

Mathematics

Bachelor of Arts

Students in the Mathematics Program will develop their analytical skills and learn how to work in a problem-solving environment. Advanced modeling, theory and methods make up the foundation of a mathematics degree and allow students to enter the work force or continue their education.

Career Options:

- Education
- Actuarial Science
- Financial Services
- Biomathematics
- Cryptography

Major Requirements:

Calculus I
Calculus II
Multivariate Calculus
Probability and Statistics
Transition to Advanced Mathematics
Linear Algebra
Abstract Algebra
Mathematics Seminar

Three of the following elective mathematics courses:

Transition to Advanced Mathematics
Discrete Methods
Geometry
Introduction to Complex Variable
Elementary Differential Equations
Special Topics

Programming Component course (3 semester hours):
Programming Structures
or other course approved by adviser.

Applied Mathematics course (3 semester hours) from:
Analytical Chemistry I w/Laboratory
Physical Chemistry I w/Laboratory
Genetics
Global Water Issues
Ecology
Ecological Methods
Corporate Finance
Operations Management
Object-Oriented Programming

Minor Requirements:

Calculus I
Calculus II
Elementary Statistics
or Probability and Statistics

Three of the following elective mathematics courses:

Multivariate Calculus
Number Theory
Discrete Methods
Geometry
Transition to Advanced Mathematics

Linear Algebra
Abstract Algebra
Introduction to Complex Variable
Elementary Differential Equations
Special Topics

Department Contact:

Bill Yankosky, Ph.D.
Professor of Mathematics
Mathematics Program Coordinator
byankosky@ncwc.edu
252.985.5149



General Education Requirements

I. Interdisciplinary Requirements	Credits	IV. Humanities Courses	Credits
Ethics	3	Religion	3
International Studies	3	English Composition	6
<hr/>		Literature	3
Total Hours	6	Art, Music or Entertainment/Theatre	3
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II. Science Courses	Credits	Total Hours	15
Mathematics	3	TOTAL GENERAL EDUCATION HOURS	41
Biology, including lab	4		
Physics, Earth Science or Chemistry, incl. lab	4		
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Total Hours	11		
III. Social Science Courses	Credits		
History, Political Science	3		
Communication, Economics, Geography or Criminal Justice	3		
Psychology or Sociology	3		
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Total Hours	9		

Unless otherwise specified, transferred credits may be used to fulfill the general requirements at the Registrar's discretion.

Major Requirements

	Credits		Credits
MAT 121	Calculus I	4	
MAT 122	Calculus II	4	
MAT 221	Multivariate Calculus	4	
MAT 323	Probability and Statistics	3	
MAT 340	Transition to Advanced Mathematics	3	
MAT 403	Linear Algebra	3	
MAT 404	Abstract Algebra	3	
MAT 427	Mathematics Seminar	3	
<i>Three of the following elective mathematics courses:</i>			
MAT 340	Transition to Advanced Mathematics	3	
MAT 318	Discrete Methods	3	
MAT 325	Geometry	3	
MAT 411	Introduction to Complex Variable	3	
MAT 415	Elementary Differential Equations	3	
MAT 495	Special Topics	1-6	
		<i>Programming Component course (3 semester hours):</i>	
CIS 211	Programming Structures	3	
		<i>or other course approved by adviser.</i>	
		<i>Applied Mathematics course (3 semester hours) from:</i>	
CHM 341	Analytical Chemistry I w/Laboratory	3	
CHM 342	Analytical Chemistry I Laboratory	1	
CHM 361	Physical Chemistry I	3	
CHM 362	Physical Chemistry I Laboratory	3	
BIO 303	Genetics	4	
BIO 330	Global Water Issues	5	
BIO 401	Ecology	3	
BIO 402	Ecological Methods	2	
BUS 307	Corporate Finance	3	
BUS 350	Operations Management	3	
CIS 330	Object-Oriented Programming	3	

General Graduation Guidelines:

Total of 120 semester hours, 39 of which must be numbered 300 or 400.

(Other programs may require coursework beyond 120 semester hours.)

At least 9 semester hours of courses designated as writing intensive.

A declared major.

A cumulative GPA average of C (2.00) and at least a C average in the graduation major.