NUCLEAR MEDICINE TECHNOLOGY, B.S.

Saint Louis University's Bachelor of Science in Nuclear Medicine Technology (NMT) prepares graduates for entry-level positions as nuclear medicine technologists.

Nuclear medicine is a medical specialty that uses safe, painless and cost-effective techniques to image the body and treat disease. Nuclear medicine uses very small amounts of radioactive materials to diagnose and treat diseases using gamma cameras or PET/CT scanners. Nuclear medicine imaging is unique in that it documents organ function and structure. It is a method of gathering information that may otherwise be unavailable, require surgery or necessitate more expensive diagnostic tests.

Program Highlights

Today, nuclear medicine offers procedures that are helpful for a broad span of medical specialties, from pediatrics to cardiology and oncology. There are almost 100 nuclear medicine imaging procedures available that include every major organ of the human body.

The advantages of earning your B.S. in nuclear medicine technology at Saint Louis University include:

- Student-tailored educational curriculum and individual mentorship by faculty in the NMT profession
- Exceptional clinical preceptors and training sites conveniently within the St. Louis metropolitan area
- Strong science curriculum that aids in preparation for immediate job placement as well as future graduate education
- Medically relevant coursework ideal for pre-professional studies
- Pre-medicine and pre-physician assistant curriculum options
- Opportunities to participate in professional conferences with faculty and fellow students

Curriculum Overview

SLU's nuclear medicine technology program includes all basic sciences, as well as an intensive NMT curriculum that includes 1,000 hours of clinical practicum. Upon completing the program, the graduate is eligible for national certification to become a certified nuclear medicine technologist (CNMT).

Nuclear medicine technology students are encouraged to join and participate in the functions of the Saint Louis University Clinical Health Sciences Club.

Clinical and Research Opportunities

Professional coursework in the nuclear medicine technology program is concentrated in the last year and a half of study. Students in the NMT program have opportunities to conduct research and produce projects and papers that are acceptable for publication and could be presented at professional conferences.

Careers

The benefits of SLU's nuclear medicine technology program also include several career opportunities. Graduates can work as technologists in hospitals and clinics. Students may seek positions in information technology, health care administration, sales and training, radiopharmacy labs, teaching and other related fields.

Nearly 20% of graduates proceed to graduate school, with about 50% of the remaining class enrolling in graduate school within five years of employment. Many attend graduate school part-time with assistance from their employers.

Career advancement opportunities from the position of staff technologist may lead to areas of administration, education, sales or research.

A nuclear medicine technologist has many responsibilities that encompass a wide range of skills. Some responsibilities include:

- Preparing, calibrating and administering radioactive chemical compounds, known as radiopharmaceuticals.
- Performing diagnostic imaging procedures using radiation-detection technology.
- Administering radioactive tracers to image the organs of the human body.
- Operating imaging technology, laboratory and computer instrumentation.
- Providing images, data analysis and patient information to the physician for diagnostic interpretation.
- Assisting the physician in theranostic procedures.

The median annual wage for nuclear medicine technologists was $92,500 in 2023 according to the Bureau of Labor Statistics.

Transfer Credit or Second Bachelor's Degree

Undergraduate students may receive credit for prior learning. This includes college credits earned during or after high school, credit by exam and credit by assessment. Credits may be applied towards the University Core or program requirements, or count as general electives. More details can be found in the Transfer Credit policy (https://catalog.slu.edu/academic-policies/academic-policies-procedures/transfer-credit/).

Students seeking a second bachelor's degree may apply their previous coursework toward program graduation requirements following the same Transfer Credit policy (https://catalog.slu.edu/academic-policies/academic-policies-procedures/transfer-credit/). The specific University Core requirements for second bachelor's degree students can be found on the University Core page (https://catalog.slu.edu/academic-policies/academic-policies-procedures/university-core/).

More information on how credits transfer to SLU can be found on the Transfer Admission page (https://www.slu.edu/admission/transfer/credits/).

Admission Requirements

Freshmen Applicants

Solid academic performance in college preparatory coursework is a primary concern in reviewing a freshman applicant's file.

Admission criteria include:

- Minimum cumulative GPA of 2.70 on a 4.00 scale.
- Saint Louis University has a test-optional admission process for all undergraduate programs. Applicants may submit standardized test

scores, but those who choose not to will not be disadvantaged in any way in the admission process.

Transfer Applicants

The minimum college transfer GPA is 2.70/4.00.

