

[CT-BS-AERN-AEST] College of Technology Catalog Year: 2010-2011

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<br>Hours | Upper<br>Division | Min.<br>Grade | Important Notes  |  |
|--|-----------------|-------------------|---------------|--|--|
| Semester One: [16 Credit Hours]                  |                 |                   |               |  |  |
| MATH 11010 Algebra for Calculus                  | 3               |                   |               | Fulfills Kent Core Mathematics and Critical Reasoning                      |  |
| GEOG 17063 World Geography                       | 3               |                   |               | Fulfills Kent Core Social Sciences and global diversity course requirement |  |
| TECH 10001 Information Technology                | 3               |                   |               |  |  |
| TECH 15000 Introduction to Aeronautics           | 3               |                   |               |  |  |
| US 10097 Destination Kent State: FYE             | 1               |                   |               | Not required for transfer students with 25 credits                         |  |
| Kent Core Requirement                            | 3               |                   |               | See Kent Core Summary on page 2  |  |
| Semester Two: [16 Credit Hours]                  |                 |                   |               |  |  |
| MATH 11022 Trigonometry                          | 2               |                   |               |  |  |
| TECH 13580 Engineering Graphics I                | 3               |                   |               |  |  |
| TECH 15740 Elements of Flight Theory             | 5               |                   |               |  |  |
| TECH 20002 Materials and Processes               | 3               |                   |               |  |  |
| Kent Core Requirement                            | 3               |                   |               | See Kent Core Summary on page 2  |  |
| Semester Three: [16 Credit Hours]                |                 |                   |               |  |  |
| MATH 11012 Intuitive Calculus                    | 3               |                   |               | Fulfills Kent Core Addtional   |  |
| PHY 13011 College Physics I                      | 2               |                   |               | Fulfills Kent Core Basic Sciences;   |  |
| PHY 13021 General College Physics Laboratory I   | 1               |                   |               | both courses must be taken together  |  |
| ECON 22060 Principles of Microeconomics          | 3               |                   |               | Fulfills Kent Core Social Sciences   |  |
| TECH 21021 Survey of Electricity and Electronics | 4               |                   |               |  |  |
| TECH 25250 Elements of Aviation Weather          | 3               |                   |               |  |  |
| Semester Four: [15 Credit Hours]                 |                 |                   |               |  |  |
| PHY 13012 College Physics II                     | 2               |                   |               | Fulfills Kent Core Basic Sciences;   |  |
| PHY 13022 General College Physics Lab II         | 1               |                   |               | courses must be taken together   |  |
| ECON 22061 Principles of Macroeconomics          | 3               |                   |               | Fulfils Kent Core Additional   |  |
| ENG 20002 Introduction to Technical Writing      | 3               |                   |               |  |  |
| Kent Core Requirement                            |                 |                   |               | See Kent Core Summary on page 2  |  |
| Semester Five: [15 Credit Hours]                 |                 |                   |               |  |  |
| TECH 35020 Aircraft Propulsion Systems           | 3               |                   |               |  |  |
| TECH 35340 Airport Management                    | 3               | •                 |               |  |  |
| TECH 35341 Air Transportation Systems            | 3               |                   |               |  |  |
| TECH 35150 Aircraft Structures                   | 3               |                   |               |  |  |
| Kent Core Requirement                            | 3               |                   |               | See Kent Core Summary on page 2  |  |
| Semester Six: [15 Credit Hours]                  |                 |                   |               |  |  |
| COMM 15000 Introduction to Human Communication   | 3               |                   |               | Fulfills Kent Core Additional  |  |
| TECH 33033 Hydraulics and Pneumatics             | 3               | •                 |               |  |  |
| TECH 35040 Aircraft Systems I                    | 3               |                   |               | Offered in spring only   |  |
| TECH 35342 Air Traffic Control                   | 3               | •                 |               |  |  |
| TECH 45130 Physiology and Human Factors          | 3               |                   |               |  |  |



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Critical requirements are boldface in shaded areas

| Course Subject and Title                        | Credit<br>Hours | Upper<br>Division | Min.<br>Grade | Important Notes   |  |
|---|-----------------|-------------------|---------------|---|--|
| Semester Seven: [15 Credit Hours]               |                 |                   |               |   |  |
| TECH 45030 Aircrafts Systems II                 | 3               |                   |               | Fulfills writing-intensive course requirement; see note below                         |  |
| TECH 45150 Applied Flight Dynamics I            | 3               |                   |               |   |  |
| TECH 45250 Aviation Law and Safety              | 3               |                   |               |   |  |
| TECH 45350 Avionics                             | 3               |                   |               |   |  |
| General Elective (lower or upper division)      | 3               |                   |               | Should fulfill domestic diversity requirement if not satisfied earlier                |  |
| Semester Eight: [16 Credit Hours]               |                 |                   |               |   |  |
| TECH 45291 Aerospace Senior Seminar             | 1               |                   |               | Offered in spring only  |  |
| TECH 45791 Aviation Security and Policy Seminar | 3               |                   |               | Fulfills writing-intensive course requirement; see note below; offered in spring only |  |
| General Electives (lower or upper division)     | 12              |                   |               | Should fulfill domestic diversity requirement if not satisfied earlier                |  |

**Graduation Requirements Summary:** 

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|-------------|--------------------|-----------------|--|-----------------------------|-----------|-------------|
| Minimum     | Minimum Upper-     | Minimum         | Diversity Course                                 | Writing Intensive           | Minimum   |             |
| Total Hours | Division Hours     | Kent Core Hours | Global / Domestic                                | Writing-Intensive           | Major GPA | Overall GPA |
| 124         | 39                 | 36              | GEOG 17063 /<br>Kent Core or General<br>Elective | TECH 45030 or<br>TECH 45791 | 2.25      | 2.00        |

Kent Core Summary

| Kent Core Categories   | Important Notes  | Remaining<br>Credit Hours |
|--|--|---------------------------|
| Additional (6 credit hours)  Must be selected from two Kent Core categories  | Fulfilled in this major with ECON 22061, COMM 15000                        | 0                         |
| Basic Sciences (6-7 credit hours)  Must include one laboratory   | Fulfilled in this major with PHY 13011, PHY 13012, PHY 13021 and PHY 13022 | 0                         |
| Composition (6-8 credit hours)<br>ENG 11002, 11011, 21011; HONR 10197, 10297   | Enrollment based on placement test   | 6-8                       |
| Humanities and Fine Arts (9 credit hours)  Minimum one course from humanities in Arts and Sciences category and minimum one course from fine arts category | May fulfill domestic diversity requirement                                 | 9                         |
| Mathematics and Critical Reasoning (3-5 credit hours)  | Fulfilled in this major with MATH 11010.                                   | 0                         |
| Social Sciences (6 credit hours)  Must be selected from two curricular areas   | Fulfilled in this major with ECON 22060 and GEOG 17063                     | 0                         |

A minimum C grade must be earned in either TECH 45030 or TECH 45791 in order to fulfill the writing-intensive requirement. Note:

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 C (2.00) grade. Visit www.kent.edu/catalog/wic 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.