

Combined Laboratory & X-Ray Technology

2-Year Diploma

Launch a rewarding healthcare career with dual training in laboratory testing and diagnostic imaging. This hands-on program prepares you to make a real impact in community hospitals and rural health centres across Manitoba.

PROGRAM LEARNING OUTCOMES

- ▶ Perform specimen procurement and processing (e.g., venipuncture, body fluids) using correct identification, labelling, handling, and transport protocols to ensure specimen integrity and patient safety.
 - ▶ Apply foundational knowledge of anatomy, physiology, pathophysiology, radiographic principles, and medical terminology to interpret orders and support patient-centred laboratory and imaging services.
 - ▶ Operate laboratory analyzers and equipment (e.g., centrifuges, microscopes) and general radiographic systems (CR/DR, fixed and mobile) in accordance with manufacturer instructions, institutional procedures, and safety standards.
 - ▶ Perform pre-analytical, analytical, and post-analytical laboratory procedures within the CLXT scope (e.g., hematology, chemistry, transfusion science, urinalysis), by validating and correlating results and acting on critical values.
 - ▶ Acquire general diagnostic radiographs and electrocardiograms (stationary or mobile units) by verifying identity/consent, positioning safely (including trauma/limited mobility/pain/distress), selecting technique factors, and evaluating image quality prior to transmission for interpretation.
- For a full list of program learning outcomes, visit assiniboine.net/CLXT.

YOU MIGHT BE A GOOD FIT FOR THIS PROGRAM IF YOU:

- ▶ Enjoy helping people and contributing to patient care
 - ▶ Are comfortable working directly with patients of all ages
 - ▶ Are comfortable working with blood and other bodily specimens
 - ▶ Have strong attention to detail and value accuracy in your work
 - ▶ Can follow strict safety protocols and procedures
 - ▶ Are interested in medical science, anatomy, or diagnostic testing
 - ▶ Communicate effectively and professionally in team environments
- For a full list of success factors, visit assiniboine.net/CLXT.



Campus/Delivery Options
Victoria Avenue East campus



Available Intakes
September 2027



Industry Work Experience
Practicum (29 weeks)

EXPECTATIONS

Program and Industry

- ▶ Attend class in-person for full-time hours (27-36 hours depending on term)
- ▶ Work in clinical laboratories and diagnostic imaging areas with potential exposure to ionizing radiation, infectious materials, sharps, and chemical hazards.
- ▶ Demonstrate strong technical abilities including fine motor control, good manual dexterity, visual acuity, and accurate colour discrimination
- ▶ Stand or sit for extended periods and complete repetitive fine-motor tasks (e.g., phlebotomy, microscopy, image acquisition).
- ▶ Position, transfer and immobilize patients safely to obtain quality radiographic images while applying radiation-protection practices.
- ▶ Collect and process specimens directly from patients (venipuncture/capillary) and perform ECGs with professionalism, empathy and clear communication.
- ▶ Wear personal protection equipment (PPE) and follow infection-control and Workplace Hazardous Materials Information System (WHMIS) procedures; handle and dispose of hazardous and biohazardous materials appropriately.
- ▶ Follow precise protocols and perform tasks accurately under time pressure
- ▶ Maintain patient confidentiality and uphold professional codes of conduct while collaborating within interprofessional teams and diverse patient populations.
- ▶ Adapt to evolving technologies and rotating schedules (including early mornings, evenings, weekends, on-call)
- ▶ Be ready for rural/independent practice settings.

CAREER OPPORTUNITIES

A versatile practitioner trained in both laboratory testing (hematology, chemistry, and blood bank) and diagnostic imaging (X-ray). CLXTs are especially critical in rural or smaller healthcare settings where access to multiple specialists is limited. Their dual skill set allows facilities to offer both lab and imaging services efficiently, ensuring patients receive timely diagnostics without needing to travel, thereby improving access to care.

ADMISSION REQUIREMENTS

Competitive Entry

- ▶ Letter of Intent
- ▶ CASPer 2 test score

Academic Requirements

- ▶ A complete Manitoba Grade 12 or equivalent
 - English 40G/40S or equivalent with a minimum mark of 70%
 - Pre-Calculus, Applied or Essential Math 40S or equivalent with minimum mark of 70%
 - Biology 30S and 40S or equivalent with a minimum mark of 70%
 - Chemistry 40S or equivalent with a minimum mark of 70%

Note: Post-secondary level courses may be used to satisfy subject prerequisites.

Once offered conditional acceptance, you will be required to submit:

- ▶ Current Criminal Record Check (with Vulnerable Sector Check)
- ▶ Current Child Abuse Registry Check
- ▶ Current Adult Abuse Registry Check
- ▶ Immunizations – refer to website for more information