International Applicants

All admission policies and requirements for domestic students apply to international students, along with the following:

- You must demonstrate English language proficiency (https://catalog.slu.edu/academic-policies/office-admission/undergraduate/english-language-proficiency/).
- Proof of financial support must include:
  - A letter of financial support from the person(s) or sponsoring agency funding your time at Saint Louis University.
  - A letter from the sponsor's bank verifying that the funds are available and will be so for the duration of your study at the University.
- Academic records, in English translation, of students who have undertaken postsecondary studies outside the United States must include the courses taken and/or lectures attended, practical laboratory work, the maximum and minimum grades attainable, the grades earned or the results of all end-of-term examinations, and any honors or degrees received. WES and ECE transcripts are accepted.

Tuition

Tuition	Cost Per Year
Undergraduate Tuition	$54,760

Additional charges may apply. Other resources are listed below:

Net Price Calculator (https://www.slu.edu/financial-aid/tuition-and-costs/calculator.php)

Information on Tuition and Fees (https://catalog.slu.edu/academic-policies/student-financial-services/tuition/)

Miscellaneous Fees (https://catalog.slu.edu/academic-policies/student-financial-services/fees/)

Information on Summer Tuition (https://catalog.slu.edu/academic-policies/student-financial-services/tuition-summer/)

Scholarships and Financial Aid

There are two principal ways to help finance a Saint Louis University education:

- **Scholarships:** Awarded based on academic achievement, service, leadership and financial need. In addition to SLU scholarships, the Doisy College of Health Sciences offers scholarships (https://www.slu.edu/doisy/about/scholarships-for-current-students.php) to sophomores, juniors, seniors and graduate students.
- **Financial Aid:** Provided in the form of grants and loans, some of which require repayment.

For priority consideration of merit-based scholarships, applicants should apply for admission by Dec. 1 and complete a Free Application for Federal Student Aid (FAFSA) by Feb. 1.

For more information, visit the Office of Student Financial Services (https://www.slu.edu/financial-aid/).

Accreditation

The Joint Review Committee on Educational Programs in Nuclear Medicine Technology
820 W. Danforth Rd. #B1
Edmond, OK 73003
405-285-0546
jrcnmt.org (http://jrcnmt.org)

Additional Accreditation Information (PDF) (https://www.slu.edu/doisy/degrees/program-pdfs/nmt-accreditation-1018.pdf)

JRCNMT Graduate Outcomes Report (https://www.jrcnmt.org/students/graduate-achievement-data/)

Learning Outcomes

1. Graduates will be able to demonstrate the Jesuit value of *cura personalis* as they perform diagnostic imaging procedures.
2. Graduates will be able to demonstrate effective communication when speaking with both patients and other healthcare professionals in the nuclear medicine department.
3. Graduates will be able to use knowledge, facts, and data to assess problems and find solutions as they relate to nuclear medicine imaging and computed tomography (CT) procedures.
4. Graduates will be able to demonstrate the ability to translate didactic knowledge into clinical practice as a nuclear medicine technologist.
5. Graduates will be able to exhibit professional characteristics expected of nuclear medicine technologists.

Requirements

Students must earn a "C-" or better in math/stat, science (BIO, CHEM, PHYS, HSCI 3300/3310/3400/3410) and program-specific (NMT prefix) courses.

Code	Title	Credits
University Undergraduate Core (https://catalog.slu.edu/academic-policies/academic-policies-procedures/university-core/)		**32-35**
Foundation		
BIOL 1240 & BIOL 1245	General Biology: Information Flow and Evolution and Principles of Biology I Laboratory	4
CHEM 1080 & CHEM 1085	Principles of Chemistry 1 Lecture and Principles of Chemistry 1 Lab	4
CHEM 1480 & CHEM 1485	Principles of Chemistry 2 Lecture and Principles of Chemistry 2 Lab	4
ENGL 1900	Advanced Strategies of Rhetoric and Research	3
HCE 1600	Embodiment, Life, and Death in Context	3
HIM 4750	Fundamentals of Clinical Medicine	3
HSCI 2000	The US Health Care System	3
HSCI 2100	Health Care Management	3
HSCI 2200	Medical Terminology	3
HSCI 3200	Aspects of Health Law	3
HSCI 3300 & HSCI 3310	Anatomy & Physiology I and Anatomy & Physiology I Lab	4

