|   |  | Nuclear Engineering   | Catalog 2024  |   |  |   |
|---|--|---|---|---|--|---|
| Fall  | Math 132 or 141 or 147 (3-4) (QR) FA,SP,SU   | Chem 122(3) and 123(1) or 128 (4) (NS) FA,  | S EF 142 or 151 or 157 (4) (EI) FA, SP  | EF 105 (1) FA, SP   | English 101 or 131 (3) FA, SP, SU  | 1   |
| 16 hours                                      | Math 132 Prereq- Math 131  | Prereg-Math 119; recommended  | EF 142 Prereq- EF 141 with C- or better and Math  | Coreq- EF 151 or 157  | 101 Standard;  |   |
|   | Math 141 Prereq- ACT Math 28 or SAT Math 660   | background in Math 131  | EF 142 Coreq- Math 132  |   | 131 English as Second Language   |   |
|   |  |   | EF 151 Coreq- 141/147 or higher and EF 105 or CC  | OSC 101 or CS 102   |  | ]   |
| Spring  | Math 142 or 148 (4) (QR) FA, SP, SU  | Chem 132(3) and 133 (1) FA, SP, SU  | EF 152 or 158 (4) (NS and EI) FA, SP, SU  | English 102 or 112 or 298 or 132 (3) FA, SP, SU   | NE 101 (1) SP  | 1   |
| 16 hours                                      | Prereq- Math 132 or 141 or 147   | Prereg- Chem 122 and 123 or 128   | Prereg-EF 142/151/157 with C or higher  | 102 Prereg 101; 112 Prereg is AP 101 and Test Scores;   | (.,  |   |
|   |  |   | Coreq- Math 142 or 148  | 298 Prereq University Honors only; 132 Prereq 131 ESL   |  |   |
|   |  |   |   |   |  |   |
| Fall  | Math 231 or 237 (3) FA, SP, SU   | NE 200 (2) FA   | ME 202 (2) FA, SP, SU   | Physics 231 (3) FA, SP, SU  | EF 230 or 237 (2) FA, SP   | ECON 201 or 207 (4) FA,                             |
| 16 hours                                      | Prereq- Math 142 or 148  |   | Coreq- EF 152 or 158 and  | Prereq- Phys 135 or EF 151 and 152  | Prereq- EF 105 or CS 102   | Vol Core Social Science (\$                         |
|   |  |   | Math 142 or 148   | Coreq- Math 142 or 148  | Coreq- EF 152/158  | <u> </u>  |
| Spring  | Math 241 or 247 (4) FA, SP, SU   | NE 233 (3) SP   | ME 331 (3) FA, SP, SU   | Physics 250 or 252 (4) FA, SP   | NE 250 (3) SP  | 1   |
| 17 hours                                      | Prereq- Math 142 or 148  | Prereq-NE 200   | Coreq- Math 241 or 247  | Prereg 250- PHYS 136 or 138 or 231  | Prereq- NE 200, Math 231 or 237  |   |
|   | ·  | •   | ·   | Prereq 252- PHYS 251 & Math 142/148 both C or better  | Coreq- Math 241 or 247   |   |
|   |  |   |   |   |  |   |
|   |  |   |   |   |  |   |
| Fall  | NE 342 or 347 (3) FA   | NE 362 or 367 (3) FA  | Physics 341 (3) FA  | Vol Core (3) FA, SP, SU   | Vol Core (3) FA, SP, SU  | 1   |
|   | NE 342 or 347 (3) FA Prereq- Math 241 or 247; ME 331 with grade  | NE 362 or 367 (3) FA<br>Prereq- Math 231/237, 241/247, NE 250   | Physics 341 (3) FA<br>Prereq- Physics 232 or 250  | Vol Core (3) FA, SP, SU<br>Global Citizenship United States (GCUS)  | Vol Core (3) FA, SP, SU Expanded Perspectives- choose from   |   |
|   |  |   |   |   |  |   |
| 15 hours                                      | Prereq- Math 241 or 247; ME 331 with grade of C or better  | Prereq- Math 231/237, 241/247, NE 250   | Prereq- Physics 232 or 250  | Global Citizenship United States (GCUS)   | Expanded Perspectives- choose from AH, AAH, GCUS, GCI, or SS   |   |
| 15 hours Spring                               | Prereq- Math 241 or 247; ME 331 with grade of C or better  NE 401 (WC) (4) SP  | Prereq- Math 231/237, 241/247, NE 250  NE 351 or 357 (3) SP   | Prereq- Physics 232 or 250  NE 340 (3) SP   | Global Citizenship United States (GCUS)  NE 470 (3) FA, SP  | Expanded Perspectives- choose from AH, AAH, GCUS, GCI, or SS  Technical Elective *(3) FA, SP, SU   | ]   |
