SOUTH DAKOTA STATE UNIVERSITY

Associate of Science
Major: Data Science
2021-2022 Sample 2-Year Plan
Total Degree Requirements: 60 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 – Option 1, stacks into B.S. in Data Science or B.S. in Mathematics with Data Science Specialization

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		
SGR #2	Oral Communication		3		
STAT 101	Introduction to Data Science	Available online	3	F	
		Total Credit Hours	16		

Spring

Prefix + Number	Course Title	Prerequisites/Comments	Credits	Semester	Grade
CSC 150	Computer Science I		3		
ENGL 201 or ENGL 277	Composition II (SGR #1) or Technical Writing in Engineering (SGR #1)	p. ENGL 101	3		
MATH 125	Calculus II	p. MATH 123	4		
SGR #3	Social Sciences/Diversity		3		
SGR #4	Arts & Humanities/Diversity		3		
		Total Credit Hours	16		

Second Year - Option 1, stacks into B.S. in Data Science or B.S. in Mathematics with Data Science Specialization

Fall

Prefix + Number	Course Title	Prerequisites/Comments	Credits	Semester	Grade
MATH 250	Introduction to Linear Algebra and Proof	p. MATH 123 available online in the spring	3		
STAT 382	Probability and Statistics I	p. MATH 125	3	F	
SGR #3	Social Sciences/Diversity		3		
STAT 415	R Programming	p. INFO101 or CSC 150 online	3	F	
General Electives			2		
		Total Credit Hours	14		

Spring

Prefix + Number	Course Title	Prerequisites/Comments	Credits	Semester	Grade
STAT 410	SAS Programming	online	3	S	
STAT 482	Probability and Statistics II	p. STAT 382	3	S	
General Electives	General Electives		8		
		Total Credit Hours	14		

Information Subject to Change. This is not a contract.

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

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First Year – Option 2, stacks into Bachelor's Degrees other than Mathematics or Data Science

Fall

Prefix + Number	Course Title	Prerequisites/Comments	Credits	Semester	Grade
STAT 281	Introduction to Statistics	p. MATH 121/L available online	3		
INFO 101	Introduction to Informatics (SGR #6)		3		
MATH 121/L	Survey of Calculus and Lab (SGR #5)	p. Placement or MATH 114	5		
STAT 101	Introduction to Data Science		3	F	
			14		

Spring

Prefix + Number	Course Title	Prerequisites/Comments	Credits	Semester	Grade
CSC 150	Computer Science I		3		
ENGL 101	Composition I (SGR #1)	p. Placement	3		
SGR #3	Social Sciences/Diversity		3		
SGR #4	Arts & Humanities/Diversity		3		
STAT 441	Statistical Methods II	p. STAT 281 available online spring and summer	3		
		Total Credit Hours	15		

Second Year - Option 2, stacks into Bachelor's Degrees other than Mathematics or Data Science

Fall

Prefix + Number	Course Title	Prerequisites/Comments	Credits	Semester	Grade
ENGL 201 or ENGL 277	Composition II (SGR #1) or Technical Writing in Engineering (SGR #1)	p. ENGL 101	3		
STAT 442	Exploratory Data Analysis	p. STAT 281	3	F	
SGR #2	Oral Communication		3		
STAT 415	R Programming	p. INFO101 or CSC 150 online	3	F	
General Electives	General Electives		4		
		Total Credit Hours	16		

Spring

Prefix + Number	Course Title	Prerequisites/Comments	Credits	Semester	Grade
MATH 250	Mathematics for Computer Science	p. MATH 121/L available online in the spring	3		
STAT 410	SAS Programming		3	S	
SGR #3	Social Sciences/Diversity		3		
General Electives	General Electives		6		
		Total Credit Hours	15		

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.

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Semester: F = Fall, S = Spring, SU = Summer