UNIVERSITY OF NORTHERN BRITISH COLUMBIA

SENATE MEETING
OPEN SESSION
AGENDA

June 28 2023
3:45 – 5:15 PM
Senate Chambers/Zoom

Please note: The Senate Meeting will begin at 3:30 pm with a brief Closed Session. The Public Session will begin at 3:45 pm.

1.0 Acknowledgement of Territory

2.0 S-202306.01
Approval of the Agenda †
Page 1 That the agenda for the June 28, 2023, Open Session of Senate be approved as presented.

† **NOTE:** *The Senate Agenda for the public session consists of two parts, a consent agenda, and a regular agenda. The consent agenda contains items that are deemed to be routine or noncontroversial and are approved by the Steering Committee of Senate for placement on that agenda. Any Senator wishing to discuss any item on the consent agenda may ask the Chair of Senate that the item be removed from the consent agenda and placed on the regular agenda. Items removed from the consent agenda will be placed on the regular agenda and dealt with in the order in which they appear on the full agenda. Senators wishing to ask a question regarding an item on the consent agenda, without necessarily removing that item from the consent agenda, are strongly encouraged to direct questions to the Secretary of Senate in advance of the meeting.*

3.0 Presentation: No Presentation in Open Session

4.0 Approval of the Minutes

S-202306.02
Approval of the Minutes
Page 8 That the Minutes for the May 24, 2023, Open Session of Senate be approved as presented.

5.0 Business Arising

5.1 ChatGPT and other AI Applications **Rodgers/Read**

6.0 President's Report *(10 minutes)* **Payne**

7.0 Report of the Provost *(5 minutes)* **Rodgers**

8.0 Report of the Registrar *(5 minutes)* **Read**

9.0 Question Period *(10 minutes)*

9.1 Written questions submitted in advance

9.2 Questions from the floor

10.0 Approval of Motions on the Consent Agenda **Payne**

S-202306.03
Approval of Motions on the Consent Agenda
That the motions on the consent agenda, except for those removed for placement on the regular agenda, be approved as presented.

11.0 Committee Reports

11.1 Senate Committee on Student Appeals **Klassen-Ross**

11.2 Senate Committee on Academic Affairs **Rodgers**

For Approval:

FACULTY OF ENVIRONMENT CALENDAR MOTIONS FOR JUNE 2023 SCAAF

Page 43 **S-202306.04**
Consent **Change(s) to Program Requirements** – MNRES Program
That the change(s) to the program requirements for the MNRES program on page 78-79 (PDF calendar accessible on the UNBC web page) of the 2022/2023 graduate calendar, be approved as proposed.
Effective Date: September 2023

FACULTY OF HUMAN AND HEALTH SCIENCES CALENDAR MOTIONS FOR JUNE 2023 SCAAF

Page 46 **S-202306.05**
Regular **Change(s) to Degree and Program Requirements** – Bachelor of Social Work
That the changes to the Qualification for Degree and Program Requirements for the Bachelor of Social Work, on pages 175-176 of the 2021-2022 undergraduate calendar, be approved as proposed.
Effective Date: September 2023

Page 50 **S-202306.06**
Consent **Change(s) to Program Requirements** – MEd Counselling Program *(for Senate Consent Agenda)*
That the change(s) to the requirements for the MEd Counselling Program, be approved as proposed.
Effective Date: September 2023

Page 58 **S-202306.07**
Consent **Change(s) to Program Requirements** – BEd for the School of Education
That the changes to the program requirements for the Bachelor of Education, on page 89 (in the PDF calendar accessible on the UNBC web page) of the 2022/2023 undergraduate calendar, be approved as proposed.
Effective Date: September 2023

Page 61 **S-202306.08**
Regular **New Course Approval** – EDUC 612-3: Trauma Counselling
That the course EDUC 612-3 Trauma Counselling that has been offered annually as an EDUC 692-3 Special Topics course be approved as proposed.
Effective Date: September 2023

Page 65 **S-202306.09**
Consent **Change(s) in Course Credit Hours –** EDUC 610-3,4: Qualitative Analysis in Education
That the change(s) to the credit hours for EDUC 610-(3,4) Qualitative Analysis in Education (MEd Program, Department of Psychology) in the PDF calendar accessible on the UNBC web page of the 2022-2023 graduate calendar, be approved as proposed.
Effective Date: September 2023

Page 67 **S-202306.10**

Consent **Change(s) to Calendar Description** – MA Disability Management Program
That the changes to the MA Disability Management program calendar page, on page 50 -51 of the 2022–2023 Graduate calendar be approved as proposed.
Effective Date: **September 2023**

Page 73 **S-202306.11**
Consent **Change(s) to Calendar Description** – Graduate Certificate in Special Education
That the change to the calendar description for the Graduate Certificate in Special Education, on page 56 of the 2022/2023 graduate calendar, be approved as proposed.
Effective Date: September 2023

Page 75 **S-202306.12**
Regular **Change(s) to Course Description** – HHSC 820-0 Qualifying Examination and Dissertation Proposal Defense
That the changes to the course description for HHSC 820-0 Qualifying Examination and Dissertation Proposal Defense on page 125 of the 2022/2023 graduate calendar, be approved as follows.
Effective Date: September 2023

FACULTY OF INDIGENOUS STUDIES, SOCIAL SCIENCES AND HUMANITIES CALENDAR MOTIONS FOR JUNE 2023 SCAAF

Page 77 **S-202306.13**
Consent **Changes to Course Description** – POLS 380-3: Law and Indigenous Peoples
That the changes to the course description for POLS 380-3: Law and Indigenous Peoples on page 293 of the 2022/2023 undergraduate calendar, be approved as proposed.
Effective Date: September 2023

FACULTY OF SCIENCE AND ENGINEERING CALENDAR MOTIONS FOR JUNE 2023 SCAAF

Page 79 **S-202306.14**
Consent **Change(s) to Program Requirements** – ENGR 270-3: Surveying
That ENGR 270 be moved to first year for Civil Engineering and Environmental Engineering Programs
Effective Date: September 2023

Page 83 **S-202306.15**
Consent **Change(s) to Program Requirements** – ENGR 354-3: Fluid Mechanics II and ENVE 455-3: Engineering Hydrology
To include ENGR 354 Fluid Mechanics II as a required course in the Civil Engineering Curriculum, replacing a technical elective in 3rd year and to include ENVE 455 Engineering Hydrology as a required course in the Civil Engineering Curriculum, replacing a technical elective in 4th year, be approved as proposed.
Effective Date: September 2023

Page 86 **S-202306.16**
Consent **Change(s) to Program Requirements** – ENGR 270-3: Surveying
That ENGR 270 be added as a required course to the Joint UNBC UBC Environmental Engineering Program, be approved as proposed.
Effective Date: September 2023

Page 89 **S-202306.17**
Consent **Change(s) to Program Requirements** – MASc in Engineering Program
That the changes to the Requirements for the MASc in Engineering Program on page 57/58 in the PDF calendar accessible on the UNBC web page of the 2023/2024 graduate calendar, be approved as proposed.
Effective Date: September 2023

Page 92 **S-202306.18**
Consent **Change(s) to Program Requirements –** BSc (Integrated) Coast Mount College Degree Completion Program

That the change to the required courses for the BSc (Integrated) Coast Mountain College Degree Completion Program, on **page 53** of the 2022/2023 undergraduate calendar, be approved as proposed.
Effective Date: September 2023

Page 94 **S-202306.19**
Consent **Course Deletion** – ENGR 350-3: Fluid Mechanics
That ENGR 350 be removed from the calendar, be approved as proposed.
Effective Date: September 2023

Page 96 **S-202306.20**
Regular **New Course Approval** – ENGR 400-6: Engineering Capstone Design Project
That the new course ENGR 400-6 be created to replace CIVE 400-3, CIVE 401-6, ENVE 400-3, and ENVE 401-6 in the Engineering curriculum, be approved as proposed.
Effective Date: September 2023

Page 100 **S-202306.21**
Regular **New Course Approval** – ENGR 406-3: Environmental Modelling *(for Senate Consent Agenda)*
That the new course ENGR 406-3 be created and cross-listed with ENSC 406-3. ENGR 406-3 replaces ENSC 406-3 in the Engineering curriculum, be approved as proposed.
Effective Date: September 2023

Page 104 **S-202306.22**
Consent **Change(s) to Credit hours -** ENGR 701-3: Graduate Seminar in Engineering
That ENGR 701 be offered in one semester as a 3 credit hour course instead of two 1.5 credit hour courses as well as change to letter grade instead of Pass/Fail, be approved as proposed
Effective Date: September 2023

Page 106 **S-202306.23**
Consent **Change(s) to Program Calendar Description** – School of Engineering
That the changes to the School of Engineering programs calendar description on pages 103 to 109 in the PDF calendar accessible on the UNBC web page of the 2022/2023 undergraduate calendar, be approved as proposed to reflect all changes made to the programs during the past year.
Effective Date: September 2023

Page 123 **S-202306.24**
Consent **Course Title and Description Change(s) –** ENGR 353-3: Hydrology and Open Channel Flow
That ENGR 353-3 “Hydrology and Open Channel Flow” be renamed to “Open Channel Flow”, be approved as follows.
Effective Date: September 2023

Page 126 **S-202306.25**
Regular **Course Prerequisite Change(s) –** ENVE 222-3: Engineering Biology
That the changes to the prerequisite requirements for ENVE 222-3, relating to ENGR 210-3,be approved as proposed.
Effective Date: September 2023

Page 128 **S-202306.26**
Regular **Course Prerequisite Change(s) –** IENG 722-3: Project Design II
That IENG 722 should have IENG 611 and IENG 613 as prerequisites, be approved as follows.
Effective Date: September 2023

Page 130 **S-202306.27**
Regular **Course Prerequisite Change(s) –** IENG 723-3: Wood Design II
That IENG 723 should have IENG 611 and IENG 613 as prerequisites, be approved as follows
Effective Date: September 2023

Page 132 **S-202306.28**
Consent **Course Prerequisite Change(s) –** IENG 727-3: Prefabrication and Digital Manufacturing in Wood Construction

That IENG 727 should have IENG 611 as a prerequisite, be approved as follows.
Effective Date: September 2023

Page 134 **S-202306.29**
Consent **Course Prerequisite Change(s) –** IENG 731-3: Master of Engineering Project
That IENG 731 should have IENG 722 and IENG 723 as prerequisites, be approved as follows.
Effective Date: September 2023

11.3 Steering Committee of Senate **Payne**

For Approval:

Page 136 **S-202306.30**
Regular **Change(s) to the Senate Handbook – SCAAf Quorum**
That the Terms of Reference for the Senate Committee on Academic Affairs (SCAAf) and subsequently the Senate Handbook be approved.
Effective Date: Upon Approval of Senate

Page 139 **S-202306.31**
Regular **New Course Approval – CHEM 742 -3**
That the new course CHEM 742-3 Organic Structure Determination be approved as follows:
Proposed semester of first offering: September 2023

For Information Items: Schedule of Dates for UNBC Senate 2023-2024

August 23, 2023
September 27, 2023
October 25, 2023
November 22, 2023
January 24, 2024
February, 28, 2024
March 27. 2024
April 24, 2024
May 29, 2024 * (meeting changed from the 4th Wednesday of the month to the 5th)
June 26, 2024

11.4 Senate Committee on Nominations **Zogas**

Regular **S-202306.32**

Recommendation of Senate Committee Members to Senate
That, on the recommendation of the Senate Committee on Nominations, the following candidates, who have met all eligibility requirements to serve on Senate committees as indicated, be appointed as proposed.
Effective date: June 28, 2023

Senate Committee Vacancies

COMMITTEE	POSITION	TERM EXPIRY DATE
SCS	Lay Senator	03/31/2024
SCN	Faculty Senator	03/31/2026
	Lay Senator	03/31/2024
SCCC	Student Senator	08/31/2023
SCAAf	Faculty Member	03/31/2026
	Graduate Student	08/31/2023
SCSB	Undergraduate Student	08/31/2023
SCUB	Graduate Student	08/31/2023
	Undergraduate Student	08/31/2023

11.5 Senate Committee on Curriculum and Calendar **Stathers**

11.6 Senate Committee on Admissions and Degrees **Read**

11.7 Senate Committee on Indigenous Initiatives **Payne**

11.8 Senate Committee on Honorary Degrees and Special Forms of Recognition **Payne**

11.9 Senate Committee on Scholarships and Bursaries **Lewis**

For Information

Page 142 **SCSB20230517.04** *(approved)*
Pharmasave Prince George Scholarship
That the NEW Terms and Conditions for the Pharmasave Prince George Scholarship be approved.
Effective: 2023-2024 Academic Year

Page 144 **SCSB20230517.05** *(approved)*
Vohora LLP Scholarship
That the NEW Terms and Conditions for the Vohora LLP Scholarship be approved.
Effective: 2023-2024 Academic Year

Page 146 **SCSB20230517.06** *(approved)*
Access Engineering Consultants Ltd. Scholarship
That the REVISED Terms and Conditions for the Access Engineering Consultants Ltd. Scholarship be approved.
Effective: 2023-2024 Academic Year

Page 148 **SCSB20230517.07** *(approved)*
College Heights Veterinary Clinic Ltd. Award
That the REVISED Terms and Conditions for the College Heights Veterinary Clinic Ltd. Award be approved.
Effective: 2023-2024 Academic Year

Page 150 **SCSB20230517.08** *(approved)*
Pretivm Award (Newcrest Award)
That the REVISED Terms and Conditions for the Pretivm Award with a name change to Newcrest Award be approved.
Effective: 2023-2024 Academic Year

Page 152 **SCSB20230517.09** *(approved)*
Pretivm Indigenous Award (Newcrest Indigenous Award)
That the REVISED Terms and Conditions for the Pretivm Indigenous Award with a name change to Newcrest Indigenous Award be approved.
Effective: 2023-2024 Academic Year

Page 154 **SCSB20230517.10** *(approved)*
Pretivm Women's Award (Newcrest Women's Award)
That the REVISED Terms and Conditions for the Pretivm Women's Award with a name change to Newcrest Women's Award be approved.
Effective: 2023-2024 Academic Year

11.10 Senate Committee on University Budget **Gehloff**

12.0 Information

13.0 Other Business

14.0 S-202306.33 *(10 minutes)*

Move to the Closed Session
That the meeting move to Close Session.

15.0 **S-202306.37**
Adjournment
That the Senate meeting be adjourned.

UNIVERSITY OF NORTHERN BRITISH COLUMBIA

Motion Number (assigned by Steering Committee of Senate): **S-202306.04**

SENATE COMMITTEE ON ACADEMIC AFFAIRS

PROPOSED REVISION OF CALENDAR ENTRY

Motion: That the change(s) to the program requirements for the MNRES program on page 78-79 (PDF calendar accessible on the UNBC web page) of the 2022/2023 graduate calendar, be approved as proposed.

1. **Effective date:** September 2023

2. **Rationale for the proposed revisions:** NRES 703-3 Integrated Resource Management is no longer offered due to low demand, and a recent faculty retirement. Instead, we require an 'integrated natural resources' course selected from an annual list provided by the NRES graduate program.

3. **Implications of the changes for other programs, etc., if applicable:** None

4. **Reproduction of current Calendar entry for the item to be revised:**

All students must complete Graduate Colloquia (NRES 701-0.5) twice during their course of studies, take a course in integrated resource management (NRES 703-3), complete NRES 700-3 and complete a research methods course approved by their supervisor and the Chair of NRES Graduate Program.
…
Summary of Thesis Option

Core Courses 19 credit hours
NRES 700-3 Research in Natural Resources and Environmental Studies
NRES 701-0.5 Graduate Colloquia (taken twice)
NRES 703-3 Integrated Resource Management
NRES 792-12 Master of Natural Resources and Environmental Studies Thesis
Methods Course 3 credit hours
Elective Courses 3 credit hours
Total Required **25 credit hours**
…
Summary of Project Option

Core Courses 13 credit hours
NRES 700-3 Research in Natural Resources and Environmental Studies
NRES 701-0.5 Graduate Colloquia (taken twice)
NRES 703-3 Integrated Resource Management
NRES 793-6 Master of Natural Resources and Environmental Studies Project
Methods Course 3 credit hours
Elective Courses 9 credit hours
Total Required **25 credit hours**
…
The Graduate Colloquia (NRES 701-0.5), taken twice, is offered during the September and January Semesters. Electives, the required methods course and Integrated Resource Management (NRES 703-3) may be taken at any time during Years I and II.

5. Proposed revision with changes underlined and deletions indicated clearly using "~~strikethrough~~":

All students must complete Graduate Colloquia (NRES 701-0.5) twice during their course of studies, ~~take a course in integrated resource management (NRES 703-3), complete~~ as well as Research in NRES (NRES 700-3), an integrated natural resources course (identified from annual course offerings), and ~~complete~~ a research methods course approved by their supervisor and the ~~Chair~~ coordinator of the NRES Graduate Program.

…

Summary of Thesis Option

Core Courses	~~19~~ 16 credit hours
NRES 700-3 Research in Natural Resources and Environmental Studies	
NRES 701-0.5 Graduate Colloquia (taken twice)	
~~NRES 703-3 Integrated Resource Management~~	
NRES 792-12 Master of Natural Resources and Environmental Studies Thesis	
Methods Course	3 credit hours
Integrated Natural Resources Course	3 credit hours
Elective Courses	3 credit hours
Total Required	**25 credit hours**

…

Summary of Project Option

Core Courses	~~13~~ 10 credit hours
NRES 700-3 Research in Natural Resources and Environmental Studies	
NRES 701-0.5 Graduate Colloquia (taken twice)	
~~NRES 703-3 Integrated Resource Management~~	
NRES 793-6 Master of Natural Resources and Environmental Studies Project	
Methods Course	3 credit hours
Integrated Natural Resources Course	3 credit hours
Elective Courses	9 credit hours
Total Required	**25 credit hours**

…

The Graduate Colloquia (NRES 701-0.5), taken twice, is offered during the September and January Semesters. The ~~E~~electives, ~~the required~~ methods course, and ~~i~~integrated natural ~~R~~resources course ~~Management (NRES 703-3) may~~ are recommended to be taken at any time during Years I and II.

6. Authorization:

SCCC Reviewed: May 23, 2023

Program / Academic / Administrative Unit: NRES Graduate Program

Faculty: Environment

Faculty Council Motion Number: FEFC 2023052401

Faculty Council Approval Date: E-vote May 24, 2023

Senate Committee on Indigenous Initiatives Motion Number: N/A

Senate Committee on Indigenous Initiatives Meeting Date: N/A

7. Other Information

Attachment Pages: 0 pages

INFORMATION TO BE COMPLETED AFTER SENATE COMMITTEE ON ACADEMIC AFFAIRS MEETING

Brief Summary of Committee Debate:

Motion No.: SCAAF 202306.03

Moved by: Kriston Rennie **Seconded by:** Todd Whitcombe

Committee Decision: CARRIED

Approved by SCAAF: June 14, 2023 _____
Date **Chair's Signature**

For recommendation to ✓ **, or information of _____ Senate.**

UNBC UNIVERSITY OF NORTHERN BRITISH COLUMBIA

Motion Number (assigned by Steering Committee of Senate): **S-202306.05**

SENATE COMMITTEE ON ACADEMIC AFFAIRS

PROPOSED REVISION OF CALENDAR ENTRY

Motion: That the changes to the Qualification for Degree and Program Requirements for the Bachelor of Social Work, on pages 175-176 of the 2021-2022 undergraduate calendar, be approved as proposed.

1. **Effective date:** September 2023

2. **Rationale for the proposed revisions:**

   The School of Social Work has undertaken a curriculum redesign process for its BSW program. The proposed changes to the Program Requirements for the Bachelor of Social Work reflect the new curriculum, most notably an increase in the required courses from 48 to 51 credit hours, leaving 9 credit hours for elective courses within the 60 credit hour BSW program; as well, the program is removing the Child Welfare and Indigenous Specializations.

3. **Implications of the changes for other programs, etc., if applicable:** N/A

4. **Reproduction of current Calendar entry for the item to be revised:**

Qualification for Degree

It is the responsibility of the student to ensure that their degree requirements are met. Graduation requirements are found in the Regulations and Policies section of this Calendar. To fulfill the requirements of graduation, the student must also:

- attain a minimum Cumulative GPA of 2.33 (C+) on courses for credit towards the Social Work degree.
- obtain a minimum passing grade of 2.00 (C) in every Social Work course for credit towards the degree (note: Students enrolling in any required course must have completed all prerequisites with a grade of C or better); and
- complete all requirements for the BSW program within eight years of admission into the program or from the first Social Work course used for credit towards the degree.

In addition, BSW students may choose to meet the requirements for one of the Areas of Specialization described in this degree program. The Specialization will be recorded on the student's transcript.

Program Requirements

300 Level

SOCW 300-3 Social Work Communication Skills
SOCW 301-3 Critical Social Work Practice
SOCW 302-6 Social Work Field Education I
SOCW 310-3 Social Work and Indigenous Peoples
SOCW 320-3 Critical Social Policy
SOCW 330-3 Social Work Research/Policy/Practice
SOCW 336-3 Social Work Philosophy and Ethics

400 Level

SOCW 401-3 Northern/Remote Social Work Practice

SOCW 402-15 Social Work Field Education II
SOCW 420-3 Family/Child Welfare Policy
SOCW 421-3 Human Growth and Development

Students must select an additional 12 credit hours of approved 400-level Social Work courses from the approved list.

SOCW 422-3 Child Welfare Practice
SOCW 426-3 Current Issues in Child Welfare Practice
SOCW 437-3 Social Work with Groups and Communities
SOCW 439-3 Social Work/Law and the Justice System
SOCW 440-3 Social Work in Mental Health
SOCW 441-3 Social Work and Substance Abuse
SOCW 442-3 Social Work with Victims of Abuse
SOCW 443-3 Medical Social Work
SOCW 444-3 Social Work Critical Issues in Aging
SOCW 445-3 Social Work and Cross-Cultural Practice
SOCW 449-3 Gender and Sexuality
SOCW 450-3 Social Work and Family Practice
SOCW 452-3 Social Work/Crisis Intervention
SOCW 453-3 Social Work Practice and Spirituality
SOCW 454-3 Disability Issues
SOCW 455-3 Indigenous Governance and Social Policy
SOCW 456-3 Indigenous Family Caring Systems
SOCW 457-3 Individual and Community Wellness for Indigenous peoples
SOCW 498-(3-6) Special Topics
SOCW 499-3 Directed Readings

Elective Requirement
Electives at any level in any subject sufficient to ensure completion of a minimum of 120 credit hours.

5. Proposed revision with changes underlined and deletions indicated clearly using "~~strikethrough~~":

Qualification for Degree
It is the responsibility of the student to ensure that their degree requirements are met. Graduation requirements are found in the Regulations and Policies section of this Calendar. To fulfill the requirements of graduation, the student must also:

- attain a minimum Cumulative GPA of 2.33 (C+) on courses for credit towards the Social Work degree.
- obtain a minimum passing grade of 2.00 (C) in every Social Work course for credit towards the degree (note: Students enrolling in any required course must have completed all prerequisites with a grade of C or better); and
- complete all requirements for the BSW program within eight years of admission into the program or from the first Social Work course used for credit towards the degree.

