



STEM

Science

Technology

Engineering

Math

LETTER FROM THE CHAIR

Hello and welcome to NIC's STEM programming. I'm so pleased to introduce you to our department and the wide range of university-level courses we have to offer.

NIC's STEM faculty is made up of scientists, mathematicians and engineers who are passionate about teaching. We love what we do and are excited to share it with you. Our goal is to provide personalized support, opportunities for unique in-class and community-based project work and prepare you for success for the next stage of your educational journey.

Please don't hesitate to reach out to any of us directly if you have any questions about courses, programs or career paths available in STEM.

- Alexandra Blair, Department Chair, Mathematics & Sciences

My instructor Jason Diemer inspired me to study engineering. I transferred directly from NIC into second year of UVic's biomedical engineering degree.

MILENA RESTAN

**NIC-UVIC ENGINEERING DUAL ADMISSION
STUDENT**





STEM PROGRAMS & COURSES

Choose from a wide range of first and second-year university courses transferable toward a Bachelor of Engineering, a Bachelor of Science in biology, chemistry, physics or math, or medical and health science programs across Canada.

START YOUR UNIVERSITY DEGREE AT NIC

In addition to guaranteed and dual admission partnerships, NIC courses can be combined to create a custom transfer plan, helping you move seamlessly into universities across Canada, including:



THE UNIVERSITY OF BRITISH COLUMBIA



UNIVERSITY OF NORTHERN BRITISH COLUMBIA



University of Victoria



VANCOUVER ISLAND UNIVERSITY

Each degree pathway has its own unique transfer requirements that are posted online. Take as many or as few courses as you want for one or two years while exploring your interests and accumulating credits.

Associate of Science Degree

Start your degree at NIC and receive two years (60 credits) of transfer credit toward any BC university. A wide range of courses are available to meet prerequisites of medical, optometry, dentistry and veterinary programs across Canada. Focus on your area of interest or explore biology, chemistry, mathematics, physics and more.

Flexible Pre-Major in Biology

Transfer directly into the third year of a degree program by completing required first and second year courses. Thanks to a special province-wide collaboration, students can easily transfer courses to a biology major at the third year level. A full list of transfer possibilities is available at bctransferguide.ca.

NEW UPCOMING PROGRAM

Computer Information Systems Certificate

Prepare for a career in software design, database management and design, and network related maintenance. Designed to transfer into Camosun's Information and Computer Systems Diploma program.

Engineering Foundations Certificate

Qualify for guaranteed admission to UVic's engineering degree programs or secure general transfer to UBC, SFU and beyond. Learn strong problem-solving skills to work in design, analysis, project management and gain a solid foundation in computer programming, math, physics and engineering mechanics.

Industrial Electronics & Automation

To learn more about the Electronics Technician Core Certificate and the Industrial Automation Technician Diploma, visit www.nic.bc.ca/industrial-electronics.

TUITION-FREE UPGRADING

Acquire numeracy and problem-solving skills to prepare for entry into specific academic programs or to increase your employment options.

YOU MAY ALSO BE INTERESTED IN:

NIC's DIGITAL Design + Development programs. Learn more: www.nic.bc.ca/digital-design-development

FOR MORE INFORMATION

Email futurstudents@nic.bc.ca

Biology Courses

Develop laboratory skills while participating in field trips and outdoor research. With our small class sizes, supportive instructors and competitive tuition, you'll be better prepared for university and career success.

- BIO-102/103 Principles of Modern Biology I & II
- BIO-110/111 Concepts of Biology I & II
- BIO-160/161 Human Anatomy & Physiology I & II
- BIO-200 Cell Biology
- BIO-201 Introduction to Biochemistry
- BIO-202 Principles of Genetics
- BIO-211 Invertebrate Biology
- BIO-215 Introductory Microbiology
- BIO-230 Principles of Ecology
- BIO-250 Independent Studies
- BIO-260/261 Pathobiology I & II

Chemistry Courses

Prepare for a career in health sciences, chemical engineering, environmental sciences and more as you gain a solid foundation in chemical reactions and systems.

Courses include:

- CHE-110/111 Chemical Principles I & II
- CHE-152 Engineering Chemistry
- CHE-200/201 Organic Chemistry I & II

Computer Science Courses

Learn fundamental programming, algorithm development, database design and applications, problem solving and technological skills to prepare for university and advance your career.

Courses include:

- CPS-101 Computer Programming II
- CPS-102 Computer Programming with C++
- CPS-110 Information Technology Essentials
- CPS-113 Operating Systems and Architecture
- CPS-114 Algorithms and Programming
- CPS-127 Software Engineering Process
- CPS-128 Web Scripting
- CPS-129 System Administration
- CPS-146 Database Fundamentals
- DGL-103 HTML and CSS
- LRN-100 Learning Skills for Technology Students

Mathematics & Statistics Courses

Learn to analyze data and solve complex problems. Mathematical skills are in-demand in industry, education, finance, physical sciences, health sciences and more.

