

# SECTION 14:

## FACULTY OF HEALTH SCIENCES

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### 14.1 Degrees offered

Bachelor of Health Science (Honours) - BHSc (Hons)

- Comprehensive program
- Health Information Management specialization

Bachelor of Health Science (Honours) in Medical Laboratory Science - BHSc (Hons)

Bachelor of Science in Nursing (Honours) - BScN (Hons)

In the Faculty of Health Sciences, students acquire the foundations for excellence in clinical practice along with the lifelong learning, research, teamwork and leadership skills essential for a successful career in the health field. The degree programs in the Faculty of Health Sciences are designed to prepare graduates for rewarding careers in the 21st century.

The faculty provides state-of-the-art technically enhanced laboratories and facilities. Students in the Faculty of Health Sciences will benefit from the university's mobile learning environment (see section 1.2).

The research focus on community health issues is enhanced through partnerships with local hospitals, public health organizations and social service agencies.

## **14.2 Program information - Bachelor of Health Science (Honours) - BHSc (Hons)**

### **14.2.1 General information**

The Bachelor of Health Science (Honours) programs have been designed to meet the needs of undergraduates aspiring to enter a variety of health-related careers or wishing to pursue post-graduate studies.

The Bachelor of Health Science (Honours) is a multi-focused undergraduate degree designed to engage students in the examination of diverse aspects of health and health care delivery and health research. Graduates are positioned to formulate questions related to human health, address technical and theoretical problems, and excel at analytical thinking.

### **14.2.2 Admission requirements**

Current Ontario secondary school students must complete the Ontario Secondary School Diploma (OSSD) with a minimum overall average of 70 percent on six 4U or 4M credits including English (ENG4U) with a minimum grade of 60 percent, biology (SBI4U), and one math (MCB4U or MGA4U or MDM4U). All other applicants should refer to section 4.5 of this calendar for the requirements for their specific category of admission.

### **14.2.3 Careers**

Graduates are equipped with the knowledge and practical skills required for success in many emerging positions currently being developed in the health sector. The interdisciplinary nature of this program allows for many career options. Professional career opportunities and directions for further education may include health management, government, insurance, pharmacy and pharmaceutical industry, health information management, health education, project management, and wellness programming. Graduates may also choose a career in research or pursue graduate studies.

### **14.2.4 Degree requirements**

To be eligible for the BHSc (Hons) degree, students must successfully complete 120 credit hours. Degree and program requirements are subject to change without notice.

The program map below is only a guide and is to be used in combination with proper advising. Students wishing to make changes to their program of study should consult their student advisor. For course descriptions, see section 16.

### **14.2.5 Program details - Comprehensive program**

The Comprehensive program in Health Science provides students with a broad-based education in health science and enables students to build a program that suits their needs. The curriculum provides an opportunity for students to take carefully selected foundation courses and augment their learning with a custom blend of courses from health sciences, science, business and liberal arts. Through the integration of disciplines, students gain an understanding of health from biological, behavioural and population-based perspectives.

## YEAR 1

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### Semester 1 (15 credit hours)

BIOL 1010U Biology I  
CSCI 1800U Computing Tools for Health Sciences\*  
HLSC 1200U Anatomy and Physiology I  
HLSC 1801U Health and Wellness  
Open elective\*

### Semester 2 (15 credit hours)

BIOL 1020U Biology II  
HLSC 1201U Anatomy and Physiology II  
HLSC 1802U Introduction to Health Care Systems  
PSYC 1000U Introductory Psychology  
Open elective\*

## YEAR 2

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### Semester 1 (15 credit hours)

HLSC 2030U Theory and Practice of Interpersonal Communication  
HLSC 2201U Introduction to Health Information Management  
HLSC 2460U Pathophysiology I  
HLSC 2801U Health, Illness and Therapeutics  
Open elective\*

### Semester 2 (15 credit hours)

HLSC 2501U Health Law  
HLSC 2461U Pathophysiology II  
HLSC 2601U Introduction to Health Management  
HLSC 3800U Critical Appraisal of Statistics in Health Science  
SOCL 1000U Introduction to Sociology

