

Nuclear Engineering Catalog 2023 Radiological Concentration

Fall 16 hours	Math 132 or 141 or 147 (3-4) (QR) FA,SP,SU Math 132 Prereq- Math 131 Math 141 Prereq- ACT Math 28 or SAT Math 660	Chem 122(3) and 123(1) or 128 (4) (NS) FA, SP, SU Prereq-Math 119; recommended background in Math 131	EF 142 or 151 or 157 (4) (E) FA, SP 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 105 or COSC 101 or CS 102	EF 105 (1) FA, SP Coreq- EF 151 or 157	English 101 or 131 (3) FA, SP, SU 101 Standard; 131 English as Second Language	
Spring 15 hours	Math 142 or 148 (4) (QR) FA, SP, SU Prereq- Math 132 or 141 or 147	Chem 132(3) and 133(1) or 138 (4) FA, SP, SU Prereq- Chem 122 and 123 or 128	EF 152 or 158 (4) (NS and E) FA, SP, SU Prereq-EF 142/151/157 with C- or higher Coreq- Math 142 or 148	English 102 or 112 or 298 or 132 (3) FA, SP, SU 102 Prereq 101; 112 Prereq is AP-101 and Test Scores; 298 Prereq University Honors only; 132 Prereq 131 ESL.		
Fall 16 hours	Math 231 or 237 (3) FA, SP, SU Prereq- Math 142 or 148	NE 200 (2) FA	ME 202 (2) FA, SP, SU Coreq- EF 152 or 158 and Math 142 or 148	Physics 231 (3) FA, SP, SU Prereq- Phys 135 or EF 151 and 152 Coreq- Math 142 or 148	EF 230 or 237 (2) FA, SP Prereq- EF 105 or CS 102 Coreq- EF 152/158	ECON 201 or 207 (4) FA, SP, SU Vol Core Social Science (SS)
Spring 17 hours	Math 241 or 247 (4) FA, SP, SU Prereq- Math 142 or 148	NE 233 (3) SP Prereq-NE 200	ME 331 (3) FA, SP, SU Coreq- Math 241 or 247	Physics 250 or 252 (4) FA, SP Prereq 250- PHYS 136 or 138 or 231 Prereq 252- PHYS 251 & Math 142/148 both C or better	NE 250 (3) SP Prereq- NE 200, Math 231 or 237 Coreq- Math 241 or 247	
Fall 15 hours	NE 342 or 347 (3) FA Prereq- Math 241 or 247 and ME 331 with grade of C or higher	NE 362 or 367 (3) FA Prereq- Math 231/237, 241/247, NE 250	Physics 341 (3) FA Prereq- Physics 232 or 250	Vol Core (3) FA, SP, SU Global Citizenship United States (GCUS)	Vol Core (3) FA, SP, SU Expanded Perspectives- choose from AH, AAH, GCUS, GCI, or SS	
Spring 16 hours	NE 401 (4) (WC) SP Prereq-English 102, 112, 132, or 298 and NE 233 and NE 250 Coreq- Math 241 or 247	Technical Elective *(3) FA, SP, SU Petition required in advance	NE 470 (3) FA, SP Prereq- NE 362 or 367	Stats 251 (3) FA, SP, SU Prereq- Math 142 or 148	Technical Elective *(3) FA, SP, SU Petition required in advance	
Fall 15 hours	NE 400 (1) FA, SP Minimum student level — senior	NE 402 or 427 (4) FA, SU Prereq- NE 401 and 470	NE 490 (3) FA Prereq- NE 233 or 433	NE 471 (1) (OC) FA Prereq- NE 470	Technical Elective *(3) FA, SP, SU Petition required in advance	Vol Core (3) FA, SP, SU Arts and Humanities (AH)
Spring 15 hours	NE 406 or 467 (3) SP Prereq- NE 233 or 433 & Physics 232	NE 472 (3) (AOC and E) SP Prereq- NE 471	Technical Elective *(3) FA, SP, SU Petition required in advance	Vol Core (3) FA, SP, SU Global Citizenship International (GCI)	Vol Core (3) FA, SP, SU Expanded Perspectives- choose from AH, AAH, GCUS, GCI, or SS	

***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 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 122/123 or 128*, CHEM 132/133 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.

Volunteer Core courses highlighted in light orange.