Courses include:

- MAT-102 Calculus for Life Sciences
- STA-115 Introduction to Statistics
- MAT-122 Logic and Foundations
- MAT-133 Matrix Algebra
- MAT-151 Finite Mathematics
- MAT-156 Applied Math and Statistics for Computing

- MAT-162/163 Mathematics for Elementary Education I & II
- MAT-181/182 Calculus I & II
- MAT-200 Linear Algebra

Physics Courses

Deepen your understanding of the world around us as you develop laboratory skills and theoretical knowledge to prepare for further study in the physical sciences.

Courses include:

- PHY-100/101 Introduction to Physics I & II
- PHY-120/121 Principles of Physics I & II
- PHY-141 Mechanics I (Statics)

Space Science & Astronomy Courses

Explore the solar system and deep space while earning first year university astronomy credit. Study with an expert astrophysicist who is one of a handful of scientists in the world with expertise to experimentally measure the rates of nuclear reactions and processes in stellar explosions.

Courses include:

- SSA-100 Introduction to the Solar System and Space Exploration
- SSA-101 Introduction to Deep Space Astronomy

START YOUR UNIVERSITY DEGREE WITH THE NIC ADVANTAGE:

2 years	
University Courses	1-2 years
Certificate	1 year
Diploma	2 years
Associate Degree	2 years



2 years		
 VANCOUVER ISLAND UNIVERSITY	 University of Victoria	
 THOMPSON RIVERS UNIVERSITY	 UNIVERSITY OF BRITISH COLUMBIA	 SFU SIMON FRASER UNIVERSITY
 ROYAL ROADS UNIVERSITY	 CAMOSUN COLLEGE	
and many more across Canada and internationally		

= Bachelor Degree 

I applied to UVic through NIC which made me eligible for entrance scholarships from both. I'm so thankful for this because it allows me to focus my energy on my courses and ensures I'm well prepared when I start UVic next year.

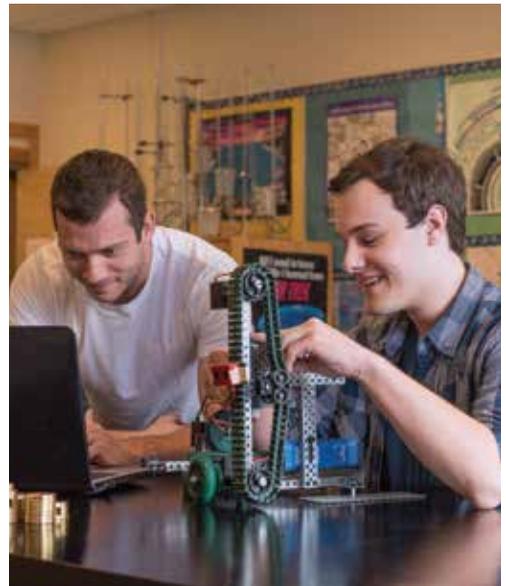
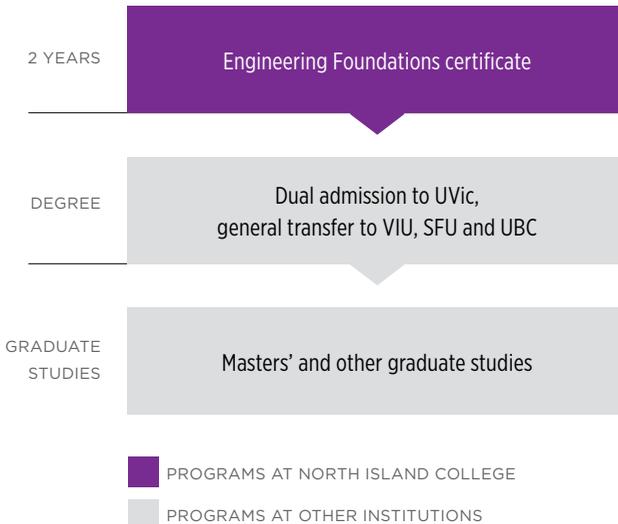
JASMIN FORD

NIC-UVIC DUAL ADMISSION STUDENT

received \$28,500 in entrance scholarships from NIC & UVic



ENGINEERING TRANSFER PATHWAY



LEARN FROM EXPERT FACULTY



DARREN GEORGE, PHD
CHEMISTRY



AISLING BRADY, PHD
MARINE BIOLOGY



DENNIS LIGHTFOOT, MSC, PENG
ENGINEERING, MATH & PHYSICS



JENNIFER FALLIS STARHUNTER, PHD
PHYSICS & ASTRONOMY



SANDRA MILLIGAN, MSC
BIOLOGY



JASON DIEMER, MSC
MATHEMATICS AND PHYSICS

These are just a few of NIC's faculty, all of whom are accessible, approachable and focused on student success. Read their full profiles at www.nic.bc.ca/about-us/nic-faculty

1-800-715-0914 | futurestudents@nic.bc.ca
www.nic.bc.ca/stem

This guide is for planning purposes only.

Please meet with an Educational Advisor to discuss your academic plans.

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