

Area of Interest: Health Sciences

## Medical Device Reprocessing

Ontario College Certificate

Program Code: 1619X01FWO

1 Year

Ottawa Campus

### Our Program

**Dedicate your career to creating a safe place for healthcare teams and their patients.**

Medical Device Reprocessing is a unique Ontario College Certificate program that combines theory, lab practice, simulation and hands-on experience.

This one-year program prepares you to apply principles of infection prevention and proper handling of reusable patient care equipment in healthcare settings.

As a student, you explore various areas including:

- human anatomy
- medical terminology
- patient interventions
- employee and patient safety

Gain manual dexterity by practising with equipment and surgical instrumentation in simulation labs as well as operating equipment in clinical healthcare settings. Collectively, these practices will prepare you for work in the healthcare field.

Benefit from more than 130 hours of clinical practice, which provides the opportunity for integrating theory and principles into hands-on practice.

Laboratory and clinical placement hours completed in the program may be used towards the prerequisite hours required to write the CMDRT exam.

Upon graduating, you may find work in healthcare facilities, which may include:

- hospital medical device reprocessing departments
- public and private clinics
- dental clinics
- surgical centres

### SUCCESS FACTORS

This program is well-suited for students who:

- Possess excellent oral and written communication skills
- Have an interest in the healthcare field.
- Are flexible and want to work in an environment with high standards of professionalism.
- Enjoy the challenges of working in a team setting.
- Have manual dexterity and are process and detail oriented.

- Are able to handle physically demanding tasks.

## Employment

Graduates may seek employment opportunities as medical device reprocessing technicians.

## Learning Outcomes

The graduate has reliably demonstrated the ability to:

- Apply principles of microbiology and infection prevention and control in the reprocessing of patient care equipment, medical devices and instrumentation.
- Sort and perform inspections and tests on patient care equipment, medical devices, instruments and endoscopic equipment for cleanliness and function.
- Calculate appropriate amounts of disinfecting and sterilizing agents used in common reprocessing machines.
- Prepare, package and sterilize appropriate multi-use medical devices and surgical instrumentation required for specific operations.
- Manage load, operate and troubleshoot steam and low temperature sterilizers and automatic endoscopic reproprocessors in accordance with critical parameters and quality assurance processes.
- Store, inventory, transport and distribute medical devices, instruments and endoscopic equipment to maintain sterile integrity.
- Recognize and respond appropriately to occupational health and safety hazards or events.
- Document quality assurance processes and respond appropriately to non-compliant reprocessing events.
- Operate and troubleshoot medical device reprocessing equipment safely.
- Communicate effectively using medical terminology and follow written department policies and standard operating procedures.
- Identify and apply discipline-specific practices that contribute to the local and global community through social responsibility, economic commitment and environmental stewardship.

## Program of Study

Level: 01	Courses	Hours
ENL1813S	Communications I	42.0
HLT0210	Infection Control for Healthcare	42.0
HLT0211	Introduction to Medical Device Reprocessing	42.0
HLT0212	Medical Device Reprocessing Lab Skills I	42.0
HLT0213	Medical Device Reprocessing Clinical I	40.0
HLT0214	Surgical Instruments and Decontamination	42.0
HLT0226	Anatomy and Physiology for Medical Device Reprocessing	42.0
Level: 02	Courses	Hours
HLT0215	Packaging and Sterilization	40.0

HLT0216	Inventory Management, Storage and Distribution	40.0
HLT0217	Endoscope Reprocessing	45.0
HLT0218	Medical Device Reprocessing Lab Skills II	40.0
HLT0219	Medical Device Reprocessing Clinical II	96.0
<b>Choose one from equivalencies: Courses</b>		<b>Hours</b>
GED1619	General Education Elective	42.0

## Fees for the 2023/2024 Academic Year

Tuition and related ancillary fees for this program can be viewed by using the Tuition and Fees Estimator tool at <https://www.algonquincollege.com/fee-estimator> .

Further information on fees can be found by visiting the Registrar's Office website at <https://www.algonquincollege.com/ro> .

Fees are subject to change.

Additional program related expenses include:

- Books and supplies cost approximately \$500.

## Admission Requirements for the 2024/2025 Academic Year

### College Eligibility

- Ontario Secondary School Diploma (OSSD) or equivalent. Applicants with an OSSD showing senior English and/or mathematics courses at the Basic Level, or with Workplace or Open courses, will be tested to determine their eligibility for admission; OR
- Academic and Career Entrance (ACE) certificate; OR
- General Educational Development (GED) certificate; OR
- Mature Student status (19 years of age or older and without a high school diploma at the start of the program). Eligibility may be determined by academic achievement testing for which a fee of \$50 (subject to change).

