

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 [16 Credits]</b>   |   |              |                |           |           |       |
| !                                  | <b>MATH 11010 Algebra for Calculus</b>  | 3            |                |           | KMC       |       |
|                                    | AERN 15000 Introduction to Aeronautics  | 3            |                | ■         |           |       |
|                                    | AERN 15745 Non-Pilot Elements of Flight Theory  | 3            |                | ■         |           |       |
|                                    | UC 10097 Destination Kent State: First Year Experience <sup>1</sup>                                     | 1            |                |           |           |       |
|                                    | Kent Core Requirement   | 3            |                |           |           |       |
|                                    | Kent Core Requirement   | 3            |                |           |           |       |
| <b>Semester Two [15 Credits]</b>   |   |              |                |           |           |       |
| !                                  | <b>MATH 11022 Trigonometry</b>  | 3            |                |           | KMC       |       |
|                                    | AERN 25250 Elements of Aviation Weather   | 3            |                | ■         |           |       |
|                                    | AERN 25350 Fundamentals of Air Traffic Control  | 2            |                | ■         |           |       |
|                                    | AERN 25351 Fundamentals of Air Traffic Control Laboratory   | 1            |                | ■         |           |       |
|                                    | COMM 15000 Introduction to Human Communication  | 3            |                |           | KAD       |       |
|                                    | TECH 20002 Materials and Processes  | 3            |                | ■         |           |       |
| <b>Semester Three [15 Credits]</b> |   |              |                |           |           |       |
| !                                  | <b>PHY 13001 General College Physics I</b>  | 4            |                |           | KBS       |       |
| !                                  | <b>PHY 13021 General College Physics Laboratory I</b>   | 1            |                |           | KBS       |       |
|                                    | AERN 20000 Professional Development in Aeronautics I  | 1            |                | ■         |           |       |
|                                    | TECH 31000 Cultural Dynamics of Technology  | 3            | C <sup>2</sup> | ■         | DD/WIC    |       |
|                                    | Kent Core Requirement   | 3            |                |           |           |       |
|                                    | Kent Core Requirement   | 3            |                |           |           |       |
| <b>Semester Four [14 Credits]</b>  |   |              |                |           |           |       |
| !                                  | <b>PHY 13012 College Physics II <sup>3</sup></b>  | 2            |                |           | KBS       |       |
|                                    | AERN 35150 Aircraft Structures  | 3            |                | ■         |           |       |
|                                    | AERN 35340 Airport Management   | 3            |                | ■         |           |       |
|                                    | Kent Core Requirement   | 3            |                |           |           |       |
|                                    | Kent Core Requirement   | 3            |                |           |           |       |
| <b>Semester Five [16 Credits]</b>  |   |              |                |           |           |       |
|                                    | AERN 35020 Aircraft Propulsion Systems  | 3            |                | ■         |           |       |
|                                    | AERN 35040 Aircraft Systems I   | 3            |                | ■         |           |       |
|                                    | TECH 21021 Survey of Electricity and Electronics  | 4            |                | ■         |           |       |
|                                    | Kent Core Requirement   | 3            |                |           |           |       |
|                                    | General Electives <sup>4</sup>  | 3            |                |           |           |       |
| <b>Semester Six [16 Credits]</b>   |   |              |                |           |           |       |
|                                    | AERN 30000 Professional Development in Aeronautics II   | 1            |                | ■         |           |       |
|                                    | AERN 35341 Air Transportation Systems   | 3            |                | ■         |           |       |
|                                    | AERN 45030 Aircraft Systems II <sup>2</sup>   | 3            |                | ■         |           |       |
|                                    | AERN 45350 Avionics   | 3            |                | ■         |           |       |
|                                    | General Electives <sup>4</sup>  | 4            |                |           |           |       |
| <b>Semester Seven [15 Credits]</b> |   |              |                |           |           |       |
|                                    | AERN 45130 Physiology and Human Factors of Flight   | 3            |                | ■         |           |       |
|                                    | AERN 45135 Aviation Safety Theory   | 3            |                | ■         |           |       |
|                                    | AERN 45150 Applied Flight Dynamics I  | 3            |                | ■         |           |       |
|                                    | AERN 45250 Aviation Law   | 3            |                | ■         |           |       |
|                                    | General Electives <sup>4</sup>  | 3            |                |           |           |       |
| <b>Semester Eight [15 Credits]</b> |   |              |                |           |           |       |
|                                    | AERN 45099 Aeronautical Studies Capstone<br>or AERN 45092 Aeronautical Internship/Cooperative Education | 3            | C              | ■         | ELR       |       |
|                                    | AERN 45291 Aerospace Senior Seminar   | 1            |                | ■         |           |       |
|                                    | AERN 45791 Aviation Security and Policy Seminar   | 3            | C <sup>2</sup> | ■         | WIC       |       |
|                                    | General Electives <sup>4</sup>  | 8            |                |           |           |       |

### 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                 | 39   | 36                      | 2.250     | 2.000       |

1. UC 10097 is not required of transfer students with 25 credits (excluding College Credit Plus) or students age 21+ at time of admission.
2. A minimum C grade must be earned in AERN 45791 or TECH 31000 to fulfill the writing-intensive requirement.
3. Students who successfully completed PHY 13002 will have met the requirement for 13012.
4. Total number of credit hours required depends on meeting minimum 120 credit hours and minimum 39 upper-division hours.

**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