



PRE-PROFESSIONAL STUDIES

# PRE-RADIATION THERAPY/ RADIATION THERAPY

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The Radiation Therapy program prepares you for a career as a Radiation Therapist, an essential member of a radiation oncology team that treats cancer patients. Radiation Therapy primarily uses high energy x-rays to kill cancer cells and is delivered from a machine outside the body or placed inside the body.

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Radiation Therapists calculate the radiation plan and operate advanced technology and imaging equipment to ensure the treatment is delivered accurately. Radiation Therapists also perform patient assessments and provide education and emotional support to patients and their supporters.

The joint program in Radiation Therapy leads to a **Diploma in Radiation Therapy** from CancerCare Manitoba (CCMB) and a **Bachelor of Science degree (4-year)** from The University of Winnipeg. Completion of the program allows you to write CAMRT National certification exams to qualify for registry.

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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 a minimum of 24 credit hours, including these courses:  
**BIOL-1112(6) Human Anatomy and Physiology**  
**STAT-1501(3) Elementary Biological Statistics I**  
**PHYS-1101(6) Foundations of Physics (preferred) or PHYS-1301(6) Introduction to Physics**  
**SOC-1100(3) Introduction to Sociology I and SOC-1102 (3) Introduction to Sociology II OR** the former SOC-1101(6) **OR PSYC-1000(6) Introduction to Psychology (Sociology preferred)**  
**RHET-1103(3) or RHET-1105(3) Academic Writing** or any other section of Academic Writing (if required)  
**OR 3 credit hours of first-year English (ENGL)**

**Note:** Academic Writing is a degree requirement. All students should take Academic Writing, unless they have received an Academic Writing waiver, in which case they should take first-year English.

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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 of the year in which their Pre-Radiation Therapy requirements are to be completed. 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 <https://www.cancercare.mb.ca/For-Health-Professionals/school-of-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.

## **STUDY PATTERN**

Students complete their diploma at CancerCare Manitoba and their degree at UWinnipeg, as follows:

Year 1 – The University of Winnipeg

Year 2-4 – CancerCare Manitoba and The University of Winnipeg

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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.

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.

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

## **CONTACT US**

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