Guidelines for Honors Students in Mechanical and Aerospace Engineering

In addition to the requirements specified by the Barrett Honors College, the aerospace engineering and mechanical engineering programs offer honors students several opportunities for honors credit and thesis research.

Honors Course Credit

1. Most upper-division AEE, MAE and MEE courses are offered for honors credit through the honors enrichment contract. Students wishing to receive honors credit should confer with the course instructor at the beginning of the semester in order to develop a mutually acceptable plan for the honors contract activity. Most honors contracts involve either a project that extends the ideas and techniques covered in the course or outside research on topics relevant to the course work. Students have the responsibility to apply for the honors contract through the Barrett Honors College. The Honors College contacts the instructor to approve the contract only after the student has initiated the process.

2. Some courses in the mechanical and aerospace engineering have honors laboratory or recitation sections. In order to receive honors credit for these courses, students must register for the honors lecture section (which meets at the same time as the regular lecture section) and for the honors lab or recitation (which meets separately). Courses that currently have honors sections are: MAE 201, MAE 202, MAE 241, MEE 322 and AEE 360.

3. Honors students may use both MAE 492 Honors Research and MAE 493 Honors Thesis as technical electives with credit towards the BSE degree. However, only six total credits of Honors Research and/or Thesis may be credited as Technical Elective.

The Honors Thesis

Students graduating from the Barrett Honors College must complete an honors thesis, which is a document that describes a body of research undertaken by the student. Students should start looking for a research topic and thesis advisor during the second semester of the sophomore year or the first semester of the junior year. All Barrett students in aerospace or mechanical engineering who plan to do their honors research and thesis under the supervision of a mechanical or aerospace engineering faculty mentor must enroll in MAE 394 Honors Research Methods before taking MAE 492. Normally, students will take MAE 394 in either the fall or spring of the junior year.

Honors students may take advantage of the Fulton Undergraduate Research Initiative, which provides a stipend and a small amount of funding for undergraduate research. Honors students may use their FURI-funded project as their honors research. For more information on the FURI program, please visit the FURI website: https://undergraduate-research.engineering.asu.edu/.

Philosophically, the honors thesis should represent a body of work performed independently by the student under the guidance of a mentor. (The mentor will normally be a regular faculty member, but adjunct faculty, faculty associates or other qualified professionals may sit on the thesis committee.) The honors research MUST be work performed above and beyond the normal coursework required for the BSE degree. The senior capstone design project or other projects done as a normal part of a course are not eligible to be used as the honors research. Students are encouraged to seek out a mentor early so that the honors research can be clearly defined well in advance of the senior year.