Bachelor of Science in Aviation Sciences: Professional Pilot – Airplane Concentration

The Professional Pilot – Airplane Concentration of the Aviation Sciences Major is for students wanting a career as a pilot. Each student graduating with the Professional Pilot – Airplane Concentration will have flying qualifications to the Commercial Pilot level (including instrument and multi-engine ratings), along with a Certified Flight Instructor (CFI) certificate. Flight training is conducted by the Baylor University Flight Center at the Waco Regional Airport.

Aviation Sciences Major, Professional Pilot – Airplane Concentration ..........125 hrs total

I. Basic Requirements........................................................................................................42 hrs

A. Chapel
   • Two semesters of CHA 1086, 1087, 1088, 1090, or 1091 (no credit hours)

B. Creative Arts Experience
   • Attend 12 events (no credit hours)

C. English – 3 hrs
   • ENG 2310 American Literary Cultures

D. History – 3 hrs
   • HIS 1300 The United States in Global Perspective

E. Political Science – 3 hrs
   • PSC 1387 The US Constitution

F. Religion – 6 hrs
   • REL 1310 Christian Scriptures
   • REL 1350 Christian Heritage

G. Courses Selected from Distribution Lists – 18 hrs
   • Communication and Media Literacy – 3 hrs
   • Contemporary Social Issues – 3 hrs
   • Fine Arts – 3 hrs
   • Formal Reasoning – met in Sec III
   • Literature in Context – 3 hrs
• Research Writing – 3 hrs
• Scientific Method I: Course with Lab Experience – met in Sec III
• Scientific Method II: Grand Challenges in Science – 3 hrs

H. Foreign Language and Culture – 8 to 12 hrs

• OPTION ONE: (two courses – 8 hrs)
  o Complete intensive language courses 1412 and 2412 in German or Spanish
  o Both courses must be from the same language and both must be completed in residence

• OPTION TWO: (three courses – 9 hrs)
  o Complete one Modern or Classical language through third-semester level (2310)
  o Choose from Arabic, Chinese, French, German, Greek, Hebrew, Italian, Japanese, Korean, Latin, Portuguese, Russian, Spanish, or Swahili
  o 6 hours must be in residence

• OPTION THREE: (four courses – 12 hrs)
  o Complete two Classical languages (Greek, Latin, Hebrew) 1301 and 1302
  o 6 hours must be in residence

I. Lifetime Fitness Activity Course (LF) – 1 hr

II. Aviation Science courses

A. Ground and Flight Training Courses – 31 hrs

  • AVS 1301 Air Navigation
  • AVS 1302 Private Pilot Ground School
  • AVS 1303 Instrument Ground School
  • AVS 2304 Commercial Ground School
  • AVS 3305 Instructor Ground School
  • AVS 1331 Private Pilot Flight
  • AVS 1332 Instrument Flight
  • AVS 2333 Commercial Flight I
  • AVS 2334 Commercial Flight II
  • AVS 3236 Certified Flight Instructor (CFI)
  • AVS 4237 Certified Flight Instructor – Instrument (CFII) OR 3235 Multi-Engine Flight

B. Aviation Science courses – 39 hrs

  • Required Courses – 24 hrs
    o AVS 1300 Introduction to Aviation
    o AVS 1313 Introduction to Meteorology
    o AVS 3310 Aviation Law
    o AVS 3311 Aircraft Accident Investigation and Prevention
    o AVS 3312 Aviation Safety
    o AVS 3315 Aviation Meteorology
    o AVS 4314 Advanced Aircraft Systems
    o AVS 4315 Aerodynamics
• **Elective Courses – Choose 15 hrs**
  
  o AVS 3320 Flight Crew Career Development  
  o AVS 3350 Introduction to Space Weather  
  o AVS 3370 Aviation Leadership  
  o AVS 4376 Aviation Management  
  o AVS 4317 Aerospace Propulsion Systems  
  o AVS 4318 Avionics Systems Design (ELC 4318)  
  o AVS 4375 Crew Resource Management  
  o AVS 4390 Internship in Aviation  
  o AVS 4306 Instructor – Instrument Ground School  
  o AVS 4237 Certified Flight Instructor – Instrument (CFII)  
  o AVS 4238 MEI Flight

**III. Required courses in other fields**

- Computer Science (CSI) 3303 or 3305 or 4301 Information Technology
- Math (MTH) 1321 Calculus I (Prereq: Grade of B or better in MTH 1320 or a score of 80 or better on the ALEKS)
- Math (MTH) 1322 Calculus II **OR** Statistics (STA) 2381 Introductory Statistical Methods (Prereq: Grade of C or better in MTH 1321)
- Physics (PHY) 1408 General Physics for Natural & Behavioral Sciences I (Algebra Based) **OR** 1420 General Physics I (Calculus-based) (Prereq: MTH 1321 or concurrent enrollment)