DEGREE/PROGRAM CHANGE
FORM C
Form Number: C1370

Fields marked with * are required

Name of Initiator: Robert Douglas Busch **Email:*** busch@unm.edu **Date:*** 12-18-13
Phone Number:* 505 277-8027 Initiator's Title* PRINCIPAL LECTURER III: Chem Nuclear Engineering

Associated Forms exist?* No

Faculty Contact* Robert Busch
Department* Chem and Nuclear Engineering
Branch

Administrative Contact* Annette Torres
Admin Email* Annette Torres
Admin Phone* (505) 277-7959

Proposed effective term:
Semester Fall Year 2015

Course Information

Select Appropriate Program Graduate Degree Program
Name of New or Existing Program * M.S. Nuclear Engr. Medical Physics Concentration
Select Category Concentration Degree Type M.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)

Med Phys Curriculum Rev 2013.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)
Reasons for changing curriculum requirements for Medical Physics Concentration, M.S. Nuclear Engineering. It was decided that 37 credit hours was too much for the Medical Physics Concentration and that the mathematical techniques class was not needed for all areas of medical physics. Thus, that course was removed from the requirements reducing the total hours to 35. ChNE 591 Special Topic in Mathematical Techniques for Medical Physics This course will be retained as a graduate course and available for post-master s work if desired.

Upload a document that inlcudes justification for the program, impact on long-range planning, detailed budget analysis and faculty workload implications:*

Med Phys Curriculum Rev 2013.pdf

Proposed reduction in hours for Medical Physics Concentration – MS Nuclear Engineering.

Current catalog - There are 37 graduate credit hours required for the Masters in Nuclear Engineering in the Medical Physics concentration. There are no electives in this curriculum. (The Medical Physics concentration is a Plan II program and does not have a thesis option.)

The required courses are: HSci 480: *Human Cross Sectional Anatomy,* ChNE 516/MPhy 516 *Medical Imaging I - X-ray Physics,* MPhy 517L *Medical Imaging I Laboratory - X-ray Physics,* ChNE 519/MPhy 518 *Medical Imaging II- MR, Ultrasound and Nuclear Medicine Physics,* MPhy 519L *Medical Imaging II-Laboratory – MR, Ultrasound and Nuclear Imaging Physics,* ChNE 523L: *Environmental Measurements Lab,* ChNE 524: *Interaction of Radiation with Matter.* ChNE 527/MPhy 527: *Radiation Biology for engineers and Scientists*, ChNE 528: *External Radiation Dosimetry*, ChNE 529 ChNE 540/MPhy 540 *Radiation Oncology Physics*, MPhy 541L *Radiation Oncology Physics Laboratory*, and CS 591: *Special Topic in Graduate Mathematical Techniques for Medical Physics.*

In addition to the 31 credit hours of courses, students must take 6 credit hours of ChNE 591-Practicum.

Proposed catalog - There are 35 graduate credit hours required for the Masters in Nuclear Engineering in the Medical Physics concentration. There are no electives in this curriculum. (The Medical Physics concentration is a Plan II program and does not have a thesis option.)

The required courses are: HSci 480: *Human Cross Sectional Anatomy,* ChNE 516/MPhy 516 *Medical Imaging I - X-ray Physics,* MPhy 517L *Medical Imaging I Laboratory - X-ray Physics,* ChNE 519/MPhy 518 *Medical Imaging II- MR, Ultrasound and Nuclear Medicine Physics,* MPhy 519L *Medical Imaging II-Laboratory – MR, Ultrasound and Nuclear Imaging Physics,* ChNE 523L: *Environmental Measurements Lab,* ChNE 524: *Interaction of Radiation with Matter.* ChNE 527/MPhy 527: *Radiation Biology for engineers and Scientists*, ChNE 528: *External Radiation Dosimetry*, ChNE 529 ChNE 540/MPhy 540 *Radiation Oncology Physics*, and MPhy 541L *Radiation Oncology Physics Laboratory*.

In addition to the 29 credit hours of courses, students must take 6 credit hours of ChNE 591-Practicum.

Reasons for changing curriculum requirements for Medical Physics Concentration, M.S. Nuclear Engineering.

It was decided that 37 credit hours was too much for the Medical Physics Concentration and that the mathematical techniques class was not needed for all areas of medical physics. Thus, that course was removed from the requirements reducing the total hours to 35.

ChNE 591 Special Topic in Mathematical Techniques for Medical Physics

This course will be retained as a graduate course and available for post-master's work if desired.

The new curriculum will be:

Chemical and Nuclear Engineering Master's Degree Curriculum Medical Physics Concentration					
Fall First Year	**10**		**Spring First Year**	**9**	
ChNE 524	3	Interaction of Radiation Matter	ChNE 528	3	External Dosimetry
ChNE/MPhy 516	3	Medical Imaging I	ChNE/MPhys 540	3	Radiation Oncology
MPhy 517L	1	Medical Imaging I Lab	MPhy 541L	3	Radiation Oncology Lab
HSCI 480	3	Cross sectional Anatomy			
Fall Second Year	**7**		**Spring Second Year**	**9**	
ChNE 523L	3	Environmental Lab	ChNE 591	6	Practicum
ChNE 519/MPhy 518	3	Medical Imaging II	ChNE 527 / MPhy 527	3	Radiation Biology
ChNE 519L/MPhy 519L	1	Medical Imaging II Lab			

There should be no resource or budget issues associated with this change.