

BHS in Clinical and Diagnostic Sciences with Emphasis in Nuclear Medicine

Degree Program Description

Nuclear medicine (NM) technologists use radioactive compounds to produce functional, molecular images and to treat many cancers. They work in a variety of settings, including hospitals, imaging and research centers, commercial radiopharmacies, and nuclear research reactors. Nuclear medicine procedures are used to diagnose and treat diseases and to tailor treatment regimens. The NM program includes two years of pre-requisite coursework and two years of professional coursework. Students graduate with a Bachelor of Health Science (BHS) degree in Clinical and Diagnostic Sciences with an emphasis in Nuclear Medicine. Graduates of the program are eligible to challenge the nuclear medicine technology credentialing examinations administered by the Nuclear Medicine Technology Certification Board and the American Registry of Radiologic Technologists. The program is accredited by the Joint Review Committee on Educational Programs in Nuclear Medicine Technology.

Major Program Requirements

Students must complete the Program Pre-requisite courses below with a grade of C- or higher. All Major Core Requirements require a grade of C (2.0) or higher, unless otherwise noted. Students must also meet degree and University requirements (<http://catalog.missouri.edu/academicdegreerequirements/universityrequirements/>), including University general education (<http://catalog.missouri.edu/academicdegreerequirements/generaleducationrequirements/>) requirements. In addition to the degree requirements below, the Nuclear Medicine program requires an application, including an interview. Students are encouraged to work with an advisor in order to best structure the pre-requisites and prepare for the program application.

Program Pre-Requisites		45
MATH 1100	College Algebra	3
or MATH 1400	Calculus for Social and Life Sciences I	
ENGLISH 1000	Writing and Rhetoric	3
or ENGLISH 1000H	Honors Writing and Rhetoric	
COMMUN 1200	Public Speaking	3
or COMMUN 1200H	Public Speaking - Honors	
BIO_SC 1010 & BIO_SC 1020	General Principles and Concepts of Biology and General Biology Laboratory	5
or BIO_SC 1500	Introduction to Biological Systems with Laboratory	
or BIO_SC 1500H	Introduction to Biological Systems with Laboratory Honors	
STAT 1200	Introductory Statistical Reasoning	3
or STAT 1300	Elementary Statistics	
or ESC_PS 4170	Introduction to Applied Statistics	
CHEM 1320	College Chemistry I	4
or CHEM 1320H	College Chemistry I - Honors	
CHEM 1330	College Chemistry II	4

or CHEM 1330H	College Chemistry II- Honors	
PHYSICS 1210	College Physics I	4
PTH_AS 2201 & PTH_AS 2203	Human Anatomy Lecture and Human Anatomy Laboratory	5
MPP 3202	Elements of Physiology	5
CDS 2190	Medical Terminology	3
CDS 4955W	Introduction to Research - Writing Intensive	3
or HLTH_SCI 4200W	Introduction to The Research Process and Evidence Base - Writing Intensive	
Major Core Requirements		69
NUCMED 3255	Orientation to Clinical Practice	2
NUCMED 3256	Clinical Nuclear Medicine I	2
NUCMED 3263	Morphological Correlations in Nuclear Medicine I	3
NUCMED 4232	Regulation of Radioisotopes	3
NUCMED 4268W	Clinical Nuclear Medicine II - Writing Intensive	3
NUCMED 4269	Clinical Nuclear Medicine III	1
NUCMED 4299	Morphological Correlations in Nuclear Medicine II	3
NUCMED 4300	Advanced Procedures	3
NUCMED 4330	PET in Nuclear Medicine	3
NUCMED 4327	Nuclear Medicine Instrumentation	3
NUCMED 4329	Radiopharmaceuticals in Nuclear Medicine	3
NUCMED 4939	Nuclear Clinical Internship I	2
NUCMED 4940	Nuclear Clinical Internship II	6
NUCMED 4941	Nuclear Clinical Internship III	7
RA_SCI 3160	Radiologic Physics	3
RA_SCI 4110	Sectional Anatomy	3
RA_SCI 4150	Computed Tomography: Physics and Procedures	6
CDS 4328	Radiation Safety and Biology	4
CDS 4460	Cardiovascular and Pulmonary Diagnostic Applications II	3
CDS 4480	Clinical Ethics	3
or PHIL 2440	Medical Ethics	
or HLTH_SCI 4480	Clinical Ethics	
or HLTH_SCI 4480W	Clinical Ethics - Writing Intensive	
CDS 4985	Healthcare Organization and Leadership	3

* Denotes courses in which a grade of C- is accepted.

Professional Certification

Upon completion of the program, students are eligible to take the national certifying examinations given by the Nuclear Medicine Technology Certification Board. Students may also pursue credentials offered through the American Registry of Radiologic Technologists.

Semester Plan

Below is a sample plan of study, semester by semester. A student's actual plan may vary based on course choices where options are available.

First Year			
Fall	CR	Spring	CR
PSYCH 1000		3 ENGLISH 1000	3
MATH 1100 or 1400		3 COMMUN 1200	3
BIO_SC 1010 & BIO_SC 1020		5 CHEM 1320	4
Humanities		3 PTH_AS 2201 & PTH_AS 2203	5
		14	15

Second Year			
Fall	CR	Spring	CR
STAT 1200, 1300, or ESC_PS 4170		3 MPP 3202	5
HIST 1100, 1200, or POL_SC 1100		3 CDS 2190	3
PHYSCS 1210		4 2000-level or higher Approved Nuclear Medicine Elective	3
CHEM 1330		4 Behavioral/Social Science	3
CDS 4955W or HLTH_SCI 3900W		3 2000+ level Humanities	3
		17	17

Third Year					
Fall	CR	Spring	CR	Summer	CR
CDS 4328		4 CDS 3460		3 CDS 4460	3
NUCMED 3255		2 CDS 4480, PHIL 2440, or HLTH_SCI 4480		3 NUCMED 4232	3
NUCMED 3263		3 NUCMED 3256		2 NUCMED 4939	2
NUCMED 4327		3 NUCMED 4299			3
RA_SCI 3160		3 NUCMED 4329			3
		15	14		8

Fourth Year			
Fall	CR	Spring	CR
CDS 4985		3 NUCMED 4269	1
NUCMED 4268W		3 NUCMED 4330	3
NUCMED 4940		6 NUCMED 4941	7
RA_SCI 4110		3 RA_SCI 4150	6
		15	17

Total Credits: 132