DEGREE/PROGRAM CHANGE
FORM C
Form Number: C1409

Fields marked with * are required

Name of Initiator: Robert Douglas Busch **Email:** busch@unm.edu **Phone Number:** 505 277-8027 **Date:** 07-31-2014

Associated Forms exist? Yes Initiator's Title Principal Lecturer: Nuclear Engineering

Faculty Contact Robert Busch Administrative Contact Annette Torres

Department Nuclear Engineering Admin Email anntorr@unm.edu

Branch Admin Phone 277-7959

Proposed effective term

Semester Fall Year 2015

Course Information

Select Appropriate Program Undergraduate Degree Program

Name of New or Existing Program BS Nuclear Engineering

Select Category Major Degree Type B.S.

Select Action Revision

Exact Title and Requirements as they should appear in the catalog. If there is a change, upload current and proposed requirements.
See current catalog for format within the respective college (upload a doc/pdf file)

Form C NE Undergraduate Curriculum for Fall 2015.pdf

☐ **Does this change affect other departmental program/branch campuses? If yes, indicate below.**

Reason(s) for Request (enter text below or upload a doc/pdf file)
To provide the necessary courses for the existing Nuclear Engineering B.S. degree in the new Nuclear Engineering Department, and to reduce the number of credit hours required for graduation so that the degree requirements can be completed in 8 semesters with normal course loads. The reduction has been done by combining material and removing some non-nuclear engineering courses that are not directly needed to provide the skills needed for a B.S. degree in Nuclear Engineering.

Upload a document that inlcudes justification for the program, impact on long-range planning, detailed budget analysis and faculty workload implications.(upload a doc/pdf file)

NE Curriculum budgetary.docx

☐ **Are you proposing a new undergraduate degree or new undergraduate certificate? If yes, upload the following documents.**

Upload a two-page Executive Summary authorized by Associate Provost. (upload a doc/pdf file)

Upload memo from Associate Provost authorizing go-ahead to full proposal. (upload a doc/pdf file)

UNIVERSITY OF NEW MEXICO as Proposed for Fall 2015
SCHOOL OF ENGINEERING
CURRICULUM FOR BACHELOR OF SCIENCE DEGREE IN NUCLEAR ENGINEERING

Hours[6] Required for Graduation: 124

Fall Semester		**Spring Semester**	
Course Title	Cr. Hrs.	Course Title	Cr. Hrs.
FRESHMAN YEAR			
Chem 121/123L General Chem/Lab	4	Chem 122/124L General Chem/Lab	4
Math 162 CalcI	4	Math 162 CalcII	4
Engl 101 Comp I: Exposition	3	Engl 102 Comp II: Analys&Arg	3
NE 101 – Intro to Nucl Engr	1	Physcs 160 General Physics	3
Core Humanities Elective[1]	3	CS 151 Comp Prog Fund	3
	15		17
SOPHOMORE YEAR			
NE 230 Princ Radiation Prot	3	NE 213 Circuits for ChNEs	3
Math 264 Calculus III	4	NE 231 Prin of Nucl Engr	3
Engl 219 Technical Writing	3	NE 314 Thermo & Nucl Sys	3
Physcs 161 General Physics	3	NE 371 Nucl. Engr. Material Sci	2
Econ 105 Intro Macroeconomics	3	Math 316 Diff Eq	3
	16		14
JUNIOR YEAR			
Ch-NE 311 Intro Transport Phenma	***3***	***Ch-NE 312 Unit Operations***	***3***
NE 315 Nucl Engr Analy&Calcs	3	NE 313L Intro Lab Technque	3
Ch-NE 323L Nucl Det Meas/Lab	3	NE 330 Nucl Engr Science	3
CE 202 Statics	3	Core Fine Arts Elective	3
Nuclear Engr. Tech. Elective[5]	3	Nuclear Engr. Tech. Elective[5]	3
	15		15
SENIOR YEAR[3,4]			
NE 410 Nucl. Reactor Thry I	3	NE 413L Nucl Engr Lab I	3
NE 464 Thrml-Hydrl Nucl Sys	3	NE 452 Senior Seminar	1
NE 497L NE Comp Methods	3	NE 470 Nucl Matls &Fuel Cycle	3
NE 462 Monte Carlo Tech	3	NE 498L Nuclear Engr Design	4
Core Humanities Elective[1]	3	Core Soc. & Behav. Sci. Elective[1]	3
		Core Second Language	3
	15		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.

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

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

5 The NE Technical Electives are chosen from a list of approved upper division nuclear engineering 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.

Changes:

1. Combined ChNE 310, 317, and 330 into 2 3 CR courses (NE 315 – Nucl Engr Analysis and Calculations, and NE 330 – Nucl Engr Science) (results in a reduction of 2CR)
2. Removed Physics 262 – 3rd semester Physics (3 CR)
3. Removed 1 Technical Elective (3 CR)
4. ChNE 311 has been changed back to a 3 CR course from 4 CR (1 CR)

Will Require:
Form A for NE 330 adding one credit hour and material from Physics 262.
Form A for NE 497L changing name to NE Computational Methods

Form B for new NE 315 NE Analyis and Calculations

Form C for new Curriculum

Budgetary and faculty load implications:

Two courses outside the department were dropped from the curriculum and three departmental courses were combined into two. With the creation of the new Nuclear Engineering Department, the faculty felt that the material in the dropped courses could be included on a topic basis where needed and that combining two existing courses, it will reduce the teaching requirements for the new NE department.

We will sunset NE 317 and add some content to NE 310 and NE 330.