AEROSPACE ENGINEERING SCIENCES - MASTER OF SCIENCE (MS)

Ranked among the top four schools in the country by the National Research Council, CU Boulder’s Department of Aerospace Engineering Sciences (AES) is internationally recognized for its research and education leadership in aerospace engineering, Earth and space sciences. Its world-renowned engineers and scientists tackle challenges in aerospace technology and science, focusing on astrodynamics and satellite navigation, remote sensing, Earth and space sciences, vehicle systems, structures and materials, and bioastronautics.

With more than 40 faculty members and over 300 MS and PhD students, our graduate programs prepare aerospace engineering students to meet the needs of our 21st-century society through the understanding, conception, design and application of aerial and spacecraft systems.

In the MS program, we focus on hands-on, experiential learning, technical and organizational expertise, and end-to-end mission and systems perspectives.

For more information, visit the department’s Graduates webpage.

Dual Degree Program

Dual MS or ProMS in Aerospace Engineering Sciences and ME in Engineering Management

For more information, visit the Engineering Management Program’s MS Aerospace Engineering Sciences & ME Engineering Management webpage.

Requirements

Course Requirements

- Students must complete a total of 30 credit hours (including both course and thesis hours) with a grade of B- or better and a cumulative GPA of at least 3.00. At least 24 credit hours must be completed at the 5000 level or above, and at least 18 of those credits must be in ASEN courses.
- If pursuing an MS degree, two to four required courses (6–12 credit hours) must be taken in the student’s primary focus or thrust area and one course (3 credit hours) must be taken in a second focus or thrust area. Students must complete either 6 credits hours of MS thesis, complete an approved certificate option, or complete a two-semester graduate project design course.
- If pursuing a ProMS degree, there are no focus area specific degree plan requirements, only that 18 credits must be in ASEN courses as required above.
- All MS and ProMS students must also complete one graduate-level math course (3 credit hours) in ASEN, APPM or MATH. All MS and ProMS students must also complete one graduate-level math course (3 credit hours) in ASEN, APPM or MATH.

- Up to 6 credit hours of 4000-level relevant courses from approved departments outside aerospace may be accepted for master’s degree credit if they fit with the student’s degree plan.

Time Limit

All degree requirements must be completed within four years of the date of commencing course work. Most students complete the degree in one to two years.