## MATHEMATICS, BACHELOR OF SCIENCE

Code	Title	Hours				
General Education Courses						
I. Communication						
English:						
Select two of the	following:	6				
ENGL U101	Composition I					
ENGL U102	Composition II					
Speech:						
SPCH U201	Foundations in Oral Communication	3				
II. Mathematics, Logic & Natural Sciences						
Mathematics: <sup>1,2</sup>						
MATH U141	Calculus I	4				
MATH U142	Calculus II	4				
Natural Science (	w/ lab):					
Select one of the	following:	4				
ASTR U111	Descriptive Astronomy					
& U111L	and Descriptive Astronomy Laboratory					
BIOL U101 & U101L	Introductory Biology I and Introductory Biology I Lab					
BIOL U102	Introductory Biology II					
& U102L	and Introductory Biology II Lab					
BIOL U110 & U110L	General Biology and General Biology Lab					
BIOL U220	Botany and Society					
& U220L	and Botany and Society Laboratory					
BIOL U244 & U244L	Human Anatomy and Physiology II and Human Anatomy and Physiology II Lab					
CHEM U106 & U106L	Chemistry and Society and Chemistry and Society Lab					
CHEM U109 & U109L	Chemistry of Living Things and Chemistry of Living Things Lab					
CHEM U111	General Chemistry					
& U111L	and General Chemistry Lab					
CHEM U112 & U112L	General Chemistry and Qualitative Analysis and General Chemistry and Qualitative Analysis Lab					
GEOL U101 & U101L	Physical Geology and Physical Geology Lab					
GEOL U102	Historical Geology					
& U102L	and Historical Geology Lab					
GEOL U103 & U103L	Environmental Geology and Environmental Geology Lab					
PHYS U101	Introduction to Physical Science					
& U101L	and Introduction to Physical Science Laboratory					
PHYS U201	General Physics I					
& U201L	and General Physics I Lab					
PHYS U202	General Physics II					
& U202L	and General Physics II Lab					
Math, Logic and/o	or Natural Science:					
Select any Natura	Il Science course listed above or.	3-4				
BIOF 0506	Genetics and Society					

BIOL U240	Human Biology and Society	
BIOL U260	Emerging Infectious Diseases	
BIOL U270	Environmental Science	
III. Information Te	chnology	
Information Tech	inology: <sup>1</sup>	
CSCI U138	Introduction to Computer Technology	3
or CSCI U150	Introduction to Computer Science	
IV. Fine Arts, Hum	anities & History	
Fine Arts:		
Select one of the	following:	3
AFAM U204	African American Culture	
ARTH U101	Introduction to Art	
ARTH U105	History of Western Art: Prehistory - Middle Ages	
ARTH U106	History of Western Art: Renaissance - Modern	
MUSC U110	Introduction to Music	
MUSC U140	History of American Popular Music	
THEA U161	Introduction to Theatre Art	
THEA U170	Fundamentals in Acting	
History:		
Select one of the	following:	3
HIST U101	Introduction to World History I	
HIST U102	Introduction to World History II	
HIST U105	History of the United States to 1877	
HIST U106	History of the United States from 1865	
V. Foreign Langua	ge & Culture	
Foreign Languag	e: <sup>3</sup>	
Select one of the	following: <sup>2</sup>	3
ASLG U101	American Sign Language I	
FREN U101	Introductory French I	
GERM U101	Introductory German I	
SPAN U101	Introductory Spanish I	
VI. Social & Behav	vioral Sciences	
Social & Behavio	ral Science:	
Select one of the	following:	3
AFAM U201	Introduction to African American Studies	
ANTH U102	Understanding Other Cultures	
ECON U221	Principles of Macroeconomics	
ECON U222	Principles of Microeconomics	
GEOG U103	Introduction to Geography	
POLI U101	American National Government	
PSYC U101	Introduction to Psychology	
SOCY U101	Introduction to Sociology	
SPCH U210	Interpersonal Communication	
UNIV U201	Leadership Development I	
WGST U101	Introduction to Women's & Gender Studies	
VII. General Educa	ation Electives	
General Educatio	n Electives:	
Select any appro academic-catalo education-course	ved general education course or courses (https:// g.uscupstate.edu/academic-programs/general- es/)	6
Major Requireme	ents <sup>1</sup>	
Select one of the	following concentrations:	33

Mathematics Concentration				
MATH U315	Statistical Methods I		<sup>1</sup> A minim	
MATH U340	Mathematical Structures and Proof		- Student	
MATH U344	Linear Algebra I		<sup>3</sup> The min	
MATH U346	Modern Algebra I		level of a	
MATH U354	Real Analysis I		a langua	
MATH U599	Seminar in Mathematics		hours in	
Select two of t	he following:		degree p	
MATH U544	Linear Algebra II		<sup>5</sup> Upper L	
MATH U546	Modern Algebra II		Natural	
MATH U552	Complex Variables		the Univ	
MATH U554	Real Analysis II		Elective	
MATH U560	Numerical Analysis I			
Select one 300	D-level or higher and two 400-level or higher			
mathematics, statistics or approved computer science courses: <sup>4</sup>				
MATH / STAT	/ CSCI			
MATH / STAT	/ CSCI			
MATH / STAT				
Statistics Concen	tration			
MATH U315	Statistical Methods I			
<b>MATH U340</b>	Mathematical Structures and Proof			
MATH U344	Linear Algebra I			
STAT U301	Statistical Computing			
STAT U410	Introduction to Probability Theory			
STAT U516	Statistical Methods II			
STAT U413	Introduction to Stochastic Processes			
or STAT U5	12Mathematical Statistics			
STAT U599	Seminar in Statistics			
Select three a	oproved 300-level or higher courses from math,			
statistics or co	omputer science:			
MATH / STAT	/ CSCI			
MATH / STAT	/ CSCI			
MATH / STAT	/ CSCI			
Supporting Cours	ses <sup>1</sup>			
Select supporting	g courses option to align with concentration	12-13		
(Mathematics or	Statistics)			
Mathematics Con	centration			
MATH U241	Calculus III			
MATH U245	Elementary Differential Equations			
MATH U174	Elements of Discrete Mathematics			
or CSCI U20	O(Computer Science I			
CSCI U300	Computer Science II (or MATH programming course)			
Statistics Concen	tration			
Select four ap STAT / CSCI /	proved 200-level or higher courses from MATH / BADM / BIOL / CHEM / ECON / PSYC / SOCY			
Upper-Level Elec	tives, Minor, and Other Electives	28-30		
Upper-Level Electi	ives or Minor <sup>1,5</sup>			
Select 12-21 c	redits			

Electives

Select 7-18 credits

**Total Hours** 

- <sup>1</sup> A minimum grade of C is required in each course indicated.
- <sup>2</sup> Students must complete all courses in this category even if they have earned an Associate's degree.
- <sup>3</sup> The minimum acceptable level of competency is completion of the 101 level of a language. Students who place into the 102 or higher level of a language satisfy the language requirement but will have additional hours in general education electives, if hours are required by their degree program.
- <sup>4</sup> At most two CSCI courses permitted here.
- <sup>5</sup> Upper Level Electives include 200 level or higher MATH/STAT/CSCI/ Natural and Physical Sciences courses and any course accepted by the University as meeting the requirements of a cognate. Upper Level Electives must be approved by the student's advisor in advance.