UNM SCHOOL of ENGINEERING

Department of Nuclear Engineering

Bachelor of Science in Nuclear Engineering (B.S.N.E.)

2015-2016 Catalog Year

Credit hours required for graduation: 124[6]

FRESHMAN YEAR

FALL SEMESTER			SPRING SEMESTER		
NE 101	Introduction to Nuclear Engineering	1	PHYC 160	General Physics	3
CHEM 121	General Chemistry I	3	CHEM 122	General Chemistry II	3
CHEM 123L	General Chemistry I Laboratory	1	CHEM 124L	General Chemistry II Laboratory	1
ENGL 110 (or 112 or 113)	Accelerated Composition (or Composition II or Enhanced Composition)	3	MATH 163	Calculus II	4
MATH 162	Calculus I	4	ENGL 120	Composition III	3
Core Humanities Elective[1]		3	CS 151L	Computer Programming Fundamentals for Non-Majors	3
	Total Semester Hours:	15		Total Semester Hours:	17

SOPHOMORE YEAR

FALL SEMESTER			SPRING SEMESTER		
NE 230	Principles of Radiation Protection	3	NE/CBE 213	Laboratory Electronics for Nuclear, Chemical and Biological Engineers	3
PHYC 161	General Physics	3	NE 231	Principles of Nuclear Engineering	3
MATH 264	Calculus III	4	NE 314	Thermodynamics and Nuclear Systems	3
ENGL 219	Technical and Professional Writing	3	NE 371	Nuclear Materials Engineering	2
ECON 105	Introductory Macroeconomics	3	MATH 316	Applied Ordinary Differential Equations	3
	Total Semester Hours:	16		Total Semester Hours:	14

JUNIOR YEAR

FALL SEMESTER			SPRING SEMESTER		
NE/CBE 311	Introduction to Transport Phenomena	3	NE/CBE 312	Unit Operations	3
NE 315	Nuclear Engineering Analysis and	3	NE 313L	Introduction to Laboratory Techniques for Nuclear Engineering	3
NE 323L	Radiation Detection and Measurement	3	NE 330	Nuclear Engineering Science	3
CE 202	Engineering Statics	3	Core Fine Arts Elective[1]		3
Nuclear Engineering Technical Elective[4]		3	Technical Elective[5]		3
	Total Semester Hours:	15		Total Semester Hours:	15

SENIOR YEAR[2][3]

FALL SEMESTER			SPRING SEMESTER		
NE 410	Nuclear Reactor Theory	3	NE 413L	Nuclear Engineering Laboratory I	3
NE 462	Monte Carlo Techniques for Nuclear	3	NE 452	Senior Seminar	1
NE 464	Thermal-Hydraulics of Nuclear Systems	3	NE 470	Nuclear Fuel Cycle and Materials	3
NE 497L	Nuclear Engineering Computational	3	NE 498L	Nuclear Engineering Design	4
Core Humanities Elective[1]		3	Core Second Language Elective[1]		3
	Total Semester Hours:	15	Core Social and Behavioral Science Elective[1]		3
				Total Semester Hours:	17

(1) Students should consult the online UNM catalog, the online LoboTrax, or an advisor to obtain a list of acceptable courses to fulfill the core curriculum requirements. These courses may be taken whenever convenient.

(2) Students must file an application for the B.S. Degree prior to the completion of 95 semester hours of applicable courses.

(3) Students are encouraged to take the Fundamentals of Engineering (FE) Examination during their senior year. This is the first formal step toward professional registration.

(4) The NE Technical Electives are chosen from a list of approved upper division nuclear engineering courses with the approval of the student's advisor.

(5) The Technical Electives are chosen from a list of approved upper division technical courses with the approval of the student's advisor.

(6) To count towards graduation credit hours, each course must be completed with a grade of C- or better. Courses used to fulfill the UNM core curriculum require a grade of C or better.