# Nuclear Engineering Catalog 2015

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| **Fall**<br>16 hours | **Math 141 or 147 (4) FA, SP, SU**<br>Prereq- Math 130 or math ACT 28 or Math SAT 630 | **English 101 or 118 (3) FA, SP, SU** | **Chem 120 or 128 (4) FA, SP, SU**<br>Math 130 | **EF 151 or 157 (4) FA, SP**<br>Coreq- Math 141 or 147 and EF 105 | **EF 105 (1) FA, SP**<br>Coreq- EF 151 or 157 | |
| **Spring**<br>15 hours | **Math 142 or 148 (4) FA, SP, SU**<br>Prereq- Math 141 or 147 | **English 102 (3) FA, SP, SU**<br>Prereq- English 101 or 118 | **Chem 130 or 138 (4) FA, SP, SU**<br>Prereq- Chem 120 or 128 | **EF 152 or 158 (4) FA, SP**<br>Prereq- EF 151 or 157 | | |
| **Fall**<br>16 hours | **Math 231 (3) FA, SP, SU**<br>Prereq- Math 142 or 148 | **NE 200 (2) FA** | **ME 202 (2) FA, SP, SU**<br>Coreq- EF 152 or 158 and Math 142 or 148 | **Physics 231 (3) FA, SP, SU**<br>Coreq- Math 142 or 148 | **EF 230 (2) FA, SP**<br>Prereq- EF 152 or 158 | **ECON 201 or 207 (4) FA, SP, SU**<br>Social Science |
| **Spring**<br>17 hours | **Math 241 or 247 (4) FA, SP, SU**<br>Prereq- Math 142 or 148 | **ME 331 (3) FA, SP, SU**<br>Coreq- Math 241 or 247 | **ECE 301 (3) FA, SP**<br>Prereq- Math 231 | **Physics 232 (4) FA, SP, SU**<br>Prereq- Physics 231<br>Coreq- Math 241 or 247 | **Gen Ed (3) FA, SP, SU**<br>Arts and Humanities | |
| **Fall**<br>15 hours | **NE 342 or 347 (3) FA**<br>Prereq- ME 331 | **NE 351 or 357 (3) FA**<br>Prereq- NE 200 | **NE 362 or 367 (3) FA**<br>Prereq- Math 231 and 241 or 247 | **Physics 341 (3) FA**<br>Prereq- Physics 232 | **Gen Ed (3) FA, SP, SU**<br>Cultures and Civilizations | |
| **Spring**<br>17 hours | **NE 401 (4) SP**<br>Coreq- NE 470 | **NE 360 (4) SP**<br>Prereq- NE 342 | **NE 433 (3) SP** | **NE 470 (3) FA, SP**<br>Prereq- NE 362 or 367 | **Gen Ed (3) FA, SP, SU**<br>Social Science | |
| **Fall**<br>17 hours | **NE 402 or 427 (WC) (4) FA**<br>Prereq- NE 401 | **MSE 201 (3) FA, SP, SU**<br>Prereq- Chemistry 120 or 128 | **ME 321 (3) FA, SP, SU**<br>Prereq- ME 202 with C or better and Math 142 or 148 | **Technical Elective *(3) FA, SP, SU**<br>Petition required in advance | **Gen Ed (3) FA, SP, SU**<br>Cultures and Civilizations | **NE 471 (1) FA**<br>Prereq-NE 470 |
| **Spring**<br>13 hours | **NE 400 (OC) (1) SP**<br>Minimum student level — senior | **NE 406 or 467 (3) SP**<br>Prereq- Physics 232 | **NE 472 (3) SP**<br>Prereq- NE 470 and 471 | **Technical Elective *(3) FA, SP, SU**<br>Petition required in advance | **Gen Ed (3) FA, SP, SU**<br>Arts & Humanities | |

***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 120* or CHEM 128*, CHEM 130* or CHEM 138*, MATH 141* or MATH 147*, MATH 142* or MATH 148*, MATH 231, EF 151* or EF 157*, EF 152* or EF 158*, NE 200, 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 CHEM 128*, CHEM 130* or CHEM 138*, MATH 141* or MATH 147*, MATH 142* or MATH 148*, MATH 231, EF 151* or EF 157*, EF 152* or EF 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.

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

**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 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.

**UTRACK Milestones:**

| **Term 1** | **Term 2** | **Term 3** | **Term 4** | **Term 5** | **Term 6 through 8** |
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| Math 130 or higher or one SS or one AH or one CC | Math 130 or higher | EF 151/157 or Physics 135/137 | EF 152/158 or Physics 136/138 | ME 202 or CS 102 or MSE 201 or CBE 201 | No Milestones |