## YEAR 3

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### Semester 1 (15 credit hours)

HLSC 3710U Ethics  
HLSC 3910U Research  
HLSC 3805U Epidemiology and Health Inquiry  
Open elective\*  
Open elective\*

### Semester 2 (15 credit hours)

HLSC 3601U Managing Health Care Teams  
HLSC 3630U Health Finance  
Open elective\*  
Open elective\*  
Open elective\*

## YEAR 4

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### Semester 1 (15 credit hours)

HLSC 4998U Research Project I  
HLSC 4850U Current Issues in Health Care  
Health or science elective  
3-4000 level open elective  
Open elective\*

**Semester 2 (15 credit hours)**

HLSC 4999U Research Project II  
Health or science elective  
HLSC 4620U Project Quality Improvement  
3-4000 level open elective  
Open elective\*

\*Students looking to pursue more science based courses should take CSCI 1000 Scientific Computing Skills

\*Open electives: No more than three open elective courses may be at the 1000 level.

**14.2.6 Program specialization - Health Information Management**

The growth of information-based decision-making, both in clinical care and in planning for delivery systems, has created a demand for timely, accurate, and accessible health data. The specialization in health information management supports the advancement of the discipline through emphasis on use and management of health information systems and databases, information analysis, research, critical thinking, and decision making.

**YEAR 1**

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**Semester 1 (15 credit hours)**

BIOL 1010U Biology I  
CSCI 1800U Computing Tools for Health Sciences\*  
HLSC 1200U Anatomy and Physiology I  
HLSC 1801U Health and Wellness  
Open elective\*

**Semester 2 (15 credit hours)**

BIOL 1020U Biology II  
HLSC 1201U Anatomy and Physiology II  
HLSC 1802U Introduction to Health Care Systems  
PSYC 1000U Introductory Psychology  
Open elective\*

**YEAR 2**

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**Semester 1 (15 credit hours)**

HLSC 2030U Theory and Practice of Interpersonal Communication  
HLSC 2201U Introduction to Health Information Management  
HLSC 2460U Pathophysiology I  
HLSC 2801U Health, Illness and Therapeutics  
Open elective\*

**Semester 2 (15 credit hours)**

HLSC 2501U Health Law  
HLSC 2461U Pathophysiology II  
HLSC 2601U Introduction to Health Management  
HLSC 3800U Critical Appraisal of Statistics in Health Science  
SOC1 1000U Introduction to Sociology

## YEAR 3

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### Semester 1 (15 credit hours)

BUSI 3040U Information Systems  
HLSC 3710U Ethics  
HLSC 3805U Epidemiology and Health Inquiry  
HLSC 3910U Research  
INFR 3810U Database Systems

### Semester 2 (15 credit hours)

HLSC 3201U Coding and Abstracting  
HLSC 3630U Health Finance  
HLSC 3601U Managing Health Care Teams  
INFR 2550U Information Technology Project Management  
Open elective\*

## YEAR 4

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### Semester 1 (15 credit hours)

HLSC 4201U Advanced Health Information Management  
HLSC 4610U Systems Analysis in Health Care  
HLSC 4850U Current Issues in Health Care  
HLSC 4998U Research Project I  
Health or science elective

### Semester 2 (15 credit hours)

HLSC 4620U Project Quality Improvement  
HLSC 4999U Research Project II  
Health or science elective  
3-4000 level open elective  
3-4000 level open elective

\*Students looking to pursue more science based courses should take CSCI 1000 Scientific Computing Skills

\*Open electives: No more than three open elective courses may be at the 1000 level.

## 14.3 Program information - Bachelor of Health Science (Honours) in Medical Laboratory Science - BHSc (Hons)

### 14.3.1 General information

The University of Ontario Institute of Technology (UOIT) offers a Bachelor of Health Science (Honours) in Medical Laboratory Science. This degree is the first of its kind in Ontario, and connects students with the most recent advances in modern medical research.

In recent years, modern health care has become increasingly dependent on complex laboratory tests to diagnose and treat disease. As a result, the demand for medical laboratory technologists is rapidly increasing in Canada.