HSCI 3400 & HSCI 3410	Anatomy and Physiology Lecture II and Anatomy & Physiology II Lab	4
HSCI 3700	Research Methods	3
MATH 1320	Survey of Calculus	3
PHYS 1220 & PHYS 1235	General Physics I and General Physics I Lab	4
PHYS 1240 & PHYS 1255	General Physics II and General Physics II Lab	4
PSY 1010 or SOC 1100	General Psychology Introduction to Sociology	3
STAT 1300	Elementary Statistics with Computers	3
Nuclear Medicine Technology		
NMT 4000	Nuclear Medicine Procedures I	3
NMT 4100	Radiation Protection	3
NMT 4310	Radiation Physics	2
NMT 4320	Radiochemistry and Radiopharmacy	3
NMT 4330	Nuclear Med Instrumentation	3
NMT 4340	Nuclear Medicine Technology Procedures II	3
NMT 4350	Nuclear Medicine Information Systems	3
NMT 4430	Emerging Technologies	3
NMT 4700	Nuclear Medicine Clinical Practicum I	4
NMT 4710	Nuclear Medicine Senior Seminar I	1
NMT 4800	Nuclear Medicine Clinical Practicum II	2
NMT 4850	Nuclear Medicine Clinical Practicum III	12
NMT 4880	Senior Seminar II	2
NMT 4890	Capstone in Nuclear Medicine	1
Total Credits		**120**

Continuation Standards

Nuclear Medicine Technology students must maintain a cumulative GPA of 2.70/4.00.

Second Degree Option for Students with Bachelor's Degree

Total program credits vary based on transfer credits. Each student will work with their advisor to create their specific course plan.

Roadmap

Roadmaps are recommended semester-by-semester plans of study for programs and assume full-time enrollment unless otherwise noted.

Courses and milestones designated as critical (marked with !) must be completed in the semester listed to ensure a timely graduation. Transfer credit may change the roadmap.

This roadmap should not be used in the place of regular academic advising appointments. All students are encouraged to meet with their advisor/mentor each semester. Requirements, course availability and sequencing are subject to change.

Course	Title	Credits
Year One		
Fall		
BIOL 1240 & BIOL 1245	General Biology: Information Flow and Evolution and Principles of Biology I Laboratory (satisfies CORE 3800)	4
CHEM 1080 & CHEM 1085	Principles of Chemistry 1 Lecture and Principles of Chemistry 1 Lab	4
CORE 1000	Ignite First Year Seminar	2 or 3
ENGL 1900	Advanced Strategies of Rhetoric and Research (satisfies CORE 1900)	3
	Credits	**13-14**
Spring		
CHEM 1480 & CHEM 1485	Principles of Chemistry 2 Lecture and Principles of Chemistry 2 Lab	4
CORE 1500	Cura Personalis 1: Self in Community	1
CORE 1200	Eloquentia Perfecta 2: Oral and Visual Communication	3
HSCI 2200	Medical Terminology	3
MATH 1320	Survey of Calculus	3
PSY 1010 or SOC 1100	General Psychology (satisfies CORE 3600) or Introduction to Sociology	3
	Credits	**17**
Year Two		
Fall		
HCE 1600	Embodiment, Life, and Death in Context (or any other approved medical ethics)	3
HSCI 2000	The US Health Care System	3
HSCI 3300 & HSCI 3310	Anatomy & Physiology I and Anatomy & Physiology I Lab	4
PHYS 1310	College Physics I	3
PHYS 1320	College Physics I Laboratory	1
	Credits	**14**
Spring		
CORE 1700	Ultimate Questions: Philosophy	3
CORE 2500	Cura Personalis 2: Self in Contemplation	0
HSCI 3400 & HSCI 3410	Anatomy and Physiology Lecture II and Anatomy & Physiology II Lab	4
PHYS 1330	College Physics II	3
PHYS 1340	College Physics II Laboratory	1
STAT 1300	Elementary Statistics with Computers (satisfies CORE 3200)	3
	Credits	**14**
Year Three		
Fall		
HIM 4750	Fundamentals of Clinical Medicine	3
HSCI 3200	Aspects of Health Law	3
HSCI 3700	Research Methods (! satisfies CORE 4000)	3
CORE 3400	Ways of Thinking: Aesthetics, History, and Culture	3
	Credits	**12**
Spring		
CORE 2800	Eloquentia Perfecta 3: Creative Expression	2-3

HSCI 2100	Health Care Management	3
NMT 4000	Nuclear Medicine Procedures I	3
NMT 4100	Radiation Protection	3
NMT 4350	Nuclear Medicine Information Systems	3
	Credits	**14-15**
Year Four		
Fall		
NMT 4310	Radiation Physics	2
NMT 4320	Radiochemistry and Radiopharmacy	3
NMT 4330	Nuclear Med Instrumentation	3
NMT 4340	Nuclear Medicine Technology Procedures II	3
NMT 4700	Nuclear Medicine Clinical Practicum I (Satisfies Reflection-in-Action)	4
NMT 4710	Nuclear Medicine Senior Seminar I (Satisfies Cura Personalis 3)	1
NMT 4800	Nuclear Medicine Clinical Practicum II (taken in the Winter Session)	2
	Credits	**18**
Spring		
NMT 4430	Emerging Technologies	3
NMT 4850	Nuclear Medicine Clinical Practicum III	12
NMT 4880	Senior Seminar II	2
NMT 4890	Capstone in Nuclear Medicine	1
	Credits	**18**
	Total Credits	**120-122**

