



Aviation B.S. Degree

Aerospace Technology (AT) Concentration

Aviation at EKU

EKU Aviation provides the aerospace industry with the safest, best trained, and most adaptable pilots and managers. The Bachelor of Science degree has concentrations in Professional Flight, Aerospace Management, or Aerospace Technology (AT). Besides a general aviation core, aviation students are required to take supporting courses in mathematics, statistics, physics, and business management. Graduates of the program are professionally prepared for all facets of the aerospace and aviation industry to include piloting, flight instruction, aviation management, and aerospace technology.

Professional Flight

The professional flight concentration is the only Federal Aviation Administration (FAA) approved university flight program in Kentucky. Students receive flight certification as Private, Instrument, Commercial, Instructor, and Multi Engine pilot. EKU is one of only a few programs authorized to award a 1,000 hour Restricted Airline Transport Pilot (R-ATP) certificate upon graduation. This advantage makes EKU aviation the premier choice for those interested in flying careers with the airlines, air charter companies, or military aviation.

Aerospace Management

Students prepare for careers at airports, airlines, corporate aviation, and government agencies such as the FAA, NASA and NTSB with hands-on training in operations, scheduling and dispatch for management professionals. Management graduates work in aviation marketing, public relations, human resources, safety and security at the local, national and international level. They also have the opportunity to receive certification as an AAAE Certified Member (AAAE CM) through the American Association of Airport Executives (AAAE).

Aerospace Technology (AT)

A leader in innovation, EKU Aviation is on the forefront of meeting market demands by offering a hard-to-find aviation degree-completion concentration. By adding upper division aerospace management and operations studies, the Bachelor's degree AT concentration is specifically designed to complete a 2-year community college degree with a heavy technical aviation course load. Examples of aviation technical degrees include Airframes & Power Plants (A&P) or any 2-year career technical (CTE) degree partnered with a local flight school. Additionally, non-degreed airline pilots with the Airline Transport Pilot (ATP) certificate may complete their bachelor's degree. This concentration is designed to be offered online throughout Kentucky or on-campus in Richmond.

Aviation Careers

The U.S. Department of Labor projects employment of aircraft pilots to increase five percent through 2024. The "Age 65 Rule," (Dec. 2007), will reintroduce the beginning of another pilot shortage in the next few years as the initial wave of already very senior pilots begin to retire. In the long run, demand for air travel is expected to grow along with the population and the economy. Median annual earnings of commercial pilots are around \$77,200. Average entry level incomes for management are \$40,000-\$50,000. EKU aviation graduates have found positions with Delta, PSA airlines, Envoy airlines, Chautauqua Airlines, Jet Blue, Continental, Kentucky Department of Aviation, U.S. Military, San Antonio International Airport, L-3, Kentucky State Police, Louisville Police Department, and through self-employment.

Department Facilities, Faculty and Student Organizations

The Department is located in the Ralph W. Whalin Technology Complex which includes approximately 100,000 square feet of classroom and laboratory space plus a simulator facility. The facilities are located in the central portion of campus, close to the library, classroom buildings and dormitories. Flight training is conducted primarily at the Central Kentucky Regional Airport (KRG). Faculty in the aviation program have real world industry experience ranging from military to airlines to corporate aviation and Part 135 Operations. The new Flight Operations Office houses the very latest in flight locating, scheduling and dispatch. Flight students receive flight training in accordance with FAR Part 141, saving time and money. Aviation students may also participate in Alpha Eta Rho - an international professional co-ed fraternity.

