

# B.A. IN MATHEMATICS WITH EDUCATION 5-12 LICENSURE

Code	Title	Credits
<b>Major in Mathematics Education 5-12 (B.A.)</b>		
Choose one from the following course sequences:		6-7
COS 100	Introduction to Programming	
COS 105	Object-oriented Design and Programming	
Or		
COS 205	Scientific Computing	
one additional COS course (COS 212 recommended)		
MAT 124M	Calculus 1 <sup>2</sup>	4
MAT 125	Calculus 2	4
MAT 211	Linear Algebra	3
MAT 223	Multivariable Calculus	3
MAT 241	Discrete Mathematics	3
MAT 310	Abstract Algebra	4
MAT 330	Probability and Statistics	3
MAT 351	Modern Geometry	3
MAT 422	Real Analysis	3
MAT 499	Senior Seminar	3
Choose one of the following Applied Math courses:		3-4
MAT 300	Numerical Analysis	
MAT 309	Financial Mathematics	
MAT 331	Applied Statistics	
MAT 376	Operations Research	
EDU 200	Introduction to Education	3
EDU 201	Introduction to Education Field Experience	1
EDU 203	School Health and Drugs	2
EDU 220	Introduction to Middle Level Education	3
EDU 240	Educational Psychology	3
EDU 241	Educational Psychology Field Experience	1
EDU 317GZ	Educational Equity	4
EDU 320	Pedagogy and the Young Adolescent Learner	1
EDU 321	Integrated Literacy in the Content Areas	1
EDU 411	Mathematics Education Field Experience in grades 5-8 or 5-12	1
EDU 412	Methods in Teaching 5-12 Mathematics	3
EDU 490	Student Teaching Block <sup>1</sup>	14
Code	Title	Credits
Major		79-81
General Education		41-42

Electives	0-1
<b>Total Credits</b>	<b>122</b>

- <sup>1</sup> In order to meet requirements for endorsements and dual majors the number of credits is subject to change. Students should consult with their advisor.
- <sup>2</sup> Students may test into this course via successful completion of the Math and Computer Science department placement exam or by completing MAT 123M and the Math and Computer Science department placement exam requirements.
- Students may not declare a B.A. in Mathematics with Education 5-12 Licensure and a Minor in Mathematics.

Students may not declare a B.A. in Mathematics with Education 5-12 Licensure and a B.A. in Mathematics.

Courses whose number is followed by a letter fulfill a General Education requirement.

Students must earn a grade of C or better in each content area and education course (MAT, COS, EDU) in the major. Courses with grades of C- or lower must be repeated.

Students with 5-12 licensure in Mathematics Education may choose one or more Middle Level Endorsements. See endorsement area listing under Major in Elementary Education with Middle Level Endorsement in the Education section of this catalog.