Medical laboratory technologists perform general tests in all laboratory areas and analyse results to aid in patient diagnosis. Students learn fundamental skills in biological, physical and health sciences, as well as develop strong laboratory and interpersonal skills.

### 14.3.2 Admission requirements

Current Ontario secondary school students must complete the Ontario Secondary School Diploma (OSSD) with a minimum overall average of 70 percent on six 4U or 4M credits including English (ENG4U) with a minimum grade of 60 percent, one of calculus (MCB4U) or algebra and geometry (MGA4U), and two of biology (SBI4U), physics (SPH4U), or

chemistry (SCH4U). In addition, a combined minimum 70 percent average in math and science courses is required. All other applicants should refer to section 4.5 of this calendar for the requirements for their specific category of admission.

#### **14.3.3 Practicum**

Starting in first year, students will have the opportunity to apply their knowledge and get hands-on experience. As the theoretical knowledge expands so does experiential knowledge; by fourth year students will be placed in a clinical setting for the final two semesters. Students will work under the supervision of a medical laboratory technologist and perform increasingly complex procedures on real biological specimens.

Clinical placements give students hands-on practice, experience in different work environments, and the opportunity to network with potential employers.

#### **14.3.4 Careers**

The employment outlook for medical technologists is expected to grow more than the average for all occupations through the year 2010, with approximately 50,000 additional jobs opening up in North America during the next decade. Graduates of this program will have the highly demanded skills needed to work in a variety of practice settings, including hospital and industrial laboratories, clinics, cancer centres, pharmaceutical firms, environmental testing facilities, DNA/RNA analysis laboratories, and more. They may also choose a career in medical research or pursue graduate studies.

#### **14.3.5 Professional qualifications**

Following satisfactory completion of the educational program, graduates are eligible to write the examinations offered by the Canadian Society for Medical Laboratory Science (CSMLS) to obtain national certification. CSMLS certification is recognized throughout Canada.

#### **14.3.6 Degree requirements**

To be eligible for the BHSc (Hons) degree, students must successfully complete 120 credit hours. Degree and program requirements are subject to change without notice. The program map below is only a guide and is to be used in combination with proper advising. Students wishing to make changes to their program of study should consult their student advisor. For course descriptions, see section 16.

### **YEAR 1**

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#### **Semester 1 (15 credit hours)**

BIOL 1010U Biology I

CSCI 1000U Scientific Computing Tools

CHEM 1010U Chemistry I

HLSC 1200U Anatomy and Physiology I

MATH 1880U Mathematical Modelling for Health Science

#### **Semester 2 (15 credit hours)**

BIOL 1020U Biology II

CHEM 1020U Chemistry II

HLSC 1201U Anatomy and Physiology II

MLSC 1010U Introduction to Medical Laboratory Practice

PHY 1810U Physics for Health Science

## YEAR 2

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### Semester 1 (15 credit hours)

CHEM 2130U Analytical Chemistry for Biosciences

HLSC 2460U Pathophysiology I

HLSC 3710U Ethics

MLSC 2111U Clinical Biochemistry I

MLSC 2121U Clinical Hematology I

### Semester 2 (15 credit hours)

BIOL 2020U Genetics and Molecular Biology

HLSC 2461U Pathophysiology II

MLSC 2131U Clinical Microbiology I

MLSC 3111U Clinical Biochemistry II

MLSC 3121U Clinical Hematology II

## YEAR 3

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### Semester 1 (15 credit hours)

HLSC 3800U Critical Appraisal of Statistics in Health Science

HLSC 4850U Current Issues in Health Care

MLSC 3131U Clinical Microbiology II

MLSC 3220U Transfusion Science

MLSC 3230U Histotechnology

### Semester 2 (15 credit hours)

HLSC 2030U Theory and Practice of Interpersonal Communication

HLSC 3910U Research Methods

MLSC 3210U Laboratory Leadership and Quality Assurance

MLSC 3300U Clinical Simulation Practicum

Elective

## YEAR 4

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### Semester 1 (15 credit hours)

MLSC 4300U Clinical Practicum I

MLSC 4400U Clinical Project I

Elective

### Semester 2 (15 credit hours)

MLSC 4301U Clinical Practicum II

MLSC 4401U Clinical Project II

Elective

### 14.3.7 Program progression requirements

A student must achieve a minimum grade of “C” in all professional medical laboratory courses (includes all MLSC courses) other than those courses graded as pass-fail in order to be eligible to enrol in professional medical laboratory courses in the subsequent semester.