~~In addition, BSW students may choose to meet the requirements for one of the Areas of Specialization described in this degree program. The Specialization will be recorded on the student's transcript.~~

Transfer Credit
All transfer credit for coursework taken prior to admission to the BSW program ~~will be~~is evaluated and applied at the time of initial registration in the program. After students have been admitted to the School of Social Work, coursework taken in other institutions for transfer credit towards the degree requires a letter of permission prior to the registration in the course.

Program Requirements

300 Level

SOCW 300-~~36~~ ~~Social Work Communication~~ Introduction to Counselling and Assessment Skills
SOCW 301-3 Critical Social Work Practice
SOCW 302-6 Social Work Field Education I
SOCW 310-3 Social Work and Indigenous Peoples
SOCW 320-3 Critical Social Policy
SOCW 330-3 Social Work Research/Policy/Practice
SOCW 336-3 Social Work Philosophy and Ethics

400 Level
SOCW 401-3 Northern/Remote Social Work Practice
SOCW 402-15 Social Work Field Education II
SOCW 420-3 Family/Child Welfare Policy
SOCW 421-3 Human Growth and Development

Students must select an additional ~~12~~9 credit hours of approved 400-level Social Work courses from the approved list.

~~SOCW 422-3 Child Welfare Practice~~
SOCW 426-3 Current Issues in Child Welfare Practice
SOCW 437-3 Social Work with Groups and Communities
SOCW 439-3 Social Work/Law and the Justice System
SOCW 440-3 Social Work in Mental Health
SOCW 441-3 Social Work and Substance ~~Abu~~Use
SOCW 442-3 Social Work with Victims of Abuse
SOCW 443-3 ~~Medical~~ Social Work and Health Care
SOCW 444-3 Social Work Critical Issues in Aging
SOCW 445-3 Social Work and Cross-Cultural Practice
~~SOCW 449-3 Gender and Sexuality~~
SOCW 450-3 Social Work and Family Practice
~~SOCW 452-3 Social Work/Crisis Intervention~~
SOCW 453-3 Social Work Practice and Spirituality
SOCW 454-3 Disability Issues
SOCW 455-3 Indigenous Governance and Social Policy
SOCW 456-3 Indigenous ~~Family Caring Systems~~ Wellness: Individuals, Families, and Communities
~~SOCW 457-3 Individual and Community Wellness for Indigenous peoples~~
SOCW 498-(3-6) Special Topics
SOCW 499-3 Directed Readings

Elective Requirement
Electives at any level in any subject sufficient to ensure completion of a minimum of 120 credit hours.

6. Authorization:

SCCC Review Date: April 25, 2022

Program / Academic / Administrative Unit: School of Social Work

Faculty: Human and Health Sciences

Faculty Council Motion Number: FHHSFC.2022.05.19.05

Faculty Council Approval Date: May 19, 2022

Senate Committee on First Nations and Aboriginal Peoples Motion Number: N/A

Senate Committee on First Nations and Aboriginal Peoples Meeting Date: N/A

7. Other Information

Attachment Pages: **20** pages

INFORMATION TO BE COMPLETED AFTER SENATE COMMITTEE ON ACADEMIC AFFAIRS MEETING

Brief Summary of Committee Debate:

Motion No.: SCAAF 202306.04

Moved by: Ron Camp **Seconded by:** David Casperson

Committee Decision: CARRIED

Approved by SCAAF: June 14, 2023 

Date **Chair's Signature**

For recommendation to ✓, or information of _____ Senate.

UNBC UNIVERSITY OF NORTHERN BRITISH COLUMBIA

Motion Number (assigned by Steering Committee of Senate): S-202306.06

SENATE COMMITTEE ON ACADEMIC AFFAIRS

PROPOSED REVISION OF CALENDAR ENTRY

Motion: That the change(s) to the requirements for the MEd Counselling Program, be approved as proposed.

1. Effective date: September 2023

2. Rationale for the proposed revisions: The MEd Counselling Program is moving towards accreditation with the Canadian Counselling and Psychotherapy Association (CCPA) in order to stay competitive with other counselling programs in Canada. As part of the process to move to accreditation, the MEd Counselling program will need to change the number of required credits from the current 40 to a minimum of 48. To do so, it is proposed that three courses currently listed as electives become required courses. The three courses are: EDUC 618-3: Family Counselling, EDUC 612-3 Trauma Counselling (both of which are offered once each year), and EDUC 619: Counselling for Aboriginal/Indigenous People (which has been offered every other year as a July Semester intensive course). This change will result in the MEd Counselling program having 48 required credit.

3. Implications of the changes for other programs, etc., if applicable: None

4. Reproduction of current Calendar entry for the item to be revised:

Counselling (MEd Program)

Paul Siakaluk, Professor and Chair
Linda O'Neill, Associate Professor

The Counselling specialization is designed to prepare counsellors to provide professional services and leadership in counselling and psycho-educational programs offered in schools, post-secondary institutions, social service agencies, and community health organizations. Students have the opportunity to choose the type(s) of counselling they wish to focus upon, and to complete periods of supervised clinical practice in practicum settings that are relevant to their interests, based on availability. The specialization includes an integrated core of required courses, elective courses, and a thesis, project or comprehensive examination. Counselling students are required to complete eight required courses, three elective courses, and a comprehensive examination. Application can be made to the Department of Psychology to enter a thesis or project route after completion of at least 12 credit hours of coursework. If approved, the thesis route would consist of eight required courses, one elective, and the thesis, while a project route would consist of eight required courses, two electives, and a project.

Admission

Application deadlines can be found in the Graduate Programs Admissions and Regulations section of the Graduate Calendar at **www.unbc.ca/calendar/graduate/admissions**.

Admission to the MEd Counselling specialization at the Prince George campus occurs each September; deadline for applications is December 15 of the prior year. Admission to the program at regional campuses does not normally occur each year and will vary in response to demand and resources.

In addition to the admission application requirements outlined in section 1.0 of the Graduate Admissions and Regulations, priority will be given to those applicants applying for the MEd Counselling specialization who have (a) graduated with a Baccalaureate degree a minimum of two years prior to the admission date to which they are applying, and (b) obtained some paid or unpaid work experience in a helping capacity at a counselling-related or teaching-related setting since receiving their Baccalaureate degree.

Applicants are also required to submit a Curriculum Vitae or Résumé that indicates the number of hours in each employment or volunteer position. A list of any scholarships or publications should also be included.

Criminal Record Review

In addition to meeting the admission application requirements outlined in Section 1.0 of the Graduate Admissions and Regulations, all applicants to the Education (MEd) Counselling program are required to submit a Criminal Record Check search prior to the first day of classes in their entry semester.

Domestic applicants must supply a Criminal Record Check search result after receiving an offer of admission and before the first day of classes; the search result is not required with the application. International applicants must submit a Criminal Record Check search result provided by their local police authority upon application, and will also be required to submit a British Columbia Criminal Record Check if offered admission. The Office of the Registrar will provide instructions to domestic and international applicants who have accepted offers of admission on how to complete a British Columbia Criminal Record Check.

Requirements

Provided that such courses have not been associated with the receipt of either a degree or diploma from UNBC or another educational institution, students may apply to the Dean for up to 6 credit hours of previously completed graduate-level coursework that is equivalent to that completed in the MEd program. Where equivalent courses have been associated previously with the receipt of either a degree or diploma, students are permitted to elect alternative courses from the MEd program to satisfy the requirements for the degree.

Students in an MEd Program may take up to 6 credit hours of elective coursework from UNBC programs other than Counselling or from other institutions under the Western Deans' Agreement (students require permission of their Academic Supervisor and the Chair).

Thesis Requirement

The thesis route emphasizes academic study, research, and the successful completion of a thesis. This program route is designed to develop each student's ability to evaluate theory and practice,

and conduct research that contributes to the counselling discipline. The thesis route requires the successful completion of a minimum of 40 credit hours of graduate coursework and includes 9 credit hours of supervised research culminating in the completion of a thesis and the successful defence of it in an oral examination.

Project Requirement

The project route emphasizes the study of theory and practice, and the successful completion of an innovative and applied project that addresses a particular aspect of counselling support and practice. This program route is designed to develop a student's ability to evaluate and improve professional practice in counselling. The project route requires the successful completion of a minimum of 40 credit hours of graduate coursework and includes 6 credit hours of supervised applied research and development culminating in a non-defendable project.

Comprehensive Examination Requirement

The comprehensive examination route requires the successful completion of a comprehensive examination that evaluates a student's knowledge of theory, research, and practice in his/her field of study. This comprehensive examination route is designed to enhance and reinforce a student's knowledge of both theory and practice, as well as their interrelationship. The comprehensive examination route requires the successful completion of a minimum of 40 credit hours of graduate coursework including 3 credit hours awarded upon the successful completion of a written comprehensive examination at the end of the student's program.

Application can be made to the Counselling Program to enter a thesis or project route after having completed at least 12 credit hours of coursework.

Required Courses

EDUC 601-3	Educational Research Design and Methodology
EDUC 613-3	Interpersonal Counselling Skills
EDUC 711-3	Counselling Theory
EDUC 712-3	Counselling Practice
EDUC 714-3	Group Counselling Processes
EDUC 717-3	Ethics in Counselling
EDUC 719-6	Counselling Practicum

One of the following research courses is required; the other may be taken as elective credit:

EDUC 602-4	Quantitative Research Design and Data Analysis

EDUC 610-4	Qualitative Analysis in Education

Elective Courses

EDUC 603-4	Advanced Educational Research Data Analysis
EDUC 609-3	Aboriginal/Indigenous Learners: History, Culture, and Ways of Knowing
EDUC 618-3	Family Counselling
EDUC 619-3	Counselling for Aboriginal/Indigenous Peoples
EDUC 633-3	Human Development: Implications for Education
EDUC 634-3	Achievement Motivation
EDUC 635-6	Educating Exceptional Students
EDUC 636-3	Language and Learning Disabilities
EDUC 692-3	Special Topics
EDUC 693-3	Directed Reading
EDUC 715-3	Career Counselling
EDUC 716-3	Clinical Counselling
EDUC 795-3	Research Seminar

Thesis, Project or Comprehensive Examination

EDUC 797-3	Comprehensive Examination
EDUC 798-6	MEd Project
EDUC 799-9	MEd Thesis

5. Proposed revision with changes underlined and deletions indicated clearly using "~~strikethrough~~":

Counselling (MEd Program)

~~Paul Siakaluk, Professor and Chair~~
Linda O'Neill, ~~Associate~~ Professor
John Sherry, Assistant Professor
Chair (TBA)

The Counselling program ~~specialization~~ is designed to prepare counsellors to provide professional services and leadership in counselling and psycho-educational programs offered in schools, post-secondary institutions, social service agencies, and community health organizations. Students have the opportunity to choose the type(s) of counselling they wish to focus upon, and to complete periods of supervised clinical practice in practicum settings that are relevant to their interests, based on availability. The program ~~specialization~~ includes an integrated core of required courses, elective courses, and a thesis, project, or comprehensive examination. Counselling students are required to complete eleven ~~eight~~ required courses, three elective courses, and a comprehensive examination. Application can be made to the Department of Psychology to enter a thesis or project route after completion of at least 12 credit hours of coursework. If approved, the thesis route would consist of eleven ~~eight~~ required courses, one elective, and the thesis, while a project route would consist of eleven ~~eight~~ required courses, two electives, and a project.

Admission

Application deadlines can be found in the Graduate Programs Admissions and Regulations section of the Graduate Calendar at **www.unbc.ca/calendar/graduate/admissions**.

Admission to the MEd Counselling program ~~specialization~~ at the Prince George campus occurs each September; deadline for applications is December 15 of the prior year. Admission to the program at regional campuses does not normally occur each year and will vary in response to demand and resources.

In addition to the admission application requirements outlined in section 1.0 of the Graduate Admissions and Regulations, priority will be given to those applicants applying for the MEd Counselling program ~~specialization~~ who have (a) graduated with a Baccalaureate degree a minimum of two years prior to the admission date to which they are applying, and (b) obtained some paid or unpaid work experience in a helping capacity at a counselling-related or teaching-related setting since receiving their Baccalaureate degree.

Applicants are also required to submit a Curriculum Vitae or ~~R~~résumé that indicates the number of hours in each employment or volunteer position. A list of any scholarships or publications should also be included.

Criminal Record Review

In addition to meeting the admission application requirements outlined in Section 1.0 of the Graduate Admissions and Regulations, all applicants to the ~~Education (~~MEd~~)~~ Counselling program are required to submit a Criminal Record Check search prior to the first day of classes in their entry semester.

Domestic applicants must supply a Criminal Record Check search result after receiving an offer of

admission and before the first day of classes; the search result is not required with the application. International applicants must submit a Criminal Record Check search result provided by their local police authority upon application, and will also be required to submit a British Columbia Criminal Record Check if offered admission. The Office of the Registrar will provide instructions to domestic and international applicants who have accepted offers of admission on how to complete a British Columbia Criminal Record Check.

Requirements

Provided that such courses have not been associated with the receipt of either a degree or diploma from UNBC or another educational institution, students may apply to the Dean for up to 6 credit hours of previously completed graduate-level coursework that is equivalent to that completed in the MEd program. Where equivalent courses have been associated previously with the receipt of either a degree or diploma, students are permitted to elect alternative courses from the MEd program to satisfy the requirements for the degree.

Students in an MEd ~~P~~program may take up to 6 credit hours of elective coursework from UNBC programs other than Counselling or from other institutions under the Western Deans' Agreement (students require permission of their Academic Supervisor and the Chair).

Thesis Requirement

The thesis route emphasizes academic study, research, and the successful completion of a thesis. This program route is designed to develop each student's ability to evaluate theory and practice, and conduct research that contributes to the counselling discipline. The thesis route requires the successful completion of a minimum of 48 ~~40~~ credit hours of graduate coursework and includes 9 credit hours of supervised research culminating in the completion of a thesis and the successful defence of it in an oral examination.

Project Requirement

The project route emphasizes the study of theory and practice, and the successful completion of an innovative and applied project that addresses a particular aspect of counselling support and practice. This program route is designed to develop a student's ability to evaluate and improve professional practice in counselling. The project route requires the successful completion of a minimum of 48 ~~40~~ credit hours of graduate coursework and includes 6 credit hours of supervised applied research and development culminating in a non-defendable project.

Comprehensive Examination Requirement

The comprehensive examination route requires the successful completion of a comprehensive examination that evaluates a student's knowledge of theory, research, and practice in his/her field of study. This comprehensive examination route is designed to enhance and reinforce a student's knowledge of both theory and practice, as well as their interrelationship. The comprehensive examination route requires the successful completion of a minimum of 48 ~~40~~ credit hours of graduate coursework including 3 credit hours awarded upon the successful completion of a written comprehensive examination at the end of the student's program.

Application can be made to the Counselling Program to enter a thesis or project route after having completed at least 12 credit hours of coursework.

Required Courses

EDUC 601-3 Educational Research Design and Methodology
EDUC 613-3 Interpersonal Counselling Skills
EDUC 618-3 Family Counselling
EDUC 619-3 Counselling for Aboriginal/Indigenous Peoples
EDUC 692-3 Trauma Counselling
EDUC 711-3 Counselling Theory
EDUC 712-3 Counselling Practice
EDUC 714-3 Group Counselling Processes
EDUC 717-3 Ethics in Counselling
EDUC 719-6 Counselling Practicum

One of the following research courses is required; the other may be taken as elective credit:

EDUC 602-4 Quantitative Research Design and Data Analysis
EDUC 610-34 Qualitative Analysis in Education

Elective Courses

EDUC 603-4 Advanced Educational Research Data Analysis
~~EDUC 609-3 Aboriginal/Indigenous Learners: History, Culture, and Ways of Knowing~~
~~EDUC 618-3 Family Counselling~~
~~EDUC 619-3 Counselling for Aboriginal/Indigenous Peoples~~
EDUC 633-3 Human Development: Implications for Education
~~EDUC 634-3 Achievement Motivation~~
~~EDUC 635-3 Educating Exceptional Students~~
~~EDUC 636-3 Language and Learning Disabilities~~
EDUC 692-3 Special Topics (Assessment in Counselling, Child and Youth Counselling, Multicultural Counselling)
EDUC 693-3 Directed Reading
EDUC 715-3 Career Counselling
EDUC 716-3 Clinical Counselling
EDUC 795-3 Research Seminar

Thesis, Project or Comprehensive Examination

EDUC 797-3 Comprehensive Examination
EDUC 798-6 MEd Project
EDUC 799-9 MEd Thesis

6. Authorization:

Program / Academic / Administrative Unit: Department of Psychology

SCCC Reviewed: April 17, 2023

Faculty: Health and Human Sciences

Faculty Council Motion Number: FHHS.2023.05.25.07

Faculty Council Approval Date: May 25, 2023

Senate Committee on Indigenous Initiatives Motion Number:

Senate Committee on Indigenous Initiatives Meeting Date:

7. Other Information

Attachment Pages: 0 pages

INFORMATION TO BE COMPLETED AFTER SENATE COMMITTEE ON ACADEMIC AFFAIRS MEETING

Brief Summary of Committee Debate:

Motion No.: SCAAF 202306.05

Moved by: Ron Camp **Seconded by:** David Casperson

Committee Decision: CARRIED

Approved by SCAAF: June 14, 2023 _____
Date **Chair's Signature**

For recommendation to ✓, or information of _____ Senate.

UNBC UNIVERSITY OF NORTHERN BRITISH COLUMBIA

Motion Number (assigned by Steering Committee of Senate): **S-202306.07**

SENATE COMMITTEE ON ACADEMIC AFFAIRS

PROPOSED REVISION OF CALENDAR ENTRY

Motion: That the changes to the program requirements for the ~~School~~ Bachelor of Education, on page 89 (in the PDF calendar accessible on the UNBC web page) of the 2022/2023 undergraduate calendar, be approved as proposed.

1. **Effective date:** September 2023 preferred

2. **Rationale for the proposed revisions:** These changes are to clarify the expectation that BEd students need to have successfully passed all other coursework before starting their final practicum experience.

3. **Implications of the changes for other programs, etc., if applicable:** None

4. **Reproduction of current Calendar entry for the item to be revised:**

Academic Regulations

Teacher candidates must receive a Pass in all courses within a Block in order to continue to the next Block. Teacher candidates are not able to progress in their program until they successfully repeat a course for which they received a Fail.

Teacher candidates are required to withdraw from their BEd program if they have two instances of not meeting the minimum passing grade requirement.

EDUC 405 and EDUC 446 are interwoven, multi-semester courses that are aligned with courses taken across the entire Bachelor of Education program and cannot be repeated. Teacher candidates who receive a Fail in one of the interwoven course(s) EDUC 405 and/or EDUC 446 are required to withdraw from the program. Grades are assigned in these courses in either Block 5 or Block 6 of the program.

Teacher candidates must successfully complete all course requirements in each Block prior to the last Block of the program to be eligible for the summative practicum EDUC 491.

Regular attendance is expected of all teacher candidates in all courses. An instructor can initiate procedures to debar a teacher candidate from attending classes and from final examinations where unexcused absences exceed three hours of scheduled classes in one term, which may result in a Fail in the course.

Students who plan to do coursework at other institutions are required to seek prior approval from the Office of the Registrar and the Chair of the School of Education if they wish such courses to be credit toward a BEd degree at UNBC.

5. **Proposed revision with changes underlined and deletions indicated clearly using**

"~~strikethrough~~":

Academic Regulations

Teacher candidates must receive a PASS in all courses within a Block in order to continue to the next Block. Teacher candidates are not able to progress in their program until they successfully repeat a course for which they received a FAIL.

Teacher candidates are required to withdraw from their BEd program if they have two instances of not meeting the minimum passing grade requirement.

EDUC 405 and EDUC 446 are interwoven, multi-semester courses that are aligned with courses taken across the entire Bachelor of Education program and cannot be repeated. Teacher candidates who receive a FAIL in one of the interwoven course(s) EDUC 405 and/or EDUC 446 are required to withdraw from the program. Grades are assigned in these courses in either Block 5 or Block 6 of the program.

Teacher candidates must successfully complete all course requirements for the BEd program ~~in each Block~~ prior to beginning ~~the last Block of the program to be eligible for~~ the summative practicum for EDUC 491, with the exception of EDUC 405 in which students may continue to add experiences and ongoing reflective practice from EDUC 491; any required coursework for EDUC 405 is not due until at least a week after the practicum concludes. No coursework or assignments, other than the practicum, are expected to be completed during the practicum components of EDUC 391, EDUC 490, or EDUC 491.

Regular attendance is expected of all teacher candidates in all courses. An instructor can initiate procedures to debar a teacher candidate from attending classes and from final examinations where unexcused absences exceed three hours of scheduled classes in one term, which may result in a FAIL in the course.

Students who plan to do coursework at other institutions are required to seek prior approval from the Office of the Registrar and the Chair of the School of Education if they wish such courses to be credit toward a BEd degree at UNBC.

6. Authorization:

Program / Academic / Administrative Unit: School of Education

SCCC Reviewed: May 23, 2023

Faculty: Human and Health Sciences

Faculty Council Motion Number: FHHS.2023.05.25.03

Faculty Council Approval Date: May 25, 2023

Senate Committee on Indigenous Initiatives Motion Number: N/A

Senate Committee on Indigenous Initiatives Meeting Date: N/A

7. Other Information

Attachment Pages: **0** pages

INFORMATION TO BE COMPLETED AFTER SENATE COMMITTEE ON ACADEMIC AFFAIRS MEETING

Brief Summary of Committee Debate:

Motion No.: SCAAF 202306.06

Moved by: Ron Camp **Seconded by:** David Casperson

Committee Decision: CARRIED

Approved by SCAAF: June 14, 2023 _____
Date **Chair's Signature**

For recommendation to ✓, or information of _____ Senate.

UNBC UNIVERSITY OF NORTHERN BRITISH COLUMBIA

Motion Number (assigned by Steering Committee of Senate): **S-202306.08**

SENATE COMMITTEE ON ACADEMIC AFFAIRS

NEW COURSE APPROVAL MOTION FORM

Motion: That the course EDUC 612-3 Trauma Counselling that has been offered annually as an EDUC 692-3 Special Topics course be approved as proposed.

A. Description of the Course

1. **Proposed semester of first offering:** September 2023

2. **Academic Program:** MEd Counselling, Psychology

3. **Course Subject, Number*, and Credit hours:** EDUC 612-3

4. **Course Title:** Trauma Counselling

5. **Goal(s) of Course:** To provide clinicians and counsellors with an effective theoretical and practical framework to support people who have experienced adversity

6. **Calendar Course Description:**

This course is designed as the foundation for counsellors and clinicians to provide trauma-informed support to people who have experienced adversity. This course presents the basic neurobiology of trauma, including implications for memory, learning, and emotional regulation. The connection between trauma and addictions is explored. Various interventions and strength-based approaches are included, guided by the importance of safety in all aspects of clients/patients' lives and in service provision.

7. **Credit Hours:** 3 credit hours (Normally, UNBC courses are 3 credit hours and may not be repeated for additional credit. If this course falls outside the norm, please complete sections "a)" and "b)" below).

a) Can the course be repeated for credit if the subject matter differs substantially?

