

SCHOOL OF HEALTH SCIENCES PROGRAM GUIDE



A BCIT nursing student uses a virtual reality scenario in the simulation lab at the Burnaby Campus.

THE BCIT SCHOOL OF HEALTH SCIENCES

Immerse yourself in a learning experience.

BCIT School of Health Sciences provides industry-leading education for essential, in-demand careers in the healthcare field. With over 33 programs in a variety of disciplines, the doors will open to a highly rewarding and challenging career that makes a difference.

From Environmental Public Health to Occupational Health and Safety, Radiation Therapy, and Specialty Nursing, you will learn from industry practitioners and get real-world experience. Students are job-ready with 99%* of health science degree grads and 97%* of diploma grads finding employment in a related job.

On our Burnaby Campus, students learn in our exciting new landmark Health Sciences Centre. Sophisticated simulation and collaborative learning spaces replicate real world workflows and prepare students for a seamless transition into their clinical and work environments. Walk out of this adaptive training facility and into the heart of the healthcare community.



BCIT Health Sciences students learn real life scenarios through simulation in our new Health Sciences Centre.

THE LARGEST SIMULATION SPACE IN WESTERN CANADA.

BCIT Health Sciences students can experience authentic and complex clinical scenarios in a safe, learner-centred environment. Students have the opportunity to develop their roles as health care professionals through the use of scenarios that build on their learning in the classroom before performing skills in a clinical environment. Our simulation experiences support graduates to transition from students to professionals with the skills needed to care for people in BC.



A BCIT Medical Radiography faculty member shows a student how to position a patient for imaging.

DIAGNOSTICS AND ADVANCED PRACTICES PROGRAMS

Find the best way forward.

The Diagnostics and Advanced Practices programs provide hands-on training in several diagnostic and therapeutic disciplines. Diagnostics graduates work in hospitals and clinics across British Columbia and Canada.

Students are taught to combine technology with patient-centred care for a respectful, compassionate, and enhanced treatment experience.

Our diagnostics programs include:

CARDIOLOGY TECHNOLOGY

Cardiology Technology students learn to perform non-invasive diagnostic cardiology procedures to help diagnose and manage cardiac abnormalities. This program is delivered in a blended format consisting of online and in-person learning. Graduates are prepared to collaboratively care for patients as part of a healthcare team, as well as to ladder into Advanced Certificates, including Cardiovascular Technology, Electrophysiology Technology, and Cardiac Rhythm Device Technology.

CARDIOVASCULAR PERFUSION

Cardiovascular perfusionists are an integral part of the cardiovascular surgical team and are trained to operate highly specialized cardiopulmonary bypass machines during open-heart and cardiovascular surgical procedures. Perfusionists control the heart-lung machine to meet the physiological needs of a patient during cardiac interventions and operate life-saving devices using extracorporeal membrane oxygenation. They work in diverse hospital settings including the operating room, emergency department, intensive care units, and vascular departments.

MAGNETIC RESONANCE IMAGING

Magnetic resonance imaging, commonly known as MRI, utilizes powerful magnetic fields and radio waves to form images of the body to diagnose illness and injury. Students learn to provide non-invasive, diagnostic testing on almost every aspect of the human body, including bones, organs, muscles, and neurological functions.

MEDICAL RADIOGRAPHY

The Medical Radiography program trains individuals in X-ray imaging. Students are trained in areas of computed tomography [CT], fluoroscopy, operating room imaging, emergency/trauma, interventional procedures, and mammography.

NUCLEAR MEDICINE

Nuclear medicine uses biological tracers combined with radioactive material to produce images that help diagnose and manage disease. As a specialized branch of non-invasive diagnostic imaging, nuclear medicine stands out for its ability to detect subtle changes in the body's function, allowing early detection of a wide range of disorders.

RADIATION THERAPY

Radiation therapists employ focused beams of radiation to destroy tumours, while minimizing harm to healthy tissues. Students in this program learn to work with people in various stages of cancer. With comprehensive training, radiation therapists become a main source of support and comfort for patients and families.

DIAGNOSTIC MEDICAL SONOGRAPHY

Diagnostic medical sonography, commonly known as ultrasound, uses high-frequency sound waves to examine a variety of structures. The program offers three options: the general option focuses on the abdomen, pelvis, developing fetus, and blood vessels; the cardiac option focuses on the heart; and the dual general and cardiac option covers all areas. Students learn diagnostic problem-solving and team collaboration skills to ensure quality care for patients.



BCIT Medical Laboratory Science grads work at LifeLabs.