Students who earn a grade lower than “C” in these courses will be given a standing of program probation, regardless of their overall GPA. A second consecutive grade of less than “C” in a repeated professional medical laboratory course will result in a withdrawn standing and removal from the medical laboratory program.

Medical laboratory professional practice courses are graded on a pass-fail basis. The first failed grade (FAL) in a medical laboratory practice course will result in a program probationary standing. A second failed grade (FAL) in a medical laboratory practice course (either a repeated or subsequent practice course) will result in a withdrawn standing.

At any point during the academic term, the Faculty of Health Sciences reserves the right to terminate a student's experience in a medical laboratory practice setting, when patterns of behaviour place the student, clients or others at risk. This action will result in the student receiving a failed grade (FAL) for the course. In this circumstance, students shall have established rights of appeal; however, they cannot remain in the course while the appeal is underway. The appeal will be conducted promptly in order to protect the student's rights.

The dean can waive the regulations above in exceptional circumstances. In such cases, it shall be the dean's responsibility to specify the requirements for regaining satisfactory standing on the regular progression ladder and to notify the registrar in writing of that decision.

## **14.4 Program information - Bachelor of Science in Nursing (Honours) – BScN (Hons)**

### **14.4.1 General information**

The Faculty of Health Sciences, in collaboration with Durham College, offers an Honours Bachelor of Science in Nursing. The faculty's mission is to prepare professional nurses who are committed to excellence and innovation in assessing and meeting the nursing needs of society; and to develop and transmit knowledge regarding nursing practice and the human experience of health, illness and healing.

This fully integrated partnership provides collaborative learning activities, in which students take an active role in their own learning. This learning strategy combined with traditional methods prepares students for life-long learning, research, teamwork, and leadership skills essential for nursing practice. The state-of-the-art nursing labs provide students with practical, hands-on experience in hospital and home-care settings—with the latest technology right at their fingertips.

### **14.4.2 Admission requirements**

Current Ontario secondary school students must complete the Ontario Secondary School Diploma (OSSD) with a minimum overall average of 70 percent on six 4U or 4M credits including English (ENG4U), biology (SBI4U), chemistry (SCH4U), and one math (MGA4U, MCB4U, or MDM4U).

All other applicants should refer to section 4.5 of this calendar for the requirements for their specific category of admission.

### **14.4.3 Practicum**

Students begin their hands-on experience in first year using the state-of-the-art nursing lab. In their second term, students will be out in a clinical setting learning from practicing professionals. Over fifty employers from the health sector provide practicum experience and supervision.

### **14.4.4 Careers**

There is no better time to choose a rewarding career in nursing. Projections continue to show that the province of Ontario faces a shortfall of over 12,000 registered nurses in the hospital sector alone. There are abundant and varied employment opportunities for nursing graduates in a variety of venues, including hospitals, nursing homes, community service organizations and health centres.

### **14.4.5 Professional qualifications**

Graduates are prepared to write the licensure examinations for the College of Nurses of Ontario (CNO). To become a registered nurse you must comply with the licensing requirements of the College of Nurses. Students applying to the program should review the legislation for individuals requesting registration. For more information on how this new legislation may impact you, call the College of Nurses of Ontario (CNO) at 1.800.387.5526 for clarification.



#### 14.4.6 Degree requirements

To be eligible for the BScN (Hons) degree, students must successfully complete 120 credit hours. Degree and program requirements are subject to change without notice. The program map below is only a guide and is to be used in combination with proper advising. Students wishing to make changes to their program of study should consult their student advisor. Students must achieve a minimum grade of 'C' in all nursing courses (identified by the subject code NURS) to be eligible for the degree. For course descriptions, see section 16.

