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 NERS 320	16	4	4	4	4	-	-	-	-
Engr 100, Intro to Engr[1]	4	4	-	-	-	-	-	-	-
Engr 101, Intro to Computers	4	-	4	-	-	-	-	-	-
Chemistry 125/126 and 130 or Chemistry 210 and 211[2]	5	5	-	-	-	-	-	-	-
Physics 140 with Lab 141; Physics 240 with Lab 241[3]	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 344, Fluid Mech Nucl Eng	3	-	-	-	-	-	3	-	-
NERS 420, Applied Mathematics for Engineering Physics II	4				-	4			
NERS 441, Nuclear Reactor Theory I	4	-	-	-	-	-	-	4	-
NERS 444, Fundamentals of Heat and Mass Transfer	3							3	
Laboratory Course (above NERS 315)[4]	4	-	-	-	-	-	-	-	4
NERS 491, Nuclear Engineering and Radiological Sciences Design I	1	-	-	-	-	-	-	1	-
NERS 492, Nuclear Engineering and Radiological Sciences Design II	3	-	-	-	-	-	-	-	3
NERS Electives[5]	9	-	-	-	-	-	-	3	6
Electives (17 hours)									
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***	***14***	***16***

effective: Fall 2025

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] EECS 180 credit (Exam/Transfer Introductory Computer Programming) will not meet the programming requirement on its own. Students must also select from: Engr 101, Engr 151, Engr 161, or EECS 280.

[2] 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.

[3] 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.

[4] Laboratory course, (above NERS 315) select one of the following: NERS 425, 535, 575, 586.

[5] One course must be selected from the following: NERS 421, 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 credits 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. Content must be technical. All subsitutions must be approved by the faculty advisor.