

Roadmap: Mathematics - Bachelor of Science AS-BS-MATH

College of Arts and Sciences Department of Mathematical Sciences Catalog Year: 2015-2016

This roadmap is a recommended semester-by-semester plan of study for this major. However, courses and milestones designed as critical (!) must be completed in the semester listed to ensure a timely graduation.

Critical	Course Subject and Title	Credit Hours	Min. Grade	Major GPA	Attribute	Notes
Semeste	r One [15 Credits]					
!	Computer Programming elective ¹	3 - 4		-		
!	MATH 12002 Analytic Geometry and Calculus I	5	С		KMC	
	US 10097 Destination Kent State: First Year Experience ²	1				
	Kent Core Requirement	3				
	Kent Core Requirement	3				
Semeste	r Two [16 Credits]					
!	MATH 12003 Analytic Geometry and Calculus II	5	С			
!	PHY 23101 General University Physics I	5			KBS	
	Kent Core Requirement	3				
	Kent Core Requirement	3				
Semeste	r Three [16 Credits]					
!	MATH 21001 Linear Algebra With Applications	3	С			
!	MATH 22005 Analytic Geometry and Calculus III	4	С			
	Kent Core Requirement	3				
	Kent Core Requirement	3				
	Kent Core Requirement	3				
Semeste	r Four [15 Credits]					
!	MATH 41021 Theory of Matrices	3	С			
	Allied Area Electives ³	6				
	Kent Core Requirement	3				
	General Electives	3				
Semeste	r Five [16 Credits]					
!	MATH 41001 Introduction to Modern Algebra I	3	C ⁴	-	WIC/ELR	
	Allied Area Electives ³	3				
	Foreign Language ⁵	4-5				
	General Electives ⁵	6				
Semeste	r Six [16 Credits]					
!	MATH 41002 Introduction to Modern Algebra II	3	C ⁴		WIC/ELR	
	Allied Area Electives ³	6				
	Foreign Language ⁵	4-5				
	Kent Core Requirement	3				
Semeste	r Seven [13 Credits]					
!	MATH 42001 Introduction to Analysis I	3	C ⁴		WIC/ELR	
	Allied Area Electives ³	3				
	CS or MATH elective (40000-level)	3				
	Kent Core Requirement	1				
	General Electives ⁶	3				
Semeste	r Eight [13 Credits]					
!	MATH 42002 Introduction to Analysis II	3	C ⁴		WIC/ELR	
	CS or MATH elective (40000-level)	6				
-	General Electives ⁶	4				

Graduation Requirements Summary

Minimum Total Hours	Minimum Upper-Division Hours	Minimum Kent Core Hours	Minimum		
Willindin Total Hours	30000 - 40000 level course	Willimum Rent Core Hours	Major GPA	Overall GPA	
120	42	36	2.000	2.000	

1. Computer Programming elective (3-4 credits)

1. Compater 1 regramming elective (6 4 electio)	
Choose from the following:	
CS 10061 Introduction to Computer Programming (3)	CS 13001 Computer Science I-Programming and Problem Solving (4) or
	CS 13011 Computer Science IA-Procedural Programming (2) and CS 13012
	Computer Science IB-Object Oriented Programming (2)
	*If CS 13011 and CS 13012 are chosen to fulfill this requirement, students must earn a
	minimum grade of C (2.000) in both courses.
DSCI 15310 Computational Thinking and Programming (3)	



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2. US 10097 is not required of transfer students with 25 credits (excluding College Credit Plus and dual-enrollment credit) or students age 21+ at time of

3. Allied Area Electives	(18 credits): must	t be approved by major advisor	

Choose from the following:	
BSCI 3/4xxxx BSCI upper-division courses (1 - 18)	CHEM 3/4xxxx CHEM upper-division courses (1 - 18)
CS 3/4xxxx CS upper-division courses (1 - 18)	ECON 3/4xxxx ECON upper-division courses (1 - 18)
GEOL 3/4xxxx GEOL upper-division courses (1 - 18)	MATH 3/4xxxx MATH upper-division courses (1 - 18)
MIS 3/4xxxx MIS upper-division courses (1 - 18)	PHY 3/4xxxx PHY upper-division (1 - 18)
PHIL 41035 Philosophy of Science (3)	PHIL 41038 Intermediate Logic (3)
PHIL 41045 Metalogic (3)	

- 4. A minimum C (2.000) grade must be earned in MATH 41001 or MATH 41002 or MATH 42001 or MATH 42002 to fulfill the writing-intensive requirement.
- 5. Fulfills College General Requirement.
- 6. Credits required depend on meeting minimum 120 credit hours and minimum 42 upper-division credit hours.

University Requirements: Bachelor's degree-seeking students must meet Kent Core (general education requirements), diversity, writing-intensive and experiential learning requirements. For more information about these requirements, please read the following sections in the University Catalog: Kent Core - www.kent.edu/catalog/kent-core; Diversity Course Requirement - www.kent.edu/catalog/diversity; Writing-Intensive Course Requirement - www.kent.edu/catalog/wic; Experiential Learning Requirement - www.kent.edu/catalog/elr.

Attribute Legend: DD Diversity-Domestic; DG Diversity-Global; ELR Experiential Learning; KAD Kent Core Additional; KBS Kent Core Basic Sciences; KCM Kent Core Composition; KFA Kent Core Fine Arts: KHU Kent Core Humanities; KMC Kent Core Mathematics and Critical Reasoning; KSS Kent Core Social Sciences; WIC Writing Intensive