BSME/MSAEM Accelerated Masters Program (AMP)

The AEM department's Accelerated Masters Program allows highly-motivated BSME students to complete the requirements for both a BS in mechanical engineering and an MS in aerospace engineering and mechanics in a five-year period. A student in the program can earn up to nine hours of dual-credit towards their BSME and MSAEM degrees.

Following successful completion of all requirements for their BSME, students in AMP are awarded their undergraduate degree. Students then continue taking graduate courses until the requirements for the MS degree are met. Students in AMP are classified as undergraduates until they complete all of the requirements for the undergraduate degree. They cannot hold graduate assistantships until they are classified as graduate students.

Eligibility

Students normally apply to the AMP at the end of their junior year. To be considered for admission, BSAE students must:

a) have at least a 3.3 GPA;

b) have completed 90 hours toward their BSME degree including a couple ME 300-level courses in the junior year of the flow chart; and

c) complete an on-line application to the MSAEM program through the graduate school (two letters of recommendation and a statement of purpose are required by the department).

AE Electives Eligible for Dual Credit

BSME students should consult with the ME program to confirm 500- and 600-level AEM graduate courses may be used to meet the BSME elective requirements. Most AEM graduate-level courses are taught on a one-, two- or four-year rotation; consult the course rotation document found on the MSAEM web page: http://aem.eng.ua.edu/graduate/ms-program/.

MSAEM Requirements

MSAEM curriculum requirements are posted on the graduate page: http://aem.eng.ua.edu/graduate/ms-program/. There are two plans (thesis and non-thesis); both require 30 hours of coursework which includes:

- six hours core coursework (one Aerospace core course and one Mechanics core course)
- six hours mathematics coursework
- 12 hours of elective coursework
- six hours of thesis research (Plan I) or an additional six hours of elective coursework (Plan II)

By arrangement with a faculty member, students may pursue special topic (or project) courses as elective credits. These appear as AEM 594 in published course schedules but are not open for enrollment without prior arrangement with the instructor. Plan II degrees require a culminating experience.

Table 1 shows an example BSME/MSAEM AMP course schedule for the third through fifth years. During the last academic year (summer, fall and winter), typically 18 hours would need to be completed to finish the program. Completing in five years is not required. **Students should work with their prospective research advisor or the AEM Graduate Program Coordinator during their senior year to appropriately plan their coursework.**

Table 1. An example BSME/MSAEM AMP curriculum

Year 3*	
Fall	**Spring**
AEM 250 & 251	ME 350
ME 309	ME 360
ME 349	ME 372
ECE 320	ME 383
HU/L/FA Elective	HI/SB Elective
16 hours	**16 hours – Apply to AMP**
Year 4	
ME 450	ME 490
ME 460	HU/L/FA Elective
ME 489	HI/SB Elective
HU/L/FA Elective	*AEM 5XX for BSME Elective*
AEM 5XX for BSME Elective	*Math Grad Elective for BSME Tech Elective*
16 hours	**15 hours – Complete MSAE**
Year 5	
AEM Grad Core	*AEM Grad Core*
AEM Grad Elective	*AEM Grad Elective*
AEM Grad Elective	*AEM Grad Elective*
Math Graduate Elective	
12 hours	**9 hours – Complete MSAEM**

*Assumes first two years of BSME coursework completed as shown on the BSME flowchart