

B.S. in Emergency Services

The Bachelor of Science in Emergency Services is offered at the Worldwide Campus, giving students the flexibility to balance coursework with full-time work, shift schedules, or family commitments. The program provides students with the theoretical foundations, principles, and practices for management and leadership in fire and emergency services response organizations. It broadly encompasses all emergency services response disciplines in public and private sectors including fire, emergency medical service, investigation, aircraft rescue and firefighting, hazardous materials, inspection, instruction, public information, and wildland firefighting. Concepts covered include human behavior, structures and systems, prevention, protection, investigation and analysis, organization and management, research, administration, hazardous materials, personnel management, political and legal foundations, terrorism, community risk reduction, system design for life safety, occupational safety, and human program management.

Students who choose the Aviation specialization focus on aircraft accident crash investigation, airport emergency management, aviation safety, and leadership in emergency response organizations.

Those who pursue the Fire and Emergency Services specialization study emergency response administration, management, leadership, community risk reduction, and operational issues in emergency services.

The program is part of the Air University-Associate to Baccalaureate Cooperative (AU-ABC Category I). Students with an associate degree in Fire Science and Emergency Management from the Community College of the Air Force (CCAF) can easily transition to this bachelor's program by completing no more than 60 semester hours beyond the CCAF degree.

The curriculum for this degree is designed, in part, from the National Fire Academy's Fire and Emergency Services Higher Education (FESHE) Model Curriculum for a bachelor's degree. When students complete FESHE courses through Embry-Riddle Aeronautical University, they can earn a National Fire Academy certificate just as if they completed the courses at the National Fire Academy. In addition to the FESHE core courses, our program also offers several of the FESHE non-core courses, of which have accompanying NFA certificates.

To further boost their credentials, students may consider earning a certificate from the FEMA Emergency Management Institute's Professional Development Series (PDS), which offers insights into federal emergency management practices. Additionally, the Combined Program Pathways program allows students to pursue both a bachelor's and a master's degree simultaneously, helping them advance more quickly in the field.

Program-Level Student Learning Outcomes

Students will:

- Employ leadership and supervisory practices to effectively manage fire and emergency services incidents, resources, and programs.
- Apply research, critical thinking, and analytical decision-making skills to contemporary public safety challenges.
- Apply foundational fire and emergency services to scientific and technical concepts and principles.
- Implement management, protection, prevention, mitigation, response, recovery, and planning strategies responsive to community needs.
- Identify and solve problems related to one's specialty area using Fire Science knowledge and its interrelations with historical, organizational, legal, social, political, economic, and physical factors.

Worldwide Program Requirements

General Education Requirements	36
Program Support Courses	6
Specialization	39
Specified Electives	12
Open Electives/Minor	27
Total Credits	120

Program Details

The Bachelor of Science in Emergency Services 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
COMM 122 English Composition	
Any Communication above COMM 106	
Any Communication above COMM 106	
Humanities - Lower Level	3
Social Sciences - Lower Level	3
Humanities/Social Sciences - Lower or Upper Level	3
Humanities/Social Sciences - Upper Level	3
Computer Science/Information Technology	3
Mathematics	6
Any Mathematics 6-Hour Sequence Above MATH 106	
Physical/Life Sciences	6
Total Credits	36

Program Support Courses

RSCH 202 Introduction to Research Methods	3
STAT 211 Statistics with Aviation Applications	3
or STAT 222 Business Statistics	
Total Credits	6

Specializations

Aviation Emergency Management Specialization

ESVS 301 Community Risk Reduction for the Fire and Emergency Services	3
ESVS 302 Fire Dynamics	3
ESVS 303 Fire Protection Structures and Systems	3
ESVS 305 Fire Prevention Organization and Management	3
ESVS 400 Analytical Approaches to Public Fire Protection	3
ESVS 401 Applications of Fire Research	3
ESVS 404 Managerial Issues in Hazardous Materials	3
EMGY 400 Introduction to Incident Command System	3
ESVS 405 Personnel Management for Fire and Emergency Services	3

ESVS 480	Advanced Principles in Fire and Emergency Services Safety and Survival	3
AVSF 330	Aircraft Accident Investigation	3
AVSF 350	Aircraft Crash and Emergency Management	3
AVSF 409	Aviation Safety	3
Total Credits		39

Fire and Emergency Services Specialization

ESVS 201	Fire-Related Human Behavior	3
ESVS 301	Community Risk Reduction for the Fire and Emergency Services	3
ESVS 303	Fire Protection Structures and Systems	3
ESVS 304	Fire Investigation and Analysis	3
ESVS 305	Fire Prevention Organization and Management	3
ESVS 400	Analytical Approaches to Public Fire Protection	3
ESVS 401	Applications of Fire Research	3
ESVS 402	Fire and Emergency Services Administration	3
ESVS 404	Managerial Issues in Hazardous Materials	3
EMGY 400	Introduction to Incident Command System	3
ESVS 405	Personnel Management for Fire and Emergency Services	3
ESVS 406	Political and Legal Foundations of Fire Protection	3
ESVS 480	Advanced Principles in Fire and Emergency Services Safety and Survival	3
Total Credits		39

Specified Electives

Any ASCI/SFTY/ESVS/EMGY/SSES/HLSC or SOSC 301	12
Total Credits	12

Open Electives/Minor

Open Electives	27
Students Are Allowed to Use These Credits Toward a Minor *	
Total Credits	27

* Worldwide Minors can be found: catalog.erau.edu/campuses/worldwide/ (<https://catalog.erau.edu/campuses/worldwide/>).