#### YEAR 1

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##### Semester 1 (15 credit hours)

HLSC 1200U Anatomy and Physiology I  
HLSC 1300U Information and Communication Technology in Health Care  
NURS 1002U Introduction to Nursing Praxis  
NURS 1003U Foundations for Nursing Practicum I  
NURS 1100U Introduction to Health and Healing  
NURS 1420U Development of Self as a Nurse I

##### Semester 2 (15 credit hours)

HLSC 1201U Anatomy and Physiology II  
NURS 1150U Health and Healing - Older Adult  
NURS 1503U Foundations for Nursing Practicum II  
NURS 1505U Professional Practice II  
NURS 2320U Health Assessment  
SOC1 1000U Introductory Sociology

#### YEAR 2

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##### Semester 1 (15 credit hours)

HLSC 2460U Pathophysiology I  
NURS 2007U Nursing Professional Practice III (Child and Family) or  
    NURS 2008U Nursing Professional Practice III (Adult Health Challenges)  
NURS 2100U Health and Healing (Child and Family) or  
    NURS 2150U Health and Healing (Adult Health Challenges)  
NURS 2810U Pharmacology for Nurses  
Open elective

##### Semester 2 (15 credit hours)

BIOL 2830U Microbiology for Health Science  
HLSC 2461U Pathophysiology II  
HLSC 2820U Nutrition for Health Science  
NURS 2100U Health and Healing (Child and Family) or  
    NURS 2150U Health and Healing (Adult Health Challenges)  
NURS 2507U Nursing Professional Practice IV (Child and Family) or  
    NURS 2508U Nursing Professional Practice IV (Adult Health Challenges)

#### YEAR 3

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##### Semester 1 (15 credit hours)

HLSC 3710U Ethics  
HLSC 3800U Critical Appraisal of Statistics for Health Science  
NURS 3007U Nursing Professional Practice V (Healthy Communities) or  
    NURS 3008U Nursing Professional Practice V (Mental Health)  
NURS 3100U Health and Healing (Healthy Communities) or  
    NURS 3150U Health and Healing (Mental Health)  
PSYC 1000U Introductory Psychology

### **Semester 2 (15 credit hours)**

HLSC 3601U Managing Health Care Teams

HLSC 3910U Research

NURS 3150U Health and Healing (Mental Health) or

NURS 3100U Health and Healing (Healthy Communities)

NURS 3507U Nursing Professional Practice VI (Healthy Communities) or

NURS 3508U Nursing Professional Practice VI (Mental Health)

PSYC 2010U Developmental Psychology

## **YEAR 4**

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### **Semester 1 (15 credit hours)**

HLSC 4850U Current Issues in Health Care

NURS 4005U Nursing Professional Practice VII

NURS 4100U Nursing Leadership

NURS 4420U Knowledge and Inquiry

Elective

### **Semester 2 (15 credit hours)**

NURS 4505U Nursing Professional Practice VIII

Elective

Elective

#### **14.4.7 Program progression requirements**

A student must achieve a minimum grade of “C” in all professional nursing courses (includes all NURS courses) other than those nursing courses graded as pass-fail in order to be eligible to enrol in professional nursing courses in the subsequent semester.

Students who earn a grade lower than “C” in these courses will be given a standing of program probation, regardless of their overall GPA. A second consecutive grade of less than “C” in a repeated professional nursing course will result in a withdrawn standing and removal from the nursing program.

Nursing professional practice courses are graded on a pass-fail basis. The first failed grade (FAL) in a nursing practice course will result in a program probationary standing. A second failed grade (FAL) in a nursing practice course (either a repeated or subsequent practice course) will result in a withdrawn standing.

At any point during the academic term, the Faculty of Health Sciences reserves the right to terminate a student’s experience in a nursing practice setting, when patterns of behaviour place the student, clients or others at risk. This action will result in the student receiving a failed grade (FAL) for the course. In this circumstance, students shall have established rights of appeal; however, they cannot remain in the course while the appeal is underway. The appeal will be conducted promptly in order to protect the student’s rights.

