

Mathematical Sciences Curriculum Map

(Effective Fall 2006 and after)

The curriculum map provides insight and direction for students to graduate in four years. With the assistance of a student's academic advisor and department chairperson, the map will provide a guide between what should be taken term by term and where the student is with respect to grades received in courses. Milestones are noted on the map and serve as hints regarding what courses and/or activities must be completed that term. Please note that every term does not have a milestone. Prerequisites are also noted providing the student and his/her advisor a true indication of where the student falls within the curriculum. In this particular document, key prerequisites are listed that can prevent a student from moving along in the curriculum if not met. Also, note that the Department of Mathematics only considers the grade of "C" or higher as meeting the prerequisite. A grade of "C" or better is required in each course in mathematics taken for credit for a major or a minor in mathematics.

Students completing any of the mathematics programs will be prepared for employment in the government sector, private industry, or graduate studies in mathematics. Mathematicians not only teach but also work with such fields as astronomy and space exploration, climate study, medicine, national security, robotics, animated films, and business. Students in this major must be comfortable with analyzing information, thinking critically, and be extremely motivated.

Mathematical Sciences Curriculum Guide		Milestone and/or Prerequisite
Term 1	Credits	Term 1 Milestones and/or Prerequisites
ENC 1101 Freshman Communication Skills I	3	Must have completed MAC 1105 and MAC 1114 or MAC 1147
MAC 2311 Calculus I	4	Must complete MAC 2311
AMH 2091 African American History	3	
Humanities Elective	3	
SLS 1101 First Year Experience College Transition	2	
<i>Total Term 1 Credits</i>	15	
Term 2	Credits	Term 2 Milestones and/or Prerequisites
ENC 1105 Freshman Communications Skills II	3	Must completed MAC 2312
COP 221 C Programming	3	
MAC 2312 Calculus II	4	
SPC 2600 Public Speaking	3	
Humanities Elective	3	
<i>Total Term 2 Credits</i>	16	
Term 3	Credits	Term 3 Milestones and/or Prerequisites
MAC 2313 Calculus III	5	Must complete MAC 2313
STA 3034 Mathematical Statistics (<i>fall only</i>)	3	*Approved Science Sequences: BSC 1010/L and BSC 1011/L CHM 1045/L and CHM 1046/L PHY 2048/L and PHY 2019/L
MAS 3105 Linear Algebra	3	
Approved Science Sequence*	4	
<i>Total Term 3 Credits</i>	15	
Term 4	Credits	Term 4 Milestones and/or Prerequisites
MHF 4202 Foundations of Math (<i>spring only</i>)	3	Must have completed a programming course
MAP 2302 Differential Equations	3	*Approved Science Sequences: BSC 1010/L and BSC 1011/L CHM 1045/L and CHM 1046/L PHY 2048/L and PHY 2019/L
Elective	3	
Approved Science Sequence	4	
Social Science Elective	3	
<i>Total Term 4 Credits</i>	16	

Term 5	Credits	Term 5 Milestones and/or Prerequisites
MAD 3401 Numerical Analysis (<i>fall only</i>)	3	(no milestones)
Electives	9	
Social Science Elective	3	
<i>Total Term 5 Credits</i>	15	
Term 6	Credits	Term 6 Milestones and/or Prerequisites
MAS 4301 Abstract Algebra (<i>spring only</i>)	3	(no milestones)
MAA 4402 Complex Variables (<i>spring only</i>)	3	
Electives	9	
<i>Total Term 6 Credits</i>	15	
Term 7	Credits	Term 7 Milestones and/or Prerequisites
MAA 4211 Advanced Calculus I (<i>fall only</i>)	3	Must complete MAA 4211
Electives	12	Take GRE
<i>Total Term 7 Credits</i>	15	
Term 8	Credits	Term 8 Milestones and/or Prerequisites
MAT 4937 Senior Seminar	3	Apply for graduation in the 1 st 2 weeks
Mathematical Sciences Elective#	3	Must submit department portfolio
Electives	9	Must complete department exit survey
<i>Total Term 8 Credits</i>	15	#Approved Mathematical Sciences Electives: MAP 4103 (spring only), MAA 4212 (spring only)
TOTAL SEMESTER HOURS	120	