

From: **Northern Lights College (NLC)**  
 Business Management Diploma, Information  
 Technology Option

To: **University of Northern BC (UNBC)**  
 Bachelor of Science, Major in Computer  
 Science

The following list of course equivalents will appear on the transfer credit summary for students who have successfully completed **NLC's Business Management Diploma, Information Technology Option** and pursue a **Bachelor of Science Degree, major in Computer Science at UNBC**.

Information in this handout is unofficial and should be used as a guide only. For questions regarding admission to UNBC or course selection please contact Student Recruitment & Advising at 250-960-6306 or [advising@unbc.ca](mailto:advising@unbc.ca).

NOTE: As per UNBC Undergraduate Calendar Regulation number 14, "Students must complete a minimum of 30 credit hours of upper division UNBC course work to receive a UNBC degree."

<b>NLC Requirement</b>	<b>NLC Course Name</b>	<b>UNBC Equivalence<sup>1</sup></b>
<i>Required Courses:</i>		
MGMT 204	Human Resource Management (Personnel)	COMM 330-3
MGMT 225	Strategic Management	COMM 2XX-3
MGMT 228	Business Law: Principles and Applications	COMM 300-3
MGMT 260	Principles of Corporate Finance I	COMM 220-3
MGMT 290	Quantitative Methods for Business	ECON 250-3
<i>Elective Courses:</i>		
Elective courses for General Option (five of the following or minimum of fifteen credits):		
COMM 301	Organizational Communications	COMM 2XX-3
ENGL 100	Academic Writing	ENGL 170-3
FNST 100	Aboriginal Peoples of Canada	FNST 100-3
FNST 102	Treaties and Aboriginal Rights	FNST 1XX-3
ITEC 150	Small Computer Systems: Organization & Architecture	CPSC 1XX-3
ITEC 240	Server Management	CPSC 1XX-3
ITEC 250	Network Infrastructure	CPSC 1XX-3
ITEC 320	Virtual Software Systems	CPSC 1XX-3
MATH 115	Introductory Discrete Mathematics	MATH 2XX-3
MGMT 111	Finite Mathematics	MATH 150-3
MGMT 201	Intermediate Financial Accounting I	COMM 310-3
MGMT 202	Intermediate Financial Accounting II	COMM 311-3
MGMT 203	Taxation	COMM 2XX-3
MGMT 210	Advertising and Promotion	COMM 2XX-3
MGMT 217	Business Systems Analysis and Design	COMM 2XX-3
MGMT 219	Entrepreneurship: Start Up	COMM 302-3
MGMT 221	Managerial Accounting	COMM 211-3
MGMT 261	Principles of Corporate Finance II	COMM 320-3
MGMT 280	Safety Management	COMM 1XX-3
MGMT 295	Management Science	COMM 251-3
MGMT 301	Management Skills for Supervisors	COMM 2XX-3
MGMT 302	Business Sustainability and the Environment	COMM 100-3
MGMT 303	Non-Profit Management	COMM 2XX-3
MGMT 430	Business Ethics and Social Responsibility	COMM 332-3
PHIL 110	Introduction to Logic and Critical Thinking	PHIL 200-3
POLI 100	Politics and Government	POLS 100-3
POLI 101	The Government of Canada	POLS 200-3
POLI 200	Politics and Pipelines	POLS 2XX-3

*Elective Courses Cont'd:*

PSYC 224	Organizational Behavior	COMM 230-3 or PSYC 200-3
MATH 101	Calculus*	MATH 100-3
MATH 105	Calculus for Social and Biological Sciences I*	MATH 152-3 <sup>2</sup>

*Additional Notes on Course Selection:*

\*Math (Calculus) Courses:

- Diploma Students are permitted a maximum of three calculus credits (In either MATH 101 or MATH 105)
- Note that Principles of Math 12 is required for students enrolling in elective MATH 101 or MATH 105

Business Electives best selected for the information technology option are:

ITEC 150	Small Computer Systems: Organization & Architecture	CPSC 1XX-3
ITEC 240	Server Management	CPSC 1XX-3
ITEC 250	Network Infrastructure	CPSC 1XX-3
ITEC 320	Virtual Software Systems	CPSC 1XX-3
MATH 115	Introductory Discrete Mathematics	CPSC 141-3
MGMT 217	Business Systems Analysis and Design	COMM 2XX-3
PHIL 110	Introduction to Logic and Critical Thinking	PHIL 200-3

<sup>1</sup> Course equivalencies were determined through the articulation process and are listed on the BC Transfer Guide, [www.bctransferguide.ca](http://www.bctransferguide.ca)

Student will need to choose coursework appropriately so as not to receive duplicate Transfer Credit.

<sup>2</sup> Course under review as the last time it was taught was 2005.

**Note:** Above based on the 2019/2020 NLC website.

**Recommended Courses to take:**

<b>NLC Courses</b>	<b>NLC Course Name</b>	<b>UNBC Equivalence<sup>1</sup></b>
ENGL 100	Academic Writing	ENGL 170-3
MATH 101	Calculus	MATH 100-3
MATH 115	Introductory Discrete Mathematics	CPSC 141-3
MATH 220	Linear Algebra	MATH 220-3
PHYS 103	Mechanics (Calculus)	PHYS 110-4
PHYS 104	Electromagnet & Waves (Calculus)	PHYS 111-4

<sup>1</sup> Course equivalencies were determined through the articulation process and are listed on the BC Transfer Guide, [www.bctransferguide.ca](http://www.bctransferguide.ca)

Student will need to choose coursework appropriately so as not to receive duplicate Transfer Credit.

