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 | $\begin{aligned} & \text { Major } \\ & \text { GPA } \end{aligned}$ | Type | Term Taken |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Semester One [15 Credits] |  |  |  |  |  |  |  |
| $!$ | CS 10061 Introduction to Computer Programming or DSCl 15310 Computational Thinking and Programming | 3 |  |  | $\square$ |  |  |
| ! | MATH 12002 Analytic Geometry and Calculus I | 5 |  |  | - | KMC |  |
|  | US 10097 Destination Kent State: First Year Experience ${ }^{1}$ | 1 |  |  |  |  |  |
|  | Kent Core Requirement | 3 |  |  |  |  |  |
|  | Kent Core Requirement | 3 |  |  |  |  |  |
| Semester Two [16 Credits] |  |  |  |  |  |  |  |
| $!$ | MATH 12003 Analytic Geometry and Calculus II | 5 |  |  | - |  |  |
| ! | PHY 23101 General University Physics I | 5 |  |  | $\square$ | KBS |  |
|  | Kent Core Requirement | 3 |  |  |  |  |  |
|  | Kent Core Requirement | 3 |  |  |  |  |  |
| Semester Three [17 Credits] |  |  |  |  |  |  |  |
| $!$ | MATH 21001 Linear Algebra With Applications | 3 |  |  | $\square$ |  |  |
| $!$ | MATH 22005 Analytic Geometry and Calculus III | 4 |  |  | - |  |  |
|  | Foreign Language ${ }^{2}$ | 4-5 |  |  |  |  |  |
|  | Kent Core Requirement | 3 |  |  |  |  |  |
|  | Kent Core Requirement | 3 |  |  |  |  |  |
| Semester Four [16 Credits] |  |  |  |  |  |  |  |
| I | MATH 40011 Introduction to Probability Theory and Applications | 3 | $\square$ |  | $\square$ |  |  |
|  | Foreign Language ${ }^{2}$ | 4-5 |  |  |  |  |  |
|  | Kent Core Requirement | 3 |  |  |  |  |  |
|  | Kent Core Requirement | 3 |  |  |  |  |  |
|  | Allied Area Electives ${ }^{3}$ | 3 | $\square$ |  | - |  |  |
| Semester Five [16 Credits] |  |  |  |  |  |  |  |
| I | MATH 30055 Mathematical Theory of Interest | 3 | $\square$ |  | ■ |  |  |
| $!$ | MATH 40012 Introduction to Statistical Concepts | 3 | - |  | ■ |  |  |
|  | Kent Core Requirement | 4 |  |  |  |  |  |
|  | Allied Area Electives ${ }^{3}$ | 3 | - |  | - |  |  |
|  | General Elective ${ }^{4}$ | 3 |  |  |  |  |  |
| Semester Six [16 Credits] |  |  |  |  |  |  |  |
| ! | MATH 40055 Actuarial Mathematics I | 4 | $\square$ |  | $\square$ |  |  |
| , | MATH 41021 Theory of Matrices | 3 | - |  | - |  |  |
|  | Allied Area Electives ${ }^{3}$ | 6 | - |  | - |  |  |
|  | General Elective ${ }^{4}$ | 3 |  |  |  |  |  |
| Semester Seven [15 Credits] |  |  |  |  |  |  |  |
| ! | MATH 40056 Actuarial Mathematics II | 4 | ■ |  | ■ |  |  |
| $!$ | MATH 42001 Introduction to Analysis $\mathrm{I}^{5}$ | 3 | - | C | - | WIC |  |
|  | Allied Area Electives ${ }^{3}$ | 3 | ■ |  | - |  |  |
|  | Kent Core Requirement | 1-2 |  |  |  |  |  |
|  | General Elective ${ }^{4}$ | 3-4 |  |  |  |  |  |
| Semester Eight [9 Credits] |  |  |  |  |  |  |  |
| ! | MATH 40091 Seminar in Actuarial Mathematics | 2 | ■ |  | ■ |  |  |
| ! | MATH 42002 Introduction to Analysis II ${ }^{5}$ | 3 | $\square$ | C | - | WIC |  |
|  | General Elective ${ }^{4}$ | 4 |  |  |  |  |  |

## Graduation Requirements Summary

| Minimum Total Hours | Minimum Upper-Division Hours | Minimum Kent Core Hours | Minimum |  |
| :---: | :---: | :---: | :---: | :---: |
|  |  |  | 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. Fulfills College General Requirement
3. Allied Area Electives ( 15 credits): must be approved by major advisor

## Choose from the following:

ACCT 3/4xxxx ACCT upper-division course* (1-15)
BSCI 3/4xxxx BSCI upper-division courses (1-15)
BMRT xxxxx BMRT courses (1-15)
CHEM 3/4xxxx CHEM upper-division courses (1-15)
ECON 3/4xxxx ECON upper-division courses* (1-15)
GEOL 3/4xxxx GEOL upper-division courses (1-15)
MIS 3/4xxxx MIS upper-division courses (1-15)
PHIL 31035 Formal Logic (3)
PHIL 41045 Metalogic (3)

BUS xxxxx BUS courses (1-15)
CS 3/4xxxx CS upper-division courses (1-15)
FIN 3/4xxxx FIN upper-division courses (1-15)
MATH 3/4xxxx MATH upper-division courses ${ }^{*}(1-15)$
PHY 3/4xxxx PHY upper-division (1-15)
PHIL 41035 Philosophy of Science (3)
*Course may satisfy the professional achievement requirements (e.g., for Fellow status) set by the Society of Actuaries and the Casualty Actuarial Society.
4. Credits required depends on meeting minimum 120 credit hours and minimum 42 upper-division credit hours
5. A minimum C (2.000) grade must be earned in MATH 42001 or MATH 41002 to fulfill the writing-intensive requirement.

University Requirements Summary

| Type | Categories | Course(s) Satisfying Category | Remaining Requirements |
| :---: | :---: | :---: | :---: |
| KCM | Kent Core I. Composition <br> 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 <br> 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 <br> 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 <br> 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 <br> 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 | PHY 23101 | 1 |
| KAD | Kent Core VIII. Additional May fulfill diversity requirement | visit www.kent.edu/catalog/kent-core | 6 |
| DD | Domestic Diversity Course Requirement <br> Either domestic or global diversity must be from Kent Core | visit www.kent.edu/catalog/diversity | one course |
| DG | Global Diversity Course Requirement <br> Either domestic or global diversity must be from Kent Core | visit www.kent.edu/catalog/diversity | one course |
| ELR | Experiential Learning Requirement <br> Either course or non-course experience approved by the appropriate faculty member | visit www.kent.edu/catalog/elr | one course or activity |
| WIC | Writing-Intensive Course Requirement Minimum C (2.000) grade | MATH 42001, MATH 42002 | fulfilled |

