



REQUIREMENTS FOR THE 4-YEAR BSc (RADIATION THERAPY)

This program is a joint diploma/degree program offered in partnership with CancerCare Manitoba.

Note: The "CCMB" department code used below indicates courses taught through CancerCare Manitoba.

MAJOR REQUIREMENTS: Minimum of 102 credit hours as per the courses listed below.

Year One Pre-Radiation Therapy:

- BIOL-1112(6) Human Anatomy and Physiology
STAT-1501(3) Elementary Biological Statistics I
PHYS-1301(6) Introduction to Physics
SOC-1100(3) Introduction to Sociology I &
SOC-1102(3) Introduction to Sociology II or PSYC-1000(6) Introductory Psychology

Plus 3 credit hours of academic writing or 1st Year English (not included in the 102 credit hours listed)

Entry into Radiation Therapy Program at Year Two

Year II-IV are full time study:

- CCMB-2902(3) Clinical Radiation Oncology I
CCMB-2903(3) Treatment Planning and Dosimetry I
CCMB-2520(3) Physics of Radiation Therapy
PHYS-2305(3) Medical Imaging (UW campus)
PHIL-2202(3) Health Care and Bioethics (UW campus)
CCMB-2901(3) Professional Practice & Patient Care I
CCMB-2912(3) Clinical Radiation Oncology II
CCMB-2913(3) Treatment Planning & Dosimetry II
CCMB-2540(3) Radiation Protection and Health Physics
CCMB-2550(3) Technology and Biology in Radiation Therapy

- CCMB-2904(3) Clinical Education I
CCMB-2911(3) Professional Practice & Patient Care II

Year III

- CCMB-3914(6) Clinical Education II
CCMB-3901(3) Directed Studies I
CCMB-2924(6) Clinical Education III
CCMB-3903(3) Directed Studies II

Year IV

- CCMB-2560(3) Advances in Radiation Therapy
CCMB-3934(6) Clinical Education IV
CCMB-3944(6) Clinical Education V
CCMB-4902(3) Independent Studies

Degree Completion:

- SOC-2126(3) Research Design & Qualitative Research Methods
SOC-3102(6) Sociology of Medicine
KIN-1601(3) Nutrition for Health and Wellness

Plus additional credit hours to meet the general degree requirements outlined below.

GENERAL 4-YEAR BSc DEGREE REQUIREMENTS

ADMISSION REQUIREMENT:

Students must complete the Qualifying Year of course (minimum 24 credit hours) in order to be eligible to apply to the program, and then be successful in the selection process.

GRADUATION REQUIREMENT:

120 credit hours

RESIDENCE REQUIREMENT:

- Degree: Minimum 60 credit hours.
Major: Minimum 30 credit hours.

GENERAL DEGREE REQUIREMENT:

- Humanities: Minimum 12 credit hours.
Writing: Minimum 3 credit hours of Academic Writing.
Indigenous: 3 credit hours in designated Indigenous requirement courses

Maximum Introductory Courses: Students may use a maximum of 42 credit hours at the 1000 level. Of these, a maximum of 6 credit hours may be below the 1000 level.

As a result, students must take a minimum of 78 credit hours at the 2000 level or above in order to not exceed the maximum number of introductory courses.

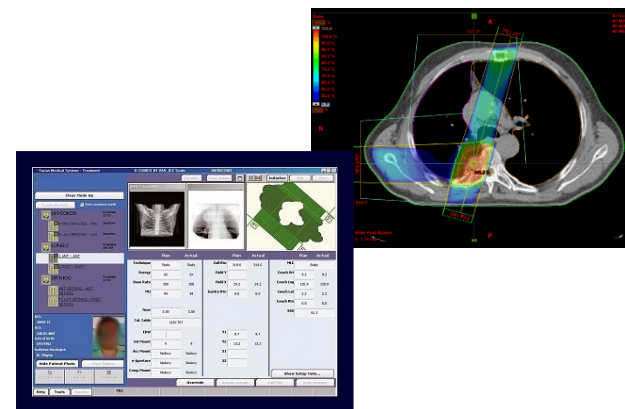
Distribution: Minimum three (3) credit hours from each of five (5) different subjects.

This is a competency based program, therefore courses include the concepts and theories behind radiation therapy (including physics, radiation biology and protection and imaging), patient care and professional practice. In clinical placements students work side-by-side with practicing radiation therapists to learn the skills and attitudes required to be successful in this career.

To find out more about this profession and the Radiation Therapy program, visit www.cancercare.mb.ca/For-Health-Professionals/school-of-radiation-therapy

or contact the School of Radiation Therapy at CancerCare Manitoba at 204-789-0909.

School of Radiation Therapy



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Winnipeg, Manitoba R3E 0V9
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IS A CAREER IN RADIATION THERAPY FOR YOU?

