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

The Professional Pilot – Helicopter Concentration of the Aviation Sciences Major is for students wanting a career as a helicopter pilot. Each student graduating with the Professional Pilot – Helicopter Concentration will have flying qualifications to the Commercial Pilot level (including instrument rating), along with Night Vision Google Training and Certified Flight Instructor (CFI) and Certified Flight Instructor – Instrument (CFI-I) certificates. Flight training is conducted by the Baylor University Flight Center at the Waco Regional Airport.

Aviation Sciences Major, Professional Pilot – Helicopter 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 1361 Private Pilot Helicopter Flight
- AVS 2362 Instrument/Commercial 1 Helicopter Flight
- AVS 2363 Instrument/Commercial 2 Helicopter Flight
- AVS 3364 CFI Helicopter Flight
- AVS 4265 CFI-I Helicopter Flight
- AVS 4266 Night Vision Goggle Helicopter 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 – 15 hrs (Choose 5 courses)**
  - 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

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)