Math BS

## **OPTION II: General Mathematics Option**

ADVISOR

Student		CIN		
General Education Requirements (39-42 units)	Term	Grade	Course Type	
Block A: Basic Subjects (9)				
A1 Oral Communication Course =				
A2 Written Communication Course =				
A3 Critical Thinking & composition Course =				
Block B: Natural Sciences (0)				
Fulfilled by major requirements	1			
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Block C: Arts and Humanities (9) from	3 differe	ent sub-b	locks	
C1 Arts Course =				
C2 Humanities Course =				
C US History Course =	1			
Block D: Social Sciences (9) from 3 diff	erent sub	o-blocks		
D1 Course =				
D2 Course =				
D US Constitution Course =				
Block E: Civic and Community based	Learning	(3)		
E Course =				
Block F: Upper Division Theme (9) fro blocks	m 3 diffe	rent sub-		
Sub block B Course =				
Sub block C Course =				
Sub block D Course =	+			
GWAR Requirements (0-3)				
UNIV 400 Writing Proficiency Exam (0)				
OR				
UNIV 401 Writing Proficiency (3)				
VARIOUS UNIVERSITY REQUIREMENTS 1. One diversity course (denoted by <i>d</i> )				
2. One civic learning course (denoted by <i>u</i> )	CL)			
3. One diversity with race and ethnicity co		ed by <b>RE</b> )		

3. One diversity with race and ethnicity course (denoted by **RE**)

4. One writing intensive course (denoted by WI).

Above requirements must be fulfilled in GE blocks. Choose accordingly.

## **RELATED AREA ELECTIVES**

If you took CS 2020 for the Group I required course, then select 10 units of Related Area Elective courses from approved list.

If you took PHYS 2200, BIOL 1200, or CHEM 1100 for the Group I required course, then select 8 units of Related Area Elective courses from approved list. The approved list of ALL electives can be obtained at math dept. webpage.

## **GRADUATION REQUIREMENTS**

Minimum **40** units of upper division courses AND **120** total units are required for graduation. For an extensive list of other graduation requirements, check "academic requirement" in your GET account.

Major Requirement (81 Units) Term Grade Lower Division Required Courses (33) MATH 2170 (3) or CS 2010 (3) MATH 2110 Calculus I (4) MATH 2120 Calculus II (4) MATH 2130 Calculus III (3) MATH 2150 Differential Equations (3) MATH 2450 Foundations of Mathematics I (3) MATH 2550 Introduction to Linear Algebra (3) PHYS 2100 General Physics I (5) BIOL 1100 - Principles of Biology I (5) **Upper Division Required Courses (7)** MATH 3450 Foundations of Mathematics II (4) MATH 4650 Advanced Calculus I (3) **Option Specific Required Courses (19-21)** MATH 4550 - Modern Algebra I (3) MATH 4900 - Senior Seminar in Mathematics (4) Select one from each of the following groups (12-14) **Group I:** MATH 4200 - Mathematical Logic (3) MATH 4300 - Modern Geometry (3) MATH 4460 - Theory of Numbers (3) MATH 4840 - Graph Theory (3) **Group II:** MATH 4570 - Linear Algebra (3) MATH 4700 - Numerical Analysis I (3) MATH 4720 - Linear Programming (3) MATH 4740 - Theory of Probability (3) Group III: MATH 4560 - Modern Algebra II (3) MATH 4660 - Analysis II (3) MATH 4670 - Multivariate Analysis (3) MATH 4680 - Intro. to Complex Analysis (3) MATH 4690 - Topology (3) MATH 4710 - Numerical Analysis II (3) MATH 4750 - Intro. to Mathematical Statistics (3) Group IV: PHYS 2200 General Physics II (5) BIOL 1200 Principles of Biology II (5) CHEM 1100 - General Chemistry I (5) CS 2020 Intro. to Object Oriented Programming (3) **Related Area Electives (8-10)** Course1 = Course2 = **Upper Division Electives (12)** Course1 = Course2 = Course3 = Course 4 =