

Departmental Honors in Aerospace Engineering

Honors Program Requirements

The aerospace engineering honors program calls upon our students to achieve greatness during their academic studies. It is a program designed for the student to *be more* rather than to *do more*. It is an extension of the Engineering+ program and allows for further differentiation. Because it is a holistic approach that combines several areas to demonstrate excellence, it allows the individual student to tailor their program.

The foundation of the program rests in five areas: scholarship, discovery, service, leadership and professionalism. The student is expected to perform in each of the five areas acquiring points upon the successful completion and documentation of tasks. During their academic studies, aerospace engineering honors students will acquire at least 150 points with at least 20 points and at most 40 points in each area.

Scholarship

Aerospace engineering honor students demonstrate the ability to excel academically. In particular, they excel in the required program courses.

Course	Title	Hours
Aerospace Required Courses (300 level and above)		
AE 324	Fundamentals of Atmospheric Flight	3
AE 333	Mechanics of Materials	3
AE 373	Dynamics	3
ME 398	Thermodynamics I	3
AE 415	Introduction to Space Dynamics	3
AE 424	Aerodynamics I	3
AE 502	Aerospace Propulsion I	3
AE 512	Experimental Methods in Aerospace	3
AE 514	Flight Dynamics and Control	3
AE 524	Aerodynamics II	3
AE 525	Flight Structures I	3
AE 625	Flight Structures II	3
AE 607	Flight Control Systems	3

Scholarship Tasks	Points
Earn an 'A' in a designated aerospace engineering course	3
Earn an 'A-' in a designated aerospace engineering course	2
Earn a 'B+' in a designated aerospace engineering course	1
Earn a 'B' in a designated aerospace engineering course	0.5
Earn a 3.000 or better GPA in two graduate-level AE elective courses	3
Earn a 3.500 or better GPA in two graduate-level AE elective courses	+1
Earn a 'B+' or better in a 500-level math or statistics course (beyond the required hours of math and science already required for graduation)	3
Be inducted in Sigma Gamma Tau	2
Be inducted in Tau Beta Pi	+1

Discovery

Aerospace engineering honors students are naturally curious about the world around them. They engage in activities that augment the classroom experience and that extend in areas of future research or studies.

Discovery Tasks	Points
Participate in an internship (20 hrs/wk, 10 weeks minimum) – up to (3) three internship experiences may be counted	3
Conduct a research experience with a faculty member for a minimum of two semesters including a seminar presentation (presentation is counted separately)	5
Acceptance in a graduate program	3
Earn a 'B+'/'A-'/'A' in AE 460H	1/1.5/2
Earn a 'B+'/'A-'/'A' in AE 690 – up to (2) two semesters may be counted	3/3.5/4
Prepare and deliver a presentation of research – may be at UGRA, AIAA student conference or a professional meeting – up to (3) three presentations may be counted	2
Present at a national/international conference	+2
Conduct an enhanced course experience (designated as an Honors section) in a 300-level or above AE course – up to (2) two experiences may be counted	3
Participate in a semester abroad (minimum 12 credit hours) – up to (2) two semesters may be counted	5
Participate in a summer abroad experience (4 week minimum) – up to (2) two experiences may be counted	3
Participate in a short term abroad experience (1 week minimum)	0.5
Participate in rocket/balloon launch beyond curricular requirements – up to (4) four activities may be counted	0.5
Join an engineering registered student organization	1
Tour an aerospace-related museum (e.g., Cosmosphere, Kansas Aviation Museum) or a plant trip to an aerospace industry – up to (6) tours may be counted	1
Attend a department/college sponsored seminar with an external speaker – up to (4) four seminars per fiscal year may be counted	1

Service

Aerospace engineering honor students invest in their professional and personal communities. They are engaged in activities that demonstrate support of colleagues, their organizational unit and the world at large.

Service Tasks	Points
Provide tutoring or other such support (GEEKS). Minimum of 60 hours in a semester – up to (4) four semesters may be counted	5
Participate as a student helper in a summer camp – up to (2) two occurrences may be counted	4
Earn a 'B' or better in a designated Service Learning course	5

Documented community service of no less than 20 hours in a semester – up to (4) four semesters may be counted	4
Participate as a mentor requiring no less than 10 hours in a semester – up to (2) two semesters may be counted	2
Participate as a student ambassador at a university, college, department or professional organization event such as orientation, WISE, LEGO Mindstorms, Best Robotics, etc. – up to (10) ten activities may be counted	1

Leadership

Aerospace engineering honors students are identified as leaders in both formal and informal settings. They are active in student and professional groups at all levels.

Leadership Tasks	Points
Serve as an officer in a registered student organization for a semester – up to (6) six may be counted	3
Lead and develop an activity for a registered student organization or the department – up to (6) six activities may be counted	2
Present an information session from an internship experience for student colleagues	3
Serve in an elected capacity in the Student Government Association or Engineering Student Council for a semester – no limit on semesters	2
Earn a 'B' or better in a leadership course – up to (4) four courses may be counted	3
Earn a leadership certificate	3
Be inducted into Mortar Board	2

Professionalism

Above all, aerospace engineering honors students demonstrate a level of professionalism consistent with the industry. They are engaged in organizations that allow them to exhibit professional traits while demonstrating the highest level of integrity and ethical standards.

Professionalism Tasks	Points
Attend a local chapter meeting of a professional society – up to (4) four meetings per fiscal year	1
Be a member of student chapter of a national/ international professional society for a semester – up to (10) ten semesters may be counted	1.5
Earn a 'B' or better in PHIL 385 Engineering Ethics	3
Earn an 'A-' or better in PHIL 385 Engineering Ethics	+1
Participate in a Student Design Team Competition beyond curricular requirements (excluding WingBox, AIAA DBF, DVC) – up to (2) two semesters may be counted	4
Attend a career fair – up to (4) may be counted	1
Have your resume reviewed at Career Development	1
Conduct a mock interview with Career Development	1

Participate in a Career Development activity (e.g. Etiquette) – up to (6) six activities may be counted .5

Activity Log

The onus of record keeping will be on the student. They will self-report their activities during advising sessions. A table or spreadsheet should be generated, printed and submitted to your advisor (to be kept in the student record).