Yes* _____ No X

***** If "yes," please indicate the maximum number** of credit hours which may be applied to a student's degree using this course: #

****** If the course may be taken more than once but will only ever be offered for 3 credit hours, for example, per offering, the credit hours are simply expressed as "3" and the following notation (with the correct number of credit hours noted) is included within the Calendar Course Description:
"This course may be repeated to a maximum of XX credit hours if the material is substantially different."

b) Is variable credit available for this course? No X

Variable credit is denoted by the following examples:

i) "3-6": in this example, the course may be offered for 3, 4, 5, OR 6 credit hours during a single offering. In this example, the course number would be expressed as CHEM 210-(3-6).

ii) **"3,6"**: in this example, the course may be offered for EITHER 3 or 6 credit hours during a single offering. In this example, the course number would be expressed as CHEM 210-(3,6).

8. **Contact Hours (per week):**

Lecture 3 Seminar #

Laboratory # Other (please specify) _____

9. **Prerequisites (taken prior):** none

10. **Prerequisites with concurrency (taken prior or simultaneously):** none

11. **Co-requisites (must be taken simultaneously):** none

12. **Preclusions:** none

13. **Course Equivalencies:** EDUC 692-3 when offered as Trauma Counselling (201603, 201703, 201905)

14. **Grade Mode:** NORMAL (i.e., alpha grade)

15. **Course to be offered:** each semester _____
each year X
alternating years _____

16. **Proposed text / readings:**
Van Der Kolk (2014). *The Body Keeps the Score: Brain, Mind and Body In the Healing of Trauma.*

Janina Fisher (2021). *Transforming the Living Legacy of Trauma: A Workbook*

B. Significance Within Academic Program

1. **Anticipated enrolment** 15-20

2. **If there is a proposed enrolment limit, state the limit and explain:** #

3. **Required for:** Major: MEd Counselling Minor: _____ Other: _____

4. **Elective in:** Major: _____ Minor: _____ Other: _____

5. **Course required by another major/minor:**

6. **Course required or recommended by an accrediting agency:** Yes

7. **Toward what degrees will the course be accepted for credit?** MEd Counselling

8. **What other courses are being proposed within the Program this year?** none

9. **What courses are being deleted from the Program this year?** none

C. Relation to Other Program Areas

1. **Identify courses in other UNBC Programs that overlap with this course; describe the overlap and comment on its significance:** NONE

2. **Is a preclusion required?** No X

3. **If there is an overlap, and no preclusion is required, please explain why not:** NA

4. **Has this overlap been discussed with the Program concerned?** NA

5. **In offering this course, will UNBC require facilities or staff at other institutions?**

   No X

If yes, please describe requirements:

6. **Is this course replacing an existing course that is included in one or more transfer agreements with external institutions?**

   No X

   If "yes," please contact the Articulation Officer in the Office of the Registrar.

D. Resources required

1. **Please describe ADDITIONAL resources required over the next five years to offer this course.**

   i. **Faculty Staffing: None**

   ii. **Space (classroom, laboratory, storage, etc.):** none

   iii: **Library Holdings:** none

   iv. **Computer (time, hardware, software):** none

E. Additional Attached Materials

F. Other Considerations

1. **First Nations Content*:** No X
   **** Whether a new course has First Nations content is to be determined by the relevant Faculty Council(s).***

   ****If "yes,"** refer the motion to the Senate Committee on Indigenous Initiatives **prior to** SCAAF.

2. **Other Information:** This course has been offered annually as a special topics course. The Counselling Program is now making the Trauma Counselling a required course

3. **Attachment Pages (in addition to required "Library Holdings" Form):** 0

G. Authorization

SCCC Reviewed: April 17, 2023

1. **Faculty(ies):** Human and Health Sciences

2. **Faculty Council Motion Number(s): FHHS.2023.05.25.05**

3. **Faculty Council Approval Date(s):** May 25, 2023

4. **Senate Committee on Indigenous Initiatives Motion Number:**

5. **Senate Committee on Indigenous Initiatives Meeting Date:**

INFORMATION TO BE COMPLETED BY RECORDING SECRETARY AFTER SENATE COMMITTEE ON ACADEMIC AFFAIRS MEETING

Brief Summary of Committee Debate:

Motion No.: SCAAF 202306.07

Moved by: Kriston Rennie **Seconded by:** Pranesh Kumar

Committee Decision: CARRIED

Approved by SCAAF: June 14, 2023 _____
Date **Chair's Signature**

For recommendation to ___✓___, or information of _____ Senate.

UNBC UNIVERSITY OF NORTHERN BRITISH COLUMBIA

Motion Number (assigned by Steering Committee of Senate): S-202306.09

SENATE COMMITTEE ON ACADEMIC AFFAIRS

PROPOSED REVISION OF CALENDAR ENTRY

Motion: That the change(s) to the credit hours for EDUC 610-(3,4) Qualitative Analysis in Education (MEd Program, Department of Psychology) in the PDF calendar accessible on the UNBC web page of the 2022-2023 graduate calendar, be approved as proposed.

1. Effective date: September 2023

2. Rationale for the proposed revisions: EDUC 610-4 Qualitative Analysis in Education instructors have decided that students need more extensive hands-on coding and analysis in the classroom before attempting to use qualitative software so we are removing the qualitative software lab requirement in the MEd Counselling Program. The MEd Specialty Education and MEd Interdisciplinary Leadership programs in Education will continue to offer the course as a 4-credit lab.

3. Implications of the changes for other programs, etc., if applicable: None

4. Reproduction of current Calendar entry for the item to be revised:

EDUC 610-4 Qualitative Analysis in Education (Lecture/Lab) This course provides an introduction to the conceptual underpinnings of qualitative research and to qualitative data analysis methods, including case study, discourse analysis, grounded theory, action research, phenomenology, narrative inquiry and ethnography. The course includes a lab in which students learn hand coding and analysis and are introduced to the use of qualitative analysis software.
Prerequisites or Co-requisites: EDUC 601-3

5. Proposed revision with changes underlined and deletions indicated clearly using "~~strikethrough:~~

EDUC 610-(3,4) Qualitative Analysis in Education ~~(Lecture/Lab)~~ This course provides an introduction to the conceptual underpinnings of qualitative research and to qualitative data analysis methods, including case study, discourse analysis, grounded theory, action research, phenomenology, narrative inquiry and ethnography. ~~The course includes a lab in which~~ ~~s~~Students have the opportunity to learn hand coding and analysis. ~~and are introduced to the use of qualitative analysis software.~~
Prerequisites or Co-requisites: EDUC 601-3

6. Authorization:

Program / Academic / Administrative Unit: Department of Psychology

SCCC Reviewed: April 17, 2023

Faculty: Human and Health Sciences

Faculty Council Motion Number: FHHS.2023.05.25.06

Faculty Council Approval Date: May 25, 2023

Senate Committee on Indigenous Initiatives Motion Number:

Senate Committee on Indigenous Initiatives Meeting Date:

7. Other Information

Attachment Pages: 0 pages

INFORMATION TO BE COMPLETED AFTER SENATE COMMITTEE ON ACADEMIC AFFAIRS MEETING

Brief Summary of Committee Debate:

Motion No.: SCAAF 202306.08

Moved by: Kriston Rennie **Seconded by:** Nicole Neufeld

Committee Decision: CARRIED

Approved by SCAAF: June 14, 2023 **Date** **Chair's Signature**

For recommendation to ✓, or information of _____ Senate.

UNIVERSITY OF NORTHERN BRITISH COLUMBIA

Motion Number (assigned by Steering Committee of Senate): **S-202306.10**

SENATE COMMITTEE ON ACADEMIC AFFAIRS

PROPOSED REVISION OF CALENDAR ENTRY

Motion: That the changes to the MA Disability Management program calendar page, on page 50 -51 of the 2022–2023 Graduate calendar be approved as proposed.

1. **Effective date:** September 2023

2. **Rationale for the proposed revisions:** Clarification of program options and delivery.

3. **Implications of the changes for other programs, etc., if applicable:** None

4. **Reproduction of current Calendar entry for the item to be revised:**

Disability Management (MA Program)

Website: www.unbc.ca/health-sciences/ disability-management

The program provides graduates with the knowledge and skills necessary to assist labour, management, insurance providers, employers, and employees with the development of successful work-entry or return-to-work strategies for persons with disabilities.

The program is attractive to students interested in integrating the fields of economics, community health, social work, psychology, education, and business. The combination of coursework, research, and the application of knowledge gives students a well-rounded, applied education in the field of Disability Management.

The program is available at the Prince George campus, either full-time or part-time, or on a part-time basis via distance delivery on the World Wide Web. Please see the information below and our website www.unbc.ca/healthsciences/disability-management for additional details

Admission

Application deadlines can be found in the Graduate Programs Admissions and Regulations section of the Graduate Calendar at www.unbc.ca/calendar/graduate/admissions.
The Disability Management MA program accepts students for the September Semester.

In addition to meeting the admission application requirements outlined in Section 1.0 of the Graduate Admissions and Regulations, all applicants to the Disability Management MA program are required to submit a Criminal Record Check search prior to the first day of classes in their entry semester.

Domestic applicants must supply a Criminal Record Check search result after receiving an offer of admission and before the first day of classes. The search result is not required with the application. International applicants must submit a Criminal Record Check search result provided by their local police authority upon application, and will also be required to submit a British Columbia Criminal Record Check if offered admission. The Office of the Registrar will provide instructions to domestic and international applicants who have accepted offers of admission on how to complete a British Columbia Criminal Record Check.

Delivery Modes

Thesis Option

The Thesis Option consists of four components:

Core courses in Disability Management	12 credit hours
Research methods courses	6 credit hours
Electives	9 credit hours
Thesis (DISM 799-9)	9 credit hours
Total	36 credit hours

All students in the Thesis Option are required to write a letter outlining their applied experience relevant to the theory, research and practice of Disability Management, and rationale for taking the 9 credit Thesis Option. If the scope of their experience is considered insufficient by the program they will be required to take the Comprehensive Examination Option (see below). In addition, all students in the Thesis Option are required to travel to the Prince George campus to fulfill some of their thesis requirements.

Comprehensive Examination Option

The Comprehensive Examination Option consists of four components:

Core courses in Disability Management	12 credit hours
Research methods courses	6 credit hours
Electives	15 credit hours
Comprehensive Examination	3 credit hours
Total	36 credit hours

Requirements

Core Courses

DISM 609-3 Professional Ethics in Health Care Management
DISM 710-3 Foundations in Disability Management
DISM 711-3 Disability Management: Legislation, Policy & Procedures
DISM 712-3 Disability Management Interventions

Other courses may be substituted or added with the approval of the student's Supervisory Committee.

Research Courses

Two additional courses from the following:

EDUC 602-4 Quantitative Research Design and Data Analysis
HHSC 603-3 Community Research Methods
HHSC 703-3 Qualitative Research Approaches in Health and Human Sciences
PSYC 600-4 Univariate Statistics
PSYC 605-4 Multivariate Statistics
SOCW 609-3 Advanced Quantitative Research

Other courses may be substituted or added with the approval of the student's Supervisory Committee.

Elective Courses

Candidates must complete a minimum of 9 credit hours from the following list:

DISM 720-3 Special Topics
DISM 798-(3-6) Directed Studies
ECON 610-3 Health Economics
ECON 611-3 Cost Benefit Analysis
EDUC 609-3 Aboriginal/Indigenous Learners: History, Culture, and Ways of Knowing
EDUC 613-3 Interpersonal Counselling Skills
HHSC 602-3 Organization and Financing of Canadian Health Care
NURS 604-3 The Healing and Well-being of Indigenous Peoples
POLS 603-3 Social and Health Policy in the Context of Health and Health Care
PSYC 609-3 Health Psychology
SOCW 605-3 Community Work/Politics of Change
SOCW 698-3 Special Topics

Other courses may be substituted or added with the approval of the student's Supervisory Committee.

Comprehensive Examination, or Thesis

DISM 796-3 Disability Management Comprehensive Examination
DISM 799-9 Disability Management Thesis

Comprehensive Examination

The comprehensive examination option of study requires the successful completion of a comprehensive examination that evaluates a candidate's knowledge of theory, research and practice in their field of study.

Thesis

An oral examination is required as per University regulations. All students taking the thesis option will be required to be in Prince George for the oral examination.

5. Proposed revision with changes underlined and deletions indicated clearly using "~~strikethrough~~":

Disability Management (MA Program)

Website: ~~www.unbc.ca/health-sciences/ disability-management~~ https://www.unbc.ca/health-sciences/disability-management

The program provides graduates with the knowledge and skills necessary to assist labour, management, insurance providers, employers, and employees with the development of successful work-entry or return-to-work strategies for persons with disabilities.

The program is attractive to students interested in integrating the fields of economics, community health, social work, psychology, education, and business. The combination of coursework, research, and the application of knowledge gives students a well-rounded, applied education in the field of Disability Management.

~~The program is available at the Prince George campus, either full-time or part-time, or on a part-time basis via distance delivery on the World Wide Web.~~ The MA in Disability Management is offered primarily as an online part-time program. A full-time, in-person option may be considered in special cases.
Please see the information below and our website. ~~www.unbc.ca/healthsciences/disability-management~~ https://www.unbc.ca/health-sciences/disability-management for additional details.

Admission

Application deadlines can be found in the Graduate Programs Admissions and Regulations section of the Graduate Calendar at www.unbc.ca/calendar/graduate/admissions.
The Disability Management MA program accepts students for the September ~~S~~semester.

In addition to meeting the admission application requirements outlined in Section 1.0 of the Graduate Admissions and Regulations, all applicants to the Disability Management MA program are required to submit a Criminal Record Check search prior to the first day of classes in their entry semester.

Domestic applicants must supply a Criminal Record Check search result after receiving an offer of admission and before the first day of classes. The search result is not required with the application. International applicants must submit a Criminal Record Check search result provided by their local police authority upon application, and will also be required to submit a British Columbia Criminal Record Check if offered admission. The Office of the Registrar will provide instructions to domestic and international applicants who have accepted offers of admission on how to complete a British Columbia Criminal Record Check.

~~Delivery Modes~~ Program Options

Comprehensive Examination Option

The Comprehensive Examination Option consists of four components:

Core courses in Disability Management	12 credit hours
Research courses	6 credit hours
Electives	15 credit hours
Comprehensive Examination	3 credit hours
Total	36 credit hours

Thesis Option

A thesis option is also available for students who wish to pursue a research-based degree **and who are able to travel to the Prince George campus to fulfill their thesis requirements**. The thesis-based option is only available pending thesis supervisor availability and interest.

The Thesis Option consists of four components:

Core courses in Disability Management	12 credit hours
Research ~~methods~~ courses	6 credit hours
Electives	9 credit hours
Thesis ~~(DISM 799-9)~~	9 credit hours
Total	36 credit hours

~~All students in the Thesis Option are required to write a letter outlining their applied experience relevant to the theory, research and practice of Disability Management, and rationale for taking the 9 credit Thesis Option. If the scope of their experience is considered insufficient by the program they will be required to take the Comprehensive Examination Option (see below above). In addition, all students in the Thesis Option are required to travel to the Prince George campus to fulfill some of their thesis requirements.~~

~~Comprehensive Examination Option~~

~~The Comprehensive Examination Option consists of four components:~~

~~Core courses in Disability Management~~	~~12 credit hours~~
~~Research methods courses~~	~~6 credit hours~~
~~Electives~~	~~15 credit hours~~

~~Comprehensive Examination 3 credit hours~~
~~Total 36 credit hours~~

Requirements

Core Courses

DISM 609-3 Professional Ethics in Health Care Management
DISM 710-3 Foundations in Disability Management
DISM 711-3 Disability Management: Legislation, Policy & Procedures
DISM 712-3 Disability Management Interventions

Other courses may be substituted or added with the approval of the student's Supervisory Committee.

Research Courses

Two additional courses from the following:

EDUC 602-4 Quantitative Research Design and Data Analysis
HHSC 603-3 Community Research Methods
HHSC 703-3 Qualitative Research Approaches in Health and Human Sciences
PSYC 600-4 Univariate Statistics
PSYC 605-4 Multivariate Statistics
SOCW 609-3 Advanced Quantitative Research

Other courses may be substituted or added with the approval of the student's Supervisory Committee.

Elective Courses

Candidates must complete a minimum of 9 credit hours from the following list:

DISM 720-3 Special Topics
DISM 798-(3-6) Directed Studies
ECON 610-3 Health Economics
ECON 611-3 Cost Benefit Analysis
EDUC 609-3 Aboriginal/Indigenous Learners: History, Culture, and Ways of Knowing
EDUC 613-3 Interpersonal Counselling Skills
HHSC 602-3 Organization and Financing of Canadian Health Care
NURS 604-3 The Healing and Well-being of Indigenous Peoples
POLS 603-3 Social and Health Policy in the Context of Health and Health Care
PSYC 609-3 Health Psychology
SOCW 605-3 Community Work/Politics of Change
SOCW 698-3 Special Topics

Other courses may be substituted or added with the approval of the student's Supervisory Committee.

Comprehensive Examination, or Thesis

DISM 796-3 Disability Management Comprehensive Examination
DISM 799-9 Disability Management Thesis

Comprehensive Examination

The comprehensive examination option of study requires the successful completion of a comprehensive examination that evaluates a candidate's knowledge of theory, research and practice in their field of study.

Thesis

An oral examination is required as per University regulations. All students taking the thesis option will be required to be in Prince George for the oral examination.

6. Authorization:

Program / Academic / Administrative Unit: Health Sciences

SCCC Reviewed: March 20, 2023

Faculty: Human and Health Sciences

Faculty Council Motion Number: FHHS.2023.05.25.08

Faculty Council Approval Date: May 25, 2023

Senate Committee on Indigenous Initiatives Motion Number:

Senate Committee on Indigenous Initiatives Meeting Date:

7. Other Information

Attachment Pages: **0** pages

INFORMATION TO BE COMPLETED AFTER SENATE COMMITTEE ON ACADEMIC AFFAIRS MEETING

Brief Summary of Committee Debate:

Motion No.: SCAAF 202306.09

Moved by: Pranesh Kumar **Seconded by:** Nicole Neufeld

Committee Decision: CARRIED

Approved by SCAAF: June 14, 2023 _____
Date **Chair's Signature**

For recommendation to ✓ **, or information of** _____ **Senate.**

UNBC UNIVERSITY OF NORTHERN BRITISH COLUMBIA

Motion Number (assigned by Steering Committee of Senate): **S-202306.11**

SENATE COMMITTEE ON ACADEMIC AFFAIRS

PROPOSED REVISION OF CALENDAR ENTRY

Motion: That the change to the calendar description for the Graduate Certificate in Special Education, on page 56 of the 2022/2023 graduate calendar, be approved as proposed.

1. **Effective date:** September 2023

2. **Rationale for the proposed revisions:** The Graduate Certificate in Special Education was introduced in September 2016, but has never had any enrolment. The School of Education would like to remove it from the calendar to accurately reflect their current offerings.

3. **Implications of the changes for other programs, etc., if applicable:** None

4. **Reproduction of current Calendar entry for the item to be revised:**

Graduate Certificate in Special Education

The Special Education Graduate Certificate is designed to prepare students to provide professional services and leadership in Special Education and educational programs offered in schools and other educational institutions. This certificate is delivered via online and face to face (blended learning model). It requires a minimum of 15 graduate credit hours for completion.

Admission

Admission requirements are the same as for the Master of Education degree.

Required Courses

EDUC 622-4 Psychoeducational Assessment
EDUC 635-3 Educating Exceptional Students
EDUC 637-3 Interventions for Literary Disorders
EDUC 638-3 Mathematic Disorders and Remediation
EDUC 639-3 School-Based Teams, Consultants and Families

5. **Proposed revision with changes underlined and deletions indicated clearly using "~~strikethrough~~":**

~~**Graduate Certificate in Special Education**~~

~~The Special Education Graduate Certificate is designed to prepare students to provide professional services and leadership in Special Education and educational programs offered in schools and other educational institutions. This certificate is delivered via online and face to face (blended learning model). It requires a minimum of 15 graduate credit hours for completion.~~

~~**Admission**~~

~~Admission requirements are the same as for the Master of Education degree.~~

~~**Required Courses**~~

~~EDUC 622-4 Psychoeducational Assessment~~
~~EDUC 635-3 Educating Exceptional Students~~
~~EDUC 637-3 Interventions for Literary Disorders~~
~~EDUC 638-3 Mathematic Disorders and Remediation~~
~~EDUC 639-3 School-Based Teams, Consultants and Families~~

6. Authorization:

SCCC Reviewed: March 20, 2023

Program / Academic / Administrative Unit: School of Education

Faculty: Human and Health Sciences

Faculty Council Motion Number: FHHS.2023.05.25.04

Faculty Council Approval Date: May 25, 2023

Senate Committee on Indigenous Initiatives Motion Number: N/A

Senate Committee on Indigenous Initiatives Meeting Date: N/A

7. Other Information

Attachment Pages: **0** pages

INFORMATION TO BE COMPLETED AFTER SENATE COMMITTEE ON ACADEMIC AFFAIRS MEETING

Brief Summary of Committee Debate:

Motion No.: SCAAF 202306.10

Moved by: Nicole Neufeld **Seconded by:** Kriston Rennie

Committee Decision: CARRIED

Approved by SCAAF: June 14, 2023 _____
Date **Chair's Signature**

For recommendation to ✓ **, or information of** _____ **Senate.**

UNBC UNIVERSITY OF NORTHERN BRITISH COLUMBIA

Motion Number (assigned by Steering Committee of Senate): S-202306.12

SENATE COMMITTEE ON ACADEMIC AFFAIRS

PROPOSED REVISION OF CALENDAR ENTRY

Motion: That the changes to the course description for HHSC 820-0 Qualifying Examination and Dissertation Proposal Defense on page 125 of the 2022/2023 graduate calendar, be approved as proposed.

1. Effective date: September 2023

2. Rationale for the proposed revisions: To clarify and simplify the Qualifying Examination part of the course.

3. Implications of the changes for other programs, etc., if applicable: None

4. Reproduction of current Calendar entry for the item to be revised:

HHSC 820-0 Qualifying Examination and Dissertation Proposal Defense This course is a two-part process, beginning with the Qualifying Examination. Students must submit a paper addressing a research question or topic chosen in collaboration with their Supervisory committee. The Qualifying Paper must include a critical review of literature relevant to the research question, discussion of the theoretical frameworks used to understand or frame the research question, or an in-depth analysis of a specific content area. Subsequent to the Qualifying Examination, students prepare and defend a research Dissertation Proposal that integrates theory, current research and methods in fields related to the selected research problem.

5. Proposed revision with changes underlined and deletions indicated clearly using "~~strikethrough~~":

HHSC 820-0 Qualifying Examination and Dissertation Proposal Defense This course is a two-part process, beginning with the Qualifying Examination. ~~Students must submit a paper addressing a research question or topic chosen in collaboration with their Supervisory committee. The Qualifying Paper must include a critical review of literature relevant to the research question, discussion of the theoretical frameworks used to understand or frame the research question, or an in-depth analysis of a specific content area~~. The Qualifying Examination is comprised of two components: the Written part and the Oral part. This examination is defined by the supervisory committee to assess the student's background knowledge and familiarity with the theory and methodology associated with their field of research. Subsequent to the Qualifying Examination (written and oral), students prepare and defend a research Dissertation Proposal that integrates theory, current research, and methods in fields related to the selected research problem.

