From: **Coast Mountain College (CMTN)** Associate of Science Degree, General Studies

To: University of Northern BC (UNBC)

Bachelor of Science (BSc Degree, Physics Major)

The following list of course equivalents will appear on the transfer credit summary for students who have successfully completed **CMTN's Associate of Science Degree** and declare their **major in Physics at UNBC**.

CMTN Requirement Applicable to ASc	CMTN Course	CMTN Course Name	UNBC Equivalence ^{1&2&3}		
6 Credits in	University Transfer Credit Needed University Transfer Credit Needed				
First Year English					
6 Credits in Mathematics	MATH 101 ⁴	Calculus I	MATH 100-3 ⁴		
(which shall include at least	MATH 102 ⁴	Calculus II	MATH 101-3 ⁴		
3 credits in Calculus)					
36 Credits in Science	CHEM 101	Introductory Chemistry I	CHEM 100-3 and CHEM 120-1		
(which shall include at least	or CHEM 121	Principles of Chemistry I	CHEM 100-3 and CHEM 120-1		
3 credits in a Laboratory Science)	PHYS 121	Advanced Physics I: Classical	PHYS 110-4		
	PHYS 122	Advanced Physics II: Electrical	PHYS 111-4		
	CPSC 113 ⁴	Comp Programming/Lego Robot	CPSC 100-4 ⁴		
	24 University Transfer Credits needed				
6 Credits in Arts other than	University Transfer Credit Needed				
English (excluding Math and	University Transfer Credit Needed				
Lab based science courses					
6 Credits in Arts, Science,	MATH 235 ⁴	Linear Algebra	MATH 220-3 ⁴		
or other areas	University Transfer Credit Needed				

¹ Course equivalencies were determined through the articulation process and are listed on the BC Transfer Guide, <u>www.bctransferguide.ca</u> Student will need to choose coursework appropriately so as not to receive duplicate Transfer Credit.

² Students need to choose coursework transferable to UNBC in order to receive credit in these areas.

³ Students need to verify they are completing approved University Transfer Credit coursework as per the BC Transfer Guide. Courses in the Creative and Performing Arts as well as Career program and other courses considered for the Associate degree may not be eligible for transfer credit to UNBC.

⁴ Must have a C- or better at CMTN to use as a prerequisite at UNBC.

Additional CMTN Recommended Courses

CMTN		UNBC Equivalence ³	
Courses	Specifics	Used towards this BSc Requirement	
CHEM 102	Introductory Chemistry I	CHEM 101-3 and CHEM 121-1	
CHEM 122	Principles of Chemistry II	CHEM 101-3 and CHEM 121-1	
Note: Fulfills UNBC Requirements			

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Sample of **UNBC Calendar** requirements for the Physics major and how CMTN Associate of Science Degree in General Studies coursework *may be* used towards completion of the degree at UNBC⁵:

UNBC Calendar Information			
			CMTN Equivalence
The minimum requirement for completion of a Bachelor of			
Science degree with a	major in Physics is 120 credit hours.		
Lower Division (100 L	evel)		
CHEM 100-3	General Chemistry I		✓ Completed at CMTN, CHEM 101 or CHEM 121
MATH 100-3 ⁶ or MATH 105-3 ⁶	Calculus I	\rightarrow	✓ Completed at CMTN, MATH 101 ⁶
MATH 103-3 ⁶	Enriched Calculus Calculus II		✓ Completed at CMTN, MATH 102 ⁶
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PHYS 110-4	Introductory Physics I: Mechanics		✓ Completed at CMTN, PHYS 121
PHYS 111-4	Introductory Physics II: Waves and Electricity		✓ Completed at CMTN, PHYS 122
CPSC 100-4	Computer Programming I		
or CPSC 110-3	Introduction to Computer Systems and Programming		✓ Completed at CMTN, CPSC 113 ⁶
Lower Division (200 L	evel)		
MATH 200-3 ⁶	Calculus III		
MATH 201-3 ⁶	Introduction to Complex Analysis		To be completed at UNBC
MATH 220-3 ⁶	Linear Algebra		✓ Completed at CMTN, MATH 235 ⁶
MATH 230-3 ⁶	Linear Differential Equations and		
	Boundary Value Problems		
PHYS 200-3	Thermal Physics		
PHYS 202-4	Electromagnetism and Optics		
PHYS 205-3	Modern Physics I		
	hours of Physics at the 200 level.		
	nouis of rifysics at the 200 level.		
Upper Division (300 Level)			
MATH 336-3 ⁶	Intermediate Differential Equations		
PHYS 300-3	Classical Mechanics		To be completed at UNBC
PHYS 302-3	Quantum Mechanics I		
PHYS 310-3	Classic Electromagnetism I		
Upper Division (400 L	evel)		
PHYS 400-3	Quantum Mechanics II		
PHYS 401-3	Seminar on Contemporary Topics in Physics		
PHYS 407-3	Statistical Mechanics		
	hours of Physics at the 300 or 400 level.		
Nine additional credit	nours of Physics at the 300 of 400 level.		
Elective and Academic Breadth Requirement			
Elective credit hours as necessary to ensure completion of a			* Please discuss how to complete this requiremen
minimum of 120 credit hours, including any additional credits			with your Student Advisor. Depending on course
necessary to meet the Academic Breadth requirement of the			selection, students may be able to complete
University (see Academic Regulation 15).			some or all of this requirement at CMTN.
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UNBC Physics major Calendar requirements continued:

Recommended electives include:

CPSC 101-4	Computer Programming II	
CHEM 101-3	General Chemistry II	
CHEM 200-3	Physical Chemistry I	
MATH 335-3 ⁶	Numerical Analysis I	
STAT 371-3 ⁶	Probability and Statistics for Scientists	
	and Engineers	

* 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 CMTN

⁵ 2017/18 UNBC Academic Calendar year. 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 <u>advising@unbc.ca</u>

⁶ Must have a C- or better at CMTN to use as a prerequisite at UNBC.

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."