

# NUCLEAR ENGINEERING: RADIATION SCIENCES

## FOUR-YEAR PLAN

### SAMPLE FOUR-YEAR PLAN

#### First Year

Fall	Credits	Spring	Credits
CHEM 109 <sup>1</sup>		5 E M A 201 <sup>3</sup>	3
MATH 221		5 MATH 222	4
Communication A		3 M E 231	3
Liberal Studies Elective		3 M S & E 350	3
		N E 231	3
	<b>16</b>		<b>16</b>

#### Second Year

Fall	Credits	Spring	Credits
MATH 234		4 MATH 320	3
PHYSICS 202		5 PHYSICS 241 or 205	3
E M A 202 <sup>4</sup>		3 M E 361	3
E P 271 or COMP SCI 310		3 E M A 303 <sup>4</sup>	3
E P D 275 or COM ARTS 105		2 N E 424	1
		Liberal Studies Elective	3
	<b>17</b>		<b>16</b>

#### Third Year

Fall	Credits	Spring	Credits
N E 305		3 N E 405	3
MATH 321		3 N E 408	3
STAT 324 <sup>5</sup>		3 PHYSICS 322	3
Technical Elective <sup>6</sup>		2 Computing Elective	3
Liberal Studies Elective		4 E C E 376 or PHYSICS 321	3
		Free Elective	1
	<b>15</b>		<b>16</b>

#### Fourth Year

Fall	Credits	Spring	Credits
N E 427		2 N E 412	5
MED PHYS/B M E/ H ONCOL/PHYSICS 501		3 N E 571	3
Medical Physics Elective		3 N E 428	2
Medical Physics Elective		3 Medical Physics Elective	3
Liberal Studies Elective		3 Liberal Studies Elective	3
INTEREGR 397		3	
	<b>17</b>		<b>16</b>

**Total Credits 129**

1

It is recommended that students take CHEM 109 Advanced General Chemistry for 5 credits. However, depending on their high school chemistry experience, students may substitute this with CHEM 103 General Chemistry I and CHEM 104 General Chemistry II for a total of 9 credits. Three credits of CHEM 103/CHEM 104 General Chemistry II may be counted as Technical Electives credits.

2

Students who were not able to take N E 231 Introduction to Nuclear Engineering as freshmen may, with the approval of their advisor, substitute a course offered in the College of Engineering or in the Departments of Chemistry, Computer Science, Mathematics, and Physics.

3

Students may substitute PHYSICS 201 General Physics, 5 credits, for E M A 201 Statics, 3 credits, with the approval of their advisor.

4

After completing E M A 201 Statics, students may complete E M A 202 Dynamics and E M A 303 Mechanics of Materials in either order or concurrently.

5

STAT 311 Introduction to Theory and Methods of Mathematical Statistics I or STAT/M E 424 Statistical Experimental Design are acceptable substitutes.

6

PHYSICS 623 Electronic Aids to Measurement is recommended for students in the Radiation Sciences focus area.