LAB AND ALLIED HEALTH PROGRAMS

Make a difference in your community.

Lab and allied health programs at BCIT use hands-on training to prepare you to work in a variety of laboratory, clinical, industry, and community settings. Graduates are equipped with skills to investigate, troubleshoot, and problem-solve health and safety issues that impact the community.

Our lab and allied health programs include:

BIOMEDICAL ENGINEERING

The Biomedical Engineering program prepares graduates for entry-level employment in hospitals and medical devices industries. Graduates help develop new medical devices and provide the wide range of services that support and manage healthcare technology.

HONOURS IN BIOTECHNOLOGY

Biotechnology harnesses biological processes to develop products that benefit human health and the health of the planet. The BCIT Honours in Biotechnology program is a joint initiative with the University of British Columbia to provide students with a Bachelor of Science degree that combines laboratory and theoretical experience.

CLINICAL GENETICS TECHNOLOGY

Clinical Genetics Technology trains students to investigate genetic disorders like Down Syndrome and cancers such as Leukemia. Graduates often work as clinical genetics technologists in hospitals and private clinics, where they use sophisticated equipment and techniques to solve complex genetic problems.

ENVIRONMENTAL PUBLIC HEALTH

Environmental health officers (also known as public health inspectors) work with businesses and the general public to protect public health. Graduates work to ensure compliance with public health legislation through a combination of education, consultation, enforcement, and advocacy.

FOOD TECHNOLOGY

The Food Technology program provides hands-on training in the basics of food science. Food technologists ensure companies are producing safe and high-quality foods. Students learn to analyze the composition of foods, examine how foods are processed, learn how to determine the shelf life of foods, and develop innovative new food products.

MEDICAL LABORATORY SCIENCE

Medical laboratory technologists (MLTs) perform over 1.2 million lab tests every day in Canada. Students learn to perform diagnostic tests on tissue samples, blood, and other bodily fluids that are used to make medical diagnoses.

OCCUPATIONAL HEALTH AND SAFETY

Occupational health and safety (OCHS) involves identifying, assessing, and managing risks in work environments. OCHS students learn the skills they need to start a great career in health and safety, in any industry and workplace.

PROSTHETICS AND ORTHOTICS

Prosthetists and orthotists design and fabricate custom orthopedic devices and provide lifelong treatment to those in need. Prosthetists work with those who have experienced limb loss, and orthotists work with those who have an injury or pathology requiring bracing or support.



BCIT Speciality Nursing students conduct an operating room simulation in our new Health Sciences Centre.

BACHELOR OF SCIENCE IN NURSING

Learn to practice with confidence.

The BCIT Bachelor of Science in Nursing (BSN) program is the largest nursing program in BC. Students hone their skills in the simulation lab and through clinical practice placements that take place in various healthcare settings across the lower mainland.

Graduates who complete the three-year, full-time program and pass the licensure exam are job-ready to support the healthcare system.

The program is based on a concept, competency-based approach. Students are exposed to the latest technology, innovative practice-based experiences, and provided with a range of resources to support learning. BSN students are offered two courses in an advanced specialty elective to explore areas in pediatrics, perinatal, neonatal, perioperative, critical care, high acuity, or emergency nursing.

The BSN program is committed to training students in becoming nurses who are ready to meet the complex care needs in today's healthcare environment.



SPECIALTY NURSING

Find your career focus.

If you are a registered nurse (RN) looking for a career advancement, or a student in an accredited RN program seeking specialized education, look no further than the BCIT Specialty Nursing program.

The Specialty Nursing program is the only one of its kind in Canada. It offers advanced training to RNs and accredited students in a variety of specialized nursing disciplines. Graduates of our certificate programs meet the growing need for trained specialists who work in high-skill, high-reward practice areas.

Courses are offered on a part-time basis to allow flexibility for learners. Certificates can be completed in as few as 18 months.

