151L	Introduction to Physics I and Lab (SGR #6) or University Physics I and Lab (SGR #6) or University Physics II and Lab (SGR #6) or Chemistry Survey and Lab (SGR #6) or General Chemistry I and Lab (SGR #6) or General Biology I and Lab (SGR #6)	PHYS 111: p. MATH 114 or higher PHYS 211: p. MATH 123 (completed or concurrent) PHYS 213: p. PHYS 211 & MATH 125 (completed or concurrent) CHEM 106: p. 1 MATH course or placement CHEM 112: p. MATH 114 or higher (completed or concurrent)	4		
		Total Credit Hours	15		

Spring

Prefix + Number	Course Title	Prerequisites/Comments	Credits	Semester	Grade
ENGL 201	Composition II (SGR #1)	p. ENGL 101	3		
MATH 125	Calculus II	p. MATH 123	4		
SGR #2	Oral Communication		3		
SGR #3	Social Sciences/Diversity		3		
SGR #4	Arts & Humanities/Diversity		3		
		Total Credit Hours	16		

Second Year

Fall

Prefix + Number	Course Title	Prerequisites/Comments	Credits	Semester	Grade
MATH 225	Calculus III	p. MATH 125	4		
MATH 230	Sophomore Seminar	p. MATH 125	1	F	
MATH 250	Introduction to Linear Algebra and Proof	p. MATH 123	3		
STAT 382	Probability and Statistics I	p. MATH 125	3	F	
General Electives			3		
		Total Credit Hours	14		

Spring

Prefix + Number	Course Title	Prerequisites/Comments	Credits	Semester	Grade
MATH 253	Logic, Sets, and Proof	p. MATH 250	4		
MATH 321 or MATH 316	Differential Equations or Discrete Math	MATH 321: p. MATH 125; MATH 316: p. MATH 253 or MATH 250	3		
SGR #3	Social Sciences/Diversity		3		
SGR #4	Arts & Humanities/Diversity		3		
MATH/STAT 300-400 Level Electives			3		
		Total Credit Hours	16		

Information Subject to Change. This is not a contract.

p. = Course Prerequisite
Semester: F = Fall, S = Spring, SU = Summer

Third Year

Fall

Prefix + Number	Course Title	Prerequisites/Comments	Credits	Semester	Grade
Take one of MATH 315 MATH 413 or MATH 425	 Linear Algebra Abstract Algebra I or Real Analysis I	 p. MATH 250 p. MATH 253 p. MATH 253	 3 or 3 or 3		
MATH/STAT 300-400 Level Electives			3		
General Electives			9		
		Total Credit Hours	15		

Spring

Prefix + Number	Course Title	Prerequisites/Comments	Credits	Semester	Grade
Take one of MATH 315 MATH 413 or MATH 425	 Linear Algebra Abstract Algebra I or Real Analysis I	 p. MATH 250 p. MATH 253 p. MATH 253	 3 or 3 or 3		
MATH/STAT 300-400 Level Electives			3		
General Electives			9		
		Total Credit Hours	15		

Fourth Year

Fall

Prefix + Number	Course Title	Prerequisites/Comments	Credits	Semester	Grade
MATH 401	Senior Capstone		2		
MATH/STAT 300-400 Level Electives			3		
General Electives			10		
		Total Credit Hours	15		

Spring

Prefix + Number	Course Title	Prerequisites/Comments	Credits	Semester	Grade
MATH 401	Senior Capstone		2		
MATH/STAT 300-400 Level Electives			2		
General Electives			10		
		Total Credit Hours	14		

Comments/Notes

The Department of Mathematics and Statistics has additional plans of study in different focus areas including Applied Mathematics and Actuarial/Financial Mathematics. Please contact your advisor for additional information.

Students from all academic majors can pursue graduation with Fishback Honors College distinction. View the Honors program requirements.