

Aviation Sciences Major Professional Pilot - Airplane

BAYLOR
AVIATION SCIENCES



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)
 - Complete intensive language courses 1412 and 2412 in German or Spanish
 - Both courses must be from the same language and both must be completed in residence
- **OPTION TWO:** (three courses – 9 hrs)
 - Complete one Modern or Classical language through third-semester level (2310)
 - Choose from Arabic, Chinese, French, German, Greek, Hebrew, Italian, Japanese, Korean, Latin, Portuguese, Russian, Spanish, or Swahili
 - 6 hours must be in residence
- **OPTION THREE:** (four courses – 12 hrs)
 - Complete two Classical languages (Greek, Latin, Hebrew) 1301 and 1302
 - 6 hours must be in residence

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

II. Aviation Science courses.....70 hrs

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**
 - AVS 1300 Introduction to Aviation
 - AVS 1313 Introduction to Meteorology
 - AVS 3310 Aviation Law
 - AVS 3311 Aircraft Accident Investigation and Prevention
 - AVS 3312 Aviation Safety
 - AVS 3315 Aviation Meteorology
 - AVS 4314 Advanced Aircraft Systems
 - AVS 4315 Aerodynamics

- **Elective Courses – Choose 15 hrs**
 - AVS 3320 Flight Crew Career Development
 - AVS 3350 Introduction to Space Weather
 - AVS 3370 Aviation Leadership
 - AVS 4310 Aviation Management
 - AVS 4317 Aerospace Propulsion Systems
 - AVS 4318 Avionics Systems Design (ELC 4318)
 - AVS 4375 Crew Resource Management
 - AVS 4390 Internship in Aviation
 - AVS 4306 Instructor – Instrument Ground School
 - AVS 4237 Certified Flight Instructor – Instrument (CFII)
 - AVS 4238 MEI Flight

III. Required courses in other fields.....13 hrs

- 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)