MATHEMATICS, BS

Code	Title	Credits
Mathematics		37
MATH-151	CALCULUS I	
MATH-152	CALCULUS II	
MATH-207	DISCRETE MATH I	
MATH-208	DISCRETE MATH II	
or MATH-345	GRAPH THEORY	
MATH-241	LINEAR ALGEBRA	
MATH-251	CALCULUS III	
MATH-341	ABSTRACT ALGEBRA I	
MATH-351	INTRODUCTION TO REAL ANALYSIS I	
MATH-492	SENIOR COMPREHENSIVE PROJECT	
MATH-252	ORDINARY DIFF. EQUATIONS (or higher) [1]	
CS-131	COMPUTER SCIENCE I	4
Select one of the following:		3-4
CS-132	COMPUTER SCIENCE II	
or ENGR-220	INTRODUCTION TO MATLAB	
Foreign Language [2]		3
General Education Requirements (https://catalog.sbu.edu/undergraduate/degree-requirements) [3]		37
Electives		36-37
Total Credits		120-122

1. CS-332 (Theory of Computation) may be used as three of these credits. The student should choose the nine credits of mathematics electives in consultation with his or her adviser to complement the student's career goals. In particular, a student interested in secondary education certification must use MATH-312, MATH-322, and MATH-323 as the electives in order to be prepared for the certification examinations.
2. The foreign language must be at level 202 or higher. Students not prepared to begin at this level will need to take additional courses in language, which will be counted as general electives.
3. SBU-102 may be taken either semester the first year. THFS-101 is highly recommended in the first two years. MATH-151 satisfies the Quantitative Literacy Distribution for the General Education Requirement.

The Senior Comprehensive Requirement

During the student's senior year (or earlier), a student majoring in mathematics will ask a faculty member to act as the mentor for their Senior Comprehensive Project. The student may make this request of any faculty member. The student and faculty member will work together to select a topic related to an upper-level mathematics course that the student has taken or is currently taking as the subject for the project. This topic should delve into material beyond the scope of the course. Under the guidance of the faculty mentor, the student will develop this topic to produce a paper. The student will then give a talk, based on that paper, to the department faculty, other math majors, and any additional interested parties. The student should register for MATH-492. Senior Comprehensive Project for their graduation semester.

First Year

Fall	Credits	Spring	Credits
MATH-151	4	SBU-102	1
SBU-101	2	MATH-152	4
ENG-101	3	MATH-207	3
General Education Requirement	3	CS-131	4
Foreign Language [1]/General Elective	3	ENG-102	3
		Foreign Language [1]/General Elective	3
	15		18

Second Year

Fall	Credits	Spring	Credits
MATH-251	4	MATH-241	3
CS-132	4	General Electives	6
MATH-208 or 345	3	General Education Requirements	6
General Education Requirements	3		
	14		15

Third Year

Fall	Credits	Spring	Credits
MATH-341 or 351	3	Mathematics Elective	3
General Education Requirements	7	General Education Requirements	6
General Elective	3	General Electives	6
	13		15

Fourth Year

Fall	Credits	Spring	Credits
MATH-351 or 341	3	MATH-492	1
Mathematics Elective	3	Mathematics Elective	3
General Electives	9	General Electives	9
	15		13

Total Credits 118

1. The foreign language must be at level 202 or higher. Students not prepared to begin at this level will need to take additional courses in language, which will be counted as general electives.