NORTHERN LIGHTS COLLEGE
REGISTRAR'S OFFICE
PROGRAM INFORMATION AND COMPLETION GUIDE

Program Name:
Credential/Certification: Associate of Science Degree (Computing and Information Science)
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Program Description: The Associate of Science Degree (Computing and Information Sciences) guides students to a degree with a high concentration of both theoretical and applied computing and information science courses. It provides the basis of knowledge in Computing and Information Science that can lead to employment in this important and growing field. This degree is an important step toward work in cloud computing, software development, computer programming, database, artificial intelligence, and many other IT positions. It will also prepare graduates for further study in the Computing and Information Sciences and provide a foundation for lifelong career success in this field.
For students intending to pursue further studies, the Associate of Science Degree (Computing and Information Sciences) comprises the majority of the credits needed for the first two years (60 credits) of a four-year degree program in Computer Science (120 credits).

Admission Requirements:
A. Domestic students and students from countries that practice Standard Written English (see Appendix A) must have official transcripts demonstrating that they have met the English Requirements: One of the following with a "C" grade or higher: English 12 or English Literature 12 or English First Peoples 12, ENGL 050, or ENGL 099. Alternatively, any university-level English course with a "C" grade or higher. Students who do not meet one of the above English requirements must complete the NLC Writing Assessment for appropriate course placement.

B. International students who do not meet the requirement A. above, and domestic students who received their secondary education in French or another language, must

show that they have met the NLC English requirement: see Appendix A (General Academic English Language Proficiency Requirements)).

C. Math Requirement: One of the following with a 'C' grade or higher: Pre-calculus 12, Calculus 12, MATH 050; or successful completion of the Calculus Readiness Assessment; or equivalent.

D. Science Requirement*: A minimum of one course as follows with a 'C' grade or higher:
- Life Sciences 11 or Biology 12 or BIOL 040 or BIOL 050, or equivalent;
- Chemistry 11 or Chemistry 12 or CHEM 040 or CHEM 050, or equivalent;
- Environmental Science 11 or Environmental Science 12, or equivalent
- Earth Sciences 11 or Geology 12, or equivalent
- Physics 11 or Physics 12 or PHYS 040 or PHYS 050, or equivalent.
- Specialized Science 12
- Anatomy and Physiology 12

*Note that some Associate of Science Degree course options have specific prerequisites. Meeting the entrance requirements for the Associate of Science Degree does not ensure course prerequisites have been met for all available science courses.

Length of Program: (weeks and total hours) 60 weeks of full-time study (two academic years) and a minimum of 1050 hours of class time.

Program Intake: (start/finish dates) Start: September, January, May. Finish: December, April or June.

Standard intakes follow the September to April schedule. Students who begin their studies in January or May, may require more than 2 years to complete the program depending on course offerings.

Available Seats: N/A

Application Deadline: As specified in the College Calendar. International students should contact the International Department to determine specific deadlines.

Career Prospects: The Associate of Science with Computer and Information Sciences specialization provides opportunities for employment in the growing information technology field. Graduates have skills in data analysis, problem solving and critical

thinking that fit them for a wide range of careers. Graduates also have a solid foundation of specific knowledge that can lead them to careers in software development, systems administration, network engineering, iOS and android Apps development, cyber-security, as well as more traditional careers in business and management.
However, the degree is primarily designed for transfer to the third year of a Bachelor of Science in Computer Science degree.

Affiliations/Partnerships: In British Columbia, completion of an Associate of Science Degree offers several transfer advantages:
Most universities in BC guarantee 60 transfer credits to holders of an Associate Degree, even if all of the courses taken towards the degree do not transfer individually to that institution.

*Priority Admission: Additionally, at some institutions, Associate Degree holders may be offered priority admission over other students in the college transfer admission category, subject to GPA criteria developed by the receiving institution.

Note that transferring students must still meet all 100- and 200-level course requirements for specific degree programs. Accordingly, students are encouraged to check the specific degree requirements of the individual receiving institution. For more information on the advantages of an Associate Degree, see http://bctransferguide.ca/associate/transfer.cfm

Location: Fort St John Campus

Additional Requirements/Supplies: (fees, supplies, materials)
Laptop computer with Intel Core i9 processor and 32 GB of RAM and a 2 TB hard drive, or equivalent or better. Lab fees may apply to science courses.Lab fees may apply to science courses

Eligibility for Canada Student Loans: (Yes or No)
Yes

Required Minimum Grade: (overall and/or minimum within a course)
A cumulative grade point average of 2.00 ('C') or better must be obtained from all courses applied toward the Associate of Science degree

Residency Requirement: (percentage of courses which must be taken at NLC)
25%; At least 15 credits (5 courses) must be taken at NLC. A 'C' grade (60%) or higher must be obtained for courses to be considered for transfer credit

Required Courses: (list courses required to complete credential and total hours for each course)

General Requirement: 60 credits of first-and second-year courses (normally 20 courses). These must include a minimum of 18 credits (6 courses) in the Sciences at the second-year level, in two or more subject areas.

Specific Requirements:

A. 6 credits (2 Courses) in 100-level English, including:

ENGL-100 Academic Writing (3 Credits)

AND

One University level English course at either First or Second Year level.

Preferrred: ENGL-111 Poetry and Drama (3 credits) OR ENGL-112 Prose Fiction (3 Credits)

B. Math and Science requirements:

2 laboratory based science courses. For superior transfer credit two of the following are preferred: PHYS 103/104 (8 Credits) BIOL 101/102 (8 Credits) or CHEM 103/104 (8 Credits).

AND

MATH 101 Calculus I (3 Credits)
MATH 102 Calculus II (3 Credits)
MATH 115 Discrete Mathematics (3 Credits)
MATH 152 Introduction to Linear Algebra (3 Credits)

C. 18 credits (6 courses) in Computing and Information Sciences courses, including

CPSC 123 Introduction to Object Oriented Programming C++ (3 Credits)
ITEC 220 Object Oriented Programming with Java (3 Credits)
NCIT 212 Object Oriented Programming II (3 Credits)
Any two of:
ITEC 112 Foundations of Web Development (3 Credits)
ITEC 150 Small Computer Systems: Organization And Architecture (3 Credits)
ITEC 225 Android Mobile Application Development (3 Credits)
ITEC 235 Computer Graphics and Animation for the Web (3 Credits)
ITEC 245 iOS App Development (3 Credits)
ITEC 241 Data Communication and Network Infrastructure (3 Credits)
ITEC 243 Introduction to Cloud Computing (3 Credits)
ITEC 251 Cyber Security Analysis (3 Credits)
Any 1 of:
ITEC 210 Database Design (3 Credits)
ITEC 255 Human Computer Interaction (3 Credits)
ITEC 290 Project Based Field Experience (3 Credits)

D. 12 credits (4 courses) in second year (or higher) Science courses in any discipline, at least one of which must be in a non computing discipline.

E. 6 credits (2 courses) in Arts other than English (excluding Mathematics and Laboratory-based Science courses)

Note: An individual course may not be used to fulfill more than one of the "specific" requirements listed above.