6. Authorization:

Program / Academic / Administrative Unit: Health Sciences

SCCC Reviewed: March 20, 2023

Faculty: Faculty of Human and Health Sciences

Faculty Council Motion Number: FHHS.2023.05.25.08

Faculty Council Approval Date: May 25, 2023

Senate Committee on Indigenous Initiatives Motion Number: N/A

Senate Committee on Indigenous Initiatives Meeting Date: N/A

7. Other Information

Attachment Pages: **0** pages

INFORMATION TO BE COMPLETED AFTER SENATE COMMITTEE ON ACADEMIC AFFAIRS MEETING

Brief Summary of Committee Debate:

Motion No.: SCAAF 202306.11

Moved by: Kriston Rennie **Seconded by:** Pranesh Kumar

Committee Decision: CARRIED

Approved by SCAAF: June 14, 2023 _____
Date **Chair's Signature**

For recommendation to ✓ **, or information of** _____ **Senate.**

UNBC UNIVERSITY OF NORTHERN BRITISH COLUMBIA

Motion Number (assigned by Steering Committee of Senate): **S-202306.13**

SENATE COMMITTEE ON ACADEMIC AFFAIRS

PROPOSED REVISION OF CALENDAR ENTRY

Motion: That the changes to the course description for POLS 380-3: Law and Indigenous Peoples on page 293 of the 2022/2023 undergraduate calendar, be approved as proposed.

1. **Effective date:** September 2023

2. **Rationale for the proposed revisions:** The old description did not accurately reflect the updated course content. The POLS 220 preclusion was deleted because this course no longer exists.

3. **Implications of the changes for other programs, etc., if applicable:** POLS 380-3 is cross listed with FNST 350-3. Following consultations between the course instructor and FNST, revisions were made to the proposed course description to accommodate the concerns and suggestions raised.

4. **Reproduction of current Calendar entry for the item to be revised:**

POLS 380-3 Law and Indigenous Peoples This course provides an introduction to Indigenous peoples' rights in international and domestic law and examines the key legal and political instruments and issues associated with Indigenous peoples' rights and interests. Topics may include but are not limited to the following: human rights, resource development, global pressures, intellectual property, customary law, traditional knowledge, dispute resolution, treaties and Supreme Court cases. The course is based on the methodological and theoretical foundations of comparative constitutional law, international law, Indigenous law and legal anthropology.
Precluded: FNST 250-3, FNST 350-3, POLS 220-3

5. **Proposed revision with changes underlined and deletions indicated clearly using "~~strikethrough~~":**

POLS 380-3 Law and Indigenous Peoples ~~This course provides an introduction to Indigenous peoples' rights in international and domestic law and examines the key legal and political instruments and issues associated with Indigenous peoples' rights and interests. Topics may include but are not limited to the following: human rights, resource development, global pressures, intellectual property, customary law, traditional knowledge, dispute resolution, treaties and Supreme Court cases. The course is based on the methodological and theoretical foundations of comparative constitutional law, international law, Indigenous law and legal anthropology.~~ This course provides a critical introduction to the constitutional law of Indigenous rights and its impact on the distribution of power, resources, and jurisdictional space amongst Indigenous, federal, and provincial governments in Canada. Topics include the evolution of the Supreme Court of Canada's section 35 Aboriginal rights jurisprudence, Indigenous legal traditions, law and the politics of reconciliation, Indigenous resistance and direct action, the impact of the United Nations Declaration on the Rights of Indigenous Peoples, and the British Columbia Treaty Process.
Precluded: FNST 250-3, FNST 350-3., ~~POLS 220-3~~

6. **Authorization: (Please ignore — Section to be completed by Committee Recording Secretaries)**

Program / Academic / Administrative Unit: Political Science

Faculty: Faculty of Indigenous Studies, Social Sciences and Humanities

Faculty Council Motion Number: FISSSHFC.2023.05.05.01

Faculty Council Approval Date: May 9, 2023

Senate Committee on Indigenous Initiatives Motion Number:

Senate Committee on Senate Committee on Indigenous Initiatives Meeting Date:

7. Other Information

Attachment Pages: 0 pages

INFORMATION TO BE COMPLETED AFTER SENATE COMMITTEE ON ACADEMIC AFFAIRS MEETING

Brief Summary of Committee Debate:

Motion No.: SCAAF 202306.12

Moved by: Jhoan Chavez Suazo **Seconded by:** Rebecca Schiff

Committee Decision: CARRIED

Approved by SCAAF: June 14, 2023 _____
Date **Chair's Signature**

For recommendation to ✓, or information of _____ Senate.

UNBC UNIVERSITY OF NORTHERN BRITISH COLUMBIA

Motion Number (assigned by Steering Committee of Senate): **S-202306.14**

SENATE COMMITTEE ON ACADEMIC AFFAIRS

PROPOSED REVISION OF CALENDAR ENTRY

Motion: That ENGR 270 be moved to first year for Civil Engineering and Environmental Engineering Programs.

1. **Effective date:** September 2023

2. **Rationale for the proposed revisions:** ENGR 270 is currently listed as part of 2nd year, and taught over two weeks. Starting in 2023-24, ENGR 270 will be listed as part of 1st year, and taught over three weeks. These changes are the result of a wide consultation and seek to:
   - add a competency at the end of year 1 that would allow our students to do surveying jobs right after year 1;
   - add a week to the offer period to allow for more learning time;
   - make the entire Spring/Summer period after 2nd year available for Summer jobs.

3. **Implications of the changes for other programs, etc., if applicable:** none

4. **Reproduction of current Calendar entry for the item to be revised:**

p. 105
…
Program Requirements

First Year (Semesters 1 & 2)

CHEM 100-3 General Chemistry I
CHEM 120-1 General Chemistry Laboratory I
CPSC 110-3 Introduction to Computer Systems and Programing
ENGR 110-3 Technical Writing
ENGR 117-3 Engineering Design I
ENGR 130-4 Mechanics of Materials I
ENGR 151-1 Engineering Tools I
ENGR 152-1 Engineering Tools II
MATH 100-3 Calculus I
MATH 101-3 Calculus II
MATH 220-3 Linear Algebra
PHYS 110-4 Introductory Physics I: Mechanics
PHYS 111-4 Introductory Physics II: Waves and Electricity

Second Year (Semesters 3 & 4)

CIVE 241-4 Civil Engineering Materials
CIVE 260-4 Soil Mechanics
CIVE 320-3 Structural Analysis I
ENGR 211-3 Engineering Communication
ENGR 217-3 Engineering Design II
ENGR 221-3 Thermodynamics and Heat Transfer
ENGR 240-4 Mechanics of Materials II

ENGR 254-4 Fluid Mechanics I
ENGR 270-3 Surveying
MATH 200-3 Calculus III
MATH 230-3 Linear Differential Equations and Boundary Value Problems
STATS 271-3 Statistical Reasoning for Engineers

Choose 3 credit hours from the lists of elective
…

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…
Program Requirements

First Year (Semesters 1 & 2)

CHEM 100-3 General Chemistry I
and CHEM 120-1 General Chemistry Laboratory I
CHEM 101-3 General Chemistry II
and CHEM 121-1 General Chemistry Laboratory II
CPSC 110-3 Introduction to Computer Systems and Programing
ENGR 110-3 Technical Writing
ENGR 117-3 Engineering Design I
ENGR 130-4 Mechanics of Materials I
ENGR 151-1 Engineering Tools I
ENGR 152-1 Engineering Tools II
MATH 100-3 Calculus I
MATH 101-3 Calculus II
MATH 220-3 Linear Algebra
PHYS 110-4 Introductory Physics I: Mechanics

Second Year (Semesters 3 & 4)

ENGR 210-3 Materials and Energy Balance
ENGR 211-3 Engineering Communication
ENGR 217-3 Engineering Design II
ENGR 220-3 Engineering Chemistry
ENGR 221-3 Thermodynamics & Heat Transfer
ENGR 254-4 Fluid Mechanics I
ENGR 270-3 Surveying
ENSC 201-3 Weather and Climate
ENVE 222-3 Engineering Biology
FSTY 205-3 Introduction to Soil Science
or GEOG 210-3 Introduction to Earth Science
MATH 200-3 Calculus III
MATH 230-3 Linear Differential Equations and Boundary Value Problems
STAT 271-3 Statistical Reasoning for Engineers

5. Proposed revision with changes underlined and deletions indicated clearly using "~~strikethrough~~":

p. 105
…
Program Requirements

First Year (Semesters 1 & 2)

CHEM 100-3 General Chemistry I

CHEM 120-1 General Chemistry Laboratory I
CPSC 110-3 Introduction to Computer Systems and Programing
ENGR 110-3 Technical Writing
ENGR 117-3 Engineering Design I
ENGR 130-4 Mechanics of Materials I
ENGR 151-1 Engineering Tools I
ENGR 152-1 Engineering Tools II
ENGR 270-3 Surveying
MATH 100-3 Calculus I
MATH 101-3 Calculus II
MATH 220-3 Linear Algebra
PHYS 110-4 Introductory Physics I: Mechanics
PHYS 111-4 Introductory Physics II: Waves and Electricity

Second Year (Semesters 3 & 4)

CIVE 241-4 Civil Engineering Materials
CIVE 260-4 Soil Mechanics
CIVE 320-3 Structural Analysis I
ENGR 211-3 Engineering Communication
ENGR 217-3 Engineering Design II
ENGR 221-3 Thermodynamics and Heat Transfer
ENGR 240-4 Mechanics of Materials II
ENGR 254-4 Fluid Mechanics I
~~ENGR 270-3 Surveying~~
MATH 200-3 Calculus III
MATH 230-3 Linear Differential Equations and Boundary Value Problems
STATS 271-3 Statistical Reasoning for Engineers

Choose 3 credit hours from the lists of elective
…

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…
Program Requirements

First Year (Semesters 1 & 2)

CHEM 100-3 General Chemistry I
    and CHEM 120-1 General Chemistry Laboratory I
CHEM 101-3 General Chemistry II
    and CHEM 121-1 General Chemistry Laboratory II
CPSC 110-3 Introduction to Computer Systems and Programing
ENGR 110-3 Technical Writing
ENGR 117-3 Engineering Design I
ENGR 130-4 Mechanics of Materials I
ENGR 151-1 Engineering Tools I
ENGR 152-1 Engineering Tools II
ENGR 270-3 Surveying
MATH 100-3 Calculus I
MATH 101-3 Calculus II
MATH 220-3 Linear Algebra
PHYS 110-4 Introductory Physics I: Mechanics

Second Year (Semesters 3 & 4)

ENGR 210-3 Materials and Energy Balance
ENGR 211-3 Engineering Communication
ENGR 217-3 Engineering Design II
ENGR 220-3 Engineering Chemistry
ENGR 221-3 Thermodynamics & Heat Transfer
ENGR 254-4 Fluid Mechanics I
~~ENGR 270-3 Surveying~~
ENSC 201-3 Weather and Climate
ENVE 222-3 Engineering Biology
FSTY 205-3 Introduction to Soil Science
or GEOG 210-3 Introduction to Earth Science
MATH 200-3 Calculus III
MATH 230-3 Linear Differential Equations and Boundary Value Problems
STAT 271-3 Statistical Reasoning for Engineers

6. Authorization:

SCCC Reviewed: April 17, 2023

Program / Academic / Administrative Unit: School of Engineering

Faculty(ies): Science and Engineering

Faculty Council Motion Number(s): FSE FC 2023.05.18.08

Faculty Council Approval Date(s): May 18, 2023

Senate Committee on Indigenous Initiatives Motion Number: not applicable

Senate Committee on Indigenous Initiatives Meeting Date: not applicable

7. Other Information

Attachment Pages: 0 pages

INFORMATION TO BE COMPLETED AFTER SENATE COMMITTEE ON ACADEMIC AFFAIRS MEETING

Brief Summary of Committee Debate:

Motion No.: SCAAF 202306.13

Moved by: Fei Tong **Seconded by:** Bill Owen

Committee Decision: CARRIED

Approved by SCAAF: June 14, 2023 (**Date**) Kathy Li (**Chair's Signature**)

For recommendation to ✓ **, or information of** _____ **Senate.**

UNBC UNIVERSITY OF NORTHERN BRITISH COLUMBIA

Motion Number (assigned by Steering Committee of Senate): **S-202306.15**

SENATE COMMITTEE ON ACADEMIC AFFAIRS

PROPOSED REVISION OF CALENDAR ENTRY

Motion: To include ENGR 354 Fluid Mechanics II as a required course in the Civil Engineering Curriculum, replacing a technical elective in 3rd year and to include ENVE 455 Engineering Hydrology as a required course in the Civil Engineering Curriculum, replacing a technical elective in 4th year.

1. Effective date: September 2023

2. Rationale for the proposed revisions: The Civil Engineering Curriculum only had ENGR 254 Fluid Mechanics I as a required course, and the topics covered in that course do not adequately cover the compulsory content listed in Engineers Canada Civil Engineering syllabi. Thus, ENGR 354 Fluid Mechanics II is being added as a required course to the Civil Engineering curriculum, replacing a 3rd year technical elective course. Of special interest in ENGR 354 to Civil Engineering are the topics of wind loads on structures, and analysis and design of pipeline systems.
The Civil Engineering Curriculum lacks the Engineering Hydrology content listed in Engineers Canada Civil Engineering syllabi. Thus, ENVE 455 Engineering Hydrology is being added as a required course to the Civil Engineering curriculum, replacing a 4th year technical elective course.

3. Implications of the changes for other programs, etc., if applicable: none

4. Reproduction of current Calendar entry for the item to be revised:

p.105

…
Third Year (Semesters 5 & 6)
CIVE 321-3 Structural Analysis II
CIVE 340-3 Structural Design I
CIVE 341-3 Structural Design II
CIVE 360-4 Geotechnical Engineering
CIVE 370-3 Transportations Systems
CIVE 372-3 Construction Management
ENGR 300-3 Sustainable Principles of Engineering
ENGR 353-3 Hydrology and Open Channel Flow
ENGR 358-4 Water and Wastewater Systems
ENGR 380-3 Engineering Economics
MATH 335-3 Introduction to Numerical Methods
Choose 3 credit hours from the lists of electives

Fourth Year (Semesters 7 & 8)
CIVE 400-3 Capstone Design Project I
CIVE 401-6 Capstone Design Project II
ENGR 410-3 Professional Practice & Law
…
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…

Choose 3 or 6 credit hours from the Environmental Engineering electives:
ENGR 354-3 Fluid Mechanics II
ENGR 412-3 Engineering Business & Project Management
ENVE 317-3 Engineering Design III: Municipal Engineering
ENVE 455-3 Engineering Hydrology
ENVE 462-3 Geo-Environmental Engineering
…

5. Proposed revision with changes underlined and deletions indicated clearly using "~~strikethrough~~":

p.105

…
Third Year (Semesters 5 & 6)
CIVE 321-3 Structural Analysis II
CIVE 340-3 Structural Design I
CIVE 341-3 Structural Design II
CIVE 360-4 Geotechnical Engineering
CIVE 370-3 Transportation~~s~~ Systems
CIVE 372-3 Construction Management
ENGR 300-3 Sustainable Principles of Engineering
ENGR 353-3 ~~Hydrology and~~ Open Channel Flow
ENGR 354-3 Fluid Mechanics II
ENGR 358-4 Water and Wastewater Systems
ENGR 380-3 Engineering Economics
MATH 335-3 Introduction to Numerical Methods
~~Choose 3 credit hours from the lists of electives~~

Fourth Year (Semesters 7 & 8)
~~CIVE 400-3 Capstone Design Project I~~
~~CIVE 401-6 Capstone Design Project II~~
ENGR 400-6 Capstone Design Project
ENGR 410-3 Professional Practice & Law
ENVE 455-3 Engineering Hydrology
…

p. 106
…
Choose 3 or 6 credit hours from the Environmental Engineering electives:
~~ENGR 354-3 Fluid Mechanics II~~
ENGR 412-3 Engineering Business & Project Management
ENVE 317-3 Engineering Design III: Municipal Engineering
~~ENVE 455-3 Engineering Hydrology~~
ENVE 462-3 Geo-Environmental Engineering
…

6. Authorization:

SCCC Reviewed: April 17, 2023

Program / Academic / Administrative Unit: School of Engineering

Faculty(ies): Science and Engineering

Faculty Council Motion Number(s): FSE FC 2023 05.18.10

Faculty Council Approval Date(s): May 18, 2023

Senate Committee on Indigenous Initiatives Motion Number: not applicable

Senate Committee on Indigenous Initiatives Meeting Date: not applicable

7. Other Information

Attachment Pages: 0 pages

INFORMATION TO BE COMPLETED AFTER SENATE COMMITTEE ON ACADEMIC AFFAIRS MEETING

Brief Summary of Committee Debate:

Motion No.: SCAAF 202306.14

Moved by: Fei Tong **Seconded by:** Bill Owen

Committee Decision: CARRIED

Approved by SCAAF: June 14, 2023 _____
Date **Chair's Signature**

For recommendation to ✓ **, or information of** _____ **Senate.**

UNIVERSITY OF NORTHERN BRITISH COLUMBIA

Motion Number (assigned by Steering Committee of Senate): **S-202306.16**

SENATE COMMITTEE ON ACADEMIC AFFAIRS

PROPOSED REVISION OF CALENDAR ENTRY

Motion: That ENGR 270 be added as a required course to the Joint UNBC UBC Environmental Engineering Program.

1. **Effective date:** September 2023

2. **Rationale for the proposed revisions:** Student and faculty surveys conducted in the past at both UNBC and UBC about the joint program have indicated that adding field courses to the joint program was a strongly suggested change. Thus, after approval by the joint board of studies, ENGR 270 is being added to the Joint UNBC UBC Environmental Engineering curriculum, to be offered in the Spring term between 1st and 2nd year. This further aligns the joint program with UNBC's stand-alone Engineering programs and also contributes to student mobility. In order to maintain the total number of credits, this addition will be balanced by the deletion of the "3 credit hours of elective" currently listed in semester 9 for the joint program (page 109, undergraduate calendar), which also responds to the students request for a less demanding 9th semester.

3. **Implications of the changes for other programs, etc., if applicable:** none

4. **Reproduction of current Calendar entry for the item to be revised:**

p. 108
…
Program Requirements

UNBC degree requirements: 91 credit hours
UBC degree requirements: 72 credit hours
Total credits for degree: 163 credit hours

Semester 1 and 2 completed at UNBC

CHEM 100-3 General Chemistry I
and CHEM 120-1 General Chemistry Lab I
CHEM 101-3 General Chemistry II
and CHEM 121-1 General Chemistry Lab II
CPSC 110-3 Introduction to Computer Systems and Programing
ENGR 110-3 Technical Writing
ENGR 117-3 Engineering Design I
ENGR 130-4 Mechanics of Materials I
ENGR 151-1 Engineering Tools I
ENGR 152-1 Engineering Tools II
MATH 100-3 Calculus I
MATH 101-3 Calculus II

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...
Semester 9 completed at UNBC

ENGR 417-6 Engineering Design V
ENPL 401-3 Environmental Law
ENSC 418-3 Environmental Measurement and Analysis
3 credit hours of Humanities or Social Science elective
3 credit hours of elective
…

5. Proposed revision with changes underlined and deletions indicated clearly using "~~strikethrough~~":

p. 108
…
Program Requirements

UNBC degree requirements: 91 credit hours
UBC degree requirements: 72 credit hours
Total credits for degree: 163 credit hours

Semester 1 and 2 completed at UNBC

CHEM 100-3 General Chemistry I
and CHEM 120-1 General Chemistry Lab I
CHEM 101-3 General Chemistry II
and CHEM 121-1 General Chemistry Lab II
CPSC 110-3 Introduction to Computer Systems and Programing
ENGR 110-3 Technical Writing
ENGR 117-3 Engineering Design I
ENGR 130-4 Mechanics of Materials I
ENGR 151-1 Engineering Tools I
ENGR 152-1 Engineering Tools II
ENGR 270-3 Surveying
MATH 100-3 Calculus I
MATH 101-3 Calculus II

p.109
...
Semester 9 completed at UNBC
ENGR 417-6 Engineering Design V
ENPL 401-3 Environmental Law
ENSC 418-3 Environmental Measurement and Analysis
3 credit hours of Humanities or Social Science elective
~~3 credit hours of elective~~
…

6. Authorization:

SCCC Reviewed: April 17, 2023

Program / Academic / Administrative Unit: School of Engineering

Faculty(ies): Science and Engineering

Faculty Council Motion Number(s): FSE FC 2023 05.18.09

Faculty Council Approval Date(s): May 18, 2023

Senate Committee on Indigenous Initiatives Motion Number: not applicable

Senate Committee on Indigenous Initiatives Meeting Date: not applicable

7. Other Information

Attachment Pages: 0 pages

INFORMATION TO BE COMPLETED AFTER SENATE COMMITTEE ON ACADEMIC AFFAIRS MEETING

Brief Summary of Committee Debate:

Motion No.: SCAAF 202306.15

Moved by: Fei Tong **Seconded by:** Bill Owen

Committee Decision: CARRIED

Approved by SCAAF: June 14, 2023 _____
Date **Chair's Signature**

For recommendation to ✓, or information of _____ Senate.

UNIVERSITY OF NORTHERN BRITISH COLUMBIA

Motion Number (assigned by Steering Committee of Senate): **S-202306.17**

SENATE COMMITTEE ON ACADEMIC AFFAIRS

PROPOSED REVISION OF CALENDAR ENTRY

Motion: That the changes to the Requirements for the MASc in Engineering Program on page 57/58 in the PDF calendar accessible on the UNBC web page of the 2023/2024 graduate calendar, be approved as proposed.

1. **Effective date:** September 2023

2. **Rationale for the proposed revisions:** The seminar course ENGR 701 is more effective in one semester, instead of two, and should be preceded by ENGR 700 Technical Writing, that will provide the students with the necessary tools to succeed in ENGR 701. Additionally, a teaching assistantship application is not required as part of the application package for the MASc in Engineering.

3. **Implications of the changes for other programs, etc., if applicable:** None

4. **Reproduction of current Calendar entry for the item to be revised:**

Requirements

The Master of Applied Science thesis is designed for candidates who wish to develop career interests related to applied scientific research or who intend to pursue further academic research degrees. MASc students are required to complete 3 credit hours of the ENGR 701-1.5 Graduate Seminar in Engineering course, along with 6 credit hours of mandatory courses to be selected from graduate-level methods and/or analysis courses, a minimum of 9 credit hours of approved electives, and a 12 credit-hour thesis (ENGR 790-12). It is expected that electives consist of engineering-oriented courses, and the thesis involves an independent investigation resulting in a scientific contribution.

The 9 credit hours of electives must be graduate-level study (i.e., at or above the 600 level) selected from the courses available at UNBC. A maximum of 3 credit hours from independent studies can be counted towards the elective requirement. Specific details of course work are determined by the research area undertaken by the student. The supervisory committee ensures an appropriate selection of elective courses is taken and may require a student to complete more than 9 credit hours of electives if, for example, weaknesses in the student's background exist (including undergraduate prerequisites for graduate courses).

As part of the MASc thesis (ENGR 790-12), students are required to (a) make an oral presentation of the thesis proposal to the supervisory committee; (b) write an original thesis based on the completed research (in accordance with established UNBC guidelines); and (c) present an oral defence of the thesis to the examining committee as per Regulation 4.5 Final Oral Examinations and Examining Committees. All course requirements must have been satisfied prior to the oral defence.

