MEDICAL RADIATION TECHNOLOGY

Program: MRTT
Credential: Ontario College Advanced Diploma
Delivery: Full-time
Work Integrated Learning: 3 Clinical Placements
Length: 6 Semesters
Duration: 3 Years
Effective: Fall 2027
Location: Barrie

Description

Imagine yourself as a caring professional and integral member in a high-tech, cutting-edge career in health care. The Medical Radiation Technology program provides you with the knowledge, skills and experience to be successful working in this growing technological field. From experienced faculty, you learn foundational skills in anatomy and physiology, pathology, radiological sciences and quality imaging procedures. Your experience in simulation labs and pre-clinical courses prepare you for clinical placements in diverse health care settings. Interprofessional collaboration, health and safety, communication and exemplary patient care is emphasized as you practice the skills necessary to become a Medical Radiation Technologist.

Career Opportunities

Medical Radiation Technologists commonly work in:

- community and teaching hospitals
- imaging centres
- doctor's offices
- mobile radiology services
- education and research

Program Learning Outcomes

The graduate has reliably demonstrated the ability to:

1. produce and assess a variety of high-quality diagnostic images employing current technologies for image acquisition and processing;
2. interpret requests and adapt procedures according to patient needs and diagnostic imaging requirements in routine and complex clinical cases;
3. comply with relevant legislation, regulations, and ethical guidelines to ensure the highest level of patient safety, confidentiality, and professional integrity;
4. employ radiation safety protocols to protect oneself, patients, families, and healthcare team members in clinical settings;
5. integrate patient advocacy and education into clinical practice to deliver compassionate and culturally sensitive care in assessment, diagnostic imaging, and therapeutic intervention;
6. monitor patients' condition and respond to emergency situations as indicated to ensure patient well-being and safety at all times;
7. prepare, calibrate, operate, troubleshoot, and evaluate complex equipment safely and efficiently to ensure optimal equipment performance and reliability;
8. analyze a broad range of diagnostic imaging procedures to assist physicians in the diagnosis and management of multiple system disorders;
9. communicate clearly and empathetically with patients, families, healthcare team members, and the public to foster effective relationships and promote cooperation;
10. develop and apply strategies for personal and professional development to enhance work performance and maintain currency with industry;
11. maintain accurate documentation in accordance with current ministry guidelines, professional standards of practice and organizational policies and procedures.

External Recognition

Upon completion of this program and pending award of an accreditation status by Accreditation Canada's EQual program, graduates are eligible to write the Canadian Association for Medical Radiation Technologists (CAMRT) registration exams. Upon successful completion of these exams, students are qualified to register with the College of Medical Radiation and Imaging Technologists of Ontario (CMRITO) as a Medical Radiation Technologist and work in a variety of settings.

Program Progression

The following reflects the planned progression for full-time offerings of the program.

Fall Intake

- **Sem 1:** Fall 2027
- **Sem 2:** Winter 2028
- **Sem 3:** Summer 2028
- **Sem 4:** Fall 2028
- **Sem 5:** Winter 2029
- **Sem 6:** Summer 2029

Admission Requirements

- Ontario Secondary School Diploma (OSSD) or equivalent, or mature student status
- Grade 12 English (C or U)
- Grade 12 Mathematics (C, M or U)
- Grade 11 or 12 Biology (C or U)
- Grade 11 or 12 Physics (C or U)

Admission requirements may be met by completing Georgian College's Pre-Health Sciences Pathway to Advanced Diplomas and Degrees certificate (https://www.georgiancollege.ca/academics/programs/pre-health-sciences/), or equivalent courses from Academic Upgrading programs offered by Colleges across Ontario.

Mature students, non-secondary school applicants (19 years or older), and home school applicants may also be considered for admission. Eligibility may be met by applicants who have taken equivalent courses, upgrading, completed their GED, and equivalency testing. For complete details refer to: www.georgiancollege.ca/admissions/academic-regulations/ (https://www.georgiancollege.ca/admissions/academic-regulations/)

Applicants who have taken courses from a recognized and accredited post-secondary institution and/or have relevant life/learning experience may also be considered for admission; refer to the Credit for Prior Learning website for details: www.georgiancollege.ca/admissions/credit-transfer/ (https://www.georgiancollege.ca/admissions/credit-transfer/)

Selection Process

Grade 11 or 12 Chemistry is recommended, in addition to the required Biology and Physics to support students in this science-based program.

