

## Nuclear Engineering Catalog 2020 Radiological Concentration

Fall 16 hours	<b>Math 141 or 147 (4) FA, SP, SU</b> Prereq- Math ACT 28 or Math SAT 660	<b>Chem 120 or 128 (4) FA, SP, SU</b> Prereq-Math 119; recommended background in Math 131	<b>EF 151 or 157 (4) FA, SP</b> Coreq- Math 132/141/147 or higher and EF 105 or CS 101 or CS 102	<b>EF 105 (1) FA, SP</b> Coreq- EF 151 or 157	<b>English 101/118 or 198 or 131 (3) FA, SP, SU</b> 101 Regular; 118 Honors; 198 Chancellor Honors Only; 131 English as Second Language	
Spring 15 hours	<b>Math 142 or 148 (4) FA, SP, SU</b> Prereq- Math 132 or 141 or 147	<b>Chem 130 or 138 (4) FA, SP, SU</b> Prereq- Chem 120 or 128	<b>EF 152 or 158 (4) FA, SP, SU</b> Prereq- EF 151/157 with C or higher Coreq- Math 142 or 148	<b>English 102 or 290 or 298 or 132 (3) FA, SP, SU</b> 102 Prereq 101 or 118; 290 Prereq AP 101 credit 298 Prereq Chancellor Honors only & 198; 132 Prereq 131 ESL		
Fall 16 hours	<b>Math 231 or 237 (3) FA, SP, SU</b> Prereq- Math 142 or 148	<b>NE 200 (2) FA</b>	<b>ME 202 (2) FA, SP, SU</b> Coreq- EF 152 or 158 and Math 142 or 148	<b>Physics 231 (3) FA, SP, SU</b> Prereq- Phys 135 or EF 151 and 152 Coreq- Math 142 or 148	<b>EF 230 (2) FA, SP</b> Prereq- EF 105 or CS 102 Coreq- EF 152/158	<b>ECON 201 or 207 (4) FA, SP, SU</b> Social Science
Spring 17 hours	<b>Math 241 or 247 (4) FA, SP, SU</b> Prereq- Math 142 or 148	<b>NE 233 (3) SP</b> Prereq-NE 200	<b>ME 331 (3) FA, SP, SU</b> Coreq- Math 241 or 247	<b>Physics 232 (4) FA, SP</b> Prereq- Physics 231 Coreq- Math 241 or 247	<b>NE 250 (3) SP</b> Prereq- NE 200, Math 231 or 237 Coreq- Math 241 or 247	
Fall 15 hours	<b>NE 342 or 347 (3) FA</b> Prereq- Math 241 or 247	<b>NE 362 or 367 (3) FA</b> Prereq- Math 231/237, 241/247, NE 250	<b>Physics 341 (3) FA</b> Prereq- Physics 232 or 250	<b>Gen Ed (3) FA, SP, SU</b> Cultures and Civilizations	<b>Gen Ed (3) FA, SP, SU</b> Social Science	
Spring 16 hours	<b>NE 401 WC (4) SP</b> Prereq-English 102, 132, 290 or 298 and NE 233 and NE 250 Coreq- Math 241or 247	<b>NE 351 or 357 (3) SP</b> Prereq- NE 200 and NE 250	<b>NE 470 (3) FA, SP</b> Prereq- NE 362 or 367	<b>Stats 251 (3) FA, SP, SU</b> Prereq- Math 142 or 148	<b>Technical Elective *(3) FA, SP, SU</b> Petition required in advance	
Fall 15 hours	<b>NE 400 (OC) (1) FA, SP</b> Minimum student level — senior	<b>NE 402 or 427 (WC) (4) FA, SU</b> Prereq- NE 401 and 470	<b>NE 490 (3) FA</b>	<b>NE 471 (1) FA</b> Prereq- NE 470	<b>Technical Elective *(3) FA, SP, SU</b> Petition required in advance	<b>Gen Ed (3) FA, SP, SU</b> Arts and Humanities
Spring 15 hours	<b>NE 406 or 467 (3) SP</b> Prereq- NE 233 or 433 & Physics 232	<b>NE 472 (3) SP</b> Prereq- NE 471	<b>Technical Elective *(3) FA, SP, SU</b> Petition required in advance	<b>Gen Ed (3) FA, SP, SU</b> Arts & Humanities	<b>Gen Ed (3) FA, SP, SU</b> Cultures and Civilizations	

\***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 120 or 128\*, CHEM 130 or 138\*, MATH 132/141/147\*, MATH 142/148\*, 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 120 or 128\*, CHEM 130 or 138\*, MATH 132/141/147\*, MATH 142/148\*, 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 2.0 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.