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] |  |  |  |  |  |
| CS 13001 Computer Science I: Programming and Problem Solving | 4 |  | C | $\square$ | See note 3 on page 2 |
| US 10097 Destination Kent State: First Year Experience | 1 |  |  |  | Not required of transfer students with 25 credits |
| Kent Core Requirement | 3 |  |  |  |  |
| Kent Core Requirement | 3 |  |  |  | See Kent Core Summary on page 2 |
| Kent Core Requirement | 3 |  |  |  |  |
| Semester Two: [15 Credit Hours] |  |  |  |  |  |
| CS 23022 Discrete Structures for Computer Science | 3 |  |  | $\square$ |  |
| Kent Core Requirement | 3 |  |  |  |  |
| Kent Core Requirement | 3 |  |  |  | See Kent Core Summary on page 2 |
| Kent Core Requirement | 3 |  |  |  |  |
| College General Requirement | 3 |  |  |  | Must be from Kent Core Basic Sciences; see note 1 on page 2 |
| Semester Three: [17 Credit Hours] |  |  |  |  |  |
| CS 23001 Computer Science II: Data Structures and Abstraction | 4 |  | C | $\square$ |  |
| CS 35101 Computer Architecture | 3 | $\square$ |  | $\square$ |  |
| Foreign Language Requirement (Elementary I) | 4-5 |  |  |  | Fulfills College General Requirement; see foreign language note |
| Kent Core Requirement | 3 |  |  |  | See Kent Core Summary on page 2 |
| College General Requirement | 3 |  |  |  | Must be from Kent Core Social Sciences; see note 2 on page 2 |
| Semester Four: [16 Credit Hours] |  |  |  |  |  |
| CS 33006 Social and Ethical Issues in Computing | 3 | $\square$ | C | $\square$ | Fulfills writing-intensive course requirement |
| CS 33101 Structure of Programming Languages | 3 | $\square$ |  | $\square$ |  |
| CS 33211 Operating Systems | 3 | $\square$ |  | $\square$ |  |
| Foreign Language Requirement (Elementary II) | 4-5 |  |  |  | Fulfills College General Requirement; see foreign language note |
| Kent Core Requirement | 3 |  |  |  | See Kent Core Summary on page 2 |
| Semester Five: [15 Credit Hours] |  |  |  |  |  |
| CS Elective (upper division) | 6 | $\square$ |  | $\square$ |  |
| Foreign Language Requirement | 3 |  |  |  | Fulfills College General Requirement; see foreign language note |
| Kent Core Requirement | 3 |  |  |  |  |
| Kent Core Requirement | 3 |  |  |  | See Kent Core Summary on page |
| Semester Six: [15 Credit Hours] |  |  |  |  |  |
| CS Elective (upper division) | 3 | $\square$ |  | $\square$ |  |
| Foreign Language Requirement | 3 |  |  |  | Fulfills College General Requirement; see foreign language note |
| Kent Core Requirement | 3 |  |  |  | Cee Kent Core Summary on page 2 |
| Kent Core Requirement | 3 |  |  |  | Kent Core Summary on pag |
| General Elective | 3 |  |  |  |  |
| Semester Seven: [15 Credit Hours] |  |  |  |  |  |
| CS Elective (40000-level) | 3 | $\square$ |  | $\square$ |  |
| General Elective (upper division) | 12 | $\square$ |  |  |  |
| Semester Eight: [14 Credit Hours] |  |  |  |  |  |
| CS Electives (40000-level) | 6 | $\square$ |  | $\square$ |  |
| General Elective | 8 |  |  |  | Number of credits required depends on meeting minimum 121 credit hours and 42 upper-division hours |

## Graduation Requirements Summary

| Minimum <br> Total Hours | Minimum Upper- <br> Division Hours | Minimum <br> Kent Core Hours | Global / Domestic <br> Diversity Course | Writing- <br> Intensive | Experiential <br> Learning | Major GPA |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 121 | 42 | 36 | Kent Core or <br> General Electives | CS 33006 | Visit <br> (www.kent.edu/catalog/elr | 2.000 |

## Kent Core Summary

| Kent Core Categories | Remaining <br> Credit Hours |  |
| :--- | :--- | :---: |
| Composition (6-8 credit hours) <br> ENG 11002, 11011, 21011; HONR 10197, 10297 | Enrollment based on placement test | $6-8$ |
| Mathematics and Critical Reasoning (3-5 credit hours) | Enrollment based on placement test | $3-5$ |
| Humanities and Fine Arts (9 credit hours) <br> Minimum one course from humanities in Arts and Sciences <br> and minimum one course from fine arts | May fulfill diversity requirement | 9 |
| Social Sciences (6 credit hours) <br> Must be selected from two curricular areas | May fulfill diversity requirement | 6 |
| Basic Sciences (6-7 credit hours) <br> Must include one laboratory |  | $6-7$ |
| Additional (6 credit hours) | May fulfill diversity requirement | 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 3: Students not prepared to take CS 13001 in the first semester will benefit from taking CS 10051.
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 $\mathrm{C}(2.000)$ grade .
Visit www.kent.edu/catalog/wic for course list.

Roadmap: Computer Science - Bachelor of Arts
[AS-BA-CS]
College of Arts and Sciences
Department of Computer Science Catalog Year: 2013-2014

## 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.

