

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 | Major GPA | Attribute  | Notes |
|------------------------------------|--|--------------|------------|-----------|------------|-------|
| <b>Semester One [14 Credits]</b>   |  |              |            |           |            |       |
| !                                  | CHEM 10060 General Chemistry I <i>and</i><br>CHEM 10062 General Chemistry I Laboratory<br><i>or</i><br>CHEM 10960 Honors General Chemistry   | 5            |            | ■         | KBS<br>KBS |       |
| !                                  | MATH 12002 Analytic Geometry and Calculus I  | 5            |            | ■         | KMC        |       |
|                                    | US 10097 Destination Kent State: First Year Experience <sup>1</sup>  | 1            |            |           |            |       |
|                                    | Kent Core Requirement  | 3            |            |           |            |       |
| <b>Semester Two [16 Credits]</b>   |  |              |            |           |            |       |
| !                                  | CHEM 10061 General Chemistry II <i>and</i><br>CHEM 10063 General Chemistry II Laboratory<br><i>or</i><br>CHEM 10961 Honors General Chemistry | 5            |            | ■         | KBS<br>KBS |       |
| !                                  | MATH 12003 Analytic Geometry and Calculus II   | 5            |            | ■         | KBS        |       |
|                                    | Kent Core Requirement  | 3            |            |           |            |       |
|                                    | Kent Core Requirement  | 3            |            |           |            |       |
| <b>Semester Three [16 Credits]</b> |  |              |            |           |            |       |
| !                                  | CHEM 30475 Organic Chemistry Laboratory I <sup>2</sup>   | 1            |            | ■         | ELR        |       |
| !                                  | CHEM 30481 Organic Chemistry I <sup>2</sup>  | 3            |            | ■         |            |       |
| !                                  | MATH 22005 Analytic Geometry and Calculus III  | 4            |            | ■         |            |       |
| !                                  | PHY 23101 General University Physics I   | 5            |            | ■         | KBS        |       |
|                                    | Kent Core Requirement  | 3            |            |           |            |       |
| <b>Semester Four [16 Credits]</b>  |  |              |            |           |            |       |
| !                                  | CHEM 30050 Introduction to Materials Chemistry <sup>3</sup>  | 2            |            | ■         |            |       |
| !                                  | CHEM 30301 Inorganic Chemistry I <sup>2</sup>  | 2            |            | ■         |            |       |
| !                                  | CHEM 30476 Organic Chemistry Laboratory II <sup>5</sup>  | 1            |            | ■         |            |       |
| !                                  | CHEM 30482 Organic Chemistry II <sup>5</sup>   | 3            |            | ■         |            |       |
| !                                  | PHY 23102 General University Physics II  | 5            |            | ■         | KBS        |       |
|                                    | Kent Core Requirement  | 3            |            |           |            |       |
| <b>Semester Five [15 Credits]</b>  |  |              |            |           |            |       |
| !                                  | CHEM 30105 Analytical Chemistry I <sup>6</sup>   | 3            |            | ■         |            |       |
| !                                  | CHEM 40302 Inorganic Chemistry II <sup>6</sup>   | 2            |            | ■         |            |       |
| !                                  | CHEM 40451 Organic Materials Chemistry <sup>7</sup>  | 3            |            | ■         |            |       |
| !                                  | CHEM 40555 Elementary Physical Chemistry <sup>6</sup>  | 3            |            | ■         |            |       |
|                                    | Foreign Language <sup>8</sup>  | 4 - 5        |            |           |            |       |
| <b>Semester Six [16 Credits]</b>   |  |              |            |           |            |       |
| !                                  | CHEM 40303 Inorganic Chemistry III <sup>4</sup>  | 2            |            | ■         |            |       |
| !                                  | CHEM 40352 Inorganic Materials Chemistry <sup>7</sup>  | 3            |            | ■         |            |       |
| !                                  | CHEM 40364 Intermediate Inorganic Chemistry Lab <sup>4</sup>   | 1            |            | ■         |            |       |
| !                                  | CHEM 40556 Elementary Physical Chemistry <sup>4</sup>  | 3            |            | ■         |            |       |
|                                    | Foreign Language <sup>8</sup>  | 4 - 5        |            |           |            |       |
|                                    | Kent Core Requirement  | 3            |            |           |            |       |
| <b>Semester Seven [13 Credits]</b> |  |              |            |           |            |       |
| !                                  | CHEM 40557 Physical Chemistry Lab <sup>6</sup>   | 2            |            | ■         |            |       |
|                                    | Kent Core Requirement  | 3            |            |           |            |       |
|                                    | CHEM Electives <sup>9</sup>  | 1 - 2        |            | ■         |            |       |
|                                    | General Electives <sup>10</sup>  | 7            |            |           |            |       |
| <b>Semester Eight [14 Credits]</b> |  |              |            |           |            |       |
| !                                  | CHEM 30106 Analytical Chemistry II <sup>4</sup>  | 2            |            | ■         |            |       |
| !                                  | CHEM 30284 Introductory Biological Chemistry <sup>5</sup>  | 4            |            | ■         |            |       |
| !                                  | CHEM 40053 Materials Chemistry Laboratory <sup>3</sup>   | 2            |            | ■         |            |       |
|                                    | General Electives <sup>10</sup>  | 6            |            |           |            |       |

### Graduation Requirements Summary

| Minimum Total Hours | Minimum Upper-Division Hours<br>30000 – 40000 level course | 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 (excluding College Credit Plus and dual-enrollment) or students age 21+ at time of admission.
2. Offered in fall and summer only
3. Contact department for offerings
4. Offered in spring only
5. Offered in spring and summer only
6. Offered in fall only
7. Offered every other year; contact department for details
8. Fulfills College General Requirement
9. Chemistry elective (1-2 credits)

**Choose from the following:**

|  |   |
|--|---|
| CHEM 30107 Analytical Chemistry Laboratory I (1) (WIC) <sup>11</sup> | CHEM 30108 Analytical Chemistry Laboratory II (2) (WIC) <sup>11</sup> |
| CHEM 40477 Intermediate Organic Chemistry Laboratory (1)             | CHEM 40483 Intermediate Organic Chemistry (1)                         |
| CHEM 40568 Elementary Physical Chemistry Laboratory (1)              | CHEM 40571 Surface Chemistry (2)                                      |
| CHEM 40796 Individual Investigation (1 - 2)                          |   |

10. Credits required depend on meeting minimum 120 credit hours and minimum 42 upper-division credit hours.
11. Minimum C (2.000) grade must be earned in CHEM 30107 or CHEM 30108 in order to fulfill the writing-intensive requirement.

**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](http://www.kent.edu/catalog/kent-core); Diversity Course Requirement – [www.kent.edu/catalog/diversity](http://www.kent.edu/catalog/diversity); Writing-Intensive Course Requirement – [www.kent.edu/catalog/wic](http://www.kent.edu/catalog/wic); Experiential Learning Requirement – [www.kent.edu/catalog/elr](http://www.kent.edu/catalog/elr).

**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