Sample of **UNBC Calendar** requirements for the Computer Science major and how NLC Business Management Diploma, Information Technology Option coursework *may be* used towards completion of the degree at UNBC<sup>1</sup>:

UNBC Calendar Information, Course Number & Course Name	NLC Equivalence
<p>The minimum requirement for completion of a Bachelor of Science with a major in Computer Science is 120 credit hours.</p>	
<p><b>Program Requirements</b></p>	
<p>*Note: Unless otherwise specified, students enrolling in any Computer Science or Mathematics course with prerequisites are required to have completed all prerequisite courses for that course with a "C-" or better, or have permission to enroll from the Program Chair.</p>	
<p><b>Lower-Division Requirement</b></p>	
<p><b>100 Level</b></p>	
<p>CPSC 100-4            Computer Programming I</p>	<p><input type="checkbox"/> To be completed at UNBC</p>
<p>CPSC 101-4           Computer Programming II</p>	<p><input type="checkbox"/> To be completed at UNBC</p>
<p>CPSC 141-3           Discrete Computational Mathematics</p>	<p>- Can be completed at NLC, MATH 115</p>
<p>ENGL 170-3           Writing and Communication Skills</p>	<p>- Can be completed at NLC, ENGL 100</p>
<p>    or ENGL 270-3    Expository Writing</p>	
<p>MATH 100-3           Calculus I</p>	<p>- Can be completed at NLC, MATH 101</p>
<p>*Note: MATH 101-3 Calculus II is strongly recommended</p>	
<p><b>200 Level</b></p>	
<p>CPSC 200-3           Algorithm Analysis and Development</p>	<p><input type="checkbox"/> To be completed at UNBC</p>
<p>CPSC 222-3           Introduction to Concurrent and Distributed Programming</p>	
<p>CPSC 230-4           Introduction to Logic Design</p>	
<p>CPSC 231-4           Computer Organization and Architecture</p>	
<p>CPSC 242-3           Mathematical Topics in Computer Science</p>	
<p>CPSC 260-3           Ethics in Computing</p>	
<p>CPSC 281-3           Data Structures I</p>	<p>- Can be completed at NLC, MATH 220</p>
<p>MATH 220-3           Linear Algebra</p>	
<p><b>General Science Requirement</b></p>	
<p>Students must take two courses from the following list of science courses. It is recommended that computer science majors take PHYS 110-4 and PHYS 111-4. However, students may take any two courses from the following list, according to their interests, to fulfill the general science requirement:</p>	
<p>PHYS 110-4           Introductory Physics I: Mechanics</p>	<p>- Can be completed at NLC, PHYS 103 &amp; NLC PHYS 104</p>
<p>PHYS 111-4           Introductory Physics II: Waves and Electricity</p>	
<p>PHYS 100-4           Introduction to Physics I</p>	
<p>PHYS 101-4           Introduction to Physics II</p>	
<p>CHEM 100-3           General Chemistry I</p>	
<p>CHEM 101-3           General Chemistry II</p>	
<p>BIOL 103-3           Introductory Biology I</p>	
<p>BIOL 104-3           Introductory Biology II</p>	

UNBC Computer Science major Calendar requirements continued:

PSYC 101-3 Psychology as a Science  
 ENVS 101-3 Introduction to Environmental Citizenship  
 GEOG 204-3 Introduction to GIS for the Social Sciences  
 GEOG 205-3 Cartography and Geomatics  
 GEOG 210-3 Geomorphology  
**\*Note:** In some special cases other science courses approved by the Chair of Computer Science may be used to satisfy this requirement.

**Upper-Division Requirement**

**Computer Science Breadth**

CPSC 300-3 Software Engineering  
 CPSC 320-3 Programming Languages  
 CPSC 321-3 Operating Systems  
 CPSC 324-3 Introduction to Database Systems  
 CPSC 340-3 Theory of Computation  
 CPSC 344-3 Data Communication and Networking  
 or CPSC 444-3 Computer Networking

**\*Note:** STAT 371-3 Probability and Statistics for Scientists and Engineers is strongly recommended.

**400 Level**

At least 12 credit hours of Computer Science courses must be taken at the 400 level, and at least nine of these credit hours must be outside the seminar course, project course, (other than CPSC 400-3), research course, or special topics course category.

Alternate courses may be substituted for the above with the written permission of the Program Chair.

**Subject Requirement**

Six additional credit hours chosen from the following:

Computer Science at any level  
 MATH 335-3 Numerical Analysis I  
 STAT 371-3 Probability and Statistics for Scientists and Engineers

**Elective and Academic Breadth**

Elective credit hours as necessary to ensure completion of a minimum of 120 credit hours including any additional credits necessary to meet the Academic Breadth requirement of the University (see Academic Regulation 15). A total of 45 credit hours in upper-division (300 and 400 level) courses from any discipline are required for graduation.

- Can be completed at NLC, see previous page

To be completed at UNBC

To be completed at UNBC

\* Please discuss how to complete this requirement with your Student Advisor. Depending on course selection, students may be able to complete some or all of this requirement at NLC.

<sup>1</sup>Based on the 2019/20 UNBC Academic Calendar year.