

MEDICAL RADIATION TECHNOLOGY (MRPG)

Gain the necessary skills for the physical and mental demands of an MRT career

Master the science and art of capturing and analyzing the inner structure of the human body. As a medical radiation technologist (MRT) student, areas of study will include anatomy and physiology, procedures and protocols, patient care, pathology, and imaging concepts. Through the program, you'll also demonstrate proficiency in general radiographic procedures, and fluoroscopy and CT scanning in radiographic and patient simulation labs. Simulation and scenario labs are used to demonstrate and perform venipuncture insertion, intravenous therapy and emergency procedures.

This profession requires you to be in good physical health with the ability to assist patients with transfer, move portable imaging equipment, and have strong visual and hearing acuity. During this intense program, you'll gain essential competency skills and knowledge, including a full-year placement at a hospital. During clinical placement there is an emphasis on the demonstration of team member, problem solving, and critical thinking skills. You'll be prepared to confront trauma, operating room procedures, and other challenging patient conditions.

Program highlights

- Limited enrolment
- Hands-on experience in radiographic and patient simulation labs
- Three consecutive semesters of training at an affiliated hospital site in Canada
- Grads are eligible to write the Canadian Association of Medical Radiation Technologists (CAMRT) certification exam to become registered to practice throughout the country
- Accredited by Accreditation Canada

Program of study for 2025-26 Academic Year

Semester 1		Credits
BIO 1005	Radiographic Skeletal Anatomy	2
BIO 1025	Medical Imaging Anatomy and Physiology I	3
ENG 1121	Research & Writing/Health Sciences	3
MRT 1104	Radiation Sciences	3
MRT 1121	Medical Radiation Lab Practice I	2
MRT 1120	Imaging Principles and Concepts I	3
MRT 1144	Radiographic Procedures I	6
Credits		22
Semester 2		
BIO 1026	Medical Imaging Anatomy and Physiology II	3
HEA 1022	Canadian Health Care	3
MRT 1241	Intro to Health Research	3
MRT 1005	Digital Imaging and PACS	3
MRT 1022	Medical Radiation Lab Practice II	2
MRT 1244	Radiographic Procedures II	5
One General Education course. ¹		3
Credits		22

Semester 3		
MRT 1150	Patient Management I	2
MRT 1201	Radiographic Pathology I	3
MRT 1210	Dedicated Radiographic Equip	3
MRT 2344	Radiographic Procedures III	5
MRT 1023	Medical Radiation Lab Practice III	2
MRT 2370	X-Ray Safety and QC	4
One General Education course. ¹		3
Credits		22
Semester 4		
BIO 1006	Cross Sectional Anatomy	3
MRT 1004	Clinical Preparation	4
MRT 2310	Computed Tomography Princ/Pro	3
MRT 2350	Patient Management II	4
MRT 2340	Health Legis. & Professional Pract	3
MRT 1202	Radiographic Pathology II	3
One General Education course. ¹		3
Credits		23
Semester 5		
MRT 1006	Clinical Practicum I	13
MRT 3511	Medical Radiation Technology Theory Review I	3
Credits		16
Semester 6		
MRT 1007	Clinical Practicum II	13
MRT 3512	Medical Radiation Technology Theory Review II	3
Credits		16
Semester 7		
MRT 1008	Clinical Practicum III	13
Credits		13
Total Credits		134

¹ For more information regarding General Education courses, click here (<https://cambriancollege.ca/general-electives/>).

Admission requirements

For graduates of the new curriculum (OSS): Ontario Secondary School Diploma (30 credits) or equivalent or mature student status, including:

- Any grade 12 English (C) or (U)
- Any grade 12 mathematics (C), (U), or (M)
- Any grade 12 biology (U), or chemistry (C) or (U), or introductory kinesiology (U)
- Any grade 12 physics (C) or (U)

Please note: A minimum of 75% is required in each prerequisite course

Additional admission requirements

Requirements for clinical placement

The following requirements must be met prior to the start of clinical training.

- Respiratory Mask Fit testing
- WHMIS training

- CPR Level Basic Life Support (BLS)
- Standard First Aid Course Certificate
- Police record check with vulnerable sector search
- AODA (Accessibility for Ontarians with Disabilities Act)
- Worker Health and Safety Awareness in Four Steps
- Proof of vaccination and/or immunization for measles, mumps, rubella, varicella, polio, hepatitis B, tetanus/diphtheria/pertussis, and COVID-19
- Influenza vaccination, when available
- Tuberculosis screening

Recommendations

- Computer competency in relevant software

Note: Cambrian's Pre-Health Sciences Pathway to Advanced Diplomas and Degrees (PHPG) program can also provide you with the necessary requirements for application to limited enrolment health programs. The minimum grades required for successful admission will be determined by the quality and quantity of the applicant pool. Limited enrolment programs are identified within the detailed program descriptions.

Program delivery

2025-2026

Fall term start

SEMESTER 1: Fall 2025
 SEMESTER 2: Winter 2026
 SEMESTER 3: Fall 2026
 SEMESTER 4: Winter 2027
 SEMESTER 5: Fall 2027
 SEMESTER 6: Winter 2028
 SEMESTER 7: Spring 2028

Accreditation

The Medical Radiation Technology program's six-year accreditation status is honoured by Accreditation Canada.

Registration to practice / additional testing

Graduates of the program are eligible to write the national certification examination established by the Canadian Association of Medical Radiation Technologists (CAMRT).

The College of Medical Radiation and Imaging Technologists of Ontario (CMRITO) is the regulatory body for radiological technologists in Ontario. Successful attainment of licensure also qualifies graduates to register with the CMRITO, which is a requirement to practice in Ontario.

Specific program pathway

Furthering your studies

Students successfully completing the Medical Radiation Technology program may be eligible to further their studies in Cambrian's one-year Magnetic Resonance Imaging (MRI) – Graduate Certificate program (<https://cambriancollege.ca/programs/magnetic-resonance-imaging/>). There are also post-graduate certificate program opportunities in multiple imaging modalities available to graduates of this program.

College or university degree opportunities

If you are a graduate of this program, you may continue your studies at a college or university and you may receive credit(s) for your prior college education. Refer to Cambrian's college and university agreement

(<https://cambriancollege.ca/supports-services/articulation-agreements/universities-in-canada/>) details for further information.

Employment opportunities

Graduates are prepared for employment opportunities as:

- Medical radiation technologists in diagnostic imaging departments in hospitals and independent health facilities.

Contacts

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INTERNATIONAL ADMISSIONS

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