



STEM

Science

Technology

Engineering

Math

STUDY STEM AT NIC:

Science, Technology, Engineering, Math

Gain essential problem solving, technological and numeracy skills sought after by employers in NIC's science, technology, engineering and mathematics classrooms.

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.

You will learn to:

- ▶ apply theory, build prototypes and experience science hands-on.
- ▶ solve problems by inventing, building and improving structures, machines, materials and processes.
- ▶ analyze data and recognize mathematical patterns.
- ▶ use the scientific method to design experiments, collect data and analyze results.
- ▶ develop skills in chemical analysis, dissection, molecular biology and ecosystem sampling.

MATH AND SCIENCE CAN CHANGE THE WORLD

“We [as Canadians] have a responsibility to... inspire and influence, to create and develop equitably and sustainably, to look for the future, to educate our people and our youth so that we continue to grow.”

– GOVERNOR GENERAL JULIE PAYETTE, MScy



“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

NIC alumni say*

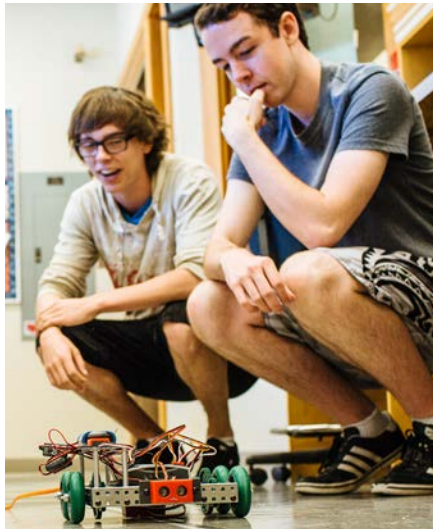
92%

that NIC's quality
of instruction
is high

90%

that they were well-
prepared by NIC
for further studies

*SOURCE: DASCO SURVEY OF FORMER NIC DIPLOMA, ASSOCIATE DEGREE
AND CERTIFICATE STUDENTS



STEM PROGRAMS & COURSES

NIC offers a wide range of university courses that transfer to universities across BC and beyond. With an average class size of 18, supportive, teaching-focused faculty, and personalized education, you will be fully prepared for university and career success.

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:



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-100/101 Computer Programming I & II
- CPS-146 Database Fundamentals

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-162/163 Mathematics for Elementary Education I & II
- MAT-181/182 Calculus I & II
- MAT-200 Linear Algebra
- MAT-210 Calculus III
- MAT-214 Calculus IV
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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)
- PHY-215 Introduction to Quantum Mechanics
- PHY-216 Introduction to Electricity & Magnetism

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

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
SCIENCE, ENGINEERING

These are just a few of NIC's diverse 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

START UNIVERSITY AT NIC

With a wide range of study areas, small class sizes, expert instructors and exclusive transfer agreements, NIC is the perfect place for you to start your studies.

Transfer seamlessly to university.

Complete a two-year associate degree at NIC and graduate with a credential that is fully transferable to university.

Hands-on research.

NIC offers multiple opportunities for hands-on research projects with community partners. NIC science students have worked with Comox Valley Project Watershed doing field sampling and on numerous projects with NIC's Centre for Applied Research, Technology and Innovation (CARTI).

Dual credit: Start university courses in high school.

Dual credit is an early entry opportunity for high school students to complete university courses while still in high school. You receive credit towards your Grade 12 graduation requirements, as well as NIC credit. These credits are fully transferable to institutions across BC. Why consider dual credit?

- Test drive college while getting support from your high school and NIC
- Lighten your course load in your first year of post-secondary
- College tuition fees may be covered by your school district

Prepare for success.

Develop university research skills and gain the confidence and skills to do well in university. With our small class sizes, supportive instructors, and competitive tuition, you'll be better prepared for university success.



"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)

Be advised, every step of the way.

Our educational advising team has extensive knowledge of programs, funding options, career paths and post-secondary education pathways at NIC and beyond.

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

UBC

SFU
SIMON FRASER UNIVERSITY

Royal Roads UNIVERSITY

CAMOSUN COLLEGE

and many more across Canada and internationally

= Bachelor Degree 

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

This guide is for planning purposes only. Please meet with an Educational Advisor to discuss your academic plans.

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