| 15 hours Spring                               | Prereq- Math 241 or 247; ME 331 with grade of C or better  | Prereq- Math 231/237, 241/247, NE 250   | Prereq- Physics 232 or 250  | Global Citizenship United States (GCUS)   | Expanded Perspectives- choose from AH, AAH, GCUS, GCI, or SS   |   |
| 15 hours Spring                               | Prereq. Math 241 or 247; ME 331 with grade of C or better  NE 401 (WC) (4) SP  Prereq-English 102, 112, 132, or 298  | Prereq- Math 231/237, 241/247, NE 250  NE 351 or 357 (3) SP   | Prereq- Physics 232 or 250  NE 340 (3) SP   | Global Citizenship United States (GCUS)  NE 470 (3) FA, SP  | Expanded Perspectives- choose from AH, AAH, GCUS, GCI, or SS  Technical Elective *(3) FA, SP, SU   |   |
| 15 hours Spring                               | Prereq. Math 241 or 247; ME 331 with grade of C or better  NE 401 (WC) (4) SP  Prereq.English 102, 112, 132, or 298 and NE 233 and NE 250  | Prereq- Math 231/237, 241/247, NE 250  NE 351 or 357 (3) SP   | Prereq- Physics 232 or 250  NE 340 (3) SP   | Global Citizenship United States (GCUS)  NE 470 (3) FA, SP  | Expanded Perspectives- choose from AH, AAH, GCUS, GCI, or SS  Technical Elective *(3) FA, SP, SU   |   |
| 15 hours  Spring 16 hours                     | Prereq. Math 241 or 247; ME 331 with grade of C or better  NE 401 (WC) (4) SP  Prereq.English 102, 112, 132, or 298 and NE 233 and NE 250  | Prereq- Math 231/237, 241/247, NE 250  NE 351 or 357 (3) SP   | Prereq- Physics 232 or 250  NE 340 (3) SP   | Global Citizenship United States (GCUS)  NE 470 (3) FA, SP  | Expanded Perspectives- choose from AH, AAH, GCUS, GCI, or SS  Technical Elective *(3) FA, SP, SU   | Vol Core (3) FA, SP, SU                             |
| Spring<br>16 hours                            | Prereq. Math 241 or 247; ME 331 with grade of C or better  NE 401 (WC) (4) SP  Prereq.English 102, 112, 132, or 298 and NE 233 and NE 250 Coreq. Math 241 or 247   | Prereq- Math 231/237, 241/247, NE 250  NE 351 or 357 (3) SP  Prereq- NE 200 and NE 250  | Prereq- Physics 232 or 250  NE 340 (3) SP Prereq- ME 202 and ME 331                                   | Global Citizenship United States (GCUS)  NE 470 (3) FA, SP Prereq- NE 362 or 367  | Expanded Perspectives- choose from AH, AAH, GCUS, GCI, or SS  Technical Elective *(3) FA, SP, SU Petition required in advance  |   |
| Fall 15 hours  Spring 16 hours  Fall 16 hours | Prereq- Math 241 or 247; ME 331 with grade of C or better  NE 401 (WC) (4) SP  Prereq-English 102, 112, 132, or 298 and NE 233 and NE 250  Coreq- Math 241 or 247  NE 402 or 427(4) FA, SU   | Prereq- Math 231/237, 241/247, NE 250  NE 351 or 357 (3) SP  Prereq- NE 200 and NE 250  NE 360 (3) FA                             | Prereq- Physics 232 or 250  NE 340 (3) SP Prereq- ME 202 and ME 331  NE 471 (2) (OC) FA               | Global Citizenship United States (GCUS)  NE 470 (3) FA, SP Prereq- NE 362 or 367  NE 400 (1) FA, SP                                 | Expanded Perspectives- choose from AH, AAH, GCUS, GCI, or SS  Technical Elective *(3) FA, SP, SU Petition required in advance  Technical Elective *(3) FA, SP, SU                              | Vol Core (3) FA, SP, SU                             |