ENGR 701-1.5 Graduate Seminar in Engineering	3 credit hours
Methods and/or Analysis Courses	6 credit hours
Elective Courses	9 credit hours
ENGR 790-12 MASc Thesis	12 credit hours
Total Required for Degree	30 credit hours

…

Admission Requirements

In addition to the admission application requirements outlined in Section 1.0 of the Graduate Academic Calendar, applicants are required to hold a four-year Baccalaureate degree (or equivalent) from a recognized institution in engineering or related area. Acceptance to the MASc program is contingent upon prospective students finding a faculty member to serve as their supervisor. Applicants must provide a completed Teaching Assistantship Application and a completed Funding Information Sheet with their application material for this program.

5. Proposed revision with changes underlined and deletions indicated clearly using "~~strikethrough~~":

Requirements

The Master of Applied Science thesis is designed for candidates who wish to develop career interests related to applied scientific research or who intend to pursue further academic research degrees. MASc students are required to complete 3 credit hours of the ENGR 700-3 Technical Writing, 3 credit hours of the ENGR 701-~~1.5~~3 Graduate Seminar in Engineering course, along with 6 credit hours of mandatory courses to be selected from graduate-level methods and/or analysis courses, a minimum of ~~9~~6 credit hours of approved electives, and a 12 credit-hour thesis (ENGR 790-12). It is expected that electives consist of engineering~~-oriented~~ courses, and the thesis involves an independent investigation resulting in a scientific contribution.

The ~~9~~6 credit hours of electives must be graduate-level study (i.e., at or above the 600 level) selected from the courses available at UNBC. A maximum of 3 credit hours from independent studies can be counted towards the elective requirement. Specific details of coursework are determined by the research area undertaken by the student. The supervisory committee ensures an appropriate selection of elective courses is taken and may require a student to complete more than ~~9~~6 credit hours of electives if, for example, weaknesses in the student's background exist (including undergraduate prerequisites for graduate courses).

As part of the MASc thesis (ENGR 790-12), students are required to (a) make an oral presentation of the thesis proposal to the supervisory committee; (b) write an original thesis based on the completed research (in accordance with established UNBC guidelines); and (c) present an oral defence of the thesis to the examining committee as per Regulation 4.5 Final Oral Examinations and Examining Committees. All course requirements must have been satisfied prior to the oral defence.

ENGR 700-3 Technical Writing	3 credit hours
ENGR 701-3~~1.5~~ Graduate Seminar in Engineering	3 credit hours
Methods and/or Analysis Courses	6 credit hours
Elective Courses	~~9~~6 credit hours
ENGR 790-12 MASc Thesis	12 credit hours
Total Required for Degree	30 credit hours

…

Admission Requirements

In addition to the admission application requirements outlined in Section 1.0 of the Graduate Academic Calendar, applicants are required to hold a four-year Baccalaureate degree (or equivalent) from a recognized institution in engineering or related area. Acceptance to the MASc program is contingent upon prospective students finding a faculty member to serve as their supervisor. ~~Applicants must provide a completed Teaching Assistantship Application and a completed Funding Information Sheet with their application material for this program.~~

6. **Authorization:**

SCCC Reviewed: April 17, 2023

Program / Academic / Administrative Unit: School of Engineering

Faculty(ies): Faculty of Science and Engineering

Faculty Council Motion Number(s): FSE FC 2023.05.18.18

Faculty Council Approval Date(s): May 18, 2023

Senate Committee on Indigenous Initiatives Motion Number: not applicable

Senate Committee on Indigenous Initiatives Meeting Date: not applicable

7. **Other Information**

Attachment Pages: **0** pages

INFORMATION TO BE COMPLETED AFTER SENATE COMMITTEE ON ACADEMIC AFFAIRS MEETING

Brief Summary of Committee Debate:

Motion No.: SCAAF 202306.16

Moved by: Fei Tong **Seconded by:** Bill Owen

Committee Decision: CARRIED

Approved by SCAAF: June 14, 2023 _____
Date **Chair's Signature**

For recommendation to ✓ **, or information of** _____ **Senate.**

UNBC UNIVERSITY OF NORTHERN BRITISH COLUMBIA

Motion Number (assigned by Steering Committee of Senate): S-202306.18

SENATE COMMITTEE ON ACADEMIC AFFAIRS

PROPOSED REVISION OF CALENDAR ENTRY

Motion: That the change to the required courses for the BSc (Integrated) Coast Mountain College Degree Completion Program, on **page 53** of the 2022/2023 undergraduate calendar, be approved as proposed.

1. Effective date: September 2023

2. Rationale for the proposed revisions:

GEOG 300 has changed from being an introduction to geographic information systems (GIS) to now being intermediate GIS. Only the introductory GIS course, GEOG 204, is required in other comparable earth science and natural resource management programs at UNBC, namely Wildlife & Fisheries, Conservation Science & Practice, Forest Ecology & Management, BSc in Geography, and BSc in Environmental Sciences. Students transferring from the Coast Mountain College Environmental Geosciences program all will have taken an introductory GIS course that is equivalent to UNBC's GEOG 204 (note that bctransferguide.ca information remains out of date as of 26 April 2023, having not reflected the 2020 change in UNBC's GEOG 300 course description and content).

In place of GEOG 300 as a required course, the curriculum committee recommends NREM 410-3, Watershed Management. With this Northwest B.Sc. degree completion program having a strong emphasis on aquatic sciences, fisheries, and slope processes, NREM 410 will serve as an important capstone course to the program

3. Implications of the changes for other programs, etc., if applicable:

The BSc (Integrated) Coast Mountain Degree Completion Program is jointly offered by the ESM and GEES Departments in the Faculty of Environment. The instructor for NREM 410 could come from either GEES or ESM.

The Chairs of GEES and ESM have been appraised of this proposal, and are supportive.

4. Reproduction of current Calendar entry for the item to be revised:

Nine credit hours of required courses, as follows:

ENVS 414-3 Environmental and Professional Ethics
GEOG 300-3 Intermediate GIS
NRES 421-1 Professional Writing
NRES 422-2 Undergraduate Report

5. Proposed revision with changes underlined and deletions indicated clearly using "~~strikethrough~~":

Nine credit hours of required courses, as follows:

ENVS 414-3 Environmental and Professional Ethics
~~GEOG 300-3 Intermediate GIS~~
NREM 410-3 Watershed Management
NRES 421-1 Professional Writing
NRES 422-2 Undergraduate Report

6. Authorization: (Please ignore — Section to be completed by Committee Recording Secretaries)

SCCC: Scheduled for May 23, 2023 (approved to forward)

Program / Academic / Administrative Unit: Ecosystem Science and Management / Geography, Earth and Environmental Sciences

Faculty: Faculty of Environment
Faculty Council Motion Number: FEFC 2023:05:11:03
Faculty Council Approval Date: May 11, 2023

Faculty: Faculty of Science and Engineering
Faculty Council Motion Number: FSE FC 2023.05.18.16
Faculty Council Approval Date: May 18, 2023

Senate Committee on First Nations and Aboriginal Peoples Motion Number: not applicable

Senate Committee on First Nations and Aboriginal Peoples Meeting Date: not applicable

7. Other Information

Attachment Pages: 0 pages

INFORMATION TO BE COMPLETED AFTER SENATE COMMITTEE ON ACADEMIC AFFAIRS MEETING

Brief Summary of Committee Debate:

Motion No.: SCAAF 202303.17

Moved by: Fei Tong **Seconded by:** Bill Owen

Committee Decision: CARRIED

Approved by SCAAF: June 14, 2023 **Date**

Chair's Signature

For recommendation to ✓ **, or information of** _____ **Senate.**

UNBC UNIVERSITY OF NORTHERN BRITISH COLUMBIA

Motion Number (assigned by Steering Committee of Senate): **S-202306.19**

SENATE COMMITTEE ON ACADEMIC AFFAIRS

PROPOSED REVISION OF CALENDAR ENTRY

Motion: That ENGR 350 be removed from the calendar.

1. **Effective date:** September 2023

2. **Rationale for the proposed revisions:** Students from other programs can take ENGR 254, and that change has been made in the 2022-23 calendar.

3. **Implications of the changes for other programs, etc., if applicable:** The Environmental Science program has been consulted. ENGR 350-3 has been replaced by ENGR 254-4 as one of the courses required for the Aquatic Science minor. That change is already reflected in the 2022/2023 Undergraduate Calendar.

4. **Reproduction of current Calendar entry for the item to be revised:**

   p. 236

   ENGR 350-3 Fluid Mechanics This course is an introduction to fluid mechanics for environmental science, engineering, physical geography, forestry and wildlife and fisheries students. The course covers the following topics: definition of fluid, fluid properties, variation of pressure in a fluid, hydrostatics forces, buoyancy, dimensional analysis, similarities, kinematics of flow, control volumes, continuity equation, momentum equation, energy equation, and flow in closed conduits.
   Prerequisites: MATH 152-3 or both of (MATH 100-3 and MATH 101-3), and PHYS 100-4 or PHYS 110-4

5. **Proposed revision with changes underlined and deletions indicated clearly using "~~strikethrough~~":**

   p. 236

   ~~**ENGR 350-3 Fluid Mechanics** This course is an introduction to fluid mechanics for environmental science, engineering, physical geography, forestry and wildlife and fisheries students. The course covers the following topics: definition of fluid, fluid properties, variation of pressure in a fluid, hydrostatics forces, buoyancy, dimensional analysis, similarities, kinematics of flow, control volumes, continuity equation, momentum equation, energy equation, and flow in closed conduits.~~
   ~~*Prerequisites:* MATH 152-3 or both of (MATH 100-3 and MATH 101-3), and PHYS 100-4 or PHYS 110-4~~

6. **Authorization:**

   SCCC Reviewed: April 17, 2023

   Program / Academic / Administrative Unit: School of Engineering

   Faculty(ies): Faculty of Science and Engineering

   Faculty Council Motion Number(s): FSE FC 2023.05.18.04

   Faculty Council Approval Date(s): May 18, 2023

   Senate Committee on Indigenous Initiatives Motion Number: not applicable

Senate Committee on Indigenous Initiatives Meeting Date: not applicable

7. Other Information

Attachment Pages: 0 pages

INFORMATION TO BE COMPLETED AFTER SENATE COMMITTEE ON ACADEMIC AFFAIRS MEETING

Brief Summary of Committee Debate:

Motion No.: SCAAF 202306.18

Moved by: Allan Kranz **Seconded by:** Kacie Long

Committee Decision: CARRIED

Approved by SCAAF: June 14, 2023 _____
Date **Chair's Signature**

For recommendation to ✓, or information of _____ Senate.

UNBC UNIVERSITY OF NORTHERN BRITISH COLUMBIA

Motion Number (assigned by Steering Committee of Senate): **S-202306.20**

SENATE COMMITTEE ON ACADEMIC AFFAIRS

NEW COURSE APPROVAL MOTION FORM

Motion: That the new course ENGR 400-6 be created to replace CIVE 400-3, CIVE 401-6, ENVE 400-3, and ENVE 401-6 in the Engineering curriculum.

A. Description of the Course

This course is a two-semester engineering capstone design project intended to provide real life experience as part of a design team. Working in teams, students solicit a project from an industrial sponsor, develop a full set of specifications, and complete the project. The intent is for the teams to draw upon all knowledge gained during their engineering degree.

1. **Proposed semester of first offering:** September 2023

2. **Academic Program:** Civil Engineering and Environmental Engineering

3. **Course Subject, Number*, and Credit hours (e.g. CHEM 210-3):** ENGR 400-6

4. **Course Title:** Engineering Capstone Design Project

5. **Goal(s) of Course:** Provide real life engineering experience as part of a design team, drawing upon all knowledge gained during the engineering program.

6. **Calendar Course Description:**

ENGR 400-6 Capstone Design Project This course is a two-semester engineering capstone design project intended to provide real-life experience as part of a design team. Working in teams, students solicit a project from an industrial sponsor, develop a full set of specifications, and complete the project. The intent is for the teams to draw upon all knowledge gained during their engineering degree.
Prerequisites: ENGR 217-3 with a minimum grade of C-, ENGR 300-3; ENGR 380-3
Precluded: CIVE 400-3, CIVE 401-6, ENVE 400-3, ENVE 401-6, ENGR 417-6

7. **Credit Hours:** 6 credit hours (Normally, UNBC courses are 3 credit hours and may not be repeated for additional credit. If this course falls outside the norm, please complete sections "a)" and "b)" below).

a) Can the course be repeated for credit if the subject matter differs substantially?

Yes* _____ No X

* If "yes," please indicate the maximum number** of credit hours which may be applied to a student's degree using this course: _____

** If the course may be taken more than once but will only ever be offered for 3 credit hours, for example, per offering, the credit hours are simply expressed as "3" and the following notation (with the correct number of credit hours noted) is included within the Calendar Course Description:
"This course may be repeated to a maximum of XX credit hours if the material is substantially different."

b) Is variable credit available for this course? Yes _____ No __X__

Variable credit is denoted by the following examples:

i) **"3-6"**: in this example, the course may be offered for 3, 4, 5, OR 6 credit hours during a single offering. In this example, the course number would be expressed as CHEM 210-(3-6).

ii) **"3,6"**: in this example, the course may be offered for EITHER 3 or 6 credit hours during a single offering. In this example, the course number would be expressed as CHEM 210-(3,6).

8. Contact Hours (per week):

Lecture ___3___

Laboratory _____

Seminar _____

Other (please specify) __3 (team work with faculty supervision)_____

9.Prerequisites (taken prior): ENGR 217-3 with a minimum grade of C-, ENGR 300-3; ENGR 380-3

10. Prerequisites with concurrency (taken prior or simultaneously): none

11. Co-requisites (must be taken simultaneously): none

12. Preclusions: CIVE 400-3, CIVE 401-6, ENVE 400-3, ENVE 401-6, ENGR 417-6

13. Course Equivalencies:

14. Grade Mode: NORMAL (i.e., alpha grade)

15. Course to be offered: each semester _____

each year __X____

alternating years _____

16. Proposed text / readings:

No textbook required.

B. Significance Within Academic Program

1. Anticipated enrolment __20 in 2023, and growing as the UNBC Engineering programs grow____

2. If there is a proposed enrolment limit, state the limit and explain: ___none__

3. Required for: Major: __Civil Engineering and Environmental Engineering__ Minor:____ Other:_____

4. Elective in: Major: Minor: _ Other:___

5. Course required by another major/minor: none

6. Course required or recommended by an accrediting agency: Required as a significant design experience by Engineers Canada

7. Toward what degrees will the course be accepted for credit? Civil Engineering (required), Environmental Engineering (required)

8. What other courses are being proposed within the Program this year? ENGR 406

9. What courses are being deleted from the Program this year? none

C. Relation to Other Program Areas

1. **Identify courses in other UNBC Programs that overlap with this course; describe the overlap and comment on its significance:** None

2. **Is a preclusion required?** Yes _____ No ___X___

3. **If there is an overlap, and no preclusion is required, please explain why not:**

4. **Has this overlap been discussed with the Program concerned?** Yes _____ No _____

5. **In offering this course, will UNBC require facilities or staff at other institutions?**

   Yes _____ No ___X___

   If yes, please describe requirements:

6. **Is this course replacing an existing course that is included in one or more transfer agreements with external institutions?**

   Yes_____ No ___X___

   If "yes," please contact the Articulation Officer in the Office of the Registrar.

D. Resources required

1. **Please describe ADDITIONAL resources required over the next five years to offer this course.**

   i. **Faculty Staffing:** none

   ii. **Space (classroom, laboratory, storage, etc.):** none

   iii: **Library Holdings:** None additional, as the course draws upon all other courses taught in Engineering

   iv. **Computer (time, hardware, software):** none

E. Additional Attached Materials None

F. Other Considerations

1. **First Nations Content*:** Yes** _____ No ___X___
   **** Whether a new course has First Nations content is to be determined by the relevant Faculty Council(s).***

   ****If "yes,"** refer the motion to the Senate Committee on Indigenous Initiatives **prior to** SCAAF.

2. **Other Information:** This course helps better organize the Engineering degrees, and facilitates enrollment procedures.

3. **Attachment Pages (in addition to required "Library Holdings" Form):** ___0___ pages

G. Authorization

SCCC Reviewed: April 17, 2023

1. **Faculty(ies):** Faculty of Science and Engineering
2. **Faculty Council Motion Number(s): FSE FC 2023.05.18.06**
3. **Faculty Council Approval Date(s): May 18, 2023**
4. **Senate Committee on Indigenous Initiatives Motion Number:** not applicable
5. **Senate Committee on Indigenous Initiatives Meeting Date:** not applicable

INFORMATION TO BE COMPLETED BY RECORDING SECRETARY AFTER SENATE COMMITTEE ON ACADEMIC AFFAIRS MEETING

Brief Summary of Committee Debate:

Motion No.: SCAAF 202306.19

Moved by: Allan Kranz **Seconded by:** Kacie Long

Committee Decision: CARRIED

Approved by SCAAF: June 14, 2023 _____
Date **Chair's Signature**

For recommendation to ✓, or information of _____ Senate.

UNBC UNIVERSITY OF NORTHERN BRITISH COLUMBIA

Motion Number (assigned by Steering Committee of Senate): **S-202306.21**

SENATE COMMITTEE ON ACADEMIC AFFAIRS

NEW COURSE APPROVAL MOTION FORM

Motion: That the new course ENGR 406-3 be created and cross-listed with ENSC 406-3. ENGR 406-3 replaces ENSC 406-3 in the Engineering curriculum:

A. Description of the Course

This course provides an understanding of the physical, chemical and biological processes that govern contaminant transport and fate in environmental media. Topics include: modelling fundamentals; mass transport in aquatic ecosystems; and mathematical modelling of a wide variety of contamination issues, such as lake eutrophication, river water quality, groundwater contamination, atmospheric deposition, and climate change. Laboratory exercises complement lecture topics and focus on the development of computer-based modelling skills.

1. **Proposed semester of first offering:** January 2024

2. **Academic Program:** Environmental Engineering

3. **Course Subject, Number*, and Credit hours (e.g. CHEM 210-3):** ENGR 406-3

4. **Course Title:** Environmental Modelling

5. **Goal(s) of Course:** Provide an understanding of the physical, chemical and biological processes that govern contaminant transport and fate in environmental media.

6. **Calendar Course Description:**

ENGR 406-3 Environmental Modelling This course provides an understanding of the physical, chemical and biological processes that govern contaminant transport and fate in environmental media. Topics include modelling fundamentals; mass transport in aquatic ecosystems; and mathematical modelling of a wide variety of contamination issues, such as lake eutrophication, river water quality, groundwater contamination, atmospheric deposition, and climate change. Laboratory exercises complement lecture topics and focus on the development of computer-based modelling skills.
Prerequisites: 60 credit hours, MATH 152-3 or both of MATH 100-3 and MATH 101-3
Precluded: ENSC 406-3, ENVS 406-3, ENSC 607-3

7. **Credit Hours:** 3 credit hours (Normally, UNBC courses are 3 credit hours and may not be repeated for additional credit. If this course falls outside the norm, please complete sections "a)" and "b)" below).

   a) Can the course be repeated for credit if the subject matter differs substantially?

   Yes* _____ No X

   * If "yes," please indicate the maximum number** of credit hours which may be applied to a student's degree using this course: _____
   ** If the course may be taken more than once but will only ever be offered for 3 credit hours, for example, per offering, the credit hours are simply expressed as "3" and the following notation (with the correct number of credit hours noted) is included within the Calendar Course Description:

"This course may be repeated to a maximum of XX credit hours if the material is substantially different."

b) Is variable credit available for this course? Yes _____ No __X__

Variable credit is denoted by the following examples:

i) "3-6": in this example, the course may be offered for 3, 4, 5, OR 6 credit hours during a single offering. In this example, the course number would be expressed as CHEM 210-(3-6).

ii) "3,6": in this example, the course may be offered for EITHER 3 or 6 credit hours during a single offering. In this example, the course number would be expressed as CHEM 210-(3,6).

8. Contact Hours (per week):

Lecture 3 Seminar 0

Laboratory 2 Other (please specify) _____

9. Prerequisites (taken prior): MATH 152, or MATH 100-3 and MATH 101-3

10. Prerequisites with concurrency (taken prior or simultaneously): none

11. Co-requisites (must be taken simultaneously): none

12. Preclusions: ENVE 421-3, ENSC 406-3, ENVS 406-3, ENSC 607-3

13. Course Equivalencies: ENVE 421-3

14. Grade Mode: NORMAL (i.e., alpha grade)

15. Course to be offered: each semester _____

each year X

alternating years _____

16. Proposed text / readings:

No textbook required.
The following are suggested references:
Schnoor J. L., Environmental Modeling: Fate and Transport of Pollutants in Water, Air, and Soil,John Wiley & Sons, 1996 (TD423.S37 1996)
Chapra S. C., Surface Water-Quality Modeling, McGraw-Hill, 1997 (TD365 .C48 1997).
Dunnivant, F.M., Anders, E., A Basic Introduction to Pollutant Fate and Transport, John Wiley & Sons, 2006
Deaton M. L., and Winebrake J. J., Dynamic Modeling of Environmental Systems, Springer-Verlag, 2000 (GE45.D37 D43 2000).
Hannon, B., Ruth, M., Dynamic Modeling, Springer-Verlag, 1994. (QA76.9.C65 H35 1994)Software used:STELLA Professional (access through UNBC Engineering Pool)

B. Significance Within Academic Program

1. Anticipated enrolment 6 in 2024, and growing as the UNBC Engineering programs grow

2. If there is a proposed enrolment limit, state the limit and explain: none

3. Required for: Major: Environmental Engineering Minor:_____ Other:_____

4. Elective in: Major: Civil Engineering, Joint UNBC/UBC Environmental Engineering Minor: _ Other:__

5. Course required by another major/minor: none

6. Course required or recommended by an accrediting agency: its contents are part of the contents recommended by Engineers Canada for Environmental Engineering

7. Toward what degrees will the course be accepted for credit? Environmental Engineering (required), Civil Engineering (elective), Joint UNBC/UBC Environmental Engineering (elective)

8. What other courses are being proposed within the Program this year? ENGR 400

9. What courses are being deleted from the Program this year? none

C. Relation to Other Program Areas

ENGR 406 will be cross-listed with ENSC 406, ENGR 606, and ENSC 607. The School of Engineering faculty member who currently teaches ENSC 406 and ENSC 607 will continue teaching all courses. The Faculty of the Environment has been consulted about this change and reassured that it shall not affect their courses, as the School of Engineering has agreed to continue supplying the necessary teaching staff and the software used in the course.

1. **Identify courses in other UNBC Programs that overlap with this course; describe the overlap and comment on its significance:** ENSC 406-3, which is taught by a School of Engineering Faculty member, as mentioned above. By offering its own course, the School of Engineering seeks to make sure that the course will be taught by an instructor possessing a license to practice Engineering in Canada, which is a requirement under Engineering accreditation regulations.

2. **Is a preclusion required?** Yes __X__ No _____

3. **If there is an overlap, and no preclusion is required, please explain why not:**

4. **Has this overlap been discussed with the Program concerned?** Yes __X__ No _____

5. **In offering this course, will UNBC require facilities or staff at other institutions?**

   Yes _____ No __X__

   If yes, please describe requirements:

6. **Is this course replacing an existing course that is included in one or more transfer agreements with external institutions?**

   Yes_____ No __X__

   If "yes," please contact the Articulation Officer in the Office of the Registrar.

