

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
<b>Semester One [14 Credits]</b>						
	US 10097 Destination Kent State: First Year Experience <sup>1</sup>	1				
	Foreign Language <sup>2</sup>	4 - 5				
	Kent Core Requirement	3				
	Kent Core Requirement	3				
	Kent Core Requirement	3				
<b>Semester Two [16 Credits]</b>						
	Foreign Language <sup>2</sup>	4 - 5				
	Kent Core Requirement	3				
	Kent Core Requirement	3				
	Kent Core Requirement	3				
	General Electives <sup>3</sup>	3				
<b>Semester Three [14 Credits]</b>						
!	<b>MATH 12002 Analytic Geometry and Calculus I</b>	<b>5</b>	<b>C</b>	■	KMC	
	Foreign Language <sup>2</sup>	3 - 5				
	Kent Core Requirement	3				
	Kent Core Requirement	3				
<b>Semester Four [15 Credits]</b>						
!	<b>MATH 12003 Analytic Geometry and Calculus II</b>	<b>5</b>	<b>C</b>	■		
!	<b>MATH 21001 Linear Algebra with Applications</b>	<b>3</b>	<b>C</b>	■		
	Foreign Language <sup>2</sup>	3 - 5				
	Kent Core Requirement	3				
	General Electives <sup>3</sup>	1				
<b>Semester Five [16 Credits]</b>						
!	<b>Computer Programming elective <sup>4</sup></b>	<b>3 - 4</b>		■		
!	<b>MATH 22005 Analytic Geometry and Calculus III</b>	<b>4</b>	<b>C</b>	■		
	College General Requirement <sup>5</sup>	3				
	College General Requirement <sup>5</sup>	3				
	Kent Core Requirement	3				
<b>Semester Six [15Credits]</b>						
	Kent Core Requirement	3				
	MATH or CS Elective (40000 level)	3	■	■		
	General Electives <sup>3</sup>	9				
<b>Semester Seven [15 Credits]</b>						
!	<b>MATH elective <sup>6</sup></b>	<b>3</b>	<b>C <sup>7</sup></b>	■	WIC	
	MATH or CS Elective (40000 level)	3		■		
	General Electives <sup>3</sup>	9				
<b>Semester Eight [15 Credits]</b>						
!	<b>MATH elective <sup>6</sup></b>	<b>3</b>	<b>C <sup>7</sup></b>	■	WIC	
	MATH or CS Elective (40000 level)	3		■		
	General Electives <sup>3</sup>	9				

### 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. Minimum 27 upper-division credit hours. Credits required depend on meeting minimum 120 credit hours and minimum 42 upper-division credit hours.

4. Computer Programming elective (3-4 credits)

Choose from the following:	
CS 10051 Introduction to Computer Science <sup>KMC</sup> (4)	CS 10061 Introduction to Computer Programming (3)
CS 13001 Computer Science I-Programming and Problem Solving (4) <b>or</b> CS 13011 Computer Science IA-Procedural Programming (2) <b>and</b> CS 13012 Computer Science IB-Object Oriented Programming (2).	DSCI 15310 Computational Thinking and Programming (3)
*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.	

5. • One additional course taken from the Kent Core Basic Science courses in the following Arts and Sciences disciplines: Anthropology (ANTH), Biological Sciences (BSCI), Chemistry (CHEM), Geography (GEOG), Geology (GEOL) or Physics (PHY). Students may take the courses listed in the "introductory" sequences with the restrictions noted above in the Kent Core Basic Science section. The course may not be from the student's major.
- One additional course taken from the Kent Core Social Sciences courses in the following Arts and Sciences disciplines: Anthropology (ANTH), Applied Conflict Management (CACM), Geography (GEOG), Criminology and Justice Studies (CRIM), Political Science (POL), Psychology (PSYC) or Sociology (SOC). The course may not be from the student's major.
6. MATH Elective (6 credits) – all courses fulfill the Writing-Intensive Requirement. To satisfy the writing-intensive requirement, one of these courses must be earned with a minimum C grade.

Choose from the following:	
MATH 41001 Introduction to Modern Algebra I (3) <sup>[WIC/ELR]</sup> and MATH 41002 Introduction to Modern Algebra II (3) <sup>[WIC/ELR]</sup>	MATH 42001 Introduction to Analysis I (3) <sup>[WIC/ELR]</sup> and MATH 42002 Introduction to Analysis II (3) <sup>[WIC/ELR]</sup>

**Foreign Language Note:** Students pursuing a Bachelor of Arts degree in the College of Arts and Sciences must have the equivalent of Elementary I and II in any language, plus one of the following options:

- a. Intermediate I and II of the same language
- b. Elementary I and II of a second language
- c. Any combination of two courses from the following list:
  - Intermediate I of the same language
  - MCLS 10001 Introduction to Structural Concepts for Language Students
  - MCLS 20000 Global Literacy and Cultural Awareness
  - MCLS 20091 Seminar: Global Literacy Case Studies

All students with prior foreign language experience should take the foreign language placement test to determine the appropriate level at which to start. Some students may begin their university foreign language experience beyond the Elementary I level and will complete the requirement with fewer credit hours and fewer courses. This may be accomplished by: (1) passing a course beyond Elementary I through Intermediate II level or (2) receiving credit through Credit by Exam (CBE), the College Level Examination Program (CLEP), the Advanced Placement (AP) exam or credit through the International Baccalaureate (IB) program; or (3) being designated a "native speaker" of a non-English language (consult with the College of Arts and Sciences Advising Office for additional information). When students complete the requirement with fewer than 14 credit hours and four courses, they will complete remaining hours with general electives.

**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](http://www.kent.edu/catalog/kent-core); Diversity Course Requirement – [www.kent.edu/catalog/diversity](http://www.kent.edu/catalog/diversity); Writing-Intensive Course Requirement – [www.kent.edu/catalog/wic](http://www.kent.edu/catalog/wic); Experiential Learning Requirement – [www.kent.edu/catalog/elr](http://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