Nuclear Engineering Catalog 2024
Radiological Concentration

Fall 16 hours
Math 132 or 141 or 147 (3-4) (QR) FA,SP,SU
Chem 122(3) and 123(1) or 128 (4) (NS) FA, SP, SU
EF 142 or 151 or 157 (4) (EI) FA, SP
EF 101 (1) (AF) SP
English 101 or 131 (3) FA, SP, SU
Math 132 Prereq- Math 131
Prereq-Math 119; recommended
EF 142 Prereq- EF 141 with C- or better and Math 131
EF 142 Coreq- Math 132
EF 151 Coreq- 141/147 or higher and EF 195 or CS101 or CS 102
Coreq Math 142 or 148
16 hours
Math 142 or 148 (4) (QR) FA, SP, SU
Chem 132(3) and 133(1) or 138 (4) FA, SP, SU
EF 152 or 158 (4) (EI) FA, SP, SU
EF 101 or 112 or 298 or 132 (2) FA, SP, SU
NE 101 (1) SP
Prereq- Math 132 or 141 or 147
Prereq- Chem 122 and 123 or 128
Prereq-EF 142/151/157 with C or higher
EF 152 Prereq 101; 112 Prereq is AP 101 and Test Scores;
EF 158 Prereq University Honors only; 132 Prereq 131 ESL

Fall 16 hours
Math 231 or 237 (3) FA, SP, SU
NE 200 (2) FA
ME 202 (2) FA, SP, SU
Physics 231 (3) FA, SP, SU
ECON 201 or 207 (4) FA, SP, SU
16 hours
Prereq- Math 142 or 148
Prereq- Phys 135 or EF 151 and 152
Prereq- EF 105 or CS 102
Coreq- Math 142 or 148
17 hours
Math 241 or 247 (4) FA, SP, SU
NE 233 (3) SP
ME 231 (3) FA, SP, SU
Physics 230 or 232 (4) FA, SP
Physics 230 or 232 (4) FA, SP
NE 101 (1) SP
Prereq Math 241 or 247
Prereq- EF 152 or 158 and
Prereq- Phys 231 (3) or 138 or 231
Coreq- Math 241 or 247

Fall 15 hours
NE 342 or 347 (3) FA
NE 362 or 367 (3) FA
Physics 341 (3) FA
NE 400 (1) FA, SP
Technical Elective *(3) FA, SP, SU
NE 402 or 427 (4) FA, SU
NE 470 (3) FA, SP
Technical Elective *(3) FA, SP, SU
NE 471 (2) FA
Technical Elective *(3) FA, SP, SU
Vol Core (3) FA, SP, SU
NE 401 (4) (WC) SP
Technical Elective *(3) FA, SP, SU
Vol Core (3) FA, SP, SU
Vol Core (3) FA, SP, SU
15 hours
Prereq- Math 241 or 247 and NE 331 with grade of C or higher
Prereq- Math 231/237, 241/247, 242/247
Prereq- Phys 231 (3) or 138 or 231
Prereq - Math 142 or 148
Vol Core (3) FA, SP, SU
Prereq- Math 241 or 247
Vol Core (3) FA, SP, SU
Prereq- Math 142 or 148
Vol Core (3) FA, SP, SU
Prereq- Math 142 or 148

Spring 16 hours
NE 400 (1) FA, SP
Technical Elective *(3) FA, SP, SU
NE 402 or 427 (4) FA, SU
Technical Elective *(3) FA, SP, SU
NE 470 (3) FA, SP
Technical Elective *(3) FA, SP, SU
NE 471 (2) FA
Technical Elective *(3) FA, SP, SU
Vol Core (3) FA, SP, SU
NE 401 (4) (WC) SP
Technical Elective *(3) FA, SP, SU
Vol Core (3) FA, SP, SU
Vol Core (3) FA, SP, SU
17 hours
Prereq- Math 241 or 247 and NE 331 with grade of C or higher
Prereq- Math 231/237, 241/247, 242/247
Prereq- Math 231/237, 241/247, 242/247
Prereq- Math 231/237, 241/247, 242/247
Prereq- Math 142 or 148
Prereq- Math 142 or 148
Vol Core (3) FA, SP, SU
Vol Core (3) FA, SP, SU
Vol Core (3) FA, SP, SU
Technical Electives are selected from upper division mathematics, chemistry, physics and engineering courses and must be pre-approved by the department. Courses in Nuclear Engineering other than 500, 502 or 598 may also be used as technical electives.

Full Status Progression
A lower-division student may apply for progression to upper division after completing CHEM 122/123 or 128*, CHEM 132/133 or 138*, MATH 130/141/147*, MATH 140/146*, MATH 231/237, EF 151/157*, EF 152/158*, and PHYS 231*, with a grade of C or better in each, and an overall GPA of at least 2.5.

Provisional Status Progression
Students who have completed CHEM 122/123 or 128*, CHEM 132/133 or 138*, MATH 130/141/147*, MATH 140/146*, MATH 231/237, EF 151/157*, EF 152/158*, and PHYS 231* with a grade of C or better and have an overall GPA between 2.0 and 2.5 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 2.5 in the first 9 hours of 300-level required nuclear engineering courses. Award of upper-division full status is dependent upon this performance. Students who have not progressed to upper-division will be dropped from departmental courses.

Nuclear Graduation Requirements
Students are required to maintain a cumulative grade point average of at least 2.5 in all nuclear engineering courses taken at the University of Tennessee, Knoxville used to satisfy the graduation requirement. No more than four (4) credit hours of required nuclear engineering 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 are strongly recommended to meet with their faculty advisor every semester.

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

Volunteer Core courses highlighted in light orange.