

# DIAGNOSTIC MEDICAL SONOGRAPHY

**Program:** SONO

**Credential:** Ontario College Advanced Diploma

**Delivery:** Full-time

**Work Integrated Learning:** 2 Clinical Placements

**Length:** 6 Semesters

**Duration:** 3 Years

**Effective:** Fall 2026

**Location:** Barrie

## Description

Imagine yourself as a compassionate professional and a vital member of a cutting-edge healthcare field. The Diagnostic Medical Sonography program equips you with the knowledge, skills, and experience needed to excel in this rapidly advancing industry. Also known as ultrasound, diagnostic medical sonography utilizes high-frequency sound waves to assess the developing fetus, abdomen, pelvis, and blood vessels. Every patient presents unique needs, and as a student, you develop diagnostic problem-solving abilities and teamwork skills to provide exceptional care. Guided by experienced faculty, you build a strong foundation in anatomy, physiology, pathology, and quality sonographic imaging. Hands-on training in simulation labs prepares you for clinical placements in diverse healthcare settings. Throughout the program, emphasis is placed on interprofessional collaboration, patient safety, effective communication, and high standards of patient care, ensuring you are well-prepared to succeed as a Diagnostic Medical Sonographer.

## Career Opportunities

Diagnostic Medical Sonographers commonly work in:

- community and teaching hospitals
- imaging centres
- urgent care clinics
- ultrasound system industries
- education and research

## Program Learning Outcomes

The graduate has reliably demonstrated the ability to:

1. communicate professionally, ethically and collaboratively with patients, their families, and the healthcare team to foster an environment that encourages patient involvement in their own care;
2. provide individualized patient care with professional conduct and judgment to ensure patient dignity, comfort, and safety;
3. integrate available diagnostic data, patient medical history, and status to formulate sonographic scanning strategies;
4. analyze sonographic data to provide a professional account of the findings for physician interpretation;
5. adhere to established protocols and safety procedures to minimize risk and maintain a safe environment for patients and healthcare providers;

6. perform quality control checks, including equipment maintenance and calibration, to optimize image quality and enhance diagnostic accuracy;
7. perform patient assessments within the scope of recognized practice, roles and responsibilities and according to professional and regulatory bodies while acknowledging professional limitations, to produce diagnostic data;
8. implement infection control practices and respond to the hygiene needs of the patient in accordance with legislation, regulations, and ethical guidelines;
9. incorporate strategies for continual learning in diagnostic medical sonography to enhance practice and support optimal patient care;
10. assess information to adapt scanning techniques in real-time to capture optimal diagnostic images in response to patient conditions;
11. maintain accurate patient records to support clinical decision-making and ensure compliance with ministry guidelines and professional standards.

## External Recognition

Upon completion of this program and pending award of an accreditation status by Accreditation Canada's EQual program, graduates are eligible to write the Sonography Canada certification exams. Upon successful completion of these exams, students are qualified to register with the College of Medical Radiation and Imaging Technologists of Ontario (CMRITO) as a Diagnostic Medical Sonographer and work in a variety of settings.

## Program Progression

The following reflects the planned progression for full-time offerings of the program.

### Fall Intake

- **Sem 1:** Fall 2026
- **Sem 2:** Winter 2027
- **Sem 3:** Summer 2027
- **Sem 4:** Fall 2027
- **Sem 5:** Winter 2028
- **Sem 6:** Summer 2028

## Admission Requirements

- Ontario Secondary School Diploma (OSSD) or equivalent, or mature student status
- Grade 12 English (C or U)
- Grade 12 Mathematics (C, M or U)
- Grade 11 or 12 Biology (C or U)
- Grade 11 or 12 Physics (C or U)

Admission requirements may be met by completing Georgian College's Pre-Health Sciences Pathway to Advanced Diplomas and Degrees certificate (<https://www.georgiancollege.ca/academics/programs/pre-health-sciences/>), or equivalent courses from Academic Upgrading programs offered by Colleges across Ontario.

Mature students, non-secondary school applicants (19 years or older), and home school applicants may also be considered for admission. Eligibility may be met by applicants who have taken equivalent courses, upgrading, completed their GED, and equivalency testing. For complete

details refer to: [www.georgiancollege.ca/admissions/academic-regulations/](http://www.georgiancollege.ca/admissions/academic-regulations/) (<https://www.georgiancollege.ca/admissions/academic-regulations/>)

Applicants who have taken courses from a recognized and accredited post-secondary institution and/or have relevant life/learning experience may also be considered for admission; refer to the Credit for Prior Learning website for details:  
[www.georgiancollege.ca/admissions/credit-transfer/](http://www.georgiancollege.ca/admissions/credit-transfer/) (<https://www.georgiancollege.ca/admissions/credit-transfer/>)

## Selection Process

Grade 11 or 12 Chemistry is recommended, in addition to the required Biology to support students in this science-based program.

This is a highly competitive program. Applicants will be assessed and ranked based on academic grades. The overall minimum GPA is determined annually.

