



In the Name of God

Islamic Republic of Iran
Ministry of Health and Medical Education
Deputy Ministry for Education

Nuclear Medicine

Degree: Specialty

Program Description (Introduction):

Since medical education eventually leads to training of responsible, professional, and committed individuals who provide the community with health services, specialized areas of medical sciences are inseparable from the areas providing the patients and society with health services despite all their different approaches and attitudes. Students passing the specialized program must gain the necessary knowledge and skills in a quiet and anxiety-free environment, because they will be responsible for managing diseases and provision of the health services in different aspects in the future, and in addition to acquiring the needed competencies, knowledge, and skills, they must gain other qualifications, such as professionalism, communicating with patients, establishing a professional communication with colleagues and other staff, and management of facilities and human resources in the professional environment, etc.

The Nuclear Medicine committee members have compiled the current curriculum using above mentioned approach and spending hundreds of hours prepared the curriculum and after legal proceedings, the executive universities were provided with this curriculum.

Clinical nuclear medicine

Definition and Duration of Training Program:

Nuclear medicine encompasses all specialized diagnostic-therapeutic measures in both clinical and paraclinical areas in which open radioactive sources are used. Clinical applications of radiobiology, using radiopharmaceuticals, radiation protection, and dosimetry are among the important working areas of this field.

Program duration: 4 years

Admission Requirements

- B.D.S./D.M.D./D.D.S or equivalent certificates for the applicants of Specialty
- Certificate of Internship or Certificate of Practice

Language Requirements:

- Language requirements: Evidence of English Proficiency on the TOEFL or IELTS tests. The minimum score for TOEFL PBT, TOEFL iBT and IELTS is 533, 72 and 5.5 respectively.
- Applicants from Persian (Farsi) Speaking countries (They shall both speak and write in Persian) who have applied for graduate Degree-based programs may be exempted, based on the decision of the department, from submitting any certificates regarding their English Language Proficiency. Nevertheless, they are required to hand in their English language certificate which meets SUMS' minimal language proficiency requirements, within one year from commencing their studies at SUMS.

Expected Competencies at the End of the Program

General Competencies*

Specific Competencies and Skills

At the end of the program learners will be competent in the following skills:

- Performing imaging procedures
- Labeling the radiopharmaceuticals required in nuclear medicine
- Setting the nuclear medicine and imaging devices
- Performing different therapeutic procedures using radiopharmaceuticals
- Performing imaging stress tests
- Performing needle biopsy of the thyroid
- Using gamma probes to examine the sentinel lymph nodes or tumors

Educational Strategies, Methods and Techniques*

Student Assessment (Methods and Types)

Methods:	Periods :
MCQ	At least 2 times/Year
portfolio	Annually
Log Book	During the Course
Mini CEX	2 times/year
DOPS	Annually
OSCE	2 times/year

Ethical Considerations*

*Note: The related document(s) can be found at <http://hcmep.behdasht.gov.ir/>.

The overall structure of the course:

Years of Residency	Educational ward, unit, or area	Contents	Duration (month)
first year	Nuclear medicine imaging ward	General imaging - Basic physics and radiation protection- Radiopharmacy-Radioimmunoassay	9 months 3 months
	Internal medicine ward and clinic (periodical course)	Cardiovascular and endocrine diseases	
second year	Radiology ward	cross-sectional anatomy, general radiology, CT scan	9 month 3 months
	Nuclear medicine imaging, clinic and hospitalization wards+ Hormone Lab	Health care, clinical follow-up of the patients treated in the department of nuclear medicine, performing PET and SPECT procedures and dynamic and static scans+ performing relevant hormone tests	
Third year	Nuclear medicine imaging ward and clinic of the Atomic Energy Agency	Clinical follow-up of the patients treated in the department of nuclear medicine, performing PET and SPECT procedures and dynamic and static scans	9 months 3 months
	Internal medicine ward and clinic	Oncology and nephrology diseases	
fourth year	Radiology ward (periodical course)	Cross-sectional anatomy, general radiology, CT scan, MRI	3 months 9 months
	Nuclear medicine wards and clinic	Nuclear medicine procedures, such as PET, SPECT, etc.	

Important Notice:

The above features the curriculum of the Nuclear Medicine Program designed and approved by the Iranian Ministry of Health and Medical Education. Given the fact that Shiraz University of Medical Sciences is constantly improving and updating itself to meet the international academic standards and the state of the art, and based on the availability of facilities, devices, ward, laboratories, etc. at SUMS, all the SUMS curricula are approximately 20% subject to change.