### Program Eligibility

- English, Grade 12 (ENG4C or equivalent)
- Applicants with international transcripts must provide proof of the subject-specific requirements noted above and may be required to provide proof of language proficiency. Domestic applicants with international transcripts must be evaluated through the International Credential Assessment Service of Canada (ICAS) or World Education Services (WES).
- IELTS-International English Language Testing Service (Academic) Overall band of 6.0 with a minimum of 5.5 in each band; **OR** TOEFL-Internet-based (iBT)-overall 80, with a minimum of 20 in each component: Reading 20; Listening 20; Speaking 20; Writing 20; **OR** Duolingo English Test (DET) Overall 110, minimum of 110 in Literacy and no score below 95.

Not sure if you meet all of the requirements? Academic Upgrading may be able to help with that: <https://www.algonquincollege.com/access/> .

### International Applicants:

International applicants who meet the program eligibility requirements are required to complete preparatory courses (4-months in duration): Introduction to Canadian Health Studies (ICHS). Students who successfully complete the introduction will then proceed to their original health program of choice. The ICHS requires applicants to submit an academic IELTS score.

Please click this link for more information:

<https://www.algonquincollege.com/healthandcommunity/ICHS>

### **Police Records Check Documentation:**

Though not an admission requirement, applicants must note important information listed below regarding Police Record Check program requirements.

Students must provide the College with a current Police Records Check (PRC) prior to the deadline identified by the department and students are responsible for any associated costs. If this documentation is not submitted on time, students may not be placed and registration in the program will be jeopardized. If you register in the program without a clear PRC and as a result are unable to participate in placement, you will not be able to graduate and will be asked to withdraw.

### **Field Placement Eligibility:**

Field placements occur in first and second semester of the program.

Hospital and Field Placements/Outreach require Health and Safety, WHMIS and OWSHA training prior to placements. There are additional costs associated with training that should be anticipated by students which are not covered by tuition fees.

To be eligible for placement, you must submit proof of PRC and complete immunizations through ParaMed and pay any associated costs. ParaMed services are the third-party provider who collects all field placement documentation for the School of Health and Community Studies.

Should you require further information, please contact the Program Chair.

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**Application Information****MEDICAL DEVICE REPROCESSING  
Program Code 1619X01FWO**

Applications to full-time day programs must be submitted with official transcripts showing completion of the academic admission requirements through:

ontariocolleges.ca  
60 Corporate Court  
Guelph, Ontario N1G 5J3  
1-888-892-2228

Students currently enrolled in an Ontario secondary school should notify their Guidance Office prior to their online application at <http://www.ontariocolleges.ca/>.

Applications for Fall Term and Winter Term admission received by February 1 will be given equal consideration. Applications received after February 1 will be processed on a first-come, first-served basis as long as places are available.

International applicants please visit this link for application process information:

<https://algonquincollege.force.com/myACint/>.

For further information on the admissions process, contact:

Registrar's Office  
Algonquin College  
1385 Woodroffe Ave  
Ottawa, ON K2G 1V8  
Telephone: 613-727-0002  
Toll-free: 1-800-565-4723  
TTY: 613-727-7766  
Fax: 613-727-7632  
Contact: <https://www.algonquincollege.com/ro>

**Additional Information**

This is a physically demanding profession. Individuals entering this field must be able to undertake moderately heavy lifting of equipment and supplies and pulling/pushing mobile transportation carts. They must be willing to do shift work in a department that operates 24 hours daily and every day of the week.

In order to attend clinical placements, students must have all necessary pre-placement documentation completed. This includes, but is not limited to: immunizations, criminal record check, health and safety training, and possible hospital-specific training. Students must have all pre-placement documentation completed by Week 8 of the Level 01 semester. Students who do not complete their pre-placement documentation in time may not attend their clinical placement and may be unsuccessful in the course. It is strongly suggested that students begin the process of completing their documentation as soon as they are admitted to the program.

Clinical Placements receive large number of students and there may be times during your studies that require you to attend weekend, evening and/or night clinical experiences. Clinical placements may be within the city of Ottawa or throughout the Eastern Ontario region, and students will be required to travel accordingly. All expenses such as travel, parking and accommodation will be the responsibility of the student.

**Contact Information**

**Program Coordinator(s)**

- Melanie Smith, <mailto:smithm8@algonquincollege.com> ,

**Course Descriptions****ENL1813S Communications I**

Communication remains an essential skill sought by employers, regardless of discipline or field of study. Using a practical, vocation-oriented approach, students focus on meeting the requirements of effective communication. Students practise writing, speaking, reading, listening, locating and documenting information, and using technology to communicate professionally. Students develop and strengthen communication skills that contribute to success in both educational and workplace environments.

Prerequisite(s): none  
Corerequisite(s):none

**GED1619 General Education Elective**

For this course, you will have the opportunity to choose from a group of general electives. Your options will include courses which cover the following broad topic areas: Arts in Society, Civic Life, Social and Cultural Understanding, Personal Understanding, and Science and Technology.

