

NUCLEAR ENGINEERING, B.S.

FOUR-YEAR PLAN

POWER FOCUS AREA IN NUCLEAR ENGINEERING

SAMPLE FOUR-YEAR PLAN

First Year

Fall	Credits	Spring	Credits
CHEM 109 ¹		5 E M A 201 ³	3
MATH 221		5 MATH 222	4
Communication A		3 M E 231	3
INTEREGR 170 ²		3 M S & E 350	3
		Liberal Studies Elective	3
	16		16

Second Year

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

Third Year

Fall	Credits	Spring	Credits
N E 305		3 N E 405	3
MATH 321		3 N E 408	3
STAT 324 ⁵		3 CBE 320 ⁶	4
Technical Elective		2 Computing Elective	3
Liberal Studies Elective		4 E C E 376	3
	15		16

Fourth Year

Fall	Credits	Spring	Credits
N E 411		3 N E 412	5
N E 427		2 N E 428	2
N E/M S & E 423		3 N E 571	3
Nuclear Engineering Elective		3 Nuclear Engineering Elective	3
Liberal Studies Elective		3 Liberal Studies Elective	3
INTEREGR 397 (was EPD 397)	3		
	17		16

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 CHEM 103 General Chemistry I and CHEM 104 General Chemistry II for a total of 9

credits. Three credits of CHEM 103/CHEM 104 may be counted towards Technical Electives credits.

² Students who were not able to take INTEREGR 170 Design Practicum 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 Sciences, 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 take 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 M E 363 Fluid Dynamics and M E 364 Elementary Heat Transfer are acceptable substitutions for CBE 320 Introductory Transport Phenomena.

RADIATION SCIENCES FOCUS AREA IN NUCLEAR ENGINEERING

SAMPLE FOUR YEAR PLAN

First Year

Fall	Credits	Spring	Credits
CHEM 109 ¹		5 E M A 201 ³	3
MATH 221		5 MATH 222	4
Communication A		3 M E 231	3
INTEREGR 170 ²		3 M S & E 350	3
		Liberal Studies Elective	3
	16		16

Second Year

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

Third Year

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

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 (was EPD 397)	3	
	17	16

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 may be counted as Technical Electives credits.
- ² Students who were not able to take INTEREGR 170 Design Practicum 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.