### Nuclear Engineering Catalog 2018
### Radiological Concentration

#### Fall
- **16 hours**
  - Math 141 or 147 (4) FA, SP, SU
  - Chem 120 or 128 (4) FA, SP, SU
  - EF 151 or 157 (4) FA, SP
  - EF 105 (1) FA, SP
  - English 101/118 or 198 or 131 (3) FA, SP, SU
  - **16 hours**
  - Prereq- Math 130 or Math ACT 28 or Math SAT 630
  - Coreq- Math 141 or 147 and EF 100
  - 101 Regular; 118 Honors; 198 Chancellor Honors Only; 131 English as Second Language

#### Spring
- **15 hours**
  - Math 142 or 148 (4) FA, SP, SU
  - Chem 130 or 138 (4) FA, SP, SU
  - EF 152 or 158 (4) FA, SP, SU
  - English 102 or 290 or 298 or 132 (3) FA, SP, SU
  - **16 hours**
  - Prereq- Math 141 or 147
  - Prereq- Chem 120 or 128
  - Prereq- EF 151 or 157
  - 102 Prereq 101 or 118; 290 Prereq AP 101 credit
  - 298 Prereq Chancellor Honors only & 198; 132 Prereq 131 ESL

### Fall
- **16 hours**
  - Math 231 or 237 (3) FA, SP, SU
  - EF 230 (2) FA, SP
  - Physics 231 (3) FA, SP, SU
  - ECON 201 or 207 (4) FA, SP, SU
  - **16 hours**
  - Prereq- Math 142 or 148
  - Coreq- EF 152 or 158 and
  - Coreq- Math 142 or 148
  - Prereq- EF 105 or CS 102
  - 298 Prereq Chancellor Honors only & 198; 132 Prereq 131 ESL

### Spring
- **17 hours**
  - Math 241 or 247 (4) FA, SP, SU
  - EF 241 (3) FA, SP, SU
  - Physics 232 (4) FA, SP, SU
  - Gen Ed (3) FA, SP, SU
  - **17 hours**
  - Prereq- Math 241 or 247
  - Prereq- NE 200
  - Prereq- Physics 231
  - Prereq- Math 231 and 241 or 247

### Fall
- **16 hours**
  - NE 342 or 347 (3) FA
  - ECE 301 (3) FA, SP
  - Physics 341 (3) FA
  - Gen Ed (3) FA, SP, SU
  - **16 hours**
  - Prereq- Math 231
  - Prereq- Math 231 and 241 or 247
  - Prereq- Physics 232
  - Prereq- ECE 301 & Math 241/247

### Spring
- **13 hours**
  - NE 401 (4) SP
  - Stats 251 (3) FA, SP, SU
  - NE 470 (3) FA, SP
  - **13 hours**
  - Prereq- NE 401 and 470
  - Prereq- NE 351 or 357 (3) SP
  - Prereq- NE 362 or 367

### Fall
- **17 hours**
  - NE 402 or 427 (WC) (4) FA
  - NE 480 (3) FA
  - Technical Elective *(3) FA, SP, SU
  - Gen Ed (3) FA, SP, SU
  - **17 hours**
  - Prereq- NE 233 or 433 & Physics 232
  - Petition required in advance
  - Arts and Humanities

### Spring
- **13 hours**
  - NE 406 (OC) (1) SP
  - NE 472 (3) SP
  - Technical Elective *(3) FA, SP, SU
  - **13 hours**
  - Minimum student level — senior
  - Petition required in advance

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*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. Pre-med, pre-vet, and pre-dentistry students should take Chem 260, Chem 360 and 369.

**Full Status Progression**

A lower-division student may apply for progression to upper division after completing CHEM 120/128*, CHEM 130/138*, MATH 141/147*, MATH 142/148*, MATH 231/237, E1 151/157*, E1 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 120/128*, CHEM 130/138*, MATH 141/147*, MATH 142/148*, MATH 231/237, E1 151/157*, E1 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.

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 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.

**UTRACK Milestones:**

<table>
<thead>
<tr>
<th>Term 1</th>
<th>Term 2</th>
<th>Term 3</th>
<th>Term 4</th>
<th>Term 5</th>
<th>Term 6 through 8</th>
</tr>
</thead>
<tbody>
<tr>
<td>Math 130 or higher or one SS or one AH or one CC</td>
<td>Math 130 or higher</td>
<td>EF 151/157 or Physics 135/137</td>
<td>EF 152/158 or Physics 136/138</td>
<td>ME 202 or CS 102 or MSE 201 or CBE 201</td>
<td>No Milestones</td>
</tr>
</tbody>
</table>