

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	Upper Div.	Min. Grade	Major GPA	Type	Term Taken
Semester One [16 Credits]							
	CS 13001 Computer Science I-Programming and Problem Solving ⁶	4		C	■		
	MATH 12002 Analytic Geometry and Calculus I	5			■	KMC	
	US 10097 Destination Kent State: First Year Experience ¹	1					
	Kent Core Requirement	3					
	General Electives ²	3					
Semester Two [15 Credits]							
!	CS 23001 Computer Science II-Data Structures and Abstraction	4		C	■		
!	CS 23022 Discrete Structures for Computer Science	3			■		
!	MATH 12003 Analytic Geometry and Calculus II	5			■		
	Kent Core Requirement	3					
Semester Three [13 Credits]							
!	CS 33211 Operating Systems	3	■		■		
!	CS 35101 Computer Architecture	3	■		■		
!	MATH 21001 Linear Algebra With Applications (3) or MATH 22005 Analytic Geometry and Calculus III (4)	3 - 4			■		
	Foreign Language ³	4 - 5					
Semester Four [16 Credits]							
!	CS 33007 Introduction to Database System Design	3	■		■		
!	CS 35201 Computer Communication Networks	3	■		■		
	Foreign Language ³	4 - 5					
	Kent Core Requirement	3					
	Kent Core Requirement	3					
Semester Five [15 Credits]							
!	CS 33901 Software Engineering	3	■		■		
!	CS 46101 Design and Analysis of Algorithms	3	■		■		
!	CS 47205 Information Security	3	■		■		
	Kent Core Requirement	3					
	General Electives ²	3					
Semester Six [15 Credits]							
!	CS 33101 Structure of Programming Languages	3	■		■		
!	CS 43401 Secure Programming	3	■		■		
	Computer Science Elective ⁴	3	■		■		
	Kent Core Requirement	3					
	Kent Core Requirement	3					
Semester Seven [16 Credits]							
!	CS 49901 Capstone Project ⁵	4	■	C	■	ELR/WIC	
!	CS 45203 Computer Network Security or CS 47221 Introduction to Cryptology	3	■		■		
	Computer Science Elective ⁴	3	■		■		
	Kent Core Requirement	3					
	Kent Core Requirement	3					
Semester Eight [14 Credits]							
	Computer Science Elective ⁴	6	■		■		
	Kent Core Requirement	3					
	Kent Core Requirement	3					
	General Electives ²	2					

Graduation Requirements Summary

Minimum Total Hours	Minimum Upper-Division Hours	Minimum Kent Core Hours	Minimum	
			Major GPA	Overall GPA
120	42	36	2.000	2.000

- US 10097 is not required of transfer students with 25 credits or students age 21+ at time of admission.
- Credits required depends on meeting minimum 120 credit hours and minimum 42 upper-division credit hours. Recommended: MATH 11022. Enrollment based on placement tests; prerequisites: MATH 11010 and 11022 may be bypassed with sufficient background. Otherwise, MATH 11022 Trigonometry is recommended as it is a prerequisite for MATH 12002. Students not prepared to take CS 13001 in the first semester will benefit from taking CS 10051
- Fulfills College General Requirement
- 9 credit hours must come from a 40000-level course, concentration requirements, if chosen, fulfill 9 of the 21 total required hours. Any CS 3/40000-level elective course, along with one or more of the following courses can be taken to satisfy this requirement:
 - MATH 22005 Analytic Geometry and Calculus III
 - MATH 40011 Introduction to Probability
 Additionally, with the CS undergraduate advisor's prior permission, other select courses from outside the department may be counted. These courses must be computer science-related and/or integrate into the students program of study.
- A minimum C (2.000) grade must be earned in CS 49901 to fulfill the writing-intensive requirement.

University Requirements Summary

Type	Categories	Course(s) Satisfying Category	Remaining Requirements
KCM	Kent Core I. Composition Enrollment based on placement test	visit www.kent.edu/catalog/kent-core	6
KMC	Kent Core II. Mathematics and Critical Reasoning Enrollment based on placement test	MATH 12002	fulfilled
KHU	Kent Core III. Humanities Minimum one course from humanities in Arts and Sciences; may fulfill diversity requirement	visit www.kent.edu/catalog/kent-core	3
KFA	Kent Core IV. Fine Arts Minimum one course from the fine arts; may fulfill diversity requirement	visit www.kent.edu/catalog/kent-core	3
KFH	Kent Core V. Humanities or Fine Arts One additional course from either the humanities or fine arts category, may fulfill diversity requirement.	visit www.kent.edu/catalog/kent-core	3
KSS	Kent Core VI. Social Sciences Must be selected from two curricular areas; may fulfill diversity requirement	visit www.kent.edu/catalog/kent-core	6
KBS	Kent Core VII. Basic Sciences Must include one laboratory	visit www.kent.edu/catalog/kent-core	6
KAD	Kent Core VIII. Additional May fulfill diversity requirement	visit www.kent.edu/catalog/kent-core	6
DD	Domestic Diversity Course Requirement Either domestic or global diversity must be from Kent Core	visit www.kent.edu/catalog/diversity	one course
DG	Global Diversity Course Requirement Either domestic or global diversity must be from Kent Core	visit www.kent.edu/catalog/diversity	one course
ELR	Experiential Learning Requirement Either course or non-course experience approved by the appropriate faculty member	CS 49901	fulfilled
WIC	Writing-Intensive Course Requirement Minimum C (2.000) grade	CS 49901	fulfilled