KENT STATE UNIVERSITY

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	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 Elective [3]**	**3 - 4**			■		
	Foreign Language [4]	4 - 5					
Semester Four [16 Credits]							
!	**CS 33007 Introduction to Database System Design**	**3**	■		■		
!	**CS 35201 Computer Communication Networks**	**3**	■		■		
	Foreign Language [4]	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 38101 Introduction to Game Programming**	**3**	■		■		
	Kent Core Requirement	3					
	General Electives [2]	3					
Semester Six [15 Credits]							
!	**CS 33101 Structure of Programming Languages**	**3**	■		■		
!	**CS 48101 Game Engine Concepts**	**3**	■		■		
	Computer Science Elective [5]	3	■		■		
	Kent Core Requirement	3					
	Kent Core Requirement	3					
Semester Seven [16 Credits]							
!	**CS 48102 Game Development Practicum [6]**	**4**	■	C	■	ELR/WIC	
!	**CS 47101 Computer Graphics**	**3**	■		■		
	Computer Science Elective (40000-level) [5]	3	■		■		
	Kent Core Requirement	3					
	Kent Core Requirement	3					
Semester Eight [14 Credits]							
	Computer Science Elective [5]	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

1. US 10097 is not required of transfer students with 25 credits or students age 21+ at time of admission.
2. 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.
3. Math Elective (3-4 credits)

Choose from the following:	
MATH 21001 Linear Algebra With Applications (3)	MATH 22005 Analytic Geometry and Calculus III (4)
MATH 30011 Basic Probability and Statistics (3)	

4. Fulfills College General Requirement

5. 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.
6. A minimum C (2.000) grade must be earned in CS 48102 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 48102	fulfilled
WIC	**Writing-Intensive Course Requirement** Minimum C (2.000) grade	CS 48102	fulfilled