Nuclear Engineering and Radiological Sciences

Sample Schedule

	Total Credit Hours	Term: 1	2	3	4	5	6	7	8
Subjects required by all programs (55 hours)									
Mathematics 115, 116, 215, and 216	16	4	4	4	4	-	-	-	-
Engr 100, Intro to Engr	4	4	-	-	-	-	-	-	-
Engr 101, Intro to Computers	4	-	4	-	-	-	-	-	-
Chemistry 125/126 and 130 or Chemistry 210 and 211[1]	5	5	-	-	-	-	-	-	-
Physics 140 with Lab 141; Physics 240 with Lab 241[2]	10	-	5	5	-	-	-	-	-
Intellectual Breadth	16	4	4	4	-	-	4	-	-
Related Technical Subjects (11 hours)									
MATSCIE 250, Princ of Eng Materials or MSE 220, Intro to Materials and Manf	4	-	-	-	4	-	-	-	-
EECS 215, Intro to Circuits or EECS 314,Electrical Circuits, Systems, and Applications	4	-	-	-	-	4	-	-	-
MECHENG 235, Thermodynamics I	3	-	-	-	-	3	-	-	-
Program Subjects (45 hours)									
NERS 250, Fundamentals of Nuclear Eng and Rad Sci	4	-	-	-	4	-	-	-	-
NERS 311, Ele of Nuc Eng & Rad Sci I	3	-	-	-	-	3	-	-	-
NERS 312, Ele of Nuc Eng & Rad Sci II	3	-	-	-	-	-	3	-	-
NERS 315, Nuclear Instr Lab	4	-	-	-	-	-	4	-	-
NERS 320, Prob in nucl Engr & Rad Sci	4	-	-	-	-	4	-	-	-
NERS 344, Fluid Mech Nucl Eng	3	-	-	-	-	-	3	-	-
NERS 441, Nuclear Reactor Theory I	4	-	-	-	-	-	-	4	-
NERS 444, Therm-hyd Nucl Sys	3	-	-	-	-	-	-	3	-
Laboratory Course (above NERS 315)[3]	4	-	-	-	-	-	-	-	4
Design Course[4]	4	-	-	-	-	-	-	-	4
NERS Electives[5]	9	-	-	-	-	-	-	6	3
Technical Electives (5 hours)[6]	5	-	-	-	-	2	-	-	3
General Electives (12 hours)	12	-	-	3	3	-	3	3	-
Total	***128***	***17***	***17***	***16***	***15***	***16***	***17***	***16***	***14***

Revised: April-17

Candidates for the Bachelor of Science Degree in Engineering in Nuclear Engineering and Radiological Sciences - B.S.E. in N.E.R.S. - must complete the program listed above. This sample schedule is an example of one leading to graduation in eight terms.

Notes:

[1.] If you have a satisfactory score or grade in Chemistry AP, A-Level, IB Exams or transfer credit from another institution for Chemistry 125/126/130 you will have met the Chemistry Core Requirement for the College of Engineering.

[2.] If you have a satisfactory score or grade in Physics AP, A-Level, IB Exams or transfer credit from another institution for Physics 140/141 and Physics 240/241 you will have met the Physics Core Requirement for the College of Engineering.

[3.] Laboratory Course, (above NERS 315) select one from the following: NERS 425, 535, 575, 586. (NERS 535 and 575 require program advisor's consent.)

[4.] Design Course, select one: NERS 442, 554.

[5.] One course must be selected from the followng: NERS 421, NERS 471 and NERS 484. A maximum of 3 credit hours of independent study (NERS 499) can count as a NERS elective. All additional NERS 499 credits beyond those 3 can only be counted as a general elective.

[6.] Technical electives are defined as: 300-level and above Mathematics, Physics or non-NERS Engineering courses. Course content must be technical. All substitutions must be approved by the faculty advisor.