Department of Applied Engineering and Technology
School of Applied Sciences and Technology
College of Business & Technology (2019-20)

Aviation B.S. Degree

Professional Flight

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 a AAAE Certified Member (AAAE CM) through the American Association of Airport Executives (AAAE).

Aerospace Technology

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 and the US or on-campus in Richmond.

Aviation Careers

Boeing forecasts a shortage of hundreds of thousands of pilots over the next 20 years, and the U.S. Department of Labor projects employment of aircraft pilots to increase 5 percent through 2024. The "Age 65 Rule," which raised the retirement age from 60 to 65, has reintroduced a pilot shortage as the initial wave of already senior pilots begin to retire. In short, demand for air travel is expected to grow along with the population and the economy, and EKU Aviation is in a unique position to help meet this need. Additionally, in Kentucky, aviation professionals of all types are needed, as aviation and aerospace are quickly becoming signature industries for the state.

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 (KRGA). Faculty in the aviation program have real world industry experience ranging from military to airlines to corporate aviation and airport operations and management. Flight students receive flight training in accordance with FAR Part 141, saving time and money. Students may also participate in a variety of aviation student organizations including Alpha Eta Rho, an international professional co-ed aviation fraternity, a student chapter of the American Association of Airport Executives, a student chapter of Women in Aviation International, and the ALPA Ace Club each offering numerous events and networking opportunities throughout the year.

For More Information

EKU Aviation

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

Department of Applied Engineering and Technology
307 Whalin Complex | Eastern Kentucky University | 521 Lancaster Avenue | Richmond, KY 40475-3102

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Suggested Curriculum Guide for Professional Flight Concentration

Freshman (1st Semester) 15 hrs

BTO 100* Orientation (1 hr)
AVN 150 Introduction to Aviation
AVN 161 Private Pilot-SEL: Ground (4 hrs)
AVN 161A Private Pilot-SEL: Flight I (1 hr)
E-1A* ENG 101 Written Communications
E-2 MAT 112 or higher

Freshman (2nd Semester) 14 hrs

AVN 162A Private Pilot-SEL: Flight II (1 hr)
AVN 220 Instrument Pilot: Ground (4 hrs)
TEC 161 Computer Systems
E-1B* ENG 102 Written Communications
E-4 PHY 101 or higher

FR (3rd) 1 hr

AVN 221A Instrument Pilot: Flight I (1 hr)

Sophomore (1st Semester) 14 hrs

AVN 222A Instrument Pilot: Flight II (1 hr)
AVN 305 Multi-Engine Pilot: Ground (1 hr)
AVN 315 Aviation Safety Programs
E-1C CMS 100/210 Communication (or **EES 250** Interpersonal Communications)
E-5B ECO 230 Principles of Economics I
E-3B Humanities

Sophomore (2nd Semester) 15 hrs

AVN 300 Commercial Pilot: Ground (2 hrs)
AVN 305A Private Pilot Multi-Engine: Flight (1 hr)
AVN 330 Crew Resource Management
AVN 335 Weather Reporting/Analysis **or GEO 315** Meteorology
STA 215 Intro to Statistical Reasoning
E-4 Natural Sciences

SO (3rd) 1 hr

AVN 301A Commercial Pilot: Flight I (1 hr)

Junior (1st Semester) 16 hrs

AVN 302A Commercial Pilot: Flight II (1 hr)
AVN 325 Aircraft Systems
AVN 329W Aviation Human Factors
MGT 301 Principles of Management (or MGT 300 if business minor/ major)
E-3A Arts
E-6A Diversity of Perspective

Junior (2nd Semester) 14 hrs

AVN 303A Commercial Pilot: Flight III (1 hr)
AVN 350 Air Transportation
AVN 415 Instructor Pilot-SEL: Ground
AVN 425 Applied Aerodynamics
AVN 480 Glass Cockpit Technologies (1)
E-6B Diversity of Perspective
BTS 300 Bus & Tech Seminar (0 credit)***

JR (3rd) 1 hr

AVN 304A Commercial Pilot: Flight IV (1 hr)

Senior (1st Semester) 15 hrs

AVN 340 Airport Operations and Security
AVN 390 Aviation Decision Making
AVN 402 Corporate and Business Aviation
AVN 410 Air Traffic Control
AVN 435 Turbine Aircraft Systems

Senior (2nd Semester) 14 hrs

AVN 370 Aviation Leadership
AVN 401 Airline Management
AVN 460 Aviation Legislation
AVN 467 Aviation Exit Exam (0 credit)
BTS 400 Bus & Tech Seminar (0 credit)**
E-5A Historical Perspective
Free Elective (2 hrs)

*Course must be taken in semester indicated. Transfer Students N/A. *** Spring Only

UNIVERSITY GRADUATION REQUIREMENTS

General Education (**9 Supporting hours** are included within the 36 hrs of GE requirements) ..... 36 hrs
Student Success Seminar (BTO 100; waived for transfers with 30+ hrs)..... 1 hr
Total Hours University Graduation Requirements ..... **37** hrs
Free Electives ..... **2** hrs

College Requirements:

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

Core Courses ..... **36** hrs

AVN 150, 315, 325, 329W, 340, 350, 370 or 490, 390, 401, 402, 410, 460, and 467 (0).

Major Requirements ..... **33** hrs

AVN 161 (4), 161A (1), 162A (1), 220 (4), 221A (1), 222A (1), 305 (1), 305A (1), 300 (2), 330, 301A (1), 302A (1), 303A (1), 304A (1), 415, 425, 435, and 480 (1)

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

TEC 161; ECO 230 (GE Element 5B); AVN 335 or GEO 315; MAT 112 or higher (GE Element 2); MGT 301 (or MGT 300 only if business minor/major); PHY 101 or higher (GE Element 4); STA 215; CMS 100 or CMS 210 or EES 250 (GE Element 1C)

Total Curriculum Requirements ..... 120 hrs

Note: *Students must take an Aviation exit examination, AVN 467, before graduation. Professional Flight students may elect to replace the flight instructor sequence with 5 AVN elective credits and still graduate. Those interested in receiving the new 1000-hour power R-ATP certificate should consult the latest copy of the FAA Letter of Authorization and consult their advisor.*