



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: [16 Credit Hours]					
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			■	
MATH 12002 Analytic Geometry and Calculus I	5			■	Fulfills Kent Core Mathematics and Critical Reasoning
US 10097 Destination Kent State: First Year Experience	1				Not required for transfer students with 25 credits
Kent Core Requirement	3				See Kent Core Summary on page 2
Kent Core Requirement	3				
Semester Two: [16 Credit Hours]					
MATH 12003 Analytic Geometry and Calculus II	5			■	
PHY 23101 General University Physics I	5			■	Fulfills Kent Core Basic Sciences
Kent Core Requirement	3				See Kent Core Summary on page 2
Kent Core Requirement	3				
Semester Three: [17-18 Credit Hours]					
MATH 21001 Linear Algebra with Applications	3			■	
MATH 22005 Analytic Geometry and Calculus III	4			■	
Foreign Language (Elementary I)	4-5				Fulfills General College Requirement
Kent Core Requirement	3				See Kent Core Summary on page 2
Kent Core Requirement	3				
Semester Four: [15-16 Credit Hours]					
Foreign Language (Elementary II)	4-5				Fulfills General College Requirement
Kent Core Requirement	3				See Kent Core Summary on page 2
Kent Core Requirement	2				
Allied Area Electives	6	■		■	See note 1 on page 2
Semester Five: [15 Credit Hours]					
MATH 41001 Introduction to Modern Algebra I	3	■	C	■	Fulfills writing-intensive course requirement; see note 1 on page 2
Allied Area Electives	3	■		■	See note 1 on page 2
General Elective (lower or upper division)	9				
Semester Six: [15 Credit Hours]					
MATH 41002 Introduction to Modern Algebra II	3	■	C	■	Fulfills writing-intensive course requirement; see note 1 on page 2
MATH 41021 Theory of Matrices	3	■		■	Offered in spring only
Allied Area Electives	6	■		■	See note 2 on page 2
Kent Core Requirement	3				
Semester Seven: [14 Credit Hours]					
MATH 42001 Introduction to Analysis I	3	■		■	Fulfills writing-intensive course requirement; see note 1 on page 2
Allied Area Electives	3	■		■	See note 2 on page 2
CS or MATH Elective (40000 level)	3	■		■	
General Electives (lower or upper division)	5				
Semester Eight: [13 Credit Hours]					
MATH 42002 Introduction to Analysis II	3	■		■	Fulfills writing-intensive course requirement; see note 1 on page 2
CS or MATH Electives (40000 level)	6	■		■	
General Elective (lower or upper division)	4				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 GPA	
						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) <i>ENG 11002, 11011, 21011; HONR 10197, 10297</i>	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) <i>Minimum one course from humanities in Arts and Sciences category and minimum one course from fine arts category</i>	May fulfill diversity requirement	9
Social Sciences (6 credit hours) <i>Must be selected from two curricular areas</i>	May fulfill diversity requirement	6
Basic Sciences (6-7 credit hours) <i>Must include one laboratory</i>	5 credits fulfilled in this major with PHY 23102	1-2
Additional (6 credit hours) <i>Must be selected from two Kent Core categories</i>	May fulfill diversity requirement	6

Note 1: 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 2: **Allied area electives (18 credit hours)**, approved by the major advisor from the following:

BSCI upper-division courses	1-18	MIS upper-division courses	1-18
CHEM upper-division courses	1-18	PHY upper-division courses	1-18
CS upper-division courses	1-18	PHIL 31045 Formal Logic	3
ECON upper-division courses	1-18	PHIL 41035 Philosophy of Science	3
GEOL upper-division courses	1-18	PHIL 41045 Metalogic	3
MATH upper-division courses	1-18		

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

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.