D. Resources required

1. **Please describe ADDITIONAL resources required over the next five years to offer this course.**

   i. **Faculty Staffing:** none

   ii. **Space (classroom, laboratory, storage, etc.):** none

   iii: **Library Holdings:** None, as the course mirrors an existing course (ENSC 406-3) and is equivalent to another existing course (ENVE 421-3)

iv. Computer (time, hardware, software): none

E. Additional Attached Materials None

F. Other Considerations

1. **First Nations Content*:** Yes** _____ No ___X___
   **** Whether a new course has First Nations content is to be determined by the relevant Faculty Council(s).***

   ****If "yes,"** refer the motion to the Senate Committee on Indigenous Initiatives **prior to** SCAAF.

2. **Other Information:**

3. **Attachment Pages (in addition to required "Library Holdings" Form):** ___0___ pages

G. Authorization

SCCC Reviewed: April 17, 2023

1. **Faculty(ies):** Faculty of Science and Engineering
2. **Faculty Council Motion Number(s): FSE FC 2023.05.18.07**
3. **Faculty Council Approval Date(s): May 18, 2023**
4. **Senate Committee on Indigenous Initiatives Motion Number:** not applicable
5. **Senate Committee on Indigenous Initiatives Meeting Date:** not applicable

INFORMATION TO BE COMPLETED BY RECORDING SECRETARY AFTER SENATE COMMITTEE ON ACADEMIC AFFAIRS MEETING

Brief Summary of Committee Debate:

Motion No.: SCAAF 202306.20

Moved by: Allan Kranz **Seconded by:** Kacie Long

Committee Decision: CARRIED

Approved by SCAAF: June 14, 2023 _____
Date **Chair's Signature**

For recommendation to ___✓___, or information of _____ Senate.

UNBC UNIVERSITY OF NORTHERN BRITISH COLUMBIA

Motion Number (assigned by Steering Committee of Senate): **S-202306.22**

SENATE COMMITTEE ON ACADEMIC AFFAIRS

PROPOSED REVISION OF CALENDAR ENTRY

Motion: That ENGR 701 be offered in one semester as a 3 credit hour course instead of two 1.5 credit hour courses as well as change to letter grade instead of Pass/Fail.

1. **Effective date:** September 2023

2. **Rationale for the proposed revisions:** ENGR 701 is currently offered in two semesters as two 1.5 CH courses. During the first semester, most MASc students are not ready to present a thesis proposal, which is the main goal of ENGR 701, and will benefit more by first taking ENGR 700 Technical Writing, which is being made required instead of elective. Thus, ENGR 701 is being converted into a single course, worth 3 CH. At the same time, ENGR 701 is being converted from a Pass/Fail course to a grade course, so that different levels of accomplishment can be acknowledged and associated with a student's performance, who will have firmer ground to proceed on while preparing their thesis.

3. **Implications of the changes for other programs, etc., if applicable:** None

4. **Reproduction of current Calendar entry for the item to be revised:**

   ENGR 701-1.5 Graduate Seminar in Engineering This course is offered over two semesters: one covering important engineering subject areas including risk assessment, safety, law, and ethics, and one which prepares the student to conduct master level research through a literature review, peer-reviewing these literature reviews, abstract composition, research proposal development, and a seminar presentation related to the student's thesis research. All MASc students are required to register for both semesters during their degree.

5. **Proposed revision with changes underlined and deletions indicated clearly using "~~strikethrough~~":**

   ENGR 701-~~1.5~~3 Graduate Seminar in Engineering This course ~~is offered over two semesters: one covering~~ covers important engineering subject areas including risk assessment, safety, law, and ethics, and ~~one which~~ prepares the student to conduct master-level research through a literature review, peer-reviews ~~reviewing these literature reviews~~, abstract composition, research proposal development, and a seminar presentation related to the student's thesis research. ~~All MASc students are required to register for both semesters during their degree~~.

6. **Authorization:**

   SCCC Reviewed: April 17, 2023

   Program / Academic / Administrative Unit: School of Engineering

   Faculty(ies): Faculty of Science and Engineering

   Faculty Council Motion Number(s): FSE FC 2023.05.18.12

   Faculty Council Approval Date(s): MY 18, 2023

   Senate Committee on Indigenous Initiatives Motion Number: not applicable

   Senate Committee on Indigenous Initiatives Meeting Date: not applicable

7. Other Information

Attachment Pages: **0** pages

INFORMATION TO BE COMPLETED AFTER SENATE COMMITTEE ON ACADEMIC AFFAIRS MEETING

Brief Summary of Committee Debate:

Motion No.: SCAAF

Moved by: Todd Whitcombe **Seconded by:** Gage Pierre

Committee Decision: CARRIED

Approved by SCAAF: June 14, 2023 **Date** **Chair's Signature**

For recommendation to ✓ **, or information of** _____ **Senate.**

UNBC UNIVERSITY OF NORTHERN BRITISH COLUMBIA

Motion Number (assigned by Steering Committee of Senate): **S-202306.23**

SENATE COMMITTEE ON ACADEMIC AFFAIRS

PROPOSED REVISION OF CALENDAR ENTRY

Motion: That the changes to the School of Engineering programs calendar description on pages 103 to 109 in the PDF calendar accessible on the UNBC web page of the 2022/2023 undergraduate calendar, be approved as proposed to reflect all changes made to the programs during the past year.

1. **Effective date:** September 2023

2. **Rationale for the proposed revisions:** Several changes have been made to the engineering programs through separate motions, and this motion seeks to update the calendar accordingly.

3. **Implications of the changes for other programs, etc., if applicable:** none

4. **Reproduction of current Calendar entry for the item to be revised:** please, see attachment "SoE_UndergradCalendar_2022_2023_Reproduction.docx"

5. **Proposed revision with changes underlined and deletions indicated clearly using "~~strikethrough~~":** please, see attachment "SoE_UndergradCalendar_2022_2023_Proposed.docx"

6. **Authorization:**

   SCCC Reviewed: April 17, 2023

   Program / Academic / Administrative Unit: School of Engineering

   Faculty(ies): Science and Engineering

   Faculty Council Motion Number(s): FSE FC 2023.05.18.11

   Faculty Council Approval Date(s): May 18, 2023

   Senate Committee on Indigenous Initiatives Motion Number: not applicable

   Senate Committee on Indigenous Initiatives Meeting Date: not applicable

7. **Other Information**

   Attachment Pages: **16** pages

INFORMATION TO BE COMPLETED AFTER SENATE COMMITTEE ON ACADEMIC AFFAIRS MEETING

Brief Summary of Committee Debate:

Motion No.: SCAAF 202306.22

Moved by: Todd Whitcombe **Seconded by:** Gage Pierre

Committee Decision: CARRIED

Approved by SCAAF: June 14, 2023 _____
Date **Chair's Signature**

For recommendation to ✓ **, or information of** _____ **Senate.**

School of Engineering (BASc Program)

- Civil Engineering
- Environmental Engineering
- Joint Environmental Engineering with UBC

Mauricio Dziedzic, Professor and Chair
Jianbing Li, Professor
Jueyi Sui, Professor
Thomas Tannert, Professor
Ron Thring, Professor
Steve Helle, Associate Professor
Asif Iqbal, Associate Professor
Guido Wimmers, Associate Professor
Jianhui Zhou, Associate Professor
Faran Ali, Assistant Professor
June Garcia-Becerra, Assistant Professor
Oliver Iorhemen, Assistant Professor
Ramla Qureshi, Assistant Professor
Fei Tong, Assistant Professor
Wenbo Zheng, Assistant Professor
Emily Cheung, Lecturer and Adjunct Professor
Maik Gehloff, Senior Laboratory Instructor
Natalie Linklater, Senior Laboratory Instructor David
Tamblyn, Senior Laboratory Instructor

Engineers serve society across a wide range of economic sectors in a number of capacities. Engineers require a solid technical and academic background, good communication skills, and the ability to work across a number of disciplines. Engineers design structures; bridges; mines; dams; transit systems; pollution control systems for air, water and soil; and much more.

UNBC offers three engineering degrees at the undergraduate level – a Civil Engineering degree, an Environmental Engineering degree and a joint Environmental Engineering degree with UBC. (UNBC also offers graduate degrees in engineering. See the Graduate Calendar.) These degrees prepare graduates for a wide range of employment opportunities where their technical expertise and problem-solving skills are required. The programs provide graduates with a strong awareness and understanding of environmental issues and problems. Our graduates are prepared for employment with engineering firms of all sizes in consulting, construction and resource industries (e.g. forestry, fisheries, mining, oil and gas, pulp and paper, and the agri-food industry), as well as government ministries and research organizations. Our graduates help shape the new environmental and civil engineering economy.
The Civil and Environmental Engineering degrees start with a similar first year in which the basic sciences and mathematics are emphasized along with an introduction to the engineering discipline. In second year, a number of courses are common in all of the engineering degrees but program requirements start to differentiate between the Civil and Environmental Engineering degrees. In the remaining years, some of the courses are common to both programs while each degree develops the in-depth knowledge to allow students to qualify within their discipline upon graduation. The final years expose students to practical engineering problems.

UNBC offers an integrated approach to Civil Engineering which is in keeping with the themes of design, lifecycle assessment, sustainable materials, and low-impact development throughout. Today's civil engineer not only designs the infrastructure essential to modern society (buildings, bridges, highways, transit systems, water and waste treatment facilities, foundations, tunnels, dams, etc.) but also analyzes the effects of deterioration on infrastructure elements while considering system interdependencies and life-cycle impacts. Civil engineers must consider environmental impact and economic sustainability in the development of modern infrastructure.

UNBC offers an Environmental Engineering degree that integrates basic science with modern engineering practices. Environmental and ecological problems are an increasing concern for all Canadians, including in the northern portion of British Columbia due to a primarily resource-based economy. Our graduates are prepared to take on challenges facing modern society, including water, air, and soil pollution control; solid waste management; contaminated site remediation; the protection of society from adverse environmental factors; and the protection of environments from potentially detrimental effects of natural and human activities.

Admission Requirements

Admission to the program is limited and based on academic qualifications and available space. Priority admission is given to students who meet the admission criteria and apply by the deadline of March 1.

Applicants from BC and Yukon secondary schools must

- meet UNBC admission requirements, and
- have an average of at least 75% based on the following five courses or equivalent: Pre-calculus 12 (min. 67%), English Studies 12 (or English First Peoples 12), two approved academic Science 12 courses, and a fifth grade 12 course (elective or additional approved academic course). Physics 12 or an equivalent is strongly recommended as it is a prerequisite for first-year Physics courses in the program. Students who are admitted without the Physics 12 prerequisite

may be delayed in their studies as they may not be able to complete the first four semesters of the program in the normal two-year time period. Meeting the minimum GPA does not guarantee admission. Under exceptional circumstances the prerequisites may be waived.

Other applicants must demonstrate that they possess qualifications at least equivalent to the BC and Yukon requirement.

UNBC is part of the Common First-Year Engineering Curriculum agreement. Students who complete the Common First-Year Engineering Curriculum at sending institutions in British Columbia may be admitted into second-year. Students who complete the Common First-Year Engineering Curriculum at sending institutions and who meet the minimum acceptance requirements at UNBC are guaranteed admission.

Transfers

Transfer into the program is allowed provided the prerequisite courses or articulated courses are completed and space is available in the program. Acceptance of transfers into the program is based on GPA with priority given to those with the highest GPA. The admission GPA for transfer students into the Environmental Engineering program is assessed on the following four courses or their university transferrable equivalents: Math 12 or Pre-calculus 12, English 12, and two provincially examinable Science 12 courses. In order to be considered for admission into the program, transfer students must have at least a 75% average based on these four courses or their equivalents.

In addition, the following requirements for the four courses apply:

- UNBC Civil and Environmental Engineering degree programs: Where both high school and university transfer coursework are provided for each of these four courses, the most recent GPA for each course is used. Transfer students must also have an overall Cumulative transfer GPA of at least 2.00, which is based on all their university transferrable coursework. Regardless of the articulated courses transferred, students must satisfy the residency requirement of a minimum of 90 credit hours.

- UNBC/UBC Joint Environmental Engineering degree program: Where both high school and university transfer coursework are provided for each of these four courses the highest GPA for each course is used. Transfer students must also have an overall Cumulative transfer GPA of at least 2.00, which is based on all their university transferrable coursework. Regardless of the articulated courses transferred, students must satisfy the residency requirement of a minimum of 90 credit hours. These may be fulfilled through a combination of courses taken at UNBC and UBC, provided that at least 30 credit hours are completed at each of the two institutions.

Qualification for Degree

It is the responsibility of the student to ensure that the degree requirements are met. General graduation requirements are found in the Regulations and Policy section of the UNBC Calendar.

UNBC Civil and Environmental Engineering degree programs:

Students must

- have a Cumulative GPA of at least 2.00 (C) on courses for credit towards an Engineering degree;
- obtain a minimum passing grade of 1.67 (C-) in each of ENGR 217 and either CIVE 400 and CIVE 401 (Civil Engineering) or ENVE 400 and ENVE 401(Environmental Engineering);
- complete all requirements of the BASc program within eight years counted from admission into the program or from the first Engineering course used for credit towards the degree.

UNBC/UBC Joint Environmental Engineering degree program:

Students must have

- a good academic standing at both institutions to graduate;
- a Cumulative GPA of at least 2.00 (63%) over all courses taken at UNBC;
- an average of at least 55%, and passing grades in at least 65% of the credits taken at UBC.

The degree parchment will carry crests from both granting institutions (UNBC and UBC).

Letter of Permission

Once admitted to Engineering at UNBC, students who want to take coursework at another institution for credit must obtain a Letter of Permission prior to registration in the course.

Students who complete courses without first having obtained a Letter of Permission risk not having those courses accepted for transfer credit. A student who has committed an academic offense or is on academic probation may be denied a Letter of Permission for subsequent coursework. Students should consult the Engineering Academic Advisor before considering coursework for transfer credit (refer to Academic Regulation 19).

Co-operative Education

Co-operative education is an optional but strongly recommended element of the Engineering programs.

For students in the UNBC Civil and Environmental Engineering degree programs, contact the UNBC Cooperative Education program for opportunities.

For students in the UNBC/UBC Environmental Engineering degree program, contact UBC Engineering Co-op for opportunities.

Civil Engineering Degree Program Requirements

The minimum requirement for completion of a Bachelor of Applied Science degree with a major in Civil Engineering is 153 credit hours.

Standards of Professional Conduct

In addition to fulfilling all University and program regulations and expectations, all Civil Engineering students are expected to abide by professional standards as set forth by Engineers and Geoscientists of British Columbia. Violation of professional standards may result in suspension or dismissal from the program and/or the University.

Academic Performance

Students must adhere to the policies and regulations as specified in the UNBC calendar. This requirement includes, but is not limited to, matters related to academic offenses and progression through the program. Progression is covered by the guidelines on academic standing and continuance. Offenses are governed by the regulations in the UNBC calendar.

Students must obtain the minimum passing grade for all courses. Failure to do so may result in a requirement to withdraw from the program.

Program Requirements

First Year (Semesters 1 & 2)

CHEM 100-3	General Chemistry I
CHEM 120-1	General Chemistry Laboratory I
CPSC 110-3	Introduction to Computer Systems and Programing
ENGR 110-3	Technical Writing
ENGR 117-3	Engineering Design I
ENGR 130-4	Mechanics of Materials I
ENGR 151-1	Engineering Tools I
ENGR 152-1	Engineering Tools II
MATH 100-3	Calculus I
MATH 101-3	Calculus II
MATH 220-3	Linear Algebra
PHYS 110-4	Introductory Physics I: Mechanics
PHYS 111-4	Introductory Physics II: Waves and Electricity

Second Year (Semesters 3 & 4)

CIVE 241-4	Civil Engineering Materials
CIVE 260-4	Soil Mechanics
CIVE 320-3	Structural Analysis I
ENGR 211-3	Engineering Communication
ENGR 217-3	Engineering Design II
ENGR 221-3	Thermodynamics and Heat Transfer
ENGR 240-4	Mechanics of Materials II
ENGR 254-4	Fluid Mechanics I
ENGR 270-3	Surveying
MATH 200-3	Calculus III
MATH 230-3	Linear Differential Equations and Boundary Value Problems
STATS 271-3	Statistical Reasoning for Engineers

Choose 3 credit hours from the lists of electives

Third Year (Semesters 5 & 6)

CIVE 321-3	Structural Analysis II
CIVE 340-3	Structural Design I
CIVE 341-3	Structural Design II
CIVE 360-4	Geotechnical Engineering
CIVE 370-3	Transportations Systems
CIVE 372-3	Construction Management
ENGR 300-3	Sustainable Principles of Engineering
ENGR 353-3	Hydrology and Open Channel Flow
ENGR 358-4	Water and Wastewater Systems
ENGR 380-3	Engineering Economics
MATH 335-3	Introduction to Numerical Methods

Choose 3 credit hours from the lists of electives

Fourth Year (Semesters 7 & 8)

CIVE 400-3	Capstone Design Project I
CIVE 401-6	Capstone Design Project II ENGR
410-3	Professional Practice & Law

One of the following:

ENGR 411-3	Project Management
ENGR 412-3	Engineering Business & Project Management

Choose 21 credit hours from the lists of electives

Electives

Electives must be chosen from the following lists.

Choose 15 credit hours. Total must be chosen from the Civil and Environmental Engineering elective lists.

Choose 9 or 12 credit hours from the Civil Engineering technical electives:

CIVE 451-3 Building Physics

CIVE 461-3 Foundation Design
CIVE 471-3 Cold Climate Construction Engineering
CIVE 481-3 Urban and Regional Planning

Choose 3 or 6 credit hours from the Environmental Engineering electives:

ENGR 354-3 Fluid Mechanics II
ENGR 412-3 Engineering Business & Project Management
ENVE 317-3 Engineering Design III: Municipal Engineering
ENVE 455-3 Engineering Hydrology
ENVE 462-3 Geo-Environmental Engineering

Choose 6 credit hours from the Science electives:

ENSC 201-3	Weather and Climate
ENSC 308-3	Northern Contaminated Environments
ENSC 412-3	Air Pollution
ENSC 425-3	Climate Change and Global Warming
FSTY 345-3	Wood Materials Science
GEOG 205-3	Cartography and Geomatics
GEOG 210-3	Introduction to Earth Science

Choose 3 credit hours from the Humanities or Social Sciences electives:

ENPL 305-3	Environmental Impact Assessment
ENVS 230-3	Introduction to Environmental Policy
ENVS 414-3	Environmental and Professional Ethics
FNST 304-3	Indigenous Environmental Philosophy
GEOG 202-3	Resources, Economies, and Sustainability
NREM 303-3	Aboriginal Perspectives on Land and Resource Management
NREM 306-3	Society, Policy and Administration
POLS 100-3	Contemporary Political Issues

3 credit hours of the following:

Humanities and Social Sciences courses with subject matter that deals with the central issues, methodologies, and thought processes of the Humanities and Social Sciences (for example, any ANTH, ENGL, ENVS, FNST, HIST, INTS, NORS, PHIL, POLS, or WMST course that does not principally impart language skills or statistics). GEOG and ENPL courses may qualify with the approval of the Chair.

Environmental Engineering Degree Program Requirements (UNBC Program)

The minimum requirement for completion of a Bachelor of Applied Science degree with a major in Environmental Engineering is 151 credit hours.

Standards of Professional Conduct

In addition to fulfilling all University and program regulations and expectations, all Environmental Engineering students are expected to abide by professional standards as set forth by Engineers and Geoscientists of British Columbia. Violation of professional standards may result in suspension or dismissal from the program and/or the University.

Academic Performance

Students must adhere to the policies and regulations as specified in the UNBC calendar. This requirement includes, but is not limited to, matters related to academic offenses and progression through the program.

Students must obtain the minimum passing grade for all courses. Failure to do so may result in a requirement to withdraw from the program.

Program Requirements

First Year (Semesters 1 & 2)

CHEM 100-3	General Chemistry I
and CHEM 120-1	General Chemistry Laboratory I
CHEM 101-3	General Chemistry II
and CHEM 121-1	General Chemistry Laboratory II
CPSC 110-3	Introduction to Computer Systems and Programing
ENGR 110-3	Technical Writing
ENGR 117-3	Engineering Design I
ENGR 130-4	Mechanics of Materials I
ENGR 151-1	Engineering Tools I
ENGR 152-1	Engineering Tools II
MATH 100-3	Calculus I
MATH 101-3	Calculus II
MATH 220-3	Linear Algebra
PHYS 110-4	Introductory Physics I: Mechanics

Second Year (Semesters 3 & 4)

ENGR 210-3	Materials and Energy Balance
ENGR 211-3	Engineering Communication
ENGR 217-3	Engineering Design II
ENGR 220-3	Engineering Chemistry
ENGR 221-3	Thermodynamics & Heat Transfer
ENGR 254-4	Fluid Mechanics I
ENGR 270-3	Surveying
ENSC 201-3	Weather and Climate
ENVE 222-3	Engineering Biology
FSTY 205-3	Introduction to Soil Science
or GEOG 210-3	Introduction to Earth Science
MATH 200-3	Calculus III
MATH 230-3	Linear Differential Equations and Boundary Value Problems
STAT 271-3	Statistical Reasoning for Engineers

Third Year (Semesters 5 & 6)

CIVE 260-4 Soil Mechanics
ENGR 300-3 Sustainable Principles of Engineering
ENGR 353-3 Hydrology and Open Channel Flow
ENGR 354-3 Fluid Mechanics II
ENGR 358-4 Waste and Wastewater Systems
ENGR 380-3 Engineering Economics
ENVE 310-3 Environmental Engineering Processes
ENVE 317-3 Engineering Design III: Municipal Engineering
ENVE 318-3 Environmental Engineering Measurement Lab
ENVE 351-4 Groundwater Flow and Contaminant Transport
MATH 335-3 Introduction to Numerical Methods
Choose 3 credit hours from the lists of electives

Fourth Year (Semesters 7 & 8)
ENGR 410-3 Professional Practice & Law
ENSC 406-3 Environmental Modelling
ENVE 400-3 Capstone Design Project I
ENVE 401-6 Capstone Design Project II
ENVE 430-3 Energy Systems
ENVE 455-3 Engineering Hydrology

One of the following:
ENGR 411-3 Project Management
ENGR 412-3 Engineering Business & Project Management

Choose 12 credit hours from the lists of electives

Electives

Electives must be chosen from the following lists.

Choose 6 credit hours from the following list:
CIVE 370-3 Transportation Systems
CIVE 451-3 Building Physics
CIVE 481-3 Urban and Regional Planning
ENVE 421-3 Contaminant Transport in the Environment
ENVE 462-3 Geo-environmental Engineering

Choose 3 credit hours from the following list:
ENSC 307-3 Introduction to Geochemistry
ENSC 308-3 Northern Contaminated Environments
ENSC 325-3 Soil Physical Processes and the Environment
ENSC 412-3 Air Pollution
ENSC 425-3 Climate Change and Global Warming
ENSC 450-3 Environmental and Geophysical Data Analysis
ENSC 452-3 Reclamation & Remediation of Disturbed Environments
FSTY 205-3 Introduction to Soil Science
FSTY 345-3 Wood Materials Science
FSTY 425-3 Soil Formation and Classification
GEOG 202-3 Resources, Economies, and Sustainability
GEOG 205-3 Cartography and Geomatics
GEOG 210-3 Introduction to Earth Science
GEOG 311-3 Drainage Basin Geomorphology
GEOG 401-3 Tenure, Conflict and Resource Geography
GEOG 403-3 First Nations and Indigenous Geographies
NREM 303-3 Aboriginal Perspectives on Land and Resource Management
NREM 306-3 Society, Policy and Administration
POLS 100-3 Contemporary Political Issues

Choose 3 credit hours from the following list:
ENPL 305-3 Environmental Impact Assessment
ENPL 401-3 Environmental Law
ENVS 230-3 Introduction to Environmental Policy
ENVS 414-3 Environmental and Professional Ethics
FNST 304-3 Indigenous Environmental Philosophy

3 credit hours of Humanities and Social Sciences courses with subject matter that deals with the central issues, methodologies, and thought processes of the Humanities and Social Sciences (for example, any ANTH, ENGL, ENVS, FNST, HIST, INTS, NORS, PHIL, POLS, or WMST course that does not principally impart language skills or statistics). GEOG and ENPL courses may qualify with the approval of the Chair.

