

# BA/BS MAJOR IN MATHEMATICS

## Requirements for a Bachelor of Arts or Bachelor of Science Degree with a Major in Mathematics

Additional Graduation Requirements (<https://catalog.una.edu/undergraduate/academic-procedures-requirements/graduation-requirements/>)

Code	Title	Hours
General Education Component ( <a href="https://catalog.una.edu/undergraduate/academic-procedures-requirements/general-education-component/">https://catalog.una.edu/undergraduate/academic-procedures-requirements/general-education-component/</a> )		
Area I (Written Composition)		6
Area II (Humanities and Fine Arts) <sup>1</sup>		12
Area III (Natural Sciences and Mathematics)		11
Area IV (History, Social and Behavioral Sciences)		12
Area V ( <a href="https://www.una.edu/areav/">https://www.una.edu/areav/</a> )		
<b>Major Core Requirements in Mathematics</b>		
MA 125	Calculus I <sup>2</sup>	4
or MA 125H	Honors Calculus I	
MA 126	Calculus II <sup>2</sup>	4
MA 227	Calculus III <sup>2</sup>	4
MA 237	Linear Algebra <sup>2</sup>	3
or MA 331	Linear Algebra with Proof	
or MA 431	Advanced Linear Algebra I	
MA 238	Applied Differential Equations I <sup>2</sup>	3
or MA 355	Differential Equations	
MA 325	Foundations of Mathematics	3
MA 345	Applied Statistics I	3
or MA 447	Mathematical Statistics I	
MA 420	Combinatorics and Graph Theory	3
MA 437	Introduction to Abstract Algebra I	3
MA 451	Introduction to Analysis	3
MA 471W	Applied Mathematics	3
Prescribed Math Electives: <sup>2</sup>		
Select one of the following:		2
MA 295	Undergraduate Directed Research	
MA 395	Undergraduate Directed Research	
MA 495	Undergraduate Directed Research	
MA 391	Mathematics Seminar	
MA 490	Undergraduate Math Mentoring	
Other Math Electives: <sup>2</sup>		
Select one of the following:		3
MA 356	Applied Differential Equations II	
MA 421	College Geometry	
MA 425	Methods and Materials for Teaching Secondary Mathematics	
MA 431	Advanced Linear Algebra I	
MA 432	Advanced Linear Algebra II	

MA 438	Introduction to Abstract Algebra II	
MA 445W	Applied Statistics II	
MA 447	Mathematical Statistics I	
MA 448	Mathematical Statistics II	
MA 452	Advanced Calculus	
MA 455	Complex Variables	
MA 461	Numerical Analysis	
MA 475W	Introduction to Operations Research	
MA 491	Special Topics	
Prescribed Supporting Courses:		
CS 155	Computer Science I	3
<b>Minor</b>		
Minor, second major, second degree, or the education/certification block as determined by the College of Education and Human Sciences is required		
<b>General Electives</b>		
General elective hours to bring total to 120		
<b>Total Hours</b>		<b>120</b>

<sup>1</sup> For BA degree, select six hours of a required foreign language at the introductory level

<sup>2</sup> These courses are required if not completed as part of the General Education component. Mathematics majors pursuing secondary certification must elect College Geometry (MA 421)

<sup>3</sup> Mathematic majors pursuing secondary certification must also take Methods and Materials for Teaching Secondary Mathematics (MA 425)