B.S. in Aerospace Engineering

The Bachelor of Science in Aerospace Engineering program exists in partial fulfillment of the University's purpose "to provide a comprehensive education to prepare graduates for productive careers and responsible citizenship with special emphasis on the needs of aviation, aerospace engineering, and related fields." The program's focus is primarily on the engineering of mission-oriented vehicles for atmospheric and space flight.

Within a few years of graduation, the alumni of the BSAE program are expected to have successful engineering careers as productive members or leaders within teams or organizations or as independent innovators, to have applied creative thinking and practical problem-solving skills to the solution of problems or to the development of processes or products for the aerospace industry, or to be engaged in advanced studies.

Furthermore, these alumni are expected to be responsible and ethical members of society and the engineering profession, and to pursue personal development through continuing education and active participation in professional organizations.

In order to achieve these objectives, the following student outcomes have been adopted:

1. *An ability to identify, formulate and solve complex engineering problems by applying principles of engineering, science, and mathematics*
2. *An ability to apply engineering design to produce solutions that meet specified needs with consideration of public health, safety, and welfare, as well as global, cultural, social, environmental, and economic factors*
3. *An ability to communicate effectively with a range of audiences*
4. *An ability to recognize ethical and professional responsibilities in engineering situations and make informed judgements, which must consider the impact of engineering solutions in global, economic, environmental, and societal contexts.*
5. *An ability to function effectively on a team whose members together provide leadership, create a collaborative and inclusive environment, establish goals, plan tasks, and meet objectives*
6. *An ability to develop and conduct appropriate experimentation, analyze and interpret data, and use engineering judgement to draw conclusions.*
7. *An ability to acquire and apply new knowledge as needed, using appropriate learning strategies*

To enter this program, students should have demonstrated competence in mathematics, physics, and chemistry in high school.

The Aerospace Engineering program is accredited by the Engineering Accreditation Commission of ABET, http://www.abet.org.

Degree Requirements

The Bachelor of Science in Aerospace Engineering program requires successful completion of a minimum of 129 credit hours. The program may be completed in eight semesters, assuming appropriate background and full-time enrollment. A CGPA of 2.0 or higher with a grade of "C" or better within three attempts, including audits and withdrawals in all courses, is required for degree completion.

Remaining on Track for AE

Aerospace Engineering students must maintain a CGPA of 2.50 or higher, and achieve a GPA of 2.50 or higher in those courses prescribed by the College of Engineering, Engineering Fundamentals Program, First-Year for Aerospace, and achieve a GPA of 2.50 or higher in CHM, EGR, MA and PS courses prescribed in First-Year for Aerospace prior to and upon completing AE 201 to continue in the program.