

NUCLEAR MEDICINE TECHNOLOGY PROGRAM

B.S. Degree

Contact Information

Educational Director: Elpida S. Crawford, M.S., C.N.M.T.
 State University of New York at Buffalo
 Parker Hall, Room 105
 3435 Main Street (CAMPUS)
 Buffalo, New York 14214-3007
 (716) 838-5889 ext. 115
 E-Mail esc@buffalo.edu

Intended Majors Advisor: David Lang
 (716) 829-3005
langdj@buffalo.edu

NUCLEAR MEDICINE TECHNOLOGY

Nuclear Medicine Technology is the health related profession concerned with the use of radioactivity for diagnostic, therapeutic, and research purposes. Nuclear Medicine procedures use radioactive materials to: (1) perform body function studies and organ imaging; (2) analyze biologic specimens; and (3) treat disease. The Nuclear Medicine Technologist is a highly skilled individual who, in conjunction with the physician, either directs or participates in the daily operation of the nuclear medicine department. The responsibilities are varied but include three major roles: technical skills, patient care, and administrative functions.

The State University of New York at Buffalo Nuclear Medicine Technology Program prepares entry level technologists through an interdisciplinary curriculum of basic science study and clinical education. Upon completion of the program, students are eligible to take national certification examinations in nuclear medicine technology.

CRITERIA FOR ADMISSION

1.) <u>Required Math and Science Prerequisite Courses</u>	<u>Credit Hours</u>
- Anatomy 113 (Human Anatomy)	4
- Biology 200 (Evolutionary Biology) and Biology 201 (Cell Biology) -OR- (a two semester General Biology sequence with labs from another institution)	9
- Chemistry 101-102 (General Chemistry)	10
- Statistics 119 (Statistical Methods)	4
- Computer Science 101 (Intro. to Computer Science)	3
- Physics 101 (College Physics)	4
- Physics 151 (Physics Lab)	1
- Physiology 300 (Human Physiology)	4

NOTES:

- Other courses that are recommended but not required include organic chemistry I & II (201 – 202) and
- medical ethics (PHI 337)

2.) QPA

A minimum overall quality point average of 2.0 and a minimum math and sciences prerequisite course quality point average of 2.5 are necessary for consideration, but do not necessarily assure admission, into the Nuclear Medicine Technology Program.

3.) Total Hours to Be Completed

Students must have achieved junior status (i.e., a minimum of 58-60 semester hours) before taking Program courses.

NMT CURRICULUMCredit HoursJunior Year - Fall Semester

Nuclear Medicine 305 (Immunology for NMT)	1
Nuclear Medicine 321 (Basic Radiation Science)	4
Nuclear Medicine 399 (In Vivo Studies I)	3
Nuclear Medicine 325 (Radiation Safety for NMT)	2
Nuclear Medicine 327 (Radiobiology for NMT)	2
General Education (Non-Science) and/or Electives	<u>3</u>
	15

Junior Year - Spring Semester

Nuclear Medicine 400 (In Vivo Studies II)	4
Nuclear Medicine 324 (Nuclear Medicine Instrumentation) (Prerequisites: NMD 321 and NMD 325)	4
Nuclear Medicine 340 (Patient Care and Management in Nuclear Medicine Technology) (Prerequisite: NMD 300)	2
Nuclear Medicine 451 (Radiopharmacy)	2
General Education (Non-Science) and/or Electives	<u>3</u>
	15

Senior Year - Fall Semester

Nuclear Medicine 421 * (Clinical Rotation A)	12
Nuclear Medicine 401 * (In Vivo Studies III)	2
Nuclear Medicine 425 * (Clinical Conference A)	<u>2</u>
	16

Senior Year - Spring Semester

Nuclear Medicine 422 * (Clinical Rotation B)	12
Nuclear Medicine 415 * (Radionuclide Therapy)	0.8
Nuclear Medicine 416 * (Departmental Management)	0.8
Nuclear Medicine 426 * (Clinical Conference B)	<u>2</u>
	15.5

* Prerequisite: Senior Status in the Program.

NOTES: The senior year clinical rotations are at Buffalo area hospitals and clinics with which the NMT Program has affiliation agreements. These University affiliates require students to comply with OSHA standards on Exposure to Bloodborne Pathogens.

ADVISEMENT

Students interested in Nuclear Medicine Technology are encouraged to contact the NMT Program Director early in their undergraduate career. It is strongly recommended that students visit a clinical nuclear medicine department prior to applying to the program.

Between September and early February of the sophomore year, applicants must contact the Program Office to obtain an application to the Program.

A student should feasibly be able to complete all prerequisite courses prior to the fall semester for which they seek admission.

TRANSFER STUDENTS

Transfer students should apply to the University in the Fall prior to the Fall term for which they are seeking admission. All transcripts showing grades for all coursework completed, including the most recent Fall semester, must be received by the University no later than January 15. Transfer students must be accepted by the University and meet the program admission criteria. Transfer students should consult with the NMT Program Director to determine the equivalency of prerequisite courses taken at other schools. All Program policies regarding admission apply to transfer students.

ADMISSION POLICIES

Application to the Program (UB students) should be made between September and February 15 of the sophomore year. A minimum cumulative overall QPA of 2.0 and a minimum of 2.5 in the math and science prerequisite courses complete at that time are necessary for admission consideration. Having the minimum GPA does not guarantee admission into the Program. Students lacking one prerequisite course or total semester hours that can be completed during the summer session between the sophomore and junior years will be considered for admission. Prerequisite courses taken at another school must be equivalent in content to those listed to be transferrable. Also, students must have completed at least 58 semester hours.

Applicants must meet with members of the selection committee for personal interviews, scheduled during the spring semester. Selection is based on GPA and information gathered through the information process.

Final decisions regarding acceptance are made prior to the end of the spring semester.

Any applicant whose native language is not English will not be accepted into the Program unless they have successfully passed the "SPEAK TEST".

LATE APPLICATIONS

University students that make an application to the Program after the February 15th deadline and transfer students that complete their University application after January 15th will be considered on a space available basis.

RETENTION POLICIES (NMT Program)

1. A student must achieve a minimum of 2.5 in their required program courses each semester.
2. A student must achieve a grade of "C" or better on all required program courses. Any required program course in which a student receives a grade of "D" or less must be satisfactorily repeated the following academic year.
3. Program students that do not meet the above criteria are placed on one semester of academic probation.

CAREER OPPORTUNITIES

Most nuclear medicine technologists are employed in hospitals and outpatient medical imaging facilities. With a few years of clinical experience, a technologist with a BS degree could also find employment with a commercial company that makes nuclear medicine products in sales, marketing, research, or education.