Roadmap: Aeronautics - Aeronautical Studies - Bachelor of Science

AT-BS-AERN-AEST



College of Applied Engineering, Sustainability and Technology

Catalog Year: 2014-2015

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.

| complet | ed in the semester listed to ensure a timely graduation. | 0 | I I more a | NA: | Mair | | T |
|----------|---|-----------------|---------------|---------------|------------------|-----------|---------------|
| Critical | Course Subject and Title | Credit Hours | Opper Div. | Min. Grade | Major GPA | Туре | Term Taken |
| Semest | er One [16 Credits] | | | | | | |
| ! | MATH 11010 Algebra for Calculus | 3 | | | | KMC | |
| | AERN 15000 Introduction to Aeronautics | 3 | | | | | |
| | AERN 15745 Non-Pilot Elements of Flight Theory | 3 | | | | | |
| | US 10097 Destination Kent State: First Year Experience ¹ | 1 | | | | | |
| | Kent Core Requirement | 3 | | | | | |
| | Kent Core Requirement | 3 | | | | | |
| Semest | er Two [15 Credits] | | | | | | |
| ! | MATH 11022 Trigonometry | 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 | | | | | |
| Semest | er Three [14 Credits] | | | | | | |
| ! | PHY 13001 General College Physics I | 4 | | | | KBS | |
| ! | PHY 13021 General College Physics Laboratory I | 1 | | | | KBS | |
| | TECH 31000 Cultural Dynamics of Technology ² | 3 | | | | DD/WIC | |
| | Kent Core Requirement | 3 | | | | | |
| | Kent Core Requirement | 3 | | | | | |
| Semest | er Four [14 Credits] | | | | | | |
| ! | PHY 13012 College Physics II ³ | 2 | | | | KBS | |
| | AERN 35040 Aircraft Systems I | 3 | | | | | |
| | AERN 35150 Aircraft Structures | 3 | | | • | | |
| | AERN 35340 Airport Management | 3 | | | • | | |
| | Kent Core Requirement | 3 | | | | | |
| Semest | er Five [16 Credits] | | | | | | |
| | AERN 35020 Aircraft Propulsion Systems | 3 | | | | | |
| | AERN 45030 Aircraft Systems II ² | 3 | | | • | | |
| | TECH 21021 Survey of Electricity and Electronics | 4 | | | | | |
| | Kent Core Requirement | 3 | | | | | |
| | Kent Core Requirement | 3 | | | | | |
| Semest | er Six [15 Credits] | | | | | | |
| | AERN 35341 Air Transportation Systems | 3 | | | | | |
| | AERN 45350 Avionics | 3 | | | | | |
| | General Elective (lower or upper-division credit hours) | 9 | | | | | |
| Semest | er Seven [15 Credits] | | | | | | |
| | 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 Elective (lower or upper-division credit hours) | 3 | | | | | |
| Semest | er Eight [15 Credits] | | | | | | |
| Note: A | Il students must successfully complete the comprehensive exit exam requirement prior to | gradua | ation w | ith the I | 3.S. in <i>i</i> | Aeronauti | ics. |
| | AERN 45099 Aeronautical Studies Capstone | 3 | • | | • | ELR | |
| | or AERN 45092 Aeronautical Internship/Cooperative Education | | | | | | - |
| | AERN 45291 Aerospace Senior Seminar | 1 | | | | 14/10 | |
| | AERN 45791 Aviation Security and Policy Seminar ² | 3 | | | | WIC | |
| | General Elective (lower or upper-division credit hours) | 8 | | | | | |

Graduation Requirements Summary

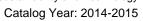
| Ī | Minimum Total Hours | Minimum Upper-Division Hours | Minimum Kent Core Hours | Minimum | | |
|---|----------------------|-------------------------------|--------------------------|-----------|-------------|--|
| | Willimum Total Hours | Millimum Opper-Division Hours | Willimum Kent Core Hours | Major GPA | Overall GPA | |
| Ī | 120 | 39 | 36 | 2.250 | 2.000 | |

- 1. US 10097 is not required of transfer students with 25 credits 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.

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Special Major Note

Comprehensive Exit Exam: All students must successfully complete the comprehensive exit exam requirement prior to graduation with the B.S. in Aeronautics. Exit exam requirements are to be satisfied by all graduation candidates no later than the eighth week of the semester of intended graduation. The exit exams shall be offered during the fourth and eighth weeks of the fall and spring semesters. Students who fail will be allowed to retake the exit exams. An overall passing grade of 70 is required. Students who transfer into the aeronautics program and receive academic credit for core areas are still responsible for taking the exam in its entirety.

University Requirements Summary

| Туре | Categories Course(s) Satisfying Category | | Remaining Requirements |
|------|--|--------------------------------------|------------------------|
| | Kent Core I. Composition 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 11010 | fulfilled |
| KHU | Kent Core III. Humanities 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 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 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 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 13001, PHY 13012 and PHY 13021 | fulfilled |
| KAD | Kent Core VIII. Additional May fulfill diversity requirement | COMM 15000, MATH 11022 | fulfilled |
| DD | Domestic Diversity Course Requirement Either domestic or global diversity must be from Kent Core | TECH 31000 | fulfilled |
| DG | Global Diversity Course Requirement Either domestic or global diversity must be from Kent Core | visit www.kent.edu/catalog/diversity | one course |
| ELR | Experiential Learning Requirement Either course or non-course experience approved by the appropriate faculty member | AERN 45099 | fulfilled |
| | Writing-Intensive Course Requirement Minimum C (2.000) grade | TECH 31000, AERN 45791 | fulfilled |