Bachelor of Science in Aviation Sciences – Air Traffic Control Concentration

The Air Traffic Control concentration of the Bachelor of Science in Aviation Science degree is for students wanting an ATC career. This program is offered in conjunction with Texas State Technical College (TSTC) in Waco and requires Baylor students to apply to TSTC.

Air Traffic Control is selective and highly competitive. If you are considering this major, please take a look at the following criteria:

- All interested students must enroll in the Aircraft Dispatch concentration for the first year. The minimum GPA after the first year is 2.5 in order to qualify for selection.
- Students will compete for ATC concentration slots. Only the top 5 students each year will be guaranteed a position. Any additional students must compete for the remaining TSTC slots.
- Students must be US Citizens - original birth certificate and social security card will be required at registration. Males 18-26 must be registered with the Selective Service; verification will be made at registration.
- A 500 word essay on “Why I Want to Be an Air Traffic Controller” must be submitted by March 1st of their first year.
- Graduates must meet the FAA's medical requirements for hiring eligibility.
- Students must graduate the program by age 29. The FAA does not hire new controllers age 31 or older.

Bachelor of Science in Aviation Sciences – Air Traffic Control Concentration .......................... 130 hrs total

I. Basic Requirements.......................................................................................................................48 to 49 hrs

A. Chapel (CHA)
   - Two semesters of CHA 1088 (no credit hours)

B. Cultural Events Experience (CEE)
   - Four semesters of CEE 1001 (no credit hours)

C. English (ENG) - 3 hrs
   - ENG 2310 American Literary Cultures

D. History (HIS) - 3 hrs
   - HIS 1300 The United States in Global Perspective

E. Political Science (PSC) - 3 hrs
   - PSC 2302 The US Constitution

F. Religion (REL) - 6 hrs
   - REL 1310 Christian Scriptures
   - REL 1350 Christian Heritage

G. Courses Selected from Distribution Lists - 18 hrs
• Communications and Media Literacy – 3 hrs
• Contemporary Social Issues – 3 hrs
• Fine Arts and Performing 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 9 hrs

• OPTION ONE: (two courses) 8 hours selected from intensive language courses in German or Spanish (both courses must be from the same language and both must be completed in residence): 1412 and 2412.

• OPTION TWO: (three courses)
  o 3 hours from: 2310 level course (or equivalent) from Arabic, Chinese, French, German, Greek, Hebrew, Italian, Japanese, Korean, Latin, Portuguese, Russian, Spanish, or Swahili
  o 6 additional hours from the Foreign Language and Culture distribution list.

• OPTION THREE: (three courses)
  o 6 hours from 1302 courses from Latin, Greek, Hebrew, or Aramaic
  o 3 additional hours from the Foreign Language and Culture distribution list.

I. Lifetime Fitness (LF) - 1 hr

• Any activity course

J. Advanced Electives (3000 or 4000 level classes in any discipline) - 6 hrs

II. Air Pilot, Aviation Management, and Aviation Science courses......................................................68 hrs

A. Air Pilot (AIRP) and Aviation Management (AVIM) courses from TSTC - 27 hrs

• AIRP 1372 Dispatch Resource Management
• AVIM 1470 Fundamentals of Air Traffic Control
• AVIM 1371 Control Tower I
• AVIM 2372 Control Tower II
• AVIM 2270 Control Tower Operations
• AVIM 1375 Introduction to Terminal Operations
• AVIM 2373 Advanced Terminal Operations
• AVIM 1377 EnRoute Operations I
• AVIM 1376 EnRoute Operations II

B. Aviation Science (AVS) courses from Baylor - 41 hrs

• Required Courses – 32 hrs
  o AVS 1300 Introduction to Aviation
  o AVS 1313 Introduction to Meteorology
  o AVS 1301 Air Navigation
  o AVS 1417 Private Pilot Ground School
  o AVS 1451 Instrument Ground School
  o AVS 3310 Aviation Law
  o AVS 3311 Aircraft Accident Investigation and Prevention
  o AVS 3315 Aviation Meteorology
  o AVS 4314 Advanced Aircraft Systems
  o AVS 4315 Aerodynamics For Flight

• Elective Courses - 9 hrs (Choose 3 courses)
  o AVS 3320 Flight Crew Career Development
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 C or better in MTH 1320 (Pre-calculus) or satisfactory performance on departmental placement exam)
- MTH 1322 Calculus II OR Statistics (STA) 2381 Introductory Statistical Methods (Prereqs: C or better in MTH 1321)
- Physics (PHY) 1408 General Physics for Natural Sciences I (Algebra Based) OR 1420 General Physics I (Calculus-based)