Prerequisite(s): none  
Corerequisite(s):none

**HLT0210 Infection Control for Healthcare**

Knowledge of various microorganisms, their biological behaviour and interactions with the host are essential to understanding disease development and infection control measures in healthcare settings. Students recognize normal flora, disease-causing microorganisms and general epidemiological principles. Students explore the rationale for disinfection and aseptic procedures in preventing nosocomial infections.

Prerequisite(s): none  
Corerequisite(s):none

**HLT0211 Introduction to Medical Device Reprocessing**

Personnel working in medical device reprocessing units need to adhere to principles and concepts unique to the healthcare environment. Students explore tenets of the Canadian healthcare system, regulatory bodies and standards of practice. Students learn concepts of ethical behaviour, confidentiality, hospital organization, quality assurance and risk management. Students explore role expectations in the different areas of medical device reprocessing units and review effective work skills including conflict resolution, problem solving, stress and time management, customer service and teamwork in a client-centred healthcare setting.

Prerequisite(s): none  
Corerequisite(s):none

**HLT0212 Medical Device Reprocessing Lab Skills I**

Personnel working in medical device reprocessing units must have strong customer service skills and organizational ability in order to handle and process a variety of items. Students practise communication and customer service skills using basic medical terminology. Students identify and handle different classifications of patient care equipment and surgical instrumentation. Students sort, wash, assemble and wrap basins and other patient care equipment while applying principles of WHMIS and ergonomic work principles.

Prerequisite(s): none  
Corerequisite(s):none

**HLT0213 Medical Device Reprocessing Clinical I**

Clinical practice provides the opportunity for integration of the theory and principles of sterile processing with hands-on practice. Under supervision, students acquire skills in the decontamination, assembly, sterilization and distribution areas in a hospital medical device reprocessing department that prepares them to work in a hospital setting. All students must complete pre-placement documentation (e.g. immunizations, criminal records check, health and safety training) before attending their clinical placement.

Prerequisite(s): none  
Corerequisite(s):none

**HLT0214 Surgical Instruments and Decontamination**

Identification and knowledge of the use of surgical instrumentation and equipment is essential to reprocessing. Students learn categories and names of instruments and how they are disassembled. Students review effective disinfection/decontamination processes, germicidal solutions and equipment required to disinfect/decontaminate patient care equipment and surgical instrumentation. Students learn functions, roles and responsibilities of the sterile supply technician in the decontamination area.

Prerequisite(s): HLT0211  
Corerequisite(s):none

**HLT0215 Packaging and Sterilization**

Appropriate packaging and sterilization of reusable patient care items is essential for safe patient care. Students learn about packaging, sterilization techniques and handling of sterile supplies. Proper documentation and quality assurance monitoring processes are identified.

Prerequisite(s): none  
Corerequisite(s):none

**HLT0216 Inventory Management, Storage and Distribution**

Healthcare institutions purchase and borrow expensive medical devices and surgical instrumentation from distributors and other facilities. This equipment must be properly inventoried and processed. Students explore policies and procedures of storage, distribution, inventory management and distribution. Students learn about quality control processes that must be followed when borrowing equipment.

Prerequisite(s): none  
Corerequisite(s):none

**HLT0217 Endoscope Reprocessing**

Reprocessing personnel must have a thorough understanding of diagnostic and surgical endoscopes and follow standards of practice and hospital policies in the reprocessing of this equipment. Students learn safety and infection control standards of practice in scope reprocessing and the importance of institutional policies. Through hands-on experiences students learn the mechanisms of endoscopic equipment. Students practise cleaning, disinfecting and sterilizing endoscopes with appropriate germicides, sterilants and equipment.

Prerequisite(s): none  
Corerequisite(s):none

**HLT0218 Medical Device Reprocessing Lab Skills II**

Personnel working in medical device reprocessing units must understand the needs of various departments, be able to operate sterilizing equipment and prepare supply carts. Students document and load carts for steam sterilization and practise loading other types of sterilizers. Students assemble case carts using hospital procedural pick lists. Leadership roles and interprofessional communication are practised.

Prerequisite(s): HLT0212  
Corerequisite(s):none

**HLT0219 Medical Device Reprocessing Clinical II**

Clinical practice provides the opportunity for integration of the theory and principles of sterile processing with hands-on practice. Under supervision, students develop their previously aquired skills in the decontamination, assembly, sterilization and distribution areas of a sterile processing department in a variety of settings. All students must complete pre-placement documentation (e.g immunizations, criminal records check, health and safety training) before attending their clinical placement.

Prerequisite(s): HLT0213  
Corerequisite(s):none

**HLT0226 Anatomy and Physiology for Medical Device Reprocessing**

Basic comprehension of medical terminology, human anatomy and physiology is essential when working in patient care settings. Students learn basic anatomy and physiology in normal body structure and functioning. Proper use of medical terminology is practiced through verbal and written communication.

Prerequisite(s): none  
Corerequisite(s):none