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 | $\begin{aligned} & \text { Major } \\ & \text { GPA } \end{aligned}$ | Attribute | Notes |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Semester One [14 Credits] |  |  |  |  |  |  |
|  | CS 13001 Computer Science I-Programming and Problem Solving (4) or <br> CS 13011 Computer Science IA-Procedural Programming (2) and CS 13012 Computer Science IB-Object Oriented Programming (2) | 4 | C | - |  |  |
|  | US 10097 Destination Kent State: First Year Experience ${ }^{1}$ | 1 |  |  |  |  |
|  | Kent Core Requirement | 3 |  |  |  |  |
|  | Kent Core Requirement | 3 |  |  |  |  |
|  | Kent Core Requirement | 3 |  |  |  |  |
| Semester Two [15 Credits] |  |  |  |  |  |  |
| $!$ | CS 23022 Discrete Structures for Computer Science | 3 |  | ■ |  |  |
|  | Kent Core Requirement | 3 |  |  |  |  |
|  | Kent Core Requirement | 3 |  |  |  |  |
|  | Kent Core Requirement | 3 |  |  |  |  |
|  | College General Requirement ${ }^{2}$ | 3 |  |  |  |  |
| Semester Three [17 Credits] |  |  |  |  |  |  |
| ! | CS 23001 Computer Science II-Data Structures and Abstraction | 4 | C | - |  |  |
| ! | CS 35101 Computer Architecture | 3 |  | $\square$ |  |  |
|  | Foreign Language ${ }^{3}$ | 4-5 |  |  |  |  |
|  | Kent Core Requirement | 3 |  |  |  |  |
|  | College General Requirement ${ }^{2}$ | 3 |  |  |  |  |
| Semester Four [16 Credits] |  |  |  |  |  |  |
| ! | CS 33101 Structure of Programming Languages | 3 |  | - |  |  |
| ! | CS 33211 Operating Systems | 3 |  | ■ |  |  |
|  | CS Upper-division Electives ${ }^{4}$ | 3 |  | $\square$ |  |  |
|  | Foreign Language ${ }^{3}$ | 4-5 |  |  |  |  |
|  | Kent Core Requirement | 3 |  |  |  |  |
| Semester Five [15 Credits] |  |  |  |  |  |  |
|  | CS Upper-division Electives ${ }^{2}$ | 6 |  | ■ |  |  |
|  | Foreign Language ${ }^{3}$ | 3-5 |  |  |  |  |
|  | Kent Core Requirement | 3 |  |  |  |  |
|  | Kent Core Requirement | 3 |  |  |  |  |
| Semester Six [15 Credits] |  |  |  |  |  |  |
|  | CS Upper-division Electives ${ }^{4}$ | 3 |  | ■ |  |  |
|  | Foreign Language ${ }^{3}$ | 3-5 |  |  |  |  |
|  | Kent Core Requirement | 3 |  |  |  |  |
|  | Kent Core Requirement | 3 |  |  |  |  |
|  | General Electives ${ }^{5}$ | 3 |  |  |  |  |
| Semester Seven [15 Credits] |  |  |  |  |  |  |
|  | CS Upper-division Electives ${ }^{4}$ | 3 |  | - |  |  |
|  | General Electives ${ }^{5}$ | 12 |  |  |  |  |
| Semester Eight [13 Credits] |  |  |  |  |  |  |
| ! | CS 44901 Software Development Project | 4 | $\mathrm{C}^{6}$ | ■ | WIC/ELR |  |
|  | CS Upper-division Electives ${ }^{4}$ | 3 |  | - |  |  |
|  | General Electives ${ }^{5}$ | 6 |  |  |  |  |

## Graduation Requirements Summary

| Minimum Total Hours | Minimum Upper-Division Hours <br> $\mathbf{3 0 0 0 0}-\mathbf{4 0 0 0 0}$ level course | Minimum Kent Core Hours | Minimum |  |
| :---: | :---: | :---: | :---: | :---: |
|  |  |  | 36 | Major GPA |
| 120 | Overall GPA |  |  |

[^0]2. 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.

3. Fulfills College General Requirement.
4.9 credit hours must come from a 40000-level course. Students may only apply three (3) credit hours of CS 33192 Internship in Computer Science to the CS Upper-Division Elective requirement.
4. 12 credit hours must be upper-division. Credits required depend on meeting minimum 120 credit hours and minimum 42 upper-division credit hours
5. A minimum $C(2.000)$ grade must be earned to fulfill the writing-intensive requirement

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:
i. Intermediate I of the same language
ii. MCLS 10001 Introduction to Structural Concepts for Language Students
iii. MCLS 20000 Global Literacy and Cultural Awareness
iv. MCLS 20091 Seminar: Global Literacy Case Studies
v. MCLS 21417 Multiculturalism in Today's Germany
vi. MCLS 22217 Diversity in Today's Russia
vii. MCLS 23217 The Francophone Experience
viii. MCLS 28404 The Latin American Experience
ix. MCLS 28405 The Spanish Experience

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.

[^1]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


[^0]:    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.
[^1]:    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; Diversity Course Requirement - www.kent.edu/catalog/diversity; Writing-Intensive Course Requirement - www.kent.edu/catalog/wic; Experiential Learning Requirement - www.kent.edu/catalog/elr.