Suggested Plans of Study

Specialization: Aviation Emergency Management

Year One

Requirements	Credits
COMM 122 - English Composition	3
MATH Sequence 1 above MATH 106	3
Semester Hours	6

Requirements	Credits
Enlgish/Communications (COMM)	3
MATH Sequence 2 above MATH 106	3
Semester Hours	6

Requirements	Credits
Computer Science/Information Technology	3
Open Elective	3
Semester Hours	6

Requirements	Credits
English/Communications (COMM)	3
RSCH 202 - Introduction to Research Methods	3
Semester Hours	6

Requirements	Credits
Physical/Life Sciences	3
Open Elective	3
Semester Hours	6

Total Credits

Total Hours for All Requirements: 30

Year Two

Requirements	Credits
ESVS 301 - Community Risk Reduction for the Fire and Emergency Services	3
Humanities - Lower Level	3
Semester Hours	6

Requirements	Credits
ESVS 302 - Fire Dynamics	3
Social Sciences - Lower Level	3
Semester Hours	6

Requirements	Credits
ESVS 303 - Fire Protection Structures and Systems	3
Physical/Life Sciences	3
Semester Hours	6

Requirements	Credits
ESVS 404 - Managerial Issues in Hazardous Materials	3
Humanities/Social Sciences - Upper Level	3
Semester Hours	6

Requirements	Credits
ESVS 405 - Personnel Management for Fire and Emergency Services	3
Humanities/Social Sciences - Lower or Upper Level	3
Semester Hours	6

Total Credits

Total Hours for All Requirements: 30

Year Three

Requirements	Credits
ESVS 305 - Fire Prevention Organization and Management	3
Open Elective	3
Semester Hours	6

Requirements	Credits
ESVS 400 - Analytical Approaches to Public Fire Protection	3
Open Elective	3
Semester Hours	6

Requirements	Credits
AVSF 330 - Aircraft Accident Investigation	3
Open Elective	3
Semester Hours	6

Requirements	Credits
AVSF 409 - Aviation Safety	3
Open Elective	3
Semester Hours	6

Requirements	Credits
AVSF 350 - Aircraft Crash and Emergency Management	3
Open Elective	3
Semester Hours	6

Total Credits

Total Hours for All Requirements: 30

Year Four

Requirements	Credits
ESVS 401 - Applications of Fire Research	3
Open Elective	3
Semester Hours	6

Requirements	Credits
EMGY 400 - Introduction to Incident Command System	3
STAT 211 - Statistics with Aviation Applications	3
Semester Hours	6

Requirements	Credits
ESVS 480 - Advanced Principles in Fire and Emergency Services Safety and Survival	3
Specified Elective	3
Semester Hours	6

Requirements	Credits
Open Elective	3
Specified Elective	3
Semester Hours	6

Requirements	Credits
Specified Elective	3
Specified Elective	3
Semester Hours	6

Total Credits

Total Hours for All Requirements: 30

Specialization: Fire & Emergency Services

Year One

Requirements	Credits
COMM 122 - English Composition	3
MATH Sequence 1 above MATH 106	3
Semester Hours	6

Requirements	Credits
English/Communication (COMM)	3
MATH Sequence 2 above MATH 106	3
Semester Hours	6

Requirements	Credits
Computer Science/Information Technology	3
Open Elective	3
Semester Hours	6

Requirements	Credits
English/Communication (COMM)	3
RSCH 202 - Introduction to Research Methods	3
Semester Hours	6

Requirements	Credits
Physical and Life Science	3
Open Elective	3
Semester Hours	6

Total Credits

Total Hours for All Requirements: 30

Year Two

Requirements	Credits
ESVS 301 - Community Risk Reduction for the Fire and Emergency Services	3
Humanities - Lower Level	3
Semester Hours	6

Requirements	Credits
ESVS 201 - Fire-Related Human Behavior	3
Social Sciences - Lower Level	3
Semester Hours	6

Requirements	Credits
ESVS 303 - Fire Protection Structures and Systems	3
Physical/Life Sciences	3
Semester Hours	6

Requirements	Credits
ESVS 404 - Managerial Issues in Hazardous Materials	3
Humanities/Social Sciences - Upper Level	3
Semester Hours	6

Requirements	Credits
ESVS 405 - Personnel Management for Fire and Emergency Services	3
Humanities/Social Sciences - Lower or Upper Level	3
Semester Hours	6

Total Credits

Total Hours for All Requirements: 30

Year Three

Requirements	Credits
ESVS 305 - Fire Prevention Organization and Management	3
Open Elective	3
Semester Hours	6

Requirements	Credits
ESVS 400 - Analytical Approaches to Public Fire Protection	3
Open Elective	3
Semester Hours	6

Requirements	Credits
ESVS 304 - Fire Investigation and Analysis	3
Open Elective	3
Semester Hours	6

Requirements	Credits
ESVS 406 - Political and Legal Foundations of Fire Protection	3
Open Elective	3
Semester Hours	6

Requirements	Credits
Open Elective	3
Open Elective	3
Semester Hours	6

Total Credits

Total Hours for All Requirements: 30

Year Four

Requirements	Credits
ESVS 401 - Applications of Fire Research	3
Open Elective	3
Semester Hours	6

Requirements	Credits
EMGY 400 - Introduction to Incident Command System	3
STAT 211 - Statistics with Aviation Applications or 222 - Business Statistics	3
Semester Hours	6

Requirements	Credits
ESVS 402 - Fire and Emergency Services Administration	3
ESVS 480 - Advanced Principles in Fire and Emergency Services Safety and Survival	3
Semester Hours	6

Requirements	Credits
Specified Elective	3
Specified Elective	3
Semester Hours	6

Requirements	Credits
Specified Elective	3
Specified Elective	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/>)