BSAE/MSME Accelerated Masters Program (AMP)

The AEM department's Accelerated Masters Program allows highly-motivated BSAE students to complete the requirements for both a BS in aerospace engineering and an MS in mechanical in a five-year period. A student accepted into the program is allowed to take graduate courses and can earn up to six hours of dual-credit hours toward their BSAE and MSME degrees.

Following successful completion of all requirements for their BSAE, 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; however, in some cases can use remaining UG scholarship funds for graduate coursework (consult with the Undergraduate Scholarship office).

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 3.7 GPA if admitted after August 2023;

b) have completed 90 hours toward their BSAE degree; and

c) complete an on-line application to the MSME program through the graduate school.

AE Electives Eligible for Dual Credit

Accepted ME 5XX courses for AEM elective: ME 501, 506, 509, 514, 562, 570, 571, 577 and 585.

MSME Requirements

MSME curriculum requirements are posted on the graduate page: http://me.eng.ua.edu/graduate/m-s-program/. There are two plans (thesis and non-thesis); both require 30 hours of coursework.

Table 1 shows an example BSAE/MSME 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 ME Graduate Program Coordinator during their senior year to appropriately plan their coursework.**

Table 1. An example BSAE/MSME AMP curriculum

Year 3*	
Fall	**Spring**
AEM 313 Aerodynamics	ME 349 Applied Numerical Methods
AEM 341/351 Aircraft Structures & Lab	AEM 368 Flight Mechanics
AEM 360 Astronautics	AEM 413 Compressible Flow
ME 215 Thermodynamics	HU/L/FA Elective
HU/L/FA Elective	HI/SB Elective
16 hours	**15 hours – Apply to AMP**
Year 4	
AEM 402 Aerospace Design I	AEM 404 Aerospace Design II
AEM 408 Propulsion	AEM 451 Aircraft Structural Design
AEM 468 Flight Dynamics and Control	HI/SB Elective
AEM 495 Senior Seminar	*ME Grad Elective (see list previous page)*
AEM Elective (C)**	*ME Grad Elective (see list previous page)*
15 hours	**15 hours – Complete BSAE**
Year 5	
ME Grad Course	*ME Grad Course*
ME Grad Course	*ME Grad Course*
ME 599 or Grad Course	*ME 599 or Grad Course*
Math Graduate Elective	*Math Graduate Elective*
12 hours	**12 hours – Complete MSME**

*Assumes first two years of BSAE coursework completed as shown on the BSAE flowchart: http://aem.eng.ua.edu/undergraduate/aerospace-engineering/

**The BSAE students must complete six hours of "C" designated courses. Consult with the BSAE advisor.