The dean can waive the regulations above in exceptional circumstances. In such cases, it shall be the dean’s responsibility to specify the requirements for regaining satisfactory standing on the regular progression ladder and to notify the registrar in writing of that decision.

## **14.5 Post-RPN – BScN (Hons) Bridge program**

### **14.5.1 General information**

The RPN – BScN Bridge program is modelled on UOIT and Durham College’s innovative Collaborative Nursing program. The post-diploma BScN program for registered practical nurses provides RPNs with enriched knowledge in the sciences, nursing, and other disciplines. The program will utilize the latest in learning technologies to enhance access for working professionals. The program can also be completed on a part-time basis.

#### 14.5.2 Admission requirements

Students seeking admission to the bridge RPN to BScN must be graduates from an approved practical nursing diploma program. Applicants must submit complete transcripts from their diploma program. Preference will be given to applicants who have achieved at least a GPA of 2.7.

Applicants must hold a current Certificate of Competence from the College of Nurses Ontario (CNO). Qualified students will be conditionally accepted and must successfully complete both the Science Bridge and the Nursing Bridge with grade of C (2.0) or higher prior to acceptance into the RPN to BScN degree program.

#### 14.5.3 Post-RPN degree requirements

1. BScN 120 credits including:

- (a) Transfer credit hours for completion of a Practical Nursing Diploma and current Certificate of Competence as a Registered Practical Nurse from the College of Nurses of Ontario.
  - (b) Major requirements:
    - (i) 78 credit hours including: NURS 0420U, HLSC 0880U, HLSC 2202U, NURS 2320U, HLSC 2820U, PSYC2010U, NURS2506U, NURS2160U, HLSC 2460U, BIOL2830U, NURS2810U, HLSC 3800U, HLSC1300U, HLSC 2461U, NURS 3507U, NURS 3100U, HLSC 3910U, HLSC 3601U, NURS 4005U, NURS 4100U, NURS 4420U, HLSC 4850U, HLSC 3710U, NURS 4505U
  - (c) Elective requirements: 12 credit hours outside major at any level
2. Residency requirement: up to an additional 15 credit hours of advance standing may be granted based on students previous university experience. Half the degree credits must be taken through UOIT.

#### 14.5.4 Progression requirements

Please refer to the progression requirements for the collaborative BScN program.

### 14.6 Post-RN – BScN (Hons) Bridge program

#### 14.6.1 General information

The RN – BScN Bridge program is modelled on UOIT and Durham College's innovative Collaborative Nursing program. The post-diploma BScN program for registered nurses provides RNs with enriched knowledge in the sciences, nursing, and other disciplines. The program will utilize the latest in learning technologies to enhance access for working professionals. The program can also be completed on a part-time basis.

#### 14.6.2 Admission requirements

Students seeking admission to the bridge RN to BScN must be graduates from an approved registered nursing diploma program. Applicants must submit complete transcripts from their diploma program. Preference will be given to applicants who have achieved at least a GPA of 2.7. Applicants must hold a current Certificate of Competence from the College of Nurses Ontario (CNO).

### 14.6.3 Post-RN degree requirements

1. BScN 120 credits including:
  - (a) Transfer credit hours for completion of a Registered Nursing Diploma and current Certificate of Competence as a Registered Nurse from the College of Nurses of Ontario.
  - (b) Major requirements:
    - (i) 51 credit hours including: HLSC 2202U, NURS 2320U, HLSC 2820U, HLSC 2460U, BIOL2830U, HLSC 3800U, HLSC1300U, HLSC 2461U, NURS 3507U, NURS 3100U, HLSC 3910U, HLSC 3601U, NURS 4420U, HLSC 4850U, HLSC 3710U, NURS 4507U
  - (c) Elective requirements: Nine credit hours outside major at any level.
2. Residency requirement: up to an additional nine credit hours of advance standing may be granted based on students previous university experience. Half the degree credits must be taken through UOIT.

### 14.6.4 Progression requirements

Please refer to the progression requirements for the collaborative BScN program.