

# A.S. in Aeronautics

The Associate of Science in Aeronautics provides essential knowledge and skills in aviation and related fields. Students learn about aircraft design, flight operations, and aviation safety, which prepare them for professional applications. The online format allows students to learn at their own pace and balance academic study with work and personal responsibilities. Students have access to networking opportunities and resources to connect with potential employers. The program supports students seeking advancement in a current role or entry into the aviation field.

At the **Worldwide Campus**, the Associate in Science is offered in online and on-campus formats, allowing students to take classes in a range of settings and schedules. The curriculum includes principles of aeronautical science, aviation maintenance, transportation, safety, security, history, engineering, and uncrewed systems. Electives and minors allow students to tailor the degree to specific academic and professional interests. Students may apply prior life experience toward more than a quarter of the required semester hours and may complete a bachelor's degree in as few as three years.

## Program-Level Student Learning Outcomes

### Students will:

- Apply management theories and practices to aviation/aerospace operations, including the ability to interpret data and make informed decisions.
- Evaluate national and international aviation legislation and law, demonstrating a comprehensive understanding of their implications for the aviation, aerospace, and aeronautics sectors.
- Enhance safety within the aviation, aerospace, and aeronautics industries by applying aviation safety principles and practices.
- Apply advanced principles of aviation, aerospace, and aeronautical science to analyze and solve complex problems within the aviation/aerospace industry.

## Worldwide Program Requirements

|                                |           |
|--------------------------------|-----------|
| General Education Requirements | 36        |
| Program Support Courses        | 9         |
| Aviation Area of Concentration | 9         |
| Electives                      | 6         |
| <b>Total Credits</b>           | <b>60</b> |

## Program Details

The Associate of Science in Aeronautics requires successful completion of a minimum of 60 credit hours. Students enrolled in the Worldwide Undergraduate Online program may complete the degree in 10 terms, or approximately two 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.

Many Embry-Riddle courses are designed to teach the same skills and knowledge that Aeronautics students may have acquired through prior education, training, or professional experience. Students who complete courses in the same aviation specialty for which they were granted

Aviation Area of Concentration credit will be considered to have duplicated subject matter. Credit earned from such duplicate coursework will not be applied toward degree requirements.

## General Education Requirements

|                                                   |           |
|---------------------------------------------------|-----------|
| Communication                                     | 9         |
| Any Communication above COMM 106                  |           |
| Humanities - Lower Level                          | 3         |
| Social Sciences - Lower Level                     | 3         |
| Humanities/Social Sciences - Lower or Upper Level | 3         |
| Humanities - Upper Level                          | 3         |
| Computer Science/Information Technology           | 3         |
| Mathematics                                       | 6         |
| STAT 222 Business Statistics                      |           |
| Any College Algebra or Higher Math                |           |
| Physical/Life Sciences                            | 6         |
| <b>Total Credits</b>                              | <b>36</b> |

## Program Support Courses

|                      |                                      |          |
|----------------------|--------------------------------------|----------|
| ASCI 202             | Introduction to Aeronautical Science | 3        |
| ASCI 254             | Aviation Legislation                 | 3        |
| AVSF 210             | Introduction to Aerospace Safety     | 3        |
| <b>Total Credits</b> |                                      | <b>9</b> |

## Aviation Area of Concentration

|                                                                                                                                                                                                                         |          |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------|
| Make up shortages with non-duplicating courses from the following disciplines: AMNT, ASCI, ATMG, AVSF, CESC, COIN, CYBR, ENGR, ESCI, ETEC, FACR, GEOS, HFCT, HIST, INTL, SCLM, SCTY, SFTW, SFTY, SIMS, SPAC, UNSY, WEAX | 9        |
| <b>Total Credits</b>                                                                                                                                                                                                    | <b>9</b> |

## Electives

|                                       |          |
|---------------------------------------|----------|
| Open Electives - Lower or Upper Level | 6        |
| <b>Total Credits</b>                  | <b>6</b> |

## Suggested Plan of Study

### Year One

| Requirements                       | Credits  |
|------------------------------------|----------|
| Communication above COMM 106       | 3        |
| Any College Algebra or Higher Math | 3        |
| <b>Semester Hours</b>              | <b>6</b> |

| Requirements                  | Credits  |
|-------------------------------|----------|
| Communication above COMM 106  | 3        |
| Social Sciences - Lower Level | 3        |
| <b>Semester Hours</b>         | <b>6</b> |

| Requirements             | Credits  |
|--------------------------|----------|
| Humanities - Lower Level | 3        |
| Physical Science/Physics | 3        |
| <b>Semester Hours</b>    | <b>6</b> |

| Requirements                                | Credits  |
|---------------------------------------------|----------|
| AVSF 210 - Introduction to Aerospace Safety | 3        |
| Computer Science/Information Technology     | 3        |
| <b>Semester Hours</b>                       | <b>6</b> |

| Requirements                                    | Credits |
|-------------------------------------------------|---------|
| Communication above COMM 106                    | 3       |
| ASCI 202 - Introduction to Aeronautical Science | 3       |
| Semester Hours                                  | 6       |

Total Credits

Total Hours for All Requirements: 30

Year Two

| Requirements                           | Credits |
|----------------------------------------|---------|
| ASCI 254 - Aviation Legislation        | 3       |
| Social Sciences - Lower or Upper Level | 3       |
| Semester Hours                         | 6       |

| Requirements                   | Credits |
|--------------------------------|---------|
| STAT 222 - Business Statistics | 3       |
| Open Elective                  | 3       |
| Semester Hours                 | 6       |

| Requirements             | Credits |
|--------------------------|---------|
| Humanities - Upper Level | 3       |
| Open Elective            | 3       |
| Semester Hours           | 6       |

| Requirements                   | Credits |
|--------------------------------|---------|
| Physical Science/Physics       | 3       |
| Aviation Area of Concentration | 3       |
| Semester Hours                 | 6       |

| Requirements                   | Credits |
|--------------------------------|---------|
| Aviation Area of Concentration | 3       |
| Aviation Area of Concentration | 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/>)