Environmental Engineering Degree Program Requirements (UNBC/UBC Joint Program)

The Environmental Engineering Bachelor of Applied Science program is a 4.5 year (nine semester) joint degree between the University of British Columbia and the University of Northern British Columbia. The program is based on a unique collaboration between UNBC and UBC that capitalizes on the strength of UNBC in Environmental Science and the breadth and depth of engineering at UBC. It incorporates complementary elements and expertise from each institution while exposing students to the distinctive character of both institutions. The program starts with a two-year foundation in mathematics and basic and environmental sciences from UNBC. In the third and fourth years, the program provides a thorough education and training in engineering fundamentals, engineering analysis and engineering design, largely through courses in Civil Engineering and Chemical and Biological Engineering at UBC. The final term at UNBC exposes students to practical environmental engineering problems.

The joint UNBC/UBC Environmental Engineering program is accredited by the Canadian Engineering Accreditation Board.

Regulations

Unless otherwise specified, the rules and regulations are those applicable at the institution (UBC or UNBC) which the students are attending at the time the rules/regulations need to be applied. In the case where the rules and regulations are needed to cover the program as a whole, or where the institution of attendance is not relevant, then the more stringent rules/regulations are applied. Academic appeals are handled using the procedures at the institution where the rules/regulations need to be applied.

Leave of Absence

Students wanting to take a Leave of Absence must apply to the Environmental Engineering Advisor at the institution that the student is currently attending. Upon approval, students are eligible for up to a one-year Leave of Absence. Students who do not apply for a Leave of Absence are withdrawn from the Environmental Engineering program.

Transit Between Institutions

Transit between years and institutions requires good academic standing in the program at the most recent institution of residence (UNBC or UBC).

At UNBC, good academic standing means a student must have a Cumulative GPA of 2.00 or greater in required 1st and 2nd year courses (including 3 credit hours of Humanities or Social Sciences), and must have successfully completed all ENGR, ENVE, MATH and STAT courses. For transit to UBC, all transit requirements must be met by April 30th of the year of transfer.

At UBC, good academic standing means an average of at least 55%, and passing grades in at least 65% of the credits taken. Refer to the UBC Environmental Engineering website (enve.ubc.ca) for more details on UBC to UNBC transit requirements.

Program Requirements

UNBC degree requirements:	91 credit hours
UBC degree requirements:	72 credit hours
Total credits for degree:	163 credit hours

Semester 1 and 2 completed at UNBC

CHEM 100-3 General Chemistry I
and CHEM 120-1 General Chemistry Lab I
CHEM 101-3 General Chemistry II
and CHEM 121-1 General Chemistry Lab II
CPSC 110-3 Introduction to Computer Systems and Programing
ENGR 110-3 Technical Writing
ENGR 117-3 Engineering Design I
ENGR 130-4 Mechanics of Materials I
ENGR 151-1 Engineering Tools I
ENGR 152-1 Engineering Tools II
MATH 100-3 Calculus I
MATH 101-3 Calculus II
MATH 220-3 Linear Algebra
PHYS 110-4 Introductory Physics I: Mechanics

Semester 3 and 4 completed at UNBC

ENGR 210-3 Material and Energy Balances
ENGR 211-3 Engineering Communication
ENGR 217-3 Engineering Design II
ENGR 220-3 Engineering Chemistry
ENGR 254-4 Fluid Mechanics I
ENSC 201-3 Weather and Climate
ENVE 222-3 Engineering Biology
FSTY 205-3 Introduction to Soil Science
or GEOG 210-3 Introduction to Earth Science
MATH 200-3 Calculus III
MATH 230-3 Linear Differential Equations and Boundary Value Problems
STAT 271-3 Statistical Reasoning for Engineers

3 credit hours of Humanities and Social Sciences courses with subject matter that deals with the central issues, methodologies, and thought processes of the Humanities and Social Sciences (for example, any ANTH, ENGL, ENVS, FNST, HIST, INTS, NORS, PHIL, POLS, or WMST course that does not principally impart language skills or statistics). GEOG and ENPL courses may qualify with the approval of the Chair.

Note: Lists for courses completed at UBC for semesters 5 through 8 are provided for information only. Please refer to the UBC calendar for official requirements.

CHBE 244-3 Chemical and Biological Engineering Thermodynamics I
CHBE 352-4 Transport Phenomena II
CHBE 364-2 Environmental Engineering Laboratory
CHBE 370-3 Fundamentals of Sustainable Engineering
CHBE 373-3 Water Pollution Control
CHBE 459-3 Chemical and Biological Engineering Economics
or CIVL 403-3 Engineering Economic Analysis
CHBE 485-3 Air Pollution Prevention and Control
CIVL 210-4 Soil Mechanics I
CIVL 250-3 Engineering and Sustainable Development
CIVL 315-4 Fluid Mechanics II
CIVL 316-4 Hydrology and Open Channel Flow
CIVL 402-3 Engineering Law and Contracts in Civil Engineering
CIVL 408-3 Geoenvironmental Engineering
CIVL 409-3 Municipal Engineering
CIVL 416-3 Environmental Hydraulics
CIVL 418-3 Engineering Hydrology
EOSC 429-3 Groundwater Contamination
MINE 486-3 Mining and the Environment

credit hours of technical electives chosen from a constrained list available at UBC.

Semester 9 completed at UNBC

ENGR 417-6 Engineering Design V
ENPL 401-3 Environmental Law
ENSC 418-3 Environmental Measurement and Analysis
3 credit hours of Humanities or Social Science elective 3 credit hours of elective

Technical electives available at UNBC for the UBC portion of the curriculum in the UBC/UNBC Joint Environmental Engineering Program

The following UNBC courses may be used to meet a Technical Elective requirement in the UBC portion of the Joint UBC/UNBC Environmental Engineering BASc program. Normally, no more than one course from the list may be used. To qualify towards UBC technical elective requirements, the technical elective must be taken prior to transition to UBC.

ENSC 302-3	Low Carbon Energy Development
ENSC 404-3	Waste Management
ENSC 406-3	Environmental Modelling
ENSC 408-3	Storms
ENSC 425-3	Climate Change and Global Warming
ENSC 450-3	Environmental and Geophysical Data Analysis
ENSC 452-3	Reclamation and Remediation of Disturbed Environments
FSTY 345-3	Wood Materials Science
NREM 410-3	Watershed Management

School of Engineering (BASc Program)

- Civil Engineering
- Environmental Engineering
- Joint Environmental Engineering with UBC

Mauricio Dziedzic, P.Eng., Professor and Chair
Jianbing Li, P.Eng., Professor
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Chinchu Cherian, Assistant Professor
June Garcia-Becerra, P.Eng., Assistant Professor
Oliver Iorhemen, P.Eng., Assistant Professor
Mohammad Kamali, Assistant Professor
Mohammad Raoufi, P.Eng., Assistant Professor
Ramla Qureshi, Assistant Professor
Fei Tong, Assistant Professor
Wenbo Zheng, P.Eng., Assistant Professor
Emily Cheung, P.Eng., Lecturer and Adjunct Professor
Maik Gehloff, Senior Laboratory Instructor
Natalie Linklater, EIT, Senior Laboratory Instructor

~~David Tamblyn, Senior Laboratory Instructor~~

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The Civil and Environmental Engineering degrees start with a similar first year in which the basic sciences and mathematics are emphasized along with an introduction to the engineering discipline. In second year, a number of courses are common in all of the engineering degrees but program requirements start to differentiate between the Civil and Environmental Engineering degrees. In the remaining years, some of the courses are common to both programs while each degree develops the in-depth knowledge to allow students to qualify within their discipline upon graduation. The final years expose students to practical engineering problems.

UNBC offers an integrated approach to Civil Engineering which is in keeping with the themes of design, lifecycle assessment, sustainable materials, and low-impact development throughout. Today's civil engineer not only designs the infrastructure essential to modern society (buildings, bridges, highways, transit systems, water and waste treatment facilities, foundations, tunnels, dams, etc.) but also analyzes the effects of deterioration on infrastructure elements while considering system interdependencies and life-cycle impacts. Civil engineers must consider environmental impact and economic sustainability in the development of modern infrastructure.

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Admission Requirements

Admission to the program is limited and based on academic qualifications and available space. Priority admission is given to students who meet the admission criteria and apply by the deadline of March 1.

Applicants from BC and Yukon secondary schools must

- meet UNBC admission requirements, and
- have an average of at least 75% based on the following five courses or equivalent: Pre-calculus 12 (min. 67%), English Studies 12 (or English First Peoples 12), two approved academic Science 12 courses, and a fifth grade

12 course (elective or additional approved academic course). Physics 12 or an equivalent is strongly recommended as it is a prerequisite for first-year Physics courses in the program. Students who are admitted without the Physics 12 prerequisite may be delayed in their studies as they may not be able to complete the first four semesters of the program in the normal two-year time period. Meeting the minimum GPA does not guarantee admission. Under exceptional circumstances the prerequisites may be waived.

Other applicants must demonstrate that they possess qualifications at least equivalent to the BC and Yukon requirement.

UNBC is part of the Common First-Year Engineering Curriculum agreement. Students who complete the Common First-Year Engineering Curriculum at sending institutions in British Columbia may be admitted into second-year. Students who complete the Common First-Year Engineering Curriculum at sending institutions and who meet the minimum acceptance requirements at UNBC are guaranteed admission.

Transfers

Transfer into the program is allowed provided the prerequisite courses or articulated courses are completed and space is available in the program. Acceptance of transfers into the program is based on GPA with priority given to those with the highest GPA. The admission GPA for transfer students into the Environmental Engineering program is assessed on the following four courses or their university transferrable equivalents: Math 12 or Pre-calculus 12, English 12, and two provincially examinable Science 12 courses. In order to be considered for admission into the program, transfer students must have at least a 75% average based on these four courses or their equivalents.

In addition, the following requirements for the four courses apply:

- UNBC Civil and Environmental Engineering degree programs: Where both high school and university transfer coursework are provided for each of these four courses, the most recent GPA for each course is used. Transfer students must also have an overall Cumulative transfer GPA of at least 2.00, which is based on all their university transferrable coursework. Regardless of the articulated courses transferred, students must satisfy the residency requirement of a minimum of 90 credit hours.

- UNBC/UBC Joint Environmental Engineering degree program: Where both high school and university transfer coursework are provided for each of these four courses the highest GPA for each course is used. Transfer students must also have an overall Cumulative transfer GPA of at least 2.00, which is based on all their university transferrable coursework. Regardless of the articulated courses transferred, students must satisfy the residency requirement of a minimum of 90 credit hours. These may be fulfilled through a combination of courses taken at UNBC and UBC, provided that at least 30 credit hours are completed at each of the two institutions.

Qualification for Degree

It is the responsibility of the student to ensure that the degree requirements are met. General graduation requirements are found in the Regulations and Policy section of the UNBC Calendar.

Course Challenges

Engineering courses are not challengeable by examination. Engineering courses rely on multiple forms of assessment. A single examination is not sufficient to assess learning, and would not be aligned with current accreditation criteria, which rely on multiple assessments of graduate attributes.

UNBC Civil and Environmental Engineering degree programs:

Students must

- have a Cumulative GPA of at least 2.00 (C) on courses for credit towards an Engineering degree;
- obtain a minimum passing grade of 1.67 (C-) in ENGR 400~~ each of ENGR 217 and either CIVE 400 and CIVE 401 (Civil Engineering) or ENVE 400 and ENVE 401(Environmental Engineering)~~;
- complete all requirements of the BASc program within eight years counted from admission into the program or from the first Engineering course used for credit towards the degree.

UNBC/UBC Joint Environmental Engineering degree program:

Students must have

- a good academic standing at both institutions to graduate;
- a Cumulative GPA of at least 2.00 (63%) over all courses taken at UNBC;
- an average of at least 55%, and passing grades in at least 65% of the credits taken at UBC.

The degree parchment will carry crests from both granting institutions (UNBC and UBC).

Letter of Permission

Once admitted to Engineering at UNBC, students who want to take coursework at another institution for credit must

obtain a Letter of Permission prior to registration in the course.

Students who complete courses without first having obtained a Letter of Permission risk not having those courses accepted for transfer credit. A student who has committed an academic offense or is on academic probation may be denied a Letter of Permission for subsequent coursework. Students should consult the Engineering Academic Advisor before considering coursework for transfer credit (refer to Academic Regulation 19).

Co-operative Education

Co-operative education is an optional but strongly recommended element of the Engineering programs.

For students in the UNBC Civil and Environmental Engineering degree programs, contact the UNBC Cooperative Education program for opportunities.

For students in the UNBC/UBC Environmental Engineering degree program, contact UBC Engineering Co-op for opportunities.

Civil Engineering Degree Program Requirements

The minimum requirement for completion of a Bachelor of Applied Science degree with a major in Civil Engineering is 153 credit hours.

Standards of Professional Conduct

In addition to fulfilling all University and program regulations and expectations, all Civil Engineering students are expected to abide by professional standards as set forth by Engineers and Geoscientists ~~of~~ British Columbia. Violation of professional standards may result in suspension or dismissal from the program and/or the University.

Academic Performance

Students must adhere to the policies and regulations as specified in the UNBC calendar. This requirement includes, but is not limited to, matters related to academic offenses and progression through the program. Progression is covered by the guidelines on academic standing and continuance. Offenses are governed by the regulations in the UNBC calendar.

Students must obtain the minimum passing grade for all courses. Failure to do so may result in a requirement to withdraw from the program.

Program Requirements

First Year (Semesters 1 & 2)

CHEM 100-3	General Chemistry I
CHEM 120-1	General Chemistry Laboratory I
CPSC 110-3	Introduction to Computer Systems and Programing
ENGR 110-3	Technical Writing
ENGR 117-3	Engineering Design I
ENGR 130-4	Mechanics of Materials I
ENGR 151-1	Engineering Tools I
ENGR 152-1	Engineering Tools II
ENGR 270-3	Surveying
MATH 100-3	Calculus I
MATH 101-3	Calculus II
MATH 220-3	Linear Algebra
PHYS 110-4	Introductory Physics I: Mechanics
PHYS 111-4	Introductory Physics II: Waves and Electricity

Second Year (Semesters 3 & 4)

CIVE 241-4	Civil Engineering Materials
CIVE 260-4	Soil Mechanics
CIVE 320-3	Structural Analysis I
ENGR 211-3	Engineering Communication
ENGR 217-3	Engineering Design II
ENGR 221-3	Thermodynamics and Heat Transfer
ENGR 240-4	Mechanics of Materials II
ENGR 254-4	Fluid Mechanics I
~~ENGR 270-3~~	~~Surveying~~
MATH 200-3	Calculus III
MATH 230-3	Linear Differential Equations and Boundary Value Problems
STATS 271-3	Statistical Reasoning for Engineers

Choose 3 credit hours from the lists of electives

Third Year (Semesters 5 & 6)

CIVE 321-3	Structural Analysis II
CIVE 340-3	Structural Design I
CIVE 341-3	Structural Design II
CIVE 360-4	Geotechnical Engineering
CIVE 370-3	Transportation~~s~~ Systems
CIVE 372-3	Construction Management
ENGR 300-3	Sustainable Principles of Engineering
ENGR 353-3	~~Hydrology and~~ Open Channel Flow
ENGR 354-3	Fluid Mechanics II
ENGR 358-4	Water and Wastewater Systems
ENGR 380-3	Engineering Economics
MATH 335-3	Introduction to Numerical Methods

~~Choose 3 credit hours from the lists of electives~~

Fourth Year (Semesters 7 & 8)

~~CIVE 400-3 Capstone Design Project I~~
~~CIVE 401-6 Capstone Design Project II~~
ENGR 400-6 Capstone Design Project
ENGR 410-3 Professional Practice & Law
ENVE 455-3 Engineering Hydrology

One of the following:

ENGR 411-3	Project Management
ENGR 412-3	Engineering Business & Project

Management

Choose 21 credit hours from the lists of electives

Electives

Electives must be chosen from the following lists.

~~Choose 15 credit hours.~~ 12 credit hours ~~Total~~ must be chosen from the Civil and Environmental Engineering elective lists.

Choose 6 or 9 ~~or 12~~ credit hours from the Civil Engineering technical electives:

CIVE 438-4	Rock Mechanics and Rock Engineering
CIVE 439-3	Introduction to Structural Fire Engineering
CIVE 441-3	Bridge Engineering
CIVE 451-3	Building Physics
CIVE 461-3	Foundation Design
CIVE 471-3	Cold Climate Construction Engineering
CIVE 481-3	Urban and Regional Planning
CIVE 491-3	Introduction to Wood as a Building Material
ENGR 450-3	CAD/BIM in the Construction Industry

Choose 3 or 6 credit hours from the Environmental Engineering electives:

ENGR 406-3	Environmental Modelling
ENGR 421-3	Ecological Engineering and Design
ENVE 317-3	Engineering Design III: Municipal Engineering
ENVE 462-3	Geo-Environmental Engineering

Choose 6 credit hours from the Science electives:

ENSC 201-3	Weather and Climate
ENSC 302-3	Low Carbon Energy Development
ENSC 308-3	Northern Contaminated Environments
ENSC 325-3	Soil Physical Processes and the Environment
ENSC 404-3	Waste Management
ENSC 408-3	Storms
ENSC 412-3	Air Pollution
ENSC 425-3	Climate Change and Global Warming
ENSC 450-3	Environmental and Geophysical Data Analysis
FSTY 205-3	Introduction to Soil Science
FSTY 345-3	Wood Materials Science
FSTY 425-3	Soil Formation and Classification
GEOG 205-3	Cartography and Geomatics
GEOG 210-3	Introduction to Earth Science
GEOG 250-3	Introduction to Geospatial Analysis
GEOG 311-3	Drainage Basin Geomorphology

Choose ~~3~~ 6 credit hours from the ~~Humanities or Social Sciences~~ Complementary Studies electives:

ENGR 411-3	Project Management
ENGR 412-3	Engineering Business & Project Management
ENPL 208-3	First Nations Community and Environmental Planning
ENPL 301-3	Sustainable Communities: Structure and Sociology
ENPL 304-3	Mediation, Negotiation and Public Participation
ENPL 305-3	Environmental Impact Assessment
ENPL 313-3	Rural Community Economic Development (CED)
ENPL 319-3	Social Research Methods
ENPL 401-3	Environmental Law
ENVS 230-3	Introduction to Environmental Policy
ENVS 309-3	Gender, Environment and Sustainability
ENVS 326-3	Public Engagement for Sustainability
ENVS 399-3	Low-Carbon Transitions: Theory and Practice
ENVS 414-3	Environmental and Professional Ethics
FNST 304-3	Indigenous Environmental Philosophy
GEOG 202-3	Resources, Economies, and Sustainability
NREM 303-3	Aboriginal Perspectives on Land and Resource Management
NREM 306-3	Society, Policy and Administration
POLS 100-3	Contemporary Political Issues
PSYC 207-3	Social Psychology
PSYC 306-3	Theories of Personality
PSYC 314-3	Emotion and Motivation
PSYC 322-3	Positive Psychology
SOCW 201-3	Introduction to Social Welfare

~~3 credit hours of the following:~~

~~Humanities and Social Sciences courses with subject matter that deals with the central issues, methodologies, and thought processes of the Humanities and Social Sciences (for example, any ANTH, ENGL, ENVS, FNST, HIST, INTS, NORS, PHIL, POLS, or WMST course that does not principally impart language skills or statistics). GEOG and ENPL courses may qualify with the approval of the Chair.~~

Environmental Engineering Degree Program Requirements (UNBC Program)

The minimum requirement for completion of a Bachelor of Applied Science degree with a major in Environmental Engineering is 151 credit hours.

Standards of Professional Conduct

In addition to fulfilling all University and program regulations and expectations, all Environmental Engineering students are expected to abide by professional standards as set forth by Engineers and Geoscientists of British Columbia. Violation of professional standards may result in suspension or dismissal from the program and/or the University.

Academic Performance

Students must adhere to the policies and regulations as specified in the UNBC calendar. This requirement includes, but is not limited to, matters related to academic offenses and progression through the program.

Students must obtain the minimum passing grade for all courses. Failure to do so may result in a requirement to withdraw from the program.

Program Requirements

First Year (Semesters 1 & 2)

CHEM 100-3 General Chemistry I
and CHEM 120-1 General Chemistry Laboratory I
CHEM 101-3 General Chemistry II
and CHEM 121-1 General Chemistry Laboratory II
CPSC 110-3 Introduction to Computer Systems and Programing
ENGR 110-3 Technical Writing
ENGR 117-3 Engineering Design I
ENGR 130-4 Mechanics of Materials I
ENGR 151-1 Engineering Tools I
ENGR 152-1 Engineering Tools II
ENGR 270-3 Surveying
MATH 100-3 Calculus I
MATH 101-3 Calculus II
MATH 220-3 Linear Algebra
PHYS 110-4 Introductory Physics I: Mechanics

Second Year (Semesters 3 & 4)

ENGR 210-3 Materials and Energy Balance
ENGR 211-3 Engineering Communication
ENGR 217-3 Engineering Design II
ENGR 220-3 Engineering Chemistry
ENGR 221-3 Thermodynamics & Heat Transfer
ENGR 254-4 Fluid Mechanics I
~~ENGR 270-3 Surveying~~
ENSC 201-3 Weather and Climate
ENVE 222-3 Engineering Biology
FSTY 205-3 Introduction to Soil Science
or GEOG 210-3 Introduction to Earth Science
MATH 200-3 Calculus III
MATH 230-3 Linear Differential Equations and Boundary Value Problems
STAT 271-3 Statistical Reasoning for Engineers

Third Year (Semesters 5 & 6)

CIVE 260-4 Soil Mechanics
ENGR 300-3 Sustainable Principles of Engineering
ENGR 353-3 Hydrology and Open Channel Flow
ENGR 354-3 Fluid Mechanics II
ENGR 358-4 ~~Waste~~Water and Wastewater Systems
ENGR 380-3 Engineering Economics
ENVE 310-3 Environmental Engineering Processes
ENVE 317-3 Engineering Design III: Municipal Engineering
ENVE 318-3 Environmental Engineering Measurement Lab
ENVE 351-4 Groundwater Flow and Contaminant Transport
MATH 335-3 Introduction to Numerical Methods
Choose 3 credit hours from the lists of electives

Fourth Year (Semesters 7 & 8)

ENGR 400-6 Capstone Design Project
ENGR 406-3 Environmental Modelling
ENGR 410-3 Professional Practice & Law
~~ENSC 406-3 Environmental Modelling~~
~~ENVE 400-3 Capstone Design Project I~~
~~ENVE 401-6 Capstone Design Project II~~
ENVE 430-3 Energy Systems
ENVE 455-3 Engineering Hydrology

One of the following:

ENGR 411-3 Project Management
ENGR 412-3 Engineering Business & Project Management

Choose 1~~2~~5 credit hours from the lists of electives

Electives

Electives must be chosen from the following lists.

