Aerospace Engineering Catalog 2021						<u></u>
Math 141 or 147 (4) FA, SP, SU Prereq- Math ACT 28 or Math SAT 660	EF 151 or 157 (4) FA, SP Coreq: Math 132/141/147 and EF 105 or CS 101 or CS 102	EF 105 (1) FA, SP Coreq- EF 151 or 157	Chem 122(3) and 123(1) or 128 (4) FA, SP, SU Prereq-Math 119; recommended background in Math 131	English 101/118 or 198 or 131 (3) FA, SP, SU 101 Regular; 118 Honors; 198 Chancellor Honors only; 131 English as Second Language		
Math 142 or 148 (4) FA, SP, SU Prereq- Math 132 or 141 or 147	Math 200 (2) FA, SP	EF 152 or 158 (4) FA, SP, SU Prereq-EF 142/151/157 with C higher Coreq- Math 142 or 148	ME 202 (2) FA, SP, SU Coreq- EF 152 or 158 and Math 142 or 148	Gen Ed (3) FA, SP, SU Social Science	English 102 or 290 or 298 or 132 (3) FA, SP, SU 102 Prereq 101 or 118; 290 Prereq AP 101 credit 298 Prereq Chancellor Honors only & 198; 132 Prereq 131 ES	
Math 241 or 247 (4) FA, SP, SU Prereq- Math 142 or 148	AE 201 (1) FA Restricted to engineering majors.	AE 210 (2) (OC) FA, SP AE or ME majors. Sophomore or Junior or Senior	ME 231 (3) FA, SP, SU Prereq. EF 152 or 158 AND ME 202 with C or better	Physics 231 (3) FA, SP, SU Prereq- Phys135 or EF 151 and 152 Coreq- Math 142 or 148	Gen Ed (3) FA, SP, SU Arts and Humanities	Gen Ed (3) FA, SP SU Cultures & Civilizations
Math 231 or 237 (3) FA, SP, SU Prereq- Math 142 or 148	EF 230 (2) FA, SP Prereq- EF 105 or CS 102 Coreq- EF152/158	ME 321 (3) FA, SP, SU Prereq- ME 202 with C or better AND Math 142/148 with C or better	Gen Ed (3) FA, SP, SU Arts & Humanities	Econ 201/207 (4)FA,SP,SU Social Science		
ME 331 (3) FA, SP, SU	AE 341 or 347 (3) FA, SP, SU	AE 370 or 377 (4) FA, SP	ECE 301 (3) FA, SP	ME 391 or 397 (3) FA, SP, SU		
Coreq- Math 241 or 247	Prereq- ME 231 with C or better and Math 241 or 247 with C or better	Coreq- AE 341	Prereq- Math 231 or 237 with C or better	Prereq- Math 231 or 237; Math 241 or 247 and Math 200,251/257 and EF 230 ALL with grades of C or better		
AE 363 (3) SP Prereq- ME 321	ME 363 or 367 (3) FA, SP, SU Prereq- ME 231 and Math 231 with grades of C or better	AE 351 (3) SP Prereq- AE 341/347 and ME 331	ME 344 (3) FA, SP, SU Prereq- ME 331 and 391 or 397 and AE 341 or 347	AE 345 (3) FA, SP, SU Prereq- ME 321 Coreq- AE 341/347 & ME 363/367 and E	CE 301	
AE 422 (3) FA Prereq- AE 351 and 370 or 377	AE 425 (3) FA Prereq- AE 351	AE 424 (3) FA Prereq- AE 351 Coreq- ME 344	AE 450 (3) FA Prereq- AE 351, AE 370/377, AE 363 Coreq- ME 344, AE/BME/ME majors	Deptmental Elective (3) Choose from approved courses		
AE 449 (3) SP (WC) Prereq- AE 345, 351, and 425	AE 460 (3) SP Prereq- AE 422, 450, 425	Gen Ed (3) FA, SP, SU Cultures and Civilizations	Departmental Elective (3) Choose from approved courses	Departmental Elective (3) Choose from approved courses		
	Prereq- Math ACT 28 or Math SAT 660 Math 142 or 148 (4) FA, SP, SU Prereq- Math 132 or 141 or 147 Math 241 or 247 (4) FA, SP, SU Prereq- Math 142 or 148 Math 231 or 237 (3) FA, SP, SU Prereq- Math 142 or 148 ME 331 (3) FA, SP, SU Coreq- Math 241 or 247 AE 363 (3) SP Prereq- ME 321 AE 422 (3) FA Prereq- AE 351 and 370 or 377 AE 449 (3) SP (WC)	Math 141 or 147 (4) FA, SP, SU EF 151 or 157 (4) FA, SP Prereq- Math ACT 28 or Coreq- Math 132/141/147 Math SAT 660 and EF 105 or CS 101 or CS 102 Math 142 or 148 (4) FA, SP, SU Math 200 (2) FA, SP Prereq- Math 132 or 141 or 147 Math 200 (2) FA, SP Math 241 or 247 (4) FA, SP, SU AE 201 (1) FA Prereq- Math 142 or 148 Restricted to engineering majors. Math 231 or 237 (3) FA, SP, SU EF 230 (2) FA, SP Prereq- Math 142 or 148 EF 230 (2) FA, SP Prereq- EF 105 or CS 102 Coreq- EF152/158 ME 331 (3) FA, SP, SU AE 341 or 347 (3) FA, SP, SU Coreq- Math 241 or 247 Prereq- ME 231 with C or better and Math 241 or 247 with C or better AE 363 (3) SP ME 363 or 367 (3) FA, SP, SU Prereq- ME 231 and Math 231 