| Spring 16 hours  Fall 16 hours                | Prereq- Math 241 or 247; ME 331 with grade of C or better  NE 401 (WC) (4) SP  Prereq-English 102, 112, 132, or 298 and NE 233 and NE 250  Coreq- Math 241 or 247  NE 402 or 427(4) FA, SU  Prereq- NE 401 and 470  English 102, 132, 290 or 298 | Prereq- Math 231/237, 241/247, NE 250  NE 351 or 357 (3) SP Prereq- NE 200 and NE 250  NE 360 (3) FA Prereq- NE 342 Coreq- NE 470 | Prereq- Physics 232 or 250  NE 340 (3) SP Prereq- ME 202 and ME 331  NE 471 (2) (OC) FA Prereq-NE 470 | Global Citizenship United States (GCUS)  NE 470 (3) FA, SP Prereq- NE 362 or 367  NE 400 (1) FA, SP Minimum level Senior in Nuclear | Expanded Perspectives- choose from AH, AAH, GCUS, GCI, or SS  Technical Elective *(3) FA, SP, SU Petition required in advance  Technical Elective *(3) FA, SP, SU Petition required in advance | Vol Core (3) FA, SP, SU                             |
| Spring<br>16 hours                            | Prereq. Math 241 or 247; ME 331 with grade of C or better  NE 401 (WC) (4) SP  Prereq.English 102, 112, 132, or 298 and NE 233 and NE 250  Coreq. Math 241 or 247  NE 402 or 427(4) FA, SU  Prereq. NE 401 and 470                               | Prereq- Math 231/237, 241/247, NE 250  NE 351 or 357 (3) SP Prereq- NE 200 and NE 250  NE 360 (3) FA Prereq- NE 342               | Prereq- Physics 232 or 250  NE 340 (3) SP Prereq- ME 202 and ME 331  NE 471 (2) (OC) FA               | Global Citizenship United States (GCUS)  NE 470 (3) FA, SP Prereq- NE 362 or 367  NE 400 (1) FA, SP                                 | Expanded Perspectives- choose from AH, AAH, GCUS, GCI, or SS  Technical Elective *(3) FA, SP, SU Petition required in advance  Technical Elective *(3) FA, SP, SU                              | Vol Core (3) FA, SP, SU<br>Arts and Humanities (AH) |

\*Technical Electives are selected from upper division mathematics, chemistry, physics and engineering courses and must be pre-approved by the department advisor. Courses in Nuclear Engineering other than 500, 502 and 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 satisfactoriny in upper-division multiple status is dependent upon this performance. Students who have not progresses to upper-division full status is dependent upon this performance. Students who have not progresses to upper-division full status is dependent upon this performance. Students who have not progresses to upper-division full status is dependent upon this performance. Students who have not progresses to upper-division full status is dependent upon this performance. Students who have not progresses to upper-division full status is dependent upon this performance. Students who have not progresses to upper-division full status is dependent upon this performance. Students who have not progresses to upper-division full status is dependent upon this performance. Students who have not progresses to upper-division full status is dependent upon this performance. Students who have not progresses to upper-division full status is dependent upon this performance. Students who have not progresses to upper-division full status is dependent upon this performance. Students who have not progresses to upper-division full status is dependent upon this performance. Students who have not progresses to upper-division full status is dependent upon this performance. Students who have not progresses to upper-division full status is dependent upon the performance is not performance. Students who have not performance is not performance. Students who have not performance is not performance. Students who have not performance is not performance

## **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 Unversity 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.