Choose ~~6~~9 credit hours from the following Engineering electives list:

CIVE 360-4 Geotechnical Engineering
CIVE 370-3 Transportation Systems
CIVE 438-4 Rock Mechanics and Rock Engineering
CIVE 451-3 Building Physics
CIVE 481-3 Urban and Regional Planning
ENGR 421-3 Ecological Engineering and Design
ENGR 450-3 CAD/BIM in the Construction Industry
~~ENVE 421-3 Contaminant Transport in the Environment~~
ENVE 462-3 Geo-environmental Engineering

Choose 3 credit hours from the following Science electives list:

ENSC 302-3 Low Carbon Energy Development
ENSC 307-3 Introduction to Geochemistry
ENSC 308-3 Northern Contaminated Environments
ENSC 325-3 Soil Physical Processes and the Environment
ENSC 404-3 Waste Management
ENSC 408-3 Storms
ENSC 412-3 Air Pollution
ENSC 425-3 Climate Change and Global Warming
ENSC 450-3 Environmental and Geophysical Data Analysis
ENSC 452-3 Reclamation & Remediation of Disturbed Environments
FSTY 205-3 Introduction to Soil Science
FSTY 345-3 Wood Materials Science
FSTY 425-3 Soil Formation and Classification

~~GEOG 202-3~~	~~Resources, Economies, and Sustainability~~
GEOG 205-3	Cartography and Geomatics
GEOG 210-3	Introduction to Earth Science
GEOG 311-3	Drainage Basin Geomorphology
~~GEOG 401-3~~	~~Tenure, Conflict and Resource Geography~~
~~GEOG 403-3~~	~~First Nations and Indigenous Geographies~~
~~NREM 303-3~~	~~Aboriginal Perspectives on Land and Resource Management~~
~~NREM 306-3~~	~~Society, Policy and Administration~~
~~POLS 100-3~~	~~Contemporary Political Issues~~
~~NREM 410-3~~	~~Watershed Management~~

Choose ~~3~~ 6 credit hours from the following Complementary Studies electives list:

ENGR 411-3	Project Management
ENGR 412-3	Engineering Business & Project Management
ENPL 208-3	First Nations Community and Environmental Planning
ENPL 301-3	Sustainable Communities: Structure and Sociology
ENPL 304-3	Mediation, Negotiation and Public Participation
ENPL 305-3	Environmental Impact Assessment
ENPL 313-3	Rural Community Economic Development (CED)
ENPL 319-3	Social Research Methods
ENPL 401-3	Environmental Law
ENPL 410-3	Land Use Planning
ENVS 230-3	Introduction to Environmental Policy
ENVS 309-3	Gender, Environment, and Sustainability
ENVS 326-3	Public Engagement for Sustainability
ENVS 339-3	Low Carbon Transitions: Theory and Practice
ENVS 414-3	Environmental and Professional Ethics
FNST 304-3	Indigenous Environmental Philosophy
GEOG 202-3	Resources, Economies and Sustainability
GEOG 401-3	Tenure, Conflict and Resource Geography
GEOG 403-3	First Nations and Indigenous Geographies
NREM 303-3	Aboriginal Perspectives on land and Resource Management
NREM 306-3	Society, Policy and Administration
POLS 100-3	Contemporary Political Issues
PSYC 207-3	Social Psychology
PSYC 306-3	Theories of Personality
PSYC 314-3	Emotion and Motivation
PSYC 322-3	Positive Psychology
SOCW 201-3	Introduction to Social Work

~~3 credit hours of Humanities and Social Sciences courses with subject matter that deals with the central issues, methodologies, and thought processes of the Humanities and Social Sciences (for example, any ANTH, ENGL, ENVS, FNST, HIST, INTS, NORS, PHIL, POLS, or WMST course that does not principally impart language skills or statistics).~~

~~GEOG and ENPL courses may qualify with the approval of the Chair.~~

Environmental Engineering Degree Program Requirements (UNBC/UBC Joint Program)

The Environmental Engineering Bachelor of Applied Science program is a 4.5 year (nine semester) joint degree between the University of British Columbia and the University of Northern British Columbia. The program is based on a unique collaboration between UNBC and UBC that capitalizes on the strength of UNBC in Environmental Science and the breadth and depth of engineering at UBC. It incorporates complementary elements and expertise from each institution while exposing students to the distinctive character of both institutions. The program starts with a two-year foundation in mathematics and basic and environmental sciences from UNBC. In the third and fourth years, the program provides a thorough education and training in engineering fundamentals, engineering analysis and engineering design, largely through courses in Civil Engineering and Chemical and Biological Engineering at UBC. The final term at UNBC exposes students to practical environmental engineering problems.

The joint UNBC/UBC Environmental Engineering program is accredited by the Canadian Engineering Accreditation Board.

Regulations

Unless otherwise specified, the rules and regulations are those applicable at the institution (UBC or UNBC) which the students are attending at the time the rules/regulations need to be applied. In the case where the rules and regulations are needed to cover the program as a whole, or where the institution of attendance is not relevant, then the more stringent rules/regulations are applied. Academic appeals are handled using the procedures at the institution where the rules/regulations need to be applied.

Leave of Absence

Students wanting to take a Leave of Absence must apply to the Environmental Engineering Advisor at the institution that the student is currently attending. Upon approval, students are eligible for up to a one-year Leave of Absence. Students who do not apply for a Leave of Absence are withdrawn from the Environmental Engineering program.

Transit Between Institutions

Transit between years and institutions requires good academic standing in the program at the most recent institution of residence (UNBC or UBC).
At UNBC, good academic standing means a student must have a Cumulative GPA of 2.00 or greater in required 1st and 2nd year courses (including 3 credit hours of Humanities or Social Sciences), and must have successfully completed all

ENGR, ENVE, MATH and STAT courses. For transit to UBC, all transit requirements must be met by April 30th of the year of transfer.

At UBC, good academic standing means an average of at least 55%, and passing grades in at least 65% of the credits taken. Refer to the UBC Environmental Engineering website (enve.ubc.ca) for more details on UBC to UNBC transit requirements.

Program Requirements

UNBC degree requirements:	91 credit hours
UBC degree requirements:	72 credit hours
Total credits for degree:	163 credit hours

Semester 1 and 2 completed at UNBC

CHEM 100-3	General Chemistry I
and CHEM 120-1	General Chemistry Lab I
CHEM 101-3	General Chemistry II
and CHEM 121-1	General Chemistry Lab II
CPSC 110-3	Introduction to Computer Systems and Programing
ENGR 110-3	Technical Writing
ENGR 117-3	Engineering Design I
ENGR 130-4	Mechanics of Materials I
ENGR 151-1	Engineering Tools I
ENGR 152-1	Engineering Tools II
ENGR 270-3	Surveying
MATH 100-3	Calculus I
MATH 101-3	Calculus II
MATH 220-3	Linear Algebra
PHYS 110-4	Introductory Physics I: Mechanics

Semester 3 and 4 completed at UNBC

ENGR 210-3	Material and Energy Balances
ENGR 211-3	Engineering Communication
ENGR 217-3	Engineering Design II
ENGR 220-3	Engineering Chemistry
ENGR 221-3	Thermodynamics & Heat Transfer
ENGR 254-4	Fluid Mechanics I
ENSC 201-3	Weather and Climate
ENVE 222-3	Engineering Biology
FSTY 205-3	Introduction to Soil Science
or GEOG 210-3	Introduction to Earth Science
MATH 200-3	Calculus III
MATH 230-3	Linear Differential Equations and Boundary Value Problems
STAT 271-3	Statistical Reasoning for Engineers

~~3 credit hours of Humanities and Social Sciences courses with subject matter that deals with the central issues, methodologies, and thought processes of the Humanities and Social Sciences (for example, any ANTH, ENGL, ENVS, FNST, HIST, INTS, NORS, PHIL, POLS, or WMST course that does not principally impart language skills or statistics).~~

~~GEOG and ENPL courses may qualify with the approval of the Chair.~~

Note: Lists for courses completed at UBC for semesters 5 through 8 are provided for information only. Please refer to the UBC calendar for official requirements.

~~CHBE 244-3~~	~~Chemical and Biological Engineering Thermodynamics I~~
CHBE 230-3	Computational Methods
CHBE 352-4	Transport Phenomena II
CHBE 364-2	Environmental Engineering Laboratory
CHBE 370-3	Fundamentals of Sustainable Engineering
CHBE 373-3	Water Pollution Control
~~CHBE 459-3~~	~~Chemical and Biological Engineering Economics~~
~~or CIVL 403-3~~	~~Engineering Economic Analysis~~
CHBE 483-3	Energy Engineering
CHBE 485-3	Air Pollution Prevention and Control
CHBE 486-3	Waste Management for Resource Recovery
CIVL 210-4	Soil Mechanics I
~~CIVL 250-3~~	~~Engineering and Sustainable Development~~
CIVL 315-4	Fluid Mechanics II
CIVL 316-4	Hydrology and Open Channel Flow
CIVL 402-3	~~Engineering Law and Contracts in Civil Engineering~~ Professionalism and Law in Civil Engineering
~~CIVL 408-3~~	~~Geoenvironmental Engineering~~
CIVL 409-3	Municipal Engineering
CIVL 416-3	Environmental Hydraulics
CIVL 418-3	Engineering Hydrology
ENVE 203-4	Environmental Engineering and Sustainability
ENVE 301-3	Environmental Engineering Integrated Design Project
EOSC 329-3	Groundwater Hydrology
~~EOSC 429-3~~	~~Groundwater Contamination~~
MINE 486-3	Mining and the Environment

One of:

CHBE 459-3	Chemical and Biological Engineering Economics
CIVL 403-3	Engineering Economic Analysis

Social Science electives – 3 credit hours
Technical electives – 6 credit hours

~~15~~9 credit hours of technical electives chosen from a constrained list available at UBC.

Semester 9 completed at UNBC

ENGR 417-6	Engineering Design V
ENPL 401-3	Environmental Law
ENSC 418-3	Environmental Measurement and Analysis

3 credit hours of Humanities or Social Science electives

~~3 credit hours of elective~~

Technical electives available at UNBC for the UBC portion of the curriculum in the UBC/UNBC Joint Environmental Engineering Program

The following UNBC courses may be used to meet a Technical Elective requirement in the UBC portion of the Joint UBC/UNBC Environmental Engineering BASc program. Normally, no more than one course from the list may be used. To qualify towards UBC technical elective requirements, the technical elective must be taken prior to transition to UBC.

ENGR 406-3	Environmental Modelling
ENSC 404-3	Waste Management
~~ENSC 406-3~~	~~Environmental Modelling~~
ENSC 408-3	Storms
ENSC 425-3	Climate Change and Global Warming
ENSC 450-3	Environmental and Geophysical Data Analysis
ENSC 452-3	Reclamation and Remediation of Disturbed Environments
FSTY 345-3	Wood Materials Science
NREM 410-3	Watershed Management

UNBC UNIVERSITY OF NORTHERN BRITISH COLUMBIA

Motion Number (assigned by Steering Committee of Senate): **S-202306.24**

SENATE COMMITTEE ON ACADEMIC AFFAIRS

PROPOSED REVISION OF CALENDAR ENTRY

Motion: That ENGR 353-3 "Hydrology and Open Channel Flow" be renamed to "Open Channel Flow."

1. **Effective date:** September 2023

2. **Rationale for the proposed revisions:** The hydrology content does not need to be included in ENGR 353-3 any longer, as ENVE 455-3 Hydrology will be a required course both for Civil Engineering and Environmental Engineering, and ENGR 353-3 Open Channel Flow can focus solely on open channel flow.

3. **Implications of the changes for other programs, etc., if applicable:** none

4. **Reproduction of current Calendar entry for the item to be revised:**

p. 105
…
Third Year (Semesters 5 & 6)
CIVE 321-3 Structural Analysis II
CIVE 340-3 Structural Design I
CIVE 341-3 Structural Design II
CIVE 360-4 Geotechnical Engineering
CIVE 370-3 Transportations Systems
CIVE 372-3 Construction Management
ENGR 300-3 Sustainable Principles of Engineering
ENGR 353-3 Hydrology and Open Channel Flow
…

p. 107
…
Third Year (Semesters 5 & 6)
CIVE 260-4 Soil Mechanics
ENGR 300-3 Sustainable Principles of Engineering
ENGR 353-3 Hydrology and Open Channel Flow
…

p. 236
…
ENGR 353-3 Hydrology and Open Channel Flow This course is an introduction to water resource systems and hydrology, including energy, momentum, and flow resistance. Topics include but are not limited to the following: energy and momentum principles in open channel flow; critical, subcritical, and supercritical flow; applications to rectangular and non-rectangular channel sections; hydraulic jump; flow resistance; uniform flow computations; non-uniform flow; longitudinal profiles; culvert design; estimation of design discharge; and flood statistics.
Prerequisites: Admission to an Engineering program and ENGR 254-4
…

5. Proposed revision with changes underlined and deletions indicated clearly using "~~strikethrough~~":

p. 105
…
Third Year (Semesters 5 & 6)
CIVE 321-3 Structural Analysis II
CIVE 340-3 Structural Design I
CIVE 341-3 Structural Design II
CIVE 360-4 Geotechnical Engineering
CIVE 370-3 Transportations Systems
CIVE 372-3 Construction Management
ENGR 300-3 Sustainable Principles of Engineering
ENGR 353-3 ~~Hydrology and~~ Open Channel Flow
…

p. 107
…
Third Year (Semesters 5 & 6)
CIVE 260-4 Soil Mechanics
ENGR 300-3 Sustainable Principles of Engineering
ENGR 353-3 ~~Hydrology and~~ Open Channel Flow
…

p. 236
…
ENGR 353-3 ~~Hydrology and~~ Open Channel Flow This course is an introduction to ~~water resource systems and hydrology~~the analysis of open channel flow, including energy, momentum, and flow resistance. Topics include, but are not limited to, the following: energy and momentum principles in open channel flow; critical, subcritical, and supercritical flow; applications to rectangular and non-rectangular channel sections; hydraulic jump; flow resistance; uniform flow computations; non-uniform flow; longitudinal profiles; and culvert design~~; estimation of design discharge; and flood statistics~~.
Prerequisites: Admission to an Engineering program and ENGR 254-4
…

6. Authorization:

SCCC Reviewed: April 17, 2023

Program / Academic / Administrative Unit: School of Engineering

Faculty(ies): Faculty of Science and Engineering

Faculty Council Motion Number(s): FSE FC 2023.05.18.05

Faculty Council Approval Date(s): May 18, 2023

Senate Committee on Indigenous Initiatives Motion Number: not applicable

Senate Committee on Indigenous Initiatives Meeting Date: not applicable

7. Other Information

Attachment Pages: **0** pages

INFORMATION TO BE COMPLETED AFTER SENATE COMMITTEE ON ACADEMIC AFFAIRS MEETING

Brief Summary of Committee Debate:

Motion No.: SCAAF 202306.23

Moved by: Todd Whitcombe **Seconded by:** Gage Pierre

Committee Decision: CARRIED

Approved by SCAAF: June 14, 2023 _____
Date **Chair's Signature**

For recommendation to ✓, or information of _____ Senate.

UNBC UNIVERSITY OF NORTHERN BRITISH COLUMBIA

Motion Number (assigned by Steering Committee of Senate): **S-202306.25**

SENATE COMMITTEE ON ACADEMIC AFFAIRS

PROPOSED REVISION OF CALENDAR ENTRY

Motion: That the changes to the prerequisite requirements for ENVE 222-3, relating to ENGR 210-3, be approved as proposed.

1. **Effective date:** September 2023

2. **Rationale for the proposed revisions:** Course sequencing was changed, and now ENGR 210-3 and ENVE 222-3 are both offered in the same term

3. **Implications of the changes for other programs, etc., if applicable:** none

4. **Reproduction of current Calendar entry for the item to be revised:**

ENVE 222-3 Engineering Biology This course is an introduction to concepts in biology relevant to environmental engineering. Topics include but are not limited to the following: biochemistry; metabolism; microbial groups; biogeochemical cycles; biological pollution control; toxicity and dose-response relationships; and applications to engineering problems.
Prerequisites: Admission to an Engineering program; ENGR 210-3, ENGR 220-3

5. **Proposed revision with changes underlined and deletions indicated clearly using "~~strikethrough~~":**

ENVE 222-3 Engineering Biology This course is an introduction to concepts in biology relevant to environmental engineering. Topics include, but are not limited to, the following: biochemistry; metabolism; microbial groups; biogeochemical cycles; biological pollution control; toxicity and dose-response relationships; and applications to engineering problems.
Prerequisites: Admission to an Engineering program; ~~ENGR 210-3,~~ ENGR 220-3
Prerequisite or co-requisite: ENGR 210-3

6. **Authorization:**

SCCC Reviewed: April 17, 2023

Program / Academic / Administrative Unit: School of Engineering

Faculty(ies): Faculty of Science and Engineering

Faculty Council Motion Number(s): FSE FC 2023.05.18.03

Faculty Council Approval Date(s): May 18, 2023

Senate Committee on Indigenous Initiatives Motion Number: not applicable

Senate Committee on Indigenous Initiatives Meeting Date: not applicable

7. **Other Information**

Attachment Pages: **0** pages

INFORMATION TO BE COMPLETED AFTER SENATE COMMITTEE ON ACADEMIC AFFAIRS MEETING

Brief Summary of Committee Debate:

Motion No.: SCAAF 202306.24

Moved by: Allen Kranz **Seconded by:** Todd Whitcombe

Committee Decision: CARRIED

Approved by SCAAF: June 14, 2023 _____
Date **Chair's Signature**

For recommendation to ✓ **, or information of** _____ **Senate.**

UNBC UNIVERSITY OF NORTHERN BRITISH COLUMBIA

Motion Number (assigned by Steering Committee of Senate): **S-202306.26**

SENATE COMMITTEE ON ACADEMIC AFFAIRS

PROPOSED REVISION OF CALENDAR ENTRY

Motion: That IENG 722 should have IENG 611 and IENG 613 as prerequisites

1. **Effective date:** September 2023

2. **Rationale for the proposed revisions:** IENG 722 builds upon concepts taught in IENG 611 and IENG 613, and command of these concepts is essential for success in IENG 722.

3. **Implications of the changes for other programs, etc., if applicable:** None

4. **Reproduction of current Calendar entry for the item to be revised:**

   IENG 722-3 Project Design II This course is a wood design studio that provides students with the opportunity to apply their desing skills to a realistic design task.

5. **Proposed revision with changes underlined and deletions indicated clearly using "~~strikethrough~~":**

   IENG 722-3 Project Design II This course is a wood design studio that provides students with the opportunity to apply their ~~desing~~ design skills to a realistic design task.
   Prerequisites: IENG 611-3 and IENG 613-3, or by permission of the Program Chair

6. **Authorization**

   SCCC Reviewed: April 17, 2023

   Program / Academic / Administrative Unit: School of Engineering

   Faculty(ies): Faculty of Science and Engineering

   Faculty Council Motion Number(s): FSE FC 2023.05.18.13

   Faculty Council Approval Date(s): May 18, 2023

   Senate Committee on Indigenous Initiatives Motion Number: not applicable

   Senate Committee on Indigenous Initiatives Meeting Date: not applicable

7. **Other Information**

   Attachment Pages: **0** pages

INFORMATION TO BE COMPLETED AFTER SENATE COMMITTEE ON ACADEMIC AFFAIRS MEETING

Brief Summary of Committee Debate:

Motion No.: SCAAF 202306.25

Moved by: Todd Whitcombe **Seconded by:** Allan Kranz

Committee Decision: CARRIED

Approved by SCAAF: June 14, 2023 _____
Date **Chair's Signature**

For recommendation to ✓, or information of _____ Senate.

UNBC UNIVERSITY OF NORTHERN BRITISH COLUMBIA

Motion Number (assigned by Steering Committee of Senate): **S-202306.27**

SENATE COMMITTEE ON ACADEMIC AFFAIRS

PROPOSED REVISION OF CALENDAR ENTRY

Motion: That IENG 723 should have IENG 611 and IENG 613 as prerequisites

1. **Effective date:** September 2023

2. **Rationale for the proposed revisions:** IENG 723 builds upon concepts taught in IENG 611 and IENG 613, and command of these concepts is essential for success in IENG 723.

3. **Implications of the changes for other programs, etc., if applicable:** None

4. **Reproduction of current Calendar entry for the item to be revised:**

   IENG 723-3 Wood Design II This course focuses on structural design of timber floors and lateral load resisting systems. Topics include: the behavior and design of floors made from solid timber; engineered wood products; timber-concrete composites; contemporary lateral load resisting systems such as light-frame; cross laminated timber shear walls and diaphragms; and moment frames. Students design and analyze various structural wood and hybrid systems. *Prerequisites:* IENG 613-3, or by permission of the Program Chair

5. **Proposed revision with changes underlined and deletions indicated clearly using "~~strikethrough~~":**

   IENG 723-3 Wood Design II This course focuses on structural design of timber floors and lateral load resisting systems. Topics include~~:~~ the behavior and design of floors made from solid timber; engineered wood products; timber-concrete composites; contemporary lateral load resisting systems such as light-frame; cross-laminated timber shear walls and diaphragms; and moment frames. Students design and analyze various structural wood and hybrid systems. *Prerequisites:* IENG 611-3 and IENG 613-3, or by permission of the Program Chair

6. **Authorization:**

   SCCC Reviewed: April 17, 2023

   Program / Academic / Administrative Unit: School of Engineering

   Faculty(ies): Faculty of Science and Engineering

   Faculty Council Motion Number(s): FSE FC 2023.05.18.14

   Faculty Council Approval Date(s): May 18, 2023

   Senate Committee on Indigenous Initiatives Motion Number: not applicable

   Senate Committee on Indigenous Initiatives Meeting Date: not applicable

7. **Other Information**

   Attachment Pages: **0** pages

INFORMATION TO BE COMPLETED AFTER SENATE COMMITTEE ON ACADEMIC AFFAIRS MEETING

Brief Summary of Committee Debate:

Motion No.: SCAAF 202306.26

Moved by: Todd Whitcombe **Seconded by:** Allan Kranz

Committee Decision: CARRIED

Approved by SCAAF: June 14, 2023 _____
Date **Chair's Signature**

For recommendation to ✓, or information of _____ Senate.

UNBC UNIVERSITY OF NORTHERN BRITISH COLUMBIA

Motion Number (assigned by Steering Committee of Senate): **S-202306.28**

SENATE COMMITTEE ON ACADEMIC AFFAIRS

PROPOSED REVISION OF CALENDAR ENTRY

Motion: That IENG 727 should have IENG 611 as a prerequisite

1. **Effective date:** September 2023

2. **Rationale for the proposed revisions:** IENG 727 builds upon concepts taught in IENG 611, and command of these concepts is essential for success in IENG 727.

3. **Implications of the changes for other programs, etc., if applicable:** None

4. **Reproduction of