

**IMPORTANT: Please Read**

## **Essential Skills and Abilities Required for the Study and Practice of Medical Radiation Sciences**

This document has been prepared to assist applicants to the Medical Radiation Sciences Program make an informed decision regarding the essential skills and abilities required for the study and practice of Medical Radiation Sciences.

### **Introduction:**

The Medical Radiation Sciences (MRS) Program is a joint degree/diploma program between the University of Toronto, Department of Radiation Oncology and The Michener Institute for Applied Health Sciences. The MRS Program is responsible to society to provide a program of study whereby graduates have the knowledge, skills, professional behaviours and attitudes necessary to enter the practice of medical radiation sciences in Canada. Graduates must be able to operate equipment, apply ionizing radiation and provide comprehensive, compassionate care to their patients. For this reason, students in the MRS Program must possess the cognitive, communication, sensory, motor, and social skills necessary to educate and counsel patients, and competently complete certain technical procedures in a reasonable timeframe while ensuring patient safety.

In addition to obtaining a degree/diploma, and completing an accredited educational program, an individual must pass the national certification examination of the Canadian Association of Medical Radiation Technologists (CAMRT: [www.camrt.ca](http://www.camrt.ca)) to work as a Medical Radiation Technologist in Canada. Furthermore, to be licensed and practice in the field of medical radiation sciences in Ontario, the College of Medical Radiation Technologists of Ontario (CMRTO: [www.cmrto.org](http://www.cmrto.org)) requires that members have not been convicted of, or are under investigation for, a criminal offence.

## **Technical Standards for Students in the MRS Program**

Students in the Program should be aware that cognitive, psychomotor, communication skills, and professional behaviours are evaluated throughout the education program. All students must have the required skills and abilities described in the section on Technical Standards. All individuals are expected to review this document to assess their ability to meet these standards. Students who anticipate requiring disability-related accommodation are responsible to register **annually** with Accessibility Services, at U of T and Michener to ensure appropriate resources are in place. Further information is available at <http://www.studentlife.utoronto.ca/accessibility.htm>

A candidate for degree/diploma must demonstrate the following abilities:

### **Observation:**

A student must be able to participate in learning situations that require skills in observation. In particular, a student must be able to accurately observe a patient and acquire visual, auditory and tactile information.

### **Communication:**

A student must be able to speak, interpret and to observe patients in order to effectively and efficiently elicit information, describe mood, activity and posture and perceive non-verbal communication. A student must be able to communicate effectively and sensitively with patients, family and any member of the health care team. A student must also be able to summarize coherently a patient's condition, both verbally and in writing.

### **Psychomotor:**

A student must demonstrate sufficient psychomotor function to safely operate equipment and accessories. The operation of such equipment must be performed independently and in a timely fashion. A student must be cognizant of the purpose, capabilities, specifications, and hazards of materials and equipment being used in the course of their practice.<sup>1</sup> A student must be able to execute movements reasonably required to provide general and emergency medical care to patients.

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<sup>1</sup> Essential Competencies, CMRTO January 2004

**Intellectual-Conceptual, Integrative and Quantitative Abilities:**

A student must demonstrate the cognitive and memory skills necessary to measure, calculate, analyze, integrate and synthesize information. In addition, the student must be able to comprehend two, three and four dimensional and spatial relationships. All of these problem-solving activities must be completed in a timely fashion.

**Behavioural and Social Attributes:**

A student must consistently demonstrate the emotional health required for full utilization of her/his intellectual abilities. The application of good judgment and the prompt completion of all responsibilities attendant to the care of the patient are necessary. The development of mature, sensitive and effective interactions with patients, families and other members of the health care team are also required. This requires committed open teamwork, respect and tolerance for others and dedication to interprofessional values. The student must be able to tolerate the physical, emotional, and mental demands of the program and function effectively under stress.

Compassion, integrity, concern for others, interpersonal skills, interest and motivation are all personal qualities that nuclear medicine technologists, radiological technologists and radiation therapists must demonstrate and are expected qualities of MRS students.

## **Students with Disabilities**

Disability is defined by Section 10 (1) of the Ontario Human Rights Code.

The MRS Program at the University of Toronto/Michener Institute for Applied Health Sciences is committed to facilitating the integration of students with disabilities into the University community. Each student with a disability is entitled to reasonable accommodation that will assist her/him to meet the standards. Reasonable accommodation will be made to facilitate the student's progress and may require members of the MRS community to exercise creativity and flexibility in responding to the needs of the student with a disability while maintaining academic and technical standards. However, such accommodation cannot compromise patient safety and well-being. The student with the disability must be able to demonstrate the knowledge to perform the necessary skills independently. There are a few circumstances in which an intermediary may be appropriate. However, no disability can be accommodated if the intermediary has to provide cognitive support, substitute for cognitive skills, perform psychomotor functions, and/or in any way supplement clinical judgment. The appropriateness of an intermediary will be assessed on a case-by-case basis.

Students are expected to complete the program within three years, because of the comprehensive, additive and integrative nature of the curriculum. Students with an identified disability may be granted an extension of time within which to complete the program. This acknowledges that central to the success of a student with a disability in completing the MRS program, it is his/her responsibility to demonstrate self-reliance and to identify needs requiring accommodation in a timely fashion.

All students are required to complete the program within a total of 5 yrs from their initial program start date.