ME Dept Undergraduate Advising Information

Advanced engineering elective options
4 courses required; any ENG 300+ course satisfies this requirement.
2019-21 classes: a 300+ natural science or mathematics course may be petitioned as one of the advanced engineering electives.
2022+ classes: one 300+ natural science or mathematics course will satisfy one of these courses (no petition required). Additional similar requests need to be petitioned.

In the ME Dept, we offer the 3xx and 4xx elective courses presented below. If a concentration is associated with the course, this relationship is noted. For electives that are NOT associated with a concentration, the subject/interest area of the course is noted. The historical schedule offering of the course is also noted.

- ME309 (Structural Mechanics; Spring): Follow-up to Mechanics of Materials (ME305)
- EK335 (Intro Environmental Engineering; NOT CURRENTLY OFFERED; Energy concentration elective)
- ME345 (Automated Manufacturing; Fall/Spring; MFG Concentration requirement)
- ME403 (Atmospheric Flight Mechanics and Control; Spring; AERO Concentration)
- ME404 (Dynamics and Control of Mechanical Systems; Fall): First course in Control Theory
- ME406 (Dynamics of Space Vehicles; Spring; AERO Concentration elective)
- ME408 (Aircraft Performance and Design; Fall; AERO Concentration elective)
- EK408 (Intro to Clean Energy Gen & Storage Tech; Fall; Energy Concentration requirement)
- EK409 (Engineering Economics; NOT CURRENTLY OFFERED; MFG requirement & Tech Innov elective)
- ME416 (Intro to Robotics; Spring): First course in robotics
- ME420 (Supply Chain Engineering; Fall; MFG Concentration requirement)
- ME421 (Aerodynamics; Spring; AERO Concentration elective): Recommended to be taken in the JUNIOR year, prior to other AERO concentration courses
- ME425 (Compressible Flow and Propulsion; Fall; AERO Concentration elective)
- ME441 (Mechanical Vibrations; Fall): First course in vibration analysis. Relevant

Most ME5xx courses are accessible to upper-level undergraduates. Graduate students are given priority registration status, so undergraduates should indicate interest by signing onto the ME Dept waitlist (accessible via the Undergraduate Resources link on the ME Dept website). MFG concentrators are given second-highest priority registration status for the ME5xx elective courses associated with the MFG concentration.

Course registration
PLEASE advise all students to register for ONLY the courses they need (and haven’t yet taken – this does happen and it prevents students from registering!) and for ALL components of the course; this includes the Lecture and all relevant Discussion and Lab sections.

IF a lecture/discussion/lab section is full, the procedure should be to add your name and ALL relevant information to the ME Department’s online waitlist:
http://www.bu.edu/eng/departments/me/general-resources-students/current-undergraduate-students/

Last update: 10/12/18
The waitlist will generally be evaluated on a first-come, first-served order, but other factors relating to class and concentration status will be taken into account. We can only process waitlist requests if all the information fields on the waitlist form have been completed.

**BU Hub Requirements as relate to the ME B.S Degree**

The BU Hub requirement is separate from the program requirements. The Hub requirements consists of 6 Hub Disciplines* that include 27 specific units. The ME degree requirements currently account for 12 such units, with a near-term goal of satisfying 5 additional units. To accommodate the remaining 8 Hub units, the “General Education” (non-ENG) course requirements associated with the ME degree have been replaced with an equal number of course credit slots designed to fulfill the BU Hub requirements. *Transfer credits:* A.P. test scores (4+) will be assessed on a subject-specific basis, resulting in an award of the (one) Hub unit most closely associated with the test subject.

Hub courses may be identified, by discipline and unit, through the BU Course Description Search tool: [https://www.bu.edu/phpbin/course-search/](https://www.bu.edu/phpbin/course-search/)

*Hub Disciplines:*
1. Philosophical, Aesthetic, and Historical Interpretation (3 units)
2. Scientific and Social Inquiry (3 units)
3. Quantitative Reasoning (2 units)
4. Diversity, Civic Engagement, and Global Citizenship (4 units)
5. Communication (6 units)
6. Intellectual Toolkit (7 units)