Specialty Nursing advanced certificates are offered in:

- Critical Care Nursing Specialty
- Emergency Nursing Specialty [Standard Option]
- High Acuity Nursing Specialty
- Neonatal Nursing Specialty
- Nephrology Nursing Specialty
- Pediatric Emergency Nursing Specialty
- Pediatric Nursing Specialty [Standard Option]
- Perinatal Nursing Specialty [Standard Option]
- Perioperative Nursing Specialty
- Pediatric Nursing Specialty [Critical Care Option]
- Bachelor of Science in Nursing degree completion [for diploma RNs]

PROGRAM ENTRANCE REQUIREMENTS

IF YOU HAVE A HIGH SCHOOL DIPLOMA, CONSIDER THESE PROGRAMS:

MRI (diploma)* Prerequisites include English 12, Pre-Calculus 12, Physics 12, and Anatomy and Physiology 12	Cardiology Technology (diploma)* Prerequisites include English 12, Pre-Calculus 12, Anatomy and Physiology 12, Physics 11, and Chemistry 11	Medical Radiography (diploma)* Prerequisites include English 12, Pre-Calculus 12, Anatomy and Physiology 12, and Physics 12	Nuclear Medicine (diploma)* Prerequisites include English 12, Pre-Calculus 12, Anatomy and Physiology 12, Physics 11, and Chemistry 12	Biomedical Engineering Technology (diploma)* Prerequisites include English 12, Pre-Calculus 12, Physics 12, and Chemistry 11
Food Technology (diploma)* Prerequisites include English 12, Pre-Calculus 12, and Chemistry 11	Medical Laboratory Technology (diploma)* Prerequisites include English 12, Pre-Calculus 12, Anatomy and Physiology 12, Physics 11, and Chemistry 12	Foundations in Occupational Health & Safety (associate certificate, part-time)* Prerequisites include a suggested 3–5 years of work experience	Occupational Health & Safety (diploma)* Prerequisites include English 12, Pre-Calculus 12, Physics 11, and Chemistry 11	

*See individual program webpage for entrance requirements on bcit.ca

IF YOU HAVE PRIOR POST-SECONDARY EDUCATION, CONSIDER THESE PROGRAMS:

Bachelor of Science in Nursing (degree)* Prerequisites include Pre-Calculus 11, Chemistry 11, and a minimum 18 credits of post-secondary	Radiation Therapy (degree)* Prerequisites include English 12, Anatomy and Physiology 12, Physics 12, and a minimum 30 credits of post-secondary	Diagnostic Medical Sonography (ultrasound) (diploma)* Prerequisites include English 12, Pre-Calculus 12, Anatomy and Physiology 12, Physics 11	Environmental Public Health (degree)* Prerequisites include at least 60 credits of post-secondary	Electroneurophysiology (diploma)* Prerequisites include English 12, Pre-Calculus 12, and post-secondary level physics and human anatomy
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*See individual program webpage for entrance requirements on bcit.ca

IF YOU HAVE AN UNDERGRADUATE DEGREE OR HEALTH SCIENCES DIPLOMA, CONSIDER THESE PROGRAMS:

Cardiovascular Perfusion (advanced certificate, part-time)* Prerequisites include a bachelor's degree or work experience as a Critical Care Nurse or a Certified Respiratory Therapist	Clinical Genetics Technology* Prerequisites include a Bachelor of Science	Prosthetics and Orthotics* Prerequisites include a bachelor's degree
Specialty Nursing Advanced Certificates* Prerequisites include either a diploma or a Bachelor of Science in Nursing	Digital Health Advanced Certificate* Prerequisites include a diploma or bachelor's degree in health care	Health Leadership* Prerequisites include a bachelor's degree or a health sciences diploma

*See individual program webpage for entrance requirements on bcit.ca



The new BCIT Health Sciences Centre (HSC) provides a state-of-the-art home for progressive clinical education.

WHAT'S NEXT?

Here are a few other ways you can learn more about BCIT School of Health Sciences:

ATTEND BIG INFO

Big Info is the largest program expo and information session at BCIT. It's your chance to find out about all our programs – from applied and natural sciences, business and media, computing and IT, engineering, health sciences, and trades & apprenticeships. bcit.ca/biginfo

ATTEND AN INFO SESSION

Join BCIT for Health Sciences Week and attend one or more info sessions to learn more about programs, related careers, and to get your questions answered by faculty and staff. bcit.ca/events/category/infosession/health-sciences/list

PROGRAM ADVISING

Still have questions? BCIT program advisors are available by phone, email, drop-in, or online. bcit.ca/advising

FINANCIAL AID

Need help with your finances? Find information on student loans, awards, bursaries, and scholarships. bcit.ca/finaid

TUITION

Want to know how much our programs cost? Find tuition fees and rates for full-time programs. bcit.ca/admission/tuition-fees/full-time-studies

SPEND A DAY

Spend a day with a BCIT student to see what a typical day is really like. You'll experience the campus and sit in on lectures and labs. bcit.ca/spendaday

CAMPUS TOURS

Want to check out the campus? Take a one-hour campus tour lead by a Student Ambassador. bcit.ca/tours