For More Information

EKU Aviation

859-622-1014 | <http://aviation.eku.edu> | email: fly@eku.edu

Department of Applied Engineering and Technology

307 Whalin Complex, Room 307 | Eastern Kentucky University | 521 Lancaster Avenue | Richmond, KY 40475-3102



Suggested Curriculum Guide for Aerospace Technology Concentration

Freshman (1st Semester) 17 hrs

- BTO 100*** Academic Orientation (1 hr)
- AVN Technical Elective**
- AVN Technical Elective** (1 hr)**
- TEC 161** Computer Applications in Technology
- Free Elective**
- E-1A** ENG 101* or 105* English Composition I
- E-5A** Historical Perspective

Freshman (2nd Semester) 18 hrs

- AVN Technical Elective**
- AVN Technical Elective**
- E-1B** ENG 102* English Composition II
- E-1C** CMS 100 Oral Communication
- E-2 (MAT 114 or higher)**
- E-4** Laboratory Life Science

Sophomore (1st Semester) 18 hrs

- AVN Technical Elective**
- AVN Technical Elective**
- STA 215** Elementary Probability & Statistics or
QMB 200 Business Statistical I
- E-4** (Phy 101 or higher)
- E-5B** ECO-230 Principles of Microeconomics
- E-6** Diversity of Perspectives & Experiences

Sophomore (2nd Semester) 18 hrs

- AVN Technical Elective**
- AVN Technical Elective**
- AVN Technical Elective**
- E-3A** Arts
- E-3B** Humanities
- E-6B** Diversity of Perspectives & Experiences

Junior (1st Semester) 13 hrs

- AVN 150** Introduction to Aviation
- AVN 192** Private Pilot Ground (4 hrs)
- AVN 315** Aviation Safety Programs
- AVN 325** Aircraft Systems

Junior (2nd Semester) 12 hrs

- AVN 350** Air Transportation
- AVN 360** Problems in Aviation Administration
- BTS 300** Professional Skills Seminar (0 credit)
- GEO 315** Intro to Meteorology or **AVN 335** Weather reporting/Analysis
- MGT 301** Principles of Management (or MGT 300 if business minor/major)

Senior (1st Semester) 12 hrs

- AVN 340** Airport Management
- AVN 390** Aviation Administration Decision Making
- AVN 402** Corporate & Business [Satisfies University Aviation *Applied Critical and Creative Thinking (ACCT)* requirement]
- AVN 410** Air Traffic Control

Senior (2nd Semester) 12 hrs

- AVN 370** Techniques: Aviation Supervisors
- AVN 401** Airline Management
- AVN 435** Turbine Aircraft Systems
- AVN 460** Aviation Legislation
- AVN 467** Aviation Exit Exam (0 credit)
- BTS 400** College to Careers Seminar (0 credit)***

*Course must be taken in semester indicated.

***Spring Only

**Transfer Students are not required to take BTO 100. Transfer student Senior 2nd Semester AVN Technical Elective is 2 credits instead of 1.

UNIVERSITY GRADUATION REQUIREMENTS

General Education	36 hrs
Student Success Seminar (BTO 100; waived for transfers with 30+ hrs)	1 hr
Free Elective	3 hrs
Total Hours University Graduation Requirements	40 hrs

College Requirements:

BTS 300 (CR only, no hours) and BTS 400 (CR only, no hours).

Core Courses34 hrs

AVN 150, 192 (4), 315, 325, 340 or 470, 350, 370 or 490, 401, 402, 410, 460, and 467 (0).

Major Requirements34 hrs

AVN 360, 390, 435, and twenty-five credit hours of aviation technical electives.

Supporting Course Requirements (not including those 9 hours also listed as Gen Ed)12-14 hrs

- TEC 161
- ECO 230 (GE Element 5B)
- AVN 335 or GEO 315
- MAT 114 or higher (GE Element 2)
- MGT 301 (or MGT 300 only if business minor/major)
- PHY 101 or higher (GE Element 4)
- STA 215 or QMB 200
- CMS 100 or EES 250

Total Curriculum Requirements **120-122 hrs**

Note: Students must take an Aviation exit examination, AVN 467, before graduation. Also, one 3-credit course from the Gen Ed requirements must be a **Writing Intensive course with a suffix of "W."** Aerospace Technology students must take **AVN 340 and 370.**