

B.S. in Aviation Safety

The Bachelor of Science in Aviation Safety includes coursework in aviation safety, safety principles, data analysis and aircraft technology. The program introduces domains integral to aviation operations, including maintenance, air traffic control, safety science, airport operations and flight safety. Students develop skills in problem identification and analysis within aviation safety contexts.

At the **Worldwide & Online Campus**, the program is delivered in an online format that allows students to complete coursework remotely. The curriculum includes safety-related subject areas, and students may use the Virtual Crash Lab to conduct crash site mapping and wreckage investigation in a virtual environment.

Program-Level Student Learning Outcomes

Students will:

- Identify the essential components of air transportation that impact aviation safety.
- Explain the tenets of ethical responsibility as it applies to aviation safety.
- Interpret safety-related data to make informed decisions and recommendations that enhance aviation safety.
- Use the tools, techniques and programs that promote and enhance aviation safety.

Worldwide Program Requirements

General Education Requirements	36
Core Requirements	60
Program Support Courses	24
Total Credits	120

Program Details

The Bachelor of Science in Aviation Safety requires successful completion of a minimum of 120 credit hours. Students enrolled in the Worldwide Undergraduate Online program may complete the degree in 20 terms, or approximately four years, assuming full-time enrollment and continuous progress. Students pursuing this undergraduate degree must earn a minimum cumulative grade point average (CGPA) of 2.00 for all work completed at the University. The courses required to earn this degree are listed below.

Students should be aware that many courses have prerequisites and/or corequisites. Students are responsible for ensuring that all prerequisite and degree requirements are satisfied prior to enrollment in advanced coursework. The suggested plan of study is provided as a guide. A student's actual plan of study may vary based on term of admission, course availability, transfer credit, and other academic considerations. Students should consult with their academic advisor to develop an individualized plan of study.

General Education Requirements

Communication	9
Any Communication above COMM 106	
Humanities - Lower or Upper Level	3
Social Sciences - Lower or Upper Level	6
Humanities - Upper Level	3
Computer Science/Information Technology	3
Mathematics	6
Any College Algebra or Higher Math Series	
Physical/Life Sciences	6
Physical Sciences/Physics	
Total Credits	36

Core Requirements

AMNT 424	Maintenance Repair and Overhaul in Aviation	3
ASCI 202	Introduction to Aeronautical Science	3
ASCI 254	Aviation Legislation	3
ASCI 301	Introduction to Air Traffic Control	3
ASCI 426	Airport Management in Air Traffic Management	3
ASCI 491	Operational Applications in Aeronautics	3
AVSF 210	Introduction to Aerospace Safety	3
AVSF 320	Human Factors in Aviation Safety	3
AVSF 330	Aircraft Accident Investigation	3
AVSF 335	Mechanical and Structural Factors in Aviation Safety	3
AVSF 345	Aviation Safety Program Management	3
AVSF 350	Aircraft Crash and Emergency Management	3
AVSF 409	Aviation Safety	3
HUMN 430	Ethics in Aviation	3
SFTY 311	Occupational Safety and Health	3
SFTY 321	Occupational Ergonomics I	3
SFTY 426	System Safety Management	3
UNSY 220	Uncrewed Aircraft Systems	3
UNSY 431	Uncrewed Systems Human Factors Considerations	3
WEAX 301	Aviation Weather	3
Total Credits		60

Program Support Courses

COMM 460	Crisis Communication	3
CPSC 123	Introduction to Computing for Data Analysis	3
CPSC 251	Introduction to Programming for Data Science	3
DSCI 201	Introduction to Data Science Applications	3
DSCI 310	Data Storytelling	3
MGMT 201	Principles of Management	3
MMIS 320	Business Information Systems	3
STAT 211	Statistics with Aviation Applications	3
Total Credits		24

Suggested Plan of Study

Year One

Requirements	Credits
Communication Above COMM 106	3
College Algebra or Higher Math Series	3
Semester Hours	6

Requirements	Credits
Communication Above COMM 106	3
College Algebra or Higher Math Series	3
Semester Hours	6

Requirements	Credits
Humanities - Lower Level	3
Physical Sciences/Physics	3
Semester Hours	6

Requirements	Credits
Social Sciences	3
Computer Science	3
Semester Hours	6

Requirements	Credits
Communication Above COMM 106	3
Social Science	3
Semester Hours	6

Total Credits

Total Hours for All Requirements: 30

Year Two

Requirements	Credits
ASCI 202 - Introduction to Aeronautical Science	3
Physical Sciences/Physics	3
Semester Hours	6

Requirements	Credits
AVSF 210 - Introduction to Aerospace Safety	3
WEAX 301 - Aviation Weather	3
Semester Hours	6

Requirements	Credits
ASCI 301 - Introduction to Air Traffic Control	3
Humanities - Upper Level	3
Semester Hours	6

Requirements	Credits
SFTY 311 - Occupational Safety and Health	3
SFTY 321 - Occupational Ergonomics I	3
Semester Hours	6

Requirements	Credits
AVSF 320 - Human Factors in Aviation Safety	3
AVSF 330 - Aircraft Accident Investigation	3
Semester Hours	6

Total Credits

Total Hours for All Requirements: 30

Year Three

Requirements	Credits
AVSF 335 - Mechanical and Structural Factors in Aviation Safety	3
AVSF 345 - Aviation Safety Program Management	3
Semester Hours	6

Requirements	Credits
AVSF 350 - Aircraft Crash and Emergency Management	3
AVSF 409 - Aviation Safety	3
Semester Hours	6

Requirements	Credits
SFTY 426 - System Safety Management	3

AMNT 424 - Maintenance Repair and Overhaul in Aviation	3
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Semester Hours	6
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Requirements	Credits
UNSY 220 - Uncrewed Aircraft Systems	3
ASCI 426 - Airport Management in Air Traffic Management	3

Semester Hours	6
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Requirements	Credits
ASCI 254 - Aviation Legislation	3
UNSY 431 - Uncrewed Systems Human Factors Considerations	3

Semester Hours	6
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Total Credits

Total Hours for All Requirements: 30

Year Four

Requirements	Credits
STAT 211 - Statistics with Aviation Applications	3
COMM 460 - Crisis Communication	3
Semester Hours	6

Requirements	Credits
CPSC 123 - Introduction to Computing for Data Analysis	3
CPSC 251 - Introduction to Programming for Data Science	3
Semester Hours	6

Requirements	Credits
DSCI 201 - Introduction to Data Science Applications	3
DSCI 310 - Data Storytelling	3
Semester Hours	6

Requirements	Credits
MMIS 320 - Business Information Systems	3
MGMT 201 - Principles of Management	3
Semester Hours	6

Requirements	Credits
HUMN 430 - Ethics in Aviation	3
ASCI 491 - Operational Applications in Aeronautics	3
Semester Hours	6

Total Credits

Total Hours for All Requirements: 30

Estimated Cost of Attendance

Estimated Cost of Attendance: California Student Information (<https://catalog.erau.edu/student-life/student-affairs/california-student/>)