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
Semester One [15 Credits]						
!	**MATH 12002 Analytic Geometry and Calculus I**	**5**	**C**	■	**KMC**	
	US 10097 Destination Kent State: First Year Experience [1]	1				
	Kent Core Requirement	3				
	Kent Core Requirement	3				
	Kent Core Requirement	3				
Semester Two [15 Credits]						
!	**MATH 12003 Analytic Geometry and Calculus II**	**5**	**C**	■		
	CS 13001 Computer Science I-Programming and Problem Solving or CS 13011 Computer Science IA-Procedural Programming (2) and CS 13012 Computer Science IB-Object Oriented Programming (2)	4	C C	■		
	Kent Core Requirement	3				
	Kent Core Requirement	3				
Semester Three [16 Credits]						
!	**MATH 22005 Analytic Geometry and Calculus III**	**4**	**C**	■		
	PHY 23101 General University Physics I	5		■	KBS	
	Foreign Language [2]	4 - 5				
	Kent Core Requirement	3				
Semester Four [15 Credits]						
!	**MATH 21001 Linear Algebra With Applications**	**3**	**C**	■		
	PHY 23102 General University Physics II	5		■	KBS	
	Foreign Language [2]	4 - 5				
	Kent Core Requirement	3				
Semester Five [15 Credits]						
!	**MATH 32044 Introduction to Ordinary Differential Equations**	**3**	**C**	■		
!	**MATH 42031 Mathematical Models and Dynamical Systems** *or* **MATH 42201 Introduction to Numerical Computing I**	**3**	**C**	■		
!	**MATH 42041 Advanced Calculus** *or* **MATH 42048 Introduction to Complex Variables**	**3**		■		
	Kent Core Requirement	3				
	Kent Core Requirement	3				
Semester Six [15 Credits]						
!	**MATH 42039 Modeling Projects** *or* **MATH 42202 Introduction to Numerical Computing II**	**3**	**C** [3]	■	**WIC/ELR**	
!	**MATH 42045 Introduction to Partial Differential Equations**	**3**		■		
	Allied Area Electives [4]	3		■		
	General Electives [5]	6				
Semester Seven [15 Credits]						
!	**MATH 40011 Introduction to Probability Theory and Applications**	**3**		■		
!	**MATH 42031 Mathematical Models and Dynamical Systems** *or* **MATH 42201 Introduction to Numerical Computing I**	**3**	**C**	■		
!	**MATH 42041 Advanced Calculus** *or* **MATH 42048 Introduction to Complex Variables**	**3**		■		
	General Electives [5]	6				
Semester Eight [14 Credits]						
!	**MATH 40012 Introduction to Statistical Concepts**	**3**		■		
!	**MATH 41021 Theory of Matrices**	**3**		■		
!	**MATH 42039 Modeling Projects** [3] *or* **MATH 42202 Introduction to Numerical Computing II**	**3**	**C** [3]	■	**WIC/ELR**	
	Allied Area Electives [4]	3		■		
	General Electives [5]	2				

Graduation Requirements Summary

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

1. US 10097 is not required of transfer students with 25 credits (excluding College Credit Plus and dual-enrollment) or students age 21+ at time of admission.
2. Fulfills College General Requirement
3. A minimum C (2.000) grade must be earned in MATH 42039 to fulfill the writing-intensive requirement.
4. Allied Area Electives (6 credits)

Choose from the following:	
BSCI 3/4xxxx Biological Science upper-division courses (1 - 6)	CHEM 3/4xxxx Chemistry upper-division courses (1 - 6)
CS 3/4xxxx Computer Science upper-division courses (1 - 6)	MATH 3/4xxxx Mathematics upper-division courses (1 - 6)
PHY 3/4xxxx Physics upper-division courses (1 - 6)	

5. Minimum 3 upper-division credit hours. Credits required depend on meeting minimum 120 credit hours and minimum 42 upper-division credit hours.

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