Aerospace Engineering Catalog 2024

Fall
15 hours
Math 132 or 141 or 141 (4) (QR) FA, SP, SU
Math 132 Prereq: Math 131
Math 141 Prereq: ACT Math 26 or SAT Math 660
Math 142 Prereq: Math 141 with C or better and Math 131
Math 142 Coreq: Math 132
Math 151 Coreq: 141-147 or higher and EF 105 or COSC 101 or CS 102
EF 142 or 151 or 157 (4) (EI) FA, SP
EF 142 Prereq: EF 141 with C or better
EF 142 Coreq: Math 141
EF 151 Coreq: Math 141
EF 151 Coreq: 141-147 or higher and EF 105 or COSC 101 or CS 102
EF 152 or 158 (4) (NS) FA, SP, SU
EF 152 Prereq: EF 151
EF 152 Coreq: Math 143 or 144
EF 157 Prereq: Math 119 recommended background in Math 131
EF 157 Coreq: English 121 as Second Language

Spring
16 hours
Math 143 or 144 (4) (QR) FA, SP, SU
Vol Core (3) FA, SP, SU
Vol Core (3) FA, SP, SU
EF 152 or 158 (4) (NS) FA, SP, SU
EF 152 Prereq: EF 151
EF 152 Coreq: Math 143 or 144
EF 157 Prereq: Math 119 recommended background in Math 131
EF 157 Coreq: English 121 as Second Language

Fall
19 hours
Math 241 or 247 (4) (EI) FA, SP, SU
Math 241 Prereq: Math 231 or 237 with C or better
Math 241 Coreq: Math 142 or 148
Math 241 Coreq: EF 152 or 158

Spring
17 hours
Math 231 or 237 (3) (QR) FA, SP, SU
Math 231 Prereq: Math 142 or 148
Math 231 Coreq: Math 142 or 148

Fall
15 hours
ME 301 (3) (EI) FA, SP, SU
ME 301 Coreq: Math 241 or 247
ME 341 or 342 (3) (EI) FA, SP, SU
ME 341 Prereq: Math 241 and Math 231 with a grade of C or better
ME 350 or 351 (3) (EI) FA, SP, SU
ME 350 Prereq: Math 241
ME 350 Coreq: Math 241

Spring
15 hours
AE 301 (3) (EI) FA, SP, SU
AE 301 Coreq: Math 341
AE 301 Prereq: Math 341
AE 301 Coreq: Math 341

Fall
15 hours
AE 402 (3) (EI) FA, SP, SU
AE 402 Prereq: Math 351 and 370 or 377
AE 402 (3) (EI) FA, SP, SU
AE 402 Prereq: Math 351
AE 402 (3) (EI) FA, SP, SU
AE 402 Prereq: Math 351
AE 402 (3) (EI) FA, SP, SU
AE 402 Prereq: Math 351

Spring
15 hours
AE 490 (3) (EI) FA, SP, SU
AE 490 (3) (EI) FA, SP, SU
AE 490 (3) (EI) FA, SP, SU
AE 490 (3) (EI) FA, SP, SU
AE 490 (3) (EI) FA, SP, SU
AE 490 (3) (EI) FA, SP, SU

Volunteer Core courses highlighted in light orange.

Departmental Electives
Choose from:  Any 400 level AE course not otherwise required for the major, ME 315, 365, 425, 435, 445, 450, 470, 475, 476, 480.
Other courses require prior approval by the department.

Full Status Progression
A few students may apply for progression to upper division after completing EF 152/158, CHEM 121 and 123 or 126, MATH 231, ME 202, ME 231 and ME 321 with a grade of C or better in each, and an overall GPA of at least 2.4. Students who have not satisfied the requirements for full status will be dropped from the departmental class rolls in upper division courses.

Provisional Status Progression
Students who have completed EF 152/158, CHEM 121 and 123 or 126, MATH 231, ME 202, ME 231 and ME 321 with a grade of C or better have an overall GPA between 2.0 and 2.4 may apply for provisional status. The granting of provisional status is based on the availability of space in departmental programs after full status students have been accommodated. Provisional status students are required to demonstrate their ability to perform satisfactorily in upper division by attaining a minimum GPA of 2.0 in the first 12 hours of 300 level required engineering courses. Award of upper division full status is dependent upon the performance. Students with an overall GPA between 2.0 and 2.4 may apply for provisional status. The granting of provisional status is based on the availability of space in departmental programs after full status students have been accommodated. Provisional status students are required to demonstrate their ability to perform satisfactorily in upper division by attaining a minimum GPA of 2.0 in the first 12 hours of 300 level required engineering courses. Award of upper division full status is dependent upon the performance. Students with an overall GPA less than 2.0 will not be admitted to upper division. Students who have not progressed to upper division full status will be dropped from departmental class rolls.

Transfer Students
Students transferring more than 24 hours from another institution are considered transfer students. Transfer students must meet the same criteria as non-transfer students, using transfer grades for acceptable substitutions. Transfer courses with grades below a C will not be accepted to fulfill any degree requirements.

Departmental Academic Standing
The faculty of the Department of Mechanical, Aerospace and Biomedical Engineering expect all students who enter to make progress toward graduation. To graduate from the department, a student must earn a minimum grade point average of 2.0 in all departmental courses counted toward the degree. Students not meeting the required departmental GPA may be dropped from their major. In addition, the University Academic Good Standing Policies apply to all students.

Graduation Requirements
A minimum GPA of 2.0 in all departmental courses counted toward the degree taken at the University of Tennessee, Knoxville, is required for graduation. No more than two departmental courses in which a C- or lower is the highest grade earned may be counted toward graduation. This is in addition to the university’s graduation requirements.

Students also have opportunities for an Honors Concentration and/or a five year BS/MS program. See the Undergraduate Catalog for details and requirements.