Second Baccalaureate Degree Option

Code	Title	Credits
Foundation Courses		
Theology or Religion		3
Medical Ethics		3
Written Composition		3
CORE 1200	Eloquentia Perfecta 2: Oral and Visual Communication	3
Arts (Fine, Performing, Art History or equivalent)		3
Humanities		3
Natural or Applied Science		3
Social or Behavioral Science		3
Quantitative Reasoning		3
Humanities or Social/Behavioral Science		3
Pre-Requisite Requirements		
CHEM 1080 & CHEM 1085	Principles of Chemistry 1 Lecture and Principles of Chemistry 1 Lab	4
CHEM 1480 & CHEM 1485	Principles of Chemistry 2 Lecture and Principles of Chemistry 2 Lab	4
HSCI 3300 & HSCI 3310	Anatomy & Physiology I and Anatomy & Physiology I Lab	4
HSCI 3400 & HSCI 3410	Anatomy and Physiology Lecture II and Anatomy & Physiology II Lab	4
PHYS 1310	College Physics I	3
PHYS 1320	College Physics I Laboratory	1
MATH 1320	Survey of Calculus	3
PHYS 1330	College Physics II	3
PHYS 1340	College Physics II Laboratory	1
HCE 1600	Embodiment, Life, and Death in Context	3
Total Credits		**60**

Courses to Be Taken at Saint Louis University

Course	Title	Credits
Year One		
Spring		
NMT 4000	Nuclear Medicine Procedures I	3
NMT 4100	Radiation Protection	3
NMT 4350	Nuclear Medicine Information Systems	3
	Credits	**9**
Year Two		
Fall		
NMT 4310	Radiation Physics	2
NMT 4320	Radiochemistry and Radiopharmacy	3
NMT 4330	Nuclear Med Instrumentation	3
NMT 4340	Nuclear Medicine Technology Procedures II	3
NMT 4700	Nuclear Medicine Clinical Practicum I	4
NMT 4710	Nuclear Medicine Senior Seminar I	1
NMT 4800	Nuclear Medicine Clinical Practicum II	2
	Credits	**18**
Spring		
NMT 4430	Emerging Technologies	3
NMT 4850	Nuclear Medicine Clinical Practicum III	12
NMT 4880	Senior Seminar II	2
NMT 4890	Capstone in Nuclear Medicine	1
	Credits	**18**
	Total Credits	**45**

Second Degree Option Notes

Successful completion leads to a second baccalaureate degree in nuclear medicine technology. This option is for a student who already possesses a bachelor's degree and is motivated to become a practicing nuclear medicine technologist in an accelerated time frame.

To be considered for the second baccalaureate degree option, the applicant must have satisfactorily completed a baccalaureate degree with a minimum GPA of 2.7 (on a 4.0 scale), including the prerequisite courses listed above.

The applicant must complete the application for the professional year and submit official transcripts of prior college work through the SLU admission website (https://www.slu.edu/admission/).

The applicant must show satisfactory evidence of good character and physical ability to perform the functions of the nuclear medicine technologist. All applicants must meet the professional performance and technical standards required by the profession. Students must also successfully complete a drug screen and criminal background check prior to the start of the professional year.

Application to the second baccalaureate option is via a competitive application process, with admission granted on a space-available basis. The selection process includes a personal interview for qualified applicants.

Selection Factors

Among the parameters considered by the selection committee are:

- Applicant's academic potential as evidenced by previous performance in college
- Specific motivation toward the pursuit of a health care profession
- Evidence of sound judgment
- Interpersonal and communication skills
- Job shadowing in a nuclear medicine department is highly recommended

2+SLU

2+SLU programs provide a guided pathway for students transferring from a partner institution.

- Nuclear Medicine Technology, B.S. (STLCC 2+SLU) (https://catalog.slu.edu/academic-policies/office-admission/undergraduate/2plusslu/stlcc/nuclear-med-tech/)

Contact Us

Apply for Admission (https://www.slu.edu/admission/)

Contact Doisy College of Health Sciences
Recruitment specialist
314-977-2570
dchs@health.slu.edu