MATHEMATICS, B.S.

Requirements for a Major in Mathematics

Code	Title	Hours
Thirty-nine semester hours, six of which must be at the 4000-level, including the following:		
Required Courses		
MTH 1321	Calculus I	3
MTH 1322	Calculus II	3
MTH 2311	Linear Algebra	3
MTH 2321	Calculus III	3
MTH 3300	Foundations of Mathematics	3
MTH 3323	Introduction to Analysis	3
or MTH 4326	Advanced Calculus I	
MTH 3312	Foundations of Combinatorics and Algebra	3
or MTH 4314	Abstract Algebra	
MTH 3325	Ordinary Differential Equations	3
or MTH 4312	Cryptology	
or MTH 4322	Numerical Analysis	
Fifteen semester hours of 3000-4000 level MTH or STA courses [1]		15
A grade of "C" or better in thirty-nine hours of MTH and STA courses used for the major.		
Subtotal		**39**
Required Courses in Other Fields		
CSI 1401	Introduction to Programming I	4
or CSI 1430	Introduction to Computer Science I with Laboratory	
or STA 2450	Introduction to Computing for the Mathematical and Statistical Sciences	
Eight semester hours of science courses with appropriate labs (with no more than 4 hours from GEO) selected from the following:		8
BIO 1305 & BIO 1105	Modern Concepts of Bioscience and Modern Concepts of Bioscience Laboratory	
BIO 1306 & BIO 1106	Modern Concepts of Bioscience, continued and Modern Concepts of Bioscience Laboratory	
CHE 1301 & CHE 1101	Basic Principles of Modern Chemistry I and General Chemistry Laboratory I	
CHE 1302 & CHE 1102	Basic Principles of Modern Chemistry II and General Chemistry Laboratory II	
ENV 1301 & ENV 1101	Exploring Environmental Issues and An Introduction to Environmental Analysis (Lab)	
GEO 1306 & GEO 1106	The Earth Through Time and The Earth Through Time, Laboratory	
or GEO 1307 & GEO 1106	Evolution and Extinction and The Earth Through Time, Laboratory	
GEO 1401	Earthquakes and Other Natural Disasters	
GEO 1402	World Oceans	
GEO 1403	Environmental Geology	
GEO 1405	The Dynamic Earth	
GEO 1408	Earth Science	
NSC 1306 & NSC 1106	Introduction to Neuroscience and Introduction to Neuroscience Laboratory	
PHY 1420	General Physics I	
PHY 1430	General Physics II	
Total Hours		**51**

[1] Excluding: MTH 3318 Data and Chance, MTH 3340 Mathematics through Technology, and MTH 4343 Topics in Mathematics for Prospective Teachers