with grades of C or better AE 422 (3) FA Prereq- AE 351 and 370 or 377 AE 425 (3) FA Prereq- AE 351 AE 449 (3) SP (WC) Prereq- AE 460 (3) SP Prereq- AE 345, 351, and 425 Prereq- AE 422, 450, 425	Math 141 or 147 (4) FA, SP, SU EF 151 or 157 (4) FA, SP EF 105 (1) FA, SP Prereq- Math ACT 28 or Math 132/141/147 Coreq- Math 132/141/147 Coreq- EF 151 or 157 Math 20 or 148 (4) FA, SP, SU Math 200 (2) FA, SP EF 152 or 158 (4) FA, SP, SU Prereq- Math 132 or 141 or 147 Math 200 (2) FA, SP EF 152 or 158 (4) FA, SP, SU Math 241 or 247 (4) FA, SP, SU AE 201 (1) FA AE 210 (2) (OC) FA, SP Prereq- Math 142 or 148 AE 201 (1) FA AE 201 (2) (OC) FA, SP Prereq- Math 142 or 148 AE 201 (1) FA AE 201 (2) (OC) FA, SP Prereq- Math 142 or 148 AE 201 (2) FA, SP AE 30 or ME majors. Sophomore or Junior or Senior Math 231 or 237 (3) FA, SP, SU Prereq- EF 150 or CS 102 Prereq- ME 202 with C or better AND Math 142/148 with C or better ME 331 (3) FA, SP, SU AE 341 or 347 (3) FA, SP, SU AE 370 or 377 (4) FA, SP Coreq- Math 241 or 247 Prereq- ME 231 with C or better AE 370 or 377 (4) FA, SP AE 363 (3) SP ME 363 or 367 (3) FA, SP, SU AE 351 (3) SP Prereq- ME 231 and Math 231 Prereq- AE 341/347 and ME 331 with grades of C or better ME 331 (3) FA Prereq- AE 351 and 370 or 377	Math 141 or 147 (4) FA, SP, SU Prereq. Math ACT 28 or Math SAT 680 EF 151 or 157 (4) FA, SP Coreq. Math 132/14/1477 and EF 105 or CS 101 or CS 102 EF 155 or 157 Coreq. EF 151 or 157 Chem 122(3) and 123(1) or 128 (4) FA, SP, SU Prereq. Math 119; recommended background in Math 131 Prereq. Math 132 or 141 or 147 Math 142 or 148 (4) FA, SP, SU Prereq. Math 132 or 141 or 147 Math 200 (2) FA, SP EF 152 or 158 (4) FA, SP, SU Prereq. Hath 142 or 148 Math 200 (2) FA, SP Math 241 or 148 Math 220 or 148 (4) FA, SP, SU Prereq. Math 142 or 148 Math 221 or 148 (4) FA, SP, SU Prereq. Math 142 or 148 Math 221 or 158 AND Math 241 or 247 (4) FA, SP, SU Prereq. Hath 142 or 148 Math 221 or 148 (4) FA, SP, SU Prereq. Math 142 or 148 Math 221 or 148 (5) FA, SP, SU Prereq. Math 142 or 148 Math 231 or 237 (3) FA, SP, SU Prereq. Hath 142 or 148 Math 231 or 237 (3) FA, SP, SU Prereq. Hath 142 or 148 Math 231 or 237 (3) FA, SP, SU Prereq. Hath 142 or 148 Math 231 or 237 (3) FA, SP, SU Prereq. Hath 241 or 247 Math 231 or 347 (3) FA, SP, SU Prereq. Hath 241 or 247 with C or better and Math 241 or 247 with C or better Aath 231 or 347 (3) FA, SP, SU Prereq. Math 231 or 237 with C or better Aath 231 or 237 with C or better Aath 231 or 237 with C or better Aath 231 or 237 with C or better Abs 363 (3) SP Prereq. Math 231 or 237 and Math 231 with grades of C or better Aath 231 or 337 (4) FA, SP, SU Prereq. Aath 341 or 347 Aath 243 (3) FA, SP, SU Prereq. Aath 341 or 347 Aath 243 (3) FA, SP, SU Prereq. Aath 341 or 347 Aath 245 (3) FA Pre	Math 141 or 147 (4) FA, SP, SU	Nath 141 or 147 (4) FA, SP, SU

Departmental Electives Choose from:

Any 400 level AE course not otherwise required for the major, ME 315, 365, 366, 405, 451, 463, 466, 470, 472, 475 or 477, 476, 480.

Other courses require prior approval by the department.

Full Status Progression

A lower-division student may apply for progression to upper division after completing EF 152/158, CHEM 122 and 123 or 128, 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 departmental class rolls in upper division courses.

Provisional Status Progression

Students who have completed EF 152/158, CHEM 122 and 123 or 128, MATH 231, ME 202, ME 231 and ME 321 with a grades of C or better and 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 this 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 will be dropped from departmental class rolls.

Transfer Students

Students transferring more that 26 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.

AE 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.