This is a highly competitive program and applicants may be ranked based on academic achievement. For current recommended averages, please refer to the Highly Competitive Program (https://www.georgiancollege.ca/highlycompetitive/) page.

Criminal Reference/Vulnerable Sector Check

Placement agencies require an up-to-date clear criminal reference check and vulnerable sector check prior to going out on placement. Students should obtain their criminal reference three months prior to placement; checks conducted earlier may not be considered current. As some jurisdictions require longer lead-time for processing, please check with the program coordinator to ensure you allow for sufficient turn-around time. It is the student's responsibility to provide the completed document prior to placement start.

NOTE: Individuals who have been charged or convicted criminally and not pardoned will be prohibited from proceeding to a clinical or work placement.

Bring Your Own Device (BYOD) requirements

All Georgian College students are required to bring their own device (BYOD) (https://georgiancollege.ca/byod/) that meets the technology requirements (https://georgiancollege.ca/byod/) for their program. Having access to a personal laptop that meets your program's technical requirements will ensure you're prepared for in-class, online and hybrid learning activities. Students are responsible for the cost, software installation, maintenance and repair of their device.

Graduation Requirements

18 Program Courses
3 Clinical Placements
1 Communications Course
3 General Education Courses

Graduation Eligibility

To graduate from this program, the passing weighted average for promotion through each semester, from year to year, and to graduate is 60%. Additionally, a student must attain a minimum of 50% or a letter grade of P (Pass) or S (Satisfactory) in each course in each semester unless otherwise stated on the course outline.

Program Tracking

The following reflects the planned course sequence for full-time offerings of the Fall intake of the program. Where more than one intake is offered contact the program co-ordinator for the program tracking.

Semester 1		**Hours**
Program Courses		
BIOL 1050	Anatomy and Physiology for Medical Imaging 1	42
IMAG 1000	Patient Care and Management 1	42
IMAG 1010	Medical Imaging Quality	56
IMAG 1011	Medical Imaging Procedures 1	70
IMAG 1012	Radiation Sciences 1	42
Communications Course		
COMM 1016	Communication Essentials	42
General Education Course		
Select 1 course from the General Education list during registration.		42
	Hours	**336**
Semester 2		
Program Courses		
BIOL 1051	Anatomy and Physiology for Medical Imaging 2	42
IMAG 1004	Patient Care and Management 2	42
IMAG 1005	Professional Practice	28
IMAG 1013	Medical Imaging Procedures 2	70
IMAG 1014	Radiation Sciences 2	42
IMAG 1015	Radiation Protection and Radiobiology	28
General Education Course		
Select 1 course from the General Education list during registration.		42
	Hours	**294**
Semester 3		
Program Courses		
BIOL 2031	Pathology for Medical Imaging	42
BIOL 2032	Sectional Anatomy for Medical Imaging	42
IMAG 2010	Pre-Clinical Foundations Theory	56
IMAG 2011	Pre-Clinical Foundations Lab	56
IMAG 2012	Medical Imaging Procedures 3	42
REAS 2004	Research Principles for Medical Imaging	42
General Education Course		
Select 1 course from the General Education list during registration.		42
	Hours	**322**
Semester 4		
Clinical Placement		
IMAG 2013	Medical Radiation Clinical Practicum 1	400
	Hours	**400**
Semester 5		
Clinical Placement		
IMAG 3003	Medical Radiation Clinical Practicum 2	450
	Hours	**450**
Semester 6		
Program Course		
IMAG 3004	Medical Radiation Consolidation	42
Clinical Placement		
IMAG 3005	Medical Radiation Clinical Practicum 3	400
	Hours	**442**
	Total Hours	**2244**

Graduation Window

Students unable to adhere to the program duration of three years (as stated above) may take a maximum of six years to complete their credential. After this time, students must be re-admitted into the program, and follow the curriculum in place at the time of re-admission.

Disclaimer: *The information in this document is correct at the time of publication. Academic content of programs and courses is revised on an*

ongoing basis to ensure relevance to changing educational objectives and employment market needs.

Program outlines may be subject to change in response to emerging situations, in order to facilitate student achievement of the learning outcomes required for graduation. Components such as courses, progression, coop work terms, placements, internships and other requirements may be delivered differently than published.