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 August 1st prior to the first Fall semester.
- 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........ 136 hrs total

I. Basic Requirements..............................................................................................................46 to 51 hrs

A. English Requirements (ENG) - 12 hrs

- ENG 1302 Thinking & Writing or FAS 1302 Freshman Academic Seminar
- ENG 3300 Technical and Professional Writing (Prereq: ENG/FAS 1302)
- ENG 2301 British Literature (Prereq: ENG/FAS 1302 and ENG 1304/3300)
- ENG 2306 World Literature (or 3 hours of "2000" level or above Great Texts (GTX)) (Prereq: ENG/FAS 1302 and ENG 1304/3300)

B. Foreign Language - 3 to 8 hrs

- Any foreign language through two semesters or above. A placement test may be taken to place out of one semester, with only the second 4 hr course needing to be taken OR a proficiency exam may be taken for a fee to place out of both semesters. The proficiency exam will count as a 3 hr credit.

C. Political Science (PSC) - 3 hrs

- PSC 2302 American Constitutional Development

D. Religion (REL) - 6 hrs

- REL 1310 Christian Scriptures or FAS 1310 Freshman Academic Seminar: Religion
- REL 1350 Christian Heritage or FAS 1308 Freshman Academic Seminar: Religion
E. Psychology (PSY) or Sociology (SOC) - 3 hrs

- PSY 1305 Introductory Psychology
  OR
- SOC 1305 Introduction to Sociology

F. History (HIS) - 6 hrs (Choose 2 courses)

- HIS 1305 World History to 1500
- HIS 1307 World History since 1500
- HIS 2365 History of the United States to 1877
- HIS 2366 History of the United States since 1877

G. Communication Studies (CSS) - 3 hrs

- CSS 1301 Public Communication
  OR
- CSS 1302 Speech for Business/Professional Students

H. Lifetime Fitness (LF) - 4 hrs

- Any four activity courses

I. Chapel (CHA)

- Two semesters of CHA 1088 (required, but worth no credits)

J. Advanced Electives (3000 or 400 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
  o AVS 3350 Introduction to Space Weather
  o AVS 3370 Aviation Leadership
  o AVS 4305 Special Topics in Aviation
  o AVS 4310 Aviation Management
  o AVS 4311 Meteorology (GEO 4314)
  o AVS 4318 Avionics Systems Design (ELC 4318)
  o AVS 4323 The Environment and Economic Analysis (ENV 4323)
  o AVS 4375 Crew Resource Management
  o AVS 4377 Airport Management
  o AVS 4386 Remote Sensing (GEO 4386)
  o AVS 4390 Internship in Aviation
  o AVS 4485 Introduction to Geographic Information Systems (GEO 4485)
  o AVS 4487 Advanced GIS Analysis (GEO 4487)

III. Required courses in other fields............................................................................................17 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)
• Laboratory Science with appropriate lab – 4 hrs (Choose one of the following options)
  o BIO 1305 & 1105
  o BIO 1306 & 1106
  o BIO 1405
  o BIO 1406
  o CHE 1301 & 1101
  o CHE 1302 & 1102
  o ENV 1301 & 1101
  o ENV 1303 & 1103
  o GEO 1401
  o GEO 1402
  o GEO 1403
  o GEO 1405
  o GEO 1406
  o GEO 1408
  o NSC 1306 & 1106
  o PHY 1409
  o PHY 1430