Approved Electives for Undergraduates

Students wishing to use courses as technical, engineering science, and/or experimental electives that do not appear on this list should submit a petition to the AME faculty for approval.

Courses that have not been approved in advance may not count for elective credit.

IMPORTANT NOTE: Any of the courses listed below which are part of YOUR REQUIRED CURRICULUM (AE or ME), cannot be considered in your choice of electives.

The electives listed are available to both AE and ME students unless noted with an asterisk *.

I. Engineering Science Electives

A. AME courses, 3000 level and above, not specifically listed on the required curriculum.
   NOTE: For AME 4980 – a consent form signed by the instructor is required. A maximum of 6 credit hours of AME 4980 is allowed towards a degree.

B. AME 2223* – Introduction to Aerospace Engineering; may be taken by ME students but only for 2 credit hours.

C. All courses offered by the Engineering Schools 3000 level and above excluding courses that are equivalent to AME courses in the required curriculum.

II. Technical Electives

A. Any Engineering Science Elective (see above)

B. Basic Science:
   1. Chemistry: CHEM 3012 and higher numbered Chemistry courses
   2. Math: MATH 3333
      Any MATH 4000 level and above
   3. Physics: PHYS 3043, 3183, 3223* (approved for AE students only) and 3803
      Any PHYS 4000 level and above
   4. Astronomy: ASTR 3113 and 4303

C. Courses offered by the College of Engineering:
   ENGR 4003CW, ENGR 4113, ENGR 4013, ENGR 4223, ENGR 4513

D. AME 2281 - Engineering Co-Op Program; Co-Op students may substitute up to 3 hours of this course for a Technical Elective

E. Other:
   1. Meteorology: Any METR 4000 level and above

III. Experimental Electives (for both AE and ME unless otherwise noted*)

A. AME 3272* Wind tunnel Lab (approved for ME curriculum only)
B. AME 4442 IC Engine Lab
C. AME 4802 Robotics Lab
D. AME 4812 Dynamics & Control Lab
E. AME 4822 Fluid & Thermal Lab
F. AME 4832 Micro and Nanomaterials Lab
G. AME 4980 Special Lab - NOTE: A consent form signed by the instructor is required. A maximum of 6 credit hours of AME 4980 is allowed towards degree. Course content must have experimental emphasis.

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