## Criminal Reference/Vulnerable Sector Check

Placement agencies require an up-to-date clear criminal reference check and vulnerable sector check prior to going out on placement. Students should obtain their criminal reference three months prior to placement; checks conducted earlier may not be considered current. As some jurisdictions require longer lead-time for processing, please check with the program coordinator to ensure you allow for sufficient turn-around time. It is the student's responsibility to provide the completed document prior to placement start.

NOTE: Individuals who have been charged or convicted criminally and not pardoned will be prohibited from proceeding to a clinical or work placement.

## Graduation Requirements

25 Program Courses  
 2 Clinical Placements  
 1 Communications Course  
 3 General Education Courses

## Graduation Eligibility

To graduate from this program, the passing weighted average for promotion through each semester, from year to year, and to graduate is 60%. Additionally, a student must attain a minimum of 50% or a letter grade of P (Pass) or S (Satisfactory) in each course in each semester unless otherwise stated on the course outline.

## Program Tracking

The following reflects the planned course sequence for full-time offerings of the Fall intake of the program. Where more than one intake is offered contact the program co-ordinator for the program tracking.

| Semester 1                                                       | Hours |
|------------------------------------------------------------------|-------|
| Program Courses                                                  |       |
| BIOL 1050 Anatomy and Physiology for Medical Imaging 1           | 42    |
| IMAG 1000 Patient Care and Management 1                          | 42    |
| IMAG 1001 Ultrasound of the Abdomen and Superficial Structures 1 | 56    |
| IMAG 1002 Ultrasound Physics and Instrumentation 1               | 42    |
| IMAG 1003 Ultrasound Skills Lab 1                                | 28    |

|                                                                      |             |
|----------------------------------------------------------------------|-------------|
| Communications Course                                                |             |
| Select 1 course from the Communications list during registration.    | 42          |
| General Education Course                                             |             |
| Select 1 course from the General Education list during registration. | 42          |
| <b>Hours</b>                                                         | <b>294</b>  |
| <b>Semester 2</b>                                                    |             |
| Program Courses                                                      |             |
| BIOL 1051 Anatomy and Physiology for Medical Imaging 2               | 42          |
| IMAG 1004 Patient Care and Management 2                              | 42          |
| IMAG 1005 Professional Practice                                      | 28          |
| IMAG 1006 Ultrasound of the Abdomen and Superficial Structures 2     | 56          |
| IMAG 1007 Ultrasound Physics and Instrumentation 2                   | 28          |
| IMAG 1008 Ultrasound Skills Lab 2                                    | 28          |
| IMAG 1009 Ultrasound of the Reproductive System 1                    | 42          |
| General Education Course                                             |             |
| Select 1 course from the General Education list during registration. | 42          |
| <b>Hours</b>                                                         | <b>308</b>  |
| <b>Semester 3</b>                                                    |             |
| Program Courses                                                      |             |
| BIOL 2031 Pathology for Medical Imaging                              | 42          |
| IMAG 2000 Ultrasound of the Abdomen and Superficial Structures 3     | 42          |
| IMAG 2001 Ultrasound Physics and Instrumentation 3                   | 28          |
| IMAG 2002 Obstetrical Ultrasound 1                                   | 56          |
| IMAG 2003 Ultrasound Skills Lab 3                                    | 42          |
| REAS 2004 Research Principles for Medical Imaging                    | 42          |
| General Education Course                                             |             |
| Select 1 course from the General Education list during registration. | 42          |
| <b>Hours</b>                                                         | <b>294</b>  |
| <b>Semester 4</b>                                                    |             |
| Program Courses                                                      |             |
| IMAG 2004 Ultrasound of the Abdomen and Superficial Structures 4     | 42          |
| IMAG 2005 Obstetrical Ultrasound 2                                   | 70          |
| IMAG 2006 Ultrasound Skills Lab 4                                    | 42          |
| IMAG 2007 Ultrasound of the Reproductive System 2                    | 42          |
| IMAG 2008 Vascular Ultrasound                                        | 42          |
| IMAG 2009 Special Topics in Ultrasound                               | 42          |
| <b>Hours</b>                                                         | <b>280</b>  |
| <b>Semester 5</b>                                                    |             |
| Clinical Placement                                                   |             |
| IMAG 3000 Sonography Clinical Practicum 1                            | 550         |
| <b>Hours</b>                                                         | <b>550</b>  |
| <b>Semester 6</b>                                                    |             |
| Program Course                                                       |             |
| IMAG 3001 Sonography Consolidation                                   | 28          |
| Clinical Placement                                                   |             |
| IMAG 3002 Sonography Clinical Practicum 2                            | 550         |
| <b>Hours</b>                                                         | <b>578</b>  |
| <b>Total Hours</b>                                                   | <b>2304</b> |

## Graduation Window

Students unable to adhere to the program duration of three years (as stated above) may take a maximum of six years to complete their credential. After this time, students must be re-admitted into the program, and follow the curriculum in place at the time of re-admission.

**Disclaimer:** The information in this document is correct at the time of publication. Academic content of programs and courses is revised on an ongoing basis to ensure relevance to changing educational objectives and employment market needs.



*Program outlines may be subject to change in response to emerging situations, in order to facilitate student achievement of the learning outcomes required for graduation. Components such as courses, progression, coop work terms, placements, internships and other requirements may be delivered differently than published.*