Your Job as a Radiation Therapist is to **prepare, plan** and **deliver radiation therapy treatments** to cancer patients requiring radiation therapy.

You are responsible to:

- Prepare and position patients for radiation therapy treatments.
- Operate or assist in the operation of a wide variety of equipment used to prepare and deliver radiation therapy treatments including treatment units, simulators, film processors, treatment planning computers, etc.
- Generate dose distributions to determine the most appropriate treatment plan for a patient.
- Perform calculations relevant to planning and the delivery of treatment, verify calculations performed by other therapists.
- Ensure accuracy in the performance of all phases of radiation therapy treatment preparation and delivery. Ensure that all phases are documented to create a detailed record of the patient treatment.
- Carry out quality control checks on equipment, reporting any deficiencies to the proper personnel for action.
- Prepare casts, moulds, shells and beam shaping devices for radiation therapy.
- Provide patient care with dignity and respect for the individual.
- Provide explanations to patients regarding the specific procedures with clear explanations on anticipated reactions, which may occur, offering information on the care to minimize the reaction.
- Monitor patients' reactions to treatment and changes in physical or mental status, reporting change to the appropriate person.
- Keep familiar with regulation changes re: radiation health and safety for self, patients and visitors.
- Assist in teaching and evaluating students.
- Provide emergency, after-hours treatment to patients when required.

You will be employed by:

Cancer treatment centers in Manitoba (Winnipeg and Brandon) and across Canada. Other opportunities include education, management, commercial sales and research.

You earn: \$72,000 to \$90,000+ per year (Manitoba Rates)

The profession offers the following rewards:

Problem Solving: Radiation Therapists are instrumental in planning and administering radiation treatments to cancer patients. Since people are different shapes and sizes with various limitations and status of disease, the treatment approach must be customized. This often involves overcoming obstacles. Top performers enjoy adapting and using their math and physics problem solving skills to provide radiation treatments with appropriate standards.

Helping People: The primary focus of this position is to prepare, plan and administer radiation treatments to cancer patients. Radiation Therapists take pride in the fact that their efforts can have a significant impact on the lives of their patients.

Variety: This profession requires one to work with other health care professionals and patients as well as use a broad knowledge base to perform their duties. This allows one to utilize both interpersonal skills and technical aptitudes. Different areas within the Radiation Therapy department depend on different skills.

Continuous Improvement: Successful Radiation Therapists are encouraged to improve their personal performance. The opportunity exists to get involved in special projects, research, education, attend conferences or seminars and to take on leadership roles.

Team Work: Radiation Therapists utilize their communication and interpersonal skills to work together as a team to provide the best possible care and treatment to the patient.

This profession has the following challenges:

Stress: Radiation Therapists often work under stressful conditions to meet deadlines. There is a high workload due to the number of patients requiring treatment, and there can be emotional stress when dealing with patients whose cancer is not responding well to treatment. Successful Radiation Therapists find that relating effectively with co-workers, family and friends and maintaining a healthy lifestyle can be helpful.

Variety: Successful Radiation Therapists enjoy the variety that is inherent when dealing with different people, thus helping to avoid the monotony, which can sometimes occur due to the repetitive nature of the daily technical tasks.

Opportunity for Advancement: This profession is extremely specialized which limits opportunity for employment to major cities that have a cancer center. Since the number of employers is limited, so is the number of senior positions; therefore opportunity for advancement may also be limited. Radiation Therapists get satisfaction from contributing to the team.

Physical Requirements: Standing and walking as well as lifting and moving patients and equipment are an integral part of the position, as well as repetitive motions. Radiation Therapists find that the physical requirements can be demanding. Maintaining a healthy lifestyle allows this to be very manageable.

The four-year program includes the following:

Year One:

Specific university/college courses are required to be successfully completed before applying for entry into Year Two of the Radiation Therapy program. These courses can be taken at The University of Winnipeg, or at any accredited educational college or university that is recognized by The University of Winnipeg. Potential candidates apply through The University of Winnipeg for entry into Year Two of Radiation Therapy programming.

Years Two – Four:

After the selection process is complete, students are registered in the Radiation Therapy diploma/degree program. Programming for Years Two-Four is offered through CCMB in dedicated classroom space adjacent to CCMB's main site located near Health Sciences Centre. Clinical education is provided at the main site with additional (limited) opportunity through the Western Manitoba Cancer Centre in Brandon during Year Four.

Students complete the requirements for a diploma through CCMB, enabling access to the Canadian Association of Medical Radiation Technologists national certification exams. Additional courses offered through The University of Winnipeg will complete their four-year Science degree in Radiation Therapy and enable access to the American Registry of Radiologic Technologists as well as other career and educational opportunities. These courses may also be taken concurrently to the CCMB courses offered during Years Three and Four.

