## **NUCLEAR ENGINEERING CURRICULUM FLOWCHART**

| FIRST YEAR   |                | SECOND YEAR           |  |  | THIRD   | YEAR   | FOURTH YEAR         |                     |
|--|----------------|-----------------------|--|--|---|--|---------------------|---------------------|
| FALL S   | SPRING         | FALL SPRIN            |  | NG   | FALL  | SPRING   | FALL                | SPRING              |
| MATH 1A<br>4   | ИАТН 1В<br>4   | MATH 53<br>4          | MATH<br>4  | 1 54   | ENGIN 40<br>4   | NUC ENG 104<br>4   | TECH ELEC<br>3 OR 4 | NUC ENG 170A<br>3   |
| CHEM 1A + 1AL 5  | HYSICS 7A<br>4 | PHYSICS 7B<br>4       | PHYSIC<br>4  | S 7C   | NUC ENG 100<br>3  | NUC ENG 150<br>4   | TECH ELEC<br>3 OR 4 | TECH ELEC<br>3 OR 4 |
| NUC ENG 10   | ENGIN 7<br>4   | MAT SCI 45 + 45L<br>4 | ELECTRON<br>3 OR   |  | NUC ENG 101<br>4  | TECH ELEC<br>3 OR 4  | TECH ELEC<br>3 OR 4 | TECH ELEC<br>3 OR 4 |
| H/SS<br>3 OR 4   |                |                       |  |  | STAT/DATA<br>ELEC 3-8   |  | TECH ELEC<br>3 OR 4 | TECH ELEC<br>3 OR 4 |
| R&C A<br>4 OR 5  | R&C B          | H/SS<br>3 OR 4        | H/SS UPP<br>3 OR   |  |   | H/SS UPPER DIV<br>(ETHICS) 3 OR 4                                      |                     |                     |
| ELECTIVE  Choose from: EECS 16A ENGIN 11 MEC ENG 100 PHYSICS 111A  STATISTICS/DATA ANALYSIS ELECTIVE Choose from: ENGIN 178 DATA/COMPSCI/STAT C8 + DATA 88 Connector (must take both) DATA/COMPSCI/STAT C100 DATA/STAT C140 EECS 126 IND ENG 172 STAT 133 STAT 134 |                |                       | This may be fulfilled within the Humanities/Social Sciences requirement by taking one of the following courses:  ANTHRO 156B BIOENG 100 ENGIN 125; 157AC, 185 ESPM 161, 162 GEOG 31 IAS 157AC ISF 100E |  | Students must complete 29 technical elective units which must include at least 17 units of upper division nuclear engineering courses. The remaining 12 technical elective units must be fulfilled by taking courses in engineering and science, of which a minimum of 9 units must be upper division. Students must consult with and obtain approval from their faculty adviser no later than the fall semester of their junior year for their choices of technical elective courses.  More details and restrictions can be found at <a href="https://engineering.berkeley.edu/students/undergrad">https://engineering.berkeley.edu/students/undergrad</a> |  |                     |                     |
| COURSE # # OF UNITS = PREREQ = COREQ   |                |                       |  | L&S 160B<br>PHILOS 2, 104, 107<br>SOCIOL 116 |   | uate-guide/degree-requirements/major-<br>programs/nuclear-engineering/ |                     |                     |

## **NUCLEAR ENGINEERING CURRICULUM FLOWCHART**

| COURSE PREREQUISITES COURSE SEQUENCING MATTERS! |   |  |  |  |  |  |         |
|---|---|--|--|--|--|--|---------|
|   |   |  |  |  |  |  | CHEM 1A |
| ENGIN 7   | MATH 1B (may be taken concurrently)   |  |  |  |  |  |         |
| ENGIN 40  | PHYSICS 7B and MATH 54. CHEM 1B recommended   |  |  |  |  |  |         |
| MAT SCI 45                                      | Students should have completed high school AP or honors chemistry and physics   |  |  |  |  |  |         |
| MATH 1A   | 3.5 years of high school math, including trigonometry and analytic geometry. Students with HS exam credits (such as AP credit) should |  |  |  |  |  |         |
|   | consider choosing a course more advanced than 1A  |  |  |  |  |  |         |
| MATH 1B   | MATH 1A or MATH N1A   |  |  |  |  |  |         |
| MATH 53   | MATH 1B or MATH N1B   |  |  |  |  |  |         |
| MATH 54   | MATH 1B, MATH N1B, MATH 10B, or MATH N10B   |  |  |  |  |  |         |
| NUC ENG 100                                     | PHYSICS 7A, PHYSICS 7B, and MATH 53   |  |  |  |  |  |         |
| NUC ENG 101                                     | PHYSICS 7C  |  |  |  |  |  |         |
| NUC ENG 104                                     | NUC ENG 101 or consent of instructor; NUC ENG 150 recommended   |  |  |  |  |  |         |
| NUC ENG 150                                     | MATH 53, MATH 54, and NUC ENG 100   |  |  |  |  |  |         |
| NUC ENG 170A                                    | Senior standing or consent of instructor  |  |  |  |  |  |         |
| PHYSICS 7A                                      | High school physics; MATH 1A; MATH 1B (which may be taken concurrently)   |  |  |  |  |  |         |
| PHYSICS 7B                                      | PHYSICS 7A; MATH 1A; MATH 1B; MATH 53 (may be taken concurrently)   |  |  |  |  |  |         |
| PHYSICS 7C                                      | PHYSICS 7A; PHYSICS 7B; MATH 1A;MATH 1B; MATH 53; MATH 54 (may be taken concurrently)   |  |  |  |  |  |         |
|   |   |  |  |  |  |  |         |

Please note that the most current prerequisite information can always be found in the UC Berkeley Course Catalog: <a href="https://guide.berkeley.edu/courses/">https://guide.berkeley.edu/courses/</a>.