



PRE-PROFESSIONAL STUDIES

## PRE-RADIATION THERAPY/ RADIATION THERAPY

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Radiation Therapists are involved in the planning, simulation and delivery of radiation treatments to patients who have diseases such as cancer. Therapists also perform patient assessments and provide education and emotional support to patients throughout their treatment.

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Radiation Therapists work as members of a team to deliver integrated care to patients. Working in both treatment planning and delivery, they are responsible for developing treatment plans and for the operation of CT simulators, treatment machines and other related equipment. They maintain patient treatment data, interpret treatment plans, administer prescribed treatment, and provide information and support to patients.

The joint program leads to a **Diploma in Radiation Therapy** from CancerCare Manitoba (CCMB) and a **Bachelor of Science degree (4-year)** from The University of Winnipeg. Students complete the requirements for a diploma through CCMB, enabling access to the Canadian Association of Medical Radiation Technologists certification exams. Students will complete their 4-year Science degree in Radiation Therapy at The University of Winnipeg, which will enable their access to the American Registry of Radiologic Technologists certification exam as well as other career and educational opportunities.

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### SAMPLE CAREERS

Radiation Therapists are employed by hospitals and clinics. The demographics of the Canadian population are reflected in this work force; the number of retirements is expected to increase in the next 5-10 years while the demand for services will also increase with the aging population.

### YOUR EDUCATION

**Pre-Radiation Therapy** - You must *first* complete 24 credit hours, including these courses:  
**BIOL-1112(6) Human Anatomy and Physiology**  
**STAT-1501(3) Elementary Biological Statistics I**  
**PHYS-1301(6) Introduction to Physics OR PHYS-1101(6) Foundation of Physics**  
**SOC-1101(6) Introduction to Sociology OR PSYC-1000(6) Introduction to Psychology** (Sociology preferred)

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**\*RHET-1103(3) Academic Writing: Science or any other section of Academic Writing OR 3 credit hours of first-year English (ENGL).** \* All students should take Academic Writing, unless they have received an Academic Writing waiver, in which case they should take first-year English.

CHEM-1111(3) Introduction to the Chemical Properties of Matter and CHEM-1112(3) Basic Principles of Chemical Reactivity are **recommended** (but not required) to keep your options open with other programs. CLAS-2850(3) Medical Terminology is also recommended and would reduce additional pre-requisite work that is required to be completed by accepted students into the program.

**NOTE:** Completion of Pre-Radiation Therapy courses does not guarantee admission to Radiation Therapy.

### **Admission to 2nd YEAR of Radiation Therapy – CCMB Diploma Component**

Students must apply for admission to the Radiation Therapy (RT) program **by March 1<sup>st</sup>** of the year in which their Pre-Radiation Therapy requirements are to be completed. Manitoba students apply through UWinnipeg and completed applications are forwarded to the CCMB Selection Committee.

**NOTE:** Eight or fewer students are accepted into the 2nd year of Radiation Therapy each year.

CCMB-RT Specific Programming is scheduled in blocks of time over three academic years. These components are offered in dedicated classroom space adjacent to CCMB's main site located by Health Sciences Centre. Through clinical education students become proficient in the operation of linear accelerators, CT simulators, and other equipment used in providing radiation therapy services. Clinical placements in the final year of the program include mandatory attendance at the Western Manitoba Cancer Centre in Brandon. For details, students should refer to the School of Radiation Therapy website: [http://www.cancercare.mb.ca/home/health\\_care\\_professionals/school\\_radiation\\_therapy/](http://www.cancercare.mb.ca/home/health_care_professionals/school_radiation_therapy/).

After successful completion of CCMB-RT programming, students receive a diploma from CCMB/UWinnipeg. Students can concurrently pursue the 4-year BSc in Radiation Therapy at UWinnipeg by completing the final required courses and electives (36 credit hours). See the *Academic Calendar* for specific courses.

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## **REQUIRED HIGH SCHOOL COURSES**

To apply for Pre-Radiation Therapy, you must meet The University of Winnipeg's general admission requirements, plus have either **Pre-Calculus Mathematics 40S** or **Applied Mathematics 40S**. Chemistry 40S and Physics 40S are recommended.

## **HOW TO APPLY**

**This is not a direct-entry program.** Students must first complete 24 credit hours of Pre-Radiation coursework and then apply for admission to the Radiation Therapy program through UWinnipeg. A selection process by CCMB will determine a short-list and select final candidates.

Only Manitoba residents and international students who are already enrolled at UWinnipeg are eligible for this program. Residents of other provinces in Canada should consult universities in their home province for RT programs.

Step 1: Apply to The University of Winnipeg for general admission: [uwinnipeg.ca/apply](http://uwinnipeg.ca/apply)

**Note:** Current students at UWinnipeg in the Pre-Radiation Therapy stream or another degree program do not pay another application fee when applying.

## **CONTACT US**

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In any case where the University's Academic Calendar and this fact sheet differ, the current Calendar takes precedence.