KENT STATE UNIVERSITY

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

Course Subject and Title	Credit Hours	Upper Div.	Min. Grade	Major GPA	Important Notes
Semester One: [14 Credit Hours]					
US 10097 Destination Kent State: First Year Experience	1				Not required of transfer students with 25 credits
Foreign Language Requirement (Elementary I)	4-5				Fulfills College General Requirement; see foreign language note on page 2
Kent Core Requirement	3				
Kent Core Requirement	3				See Kent Core Summary on page 2
Kent Core Requirement	3				
Semester Two: [16 Credit Hours]					
Foreign Language Requirement (Elementary II)	4-5				Fulfills College General Requirement; see foreign language note on page 2
Kent Core Requirement	3				
Kent Core Requirement	3				See Kent Core Summary on page 2
Kent Core Requirement	3				
General Elective	3				Recommended: MATH 11010 or 11022 if not placed into MATH 12002 (semester 3)
Semester Three: [14 Credit Hours]					
MATH 12002 Analytic Geometry and Calculus I	**5**			■	**Fulfills Kent Core Mathematics and Critical Reasoning**
Foreign Language Requirement	3-5				Fulfills College General Requirement; see foreign language note on page 2
Kent Core Requirement	3				See Kent Core Summary on page 2
Kent Core Requirement	3				
Semester Four: [16 Credit Hours]					
MATH 12003 Analytic Geometry and Calculus II	**5**			■	
Foreign Language Requirement	3-5				Fulfills College General Requirement; see foreign language note on page 2
Kent Core Requirement	3				See Kent Core Summary on page 2
Kent Core Requirement	3				
General Elective (lower or upper division)	2				
Semester Five: [16-17 Credit Hours]					
CS 10051 Introduction to Computer Programming (4) or CS 10061 Introduction to Computer Programming (3) or CS 13001 Computer Science I: Programming and Problem Solving (4) or DSCI 15310 Computational Thinking and Programming (3)	**3-4**			■	**CS 10051 only fulfills Kent Core Additional**
MATH 22005 Analytic Geometry and Calculus III	**4**			■	
College General Requirement	3				Must be from Kent Core Basic Sciences; see note 1 on page 2
College General Requirement	3				Must be from Kent Core Social Sciences; see note 2 on page 2
General Electives (lower or upper division) or Kent Core Requirement if CS 10051 is not chosen above	3				
Semester Six: [15 Credit Hours]					
MATH 21001 Linear Algebra with Applications	**3**			■	
CS or MATH Elective (40000 level)	3	■		■	Must be approved by advisor
General Electives (upper division)	9	■			
Semester Seven: [15 Credit Hours]					
MATH 41001 Introduction to Modern Algebra *or* **MATH 42001 Introduction to Analysis I**	**3**	■		■	**Both fulfill writing-intensive course requirement; see note on page 2**
CS or MATH Elective (40000 level)	3	■		■	Must be approved by advisor
General Electives (upper division)	9	■			

Course Subject and Title	Credit Hours	Upper Div.	Min. Grade	Major GPA	Important Notes
Semester Eight: [15 Credit Hours]					
MATH 41002 Introduction to Modern Algebra II *or* **MATH 42002 Introduction to Analysis II**	**3**	■		■	**Both fulfill writing-intensive course requirement; see note below**
CS or MATH Elective (40000 level)	3	■		■	Must be approved by advisor
General Electives (upper division)	9	■			Number of credits required depends on meeting minimum 121 credit hours and minimum 42 upper-division credit hours

Graduation Requirements Summary

Minimum Total Hours	Minimum Upper-Division Hours	Minimum Kent Core Hours	Global / Domestic Diversity Course	Writing-Intensive	Experiential Learning	Minimum Major GPA	Overall GPA
121	42	36	Kent Core or General Electives	MATH 41001, 41002, 42001 or 42002	Visit www.kent.edu/catalog/elr	2.000	2.000

Kent Core Summary

Kent Core Categories	Important Notes	Remaining Credit Hours
Composition (6-8 credit hours) *ENG 11002, 11011, 21011; HONR 10197, 10297*	Enrollment based on placement test	6-8
Mathematics and Critical Reasoning (3-5 credit hours)	Fulfilled in this major with MATH 12002	0
Humanities and Fine Arts (9 credit hours) *Minimum one course from humanities in Arts and Sciences category and minimum one course from fine arts category*	May fulfill diversity requirement	9
Social Sciences (6 credit hours) *Must be selected from two curricular areas*	May fulfill diversity requirement	6
Basic Sciences (6-7 credit hours) *Must include one laboratory*		6-7
Additional (6 credit hours)	4 credits fulfilled in this major with CS 10051 if chosen; may fulfill diversity requirement	2-6

Note 1: 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.

Note 2: 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 (JUS), Political Science (POL), Psychology (PSYC) or Sociology (SOC). The course may not be from the student's major.

Note: If student takes MATH 41001 in semester seven, they must plan to take MATH 41002 in semester eight. If student takes MATH 42001 in semester seven, they must plan to take MATH 42002 in semester eight. To satisfy the writing-intensive course requirement (see description below), either MATH 41001, 41002, 42001 or 42002 must be earned with minimum C grade.

Note: All courses taken from the list of major program requirements are used in the calculation of the major GPA.

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 the 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 the remaining hours with general electives.

Kent Core
Students must complete a minimum 36 credit hours of the Kent Core. Certain courses required in programs and in student's major field may also fulfill the Kent Core. Honors equivalents shall satisfy the Kent Core. None of the courses on the Kent Core list may be taken with a pass/fail grade. Visit www.kent.edu/catalog/kent-core for course list.

Diversity Course Requirement
Students must complete a two-course diversity requirement, consisting of one with a domestic (U.S.) focus and one with a global focus. One course must come from the Kent Core. The second course may be taken as a second Kent Core, within a major or minor, or as a general elective; or, with dean's approval, by completing one semester of study in another country. Visit www.kent.edu/catalog/diversity for course list.

Writing-Intensive Course Requirement
Students must complete a one-course writing-intensive requirement in their major and earn minimum C (2.000) grade.
Visit www.kent.edu/catalog/wic for course list.

Experiential Learning Requirement (ELR)
To provide students with direct engagement in learning experiences that promote academic relevance, meaning and an understanding of real-world issues, students must complete this requirement at Kent State, either as a for-credit course or as a non-credit, non-course experience approved by the appropriate faculty member. Visit www.kent.edu/catalog/elr for course list.

Upper-Division Requirement
Students must complete a minimum 39 upper-division (numbered 30000 to 49999) credit hours of coursework. Programs in the College of Arts and Sciences require a minimum of 42 hours of upper-division coursework.

Foreign Language
Visit www.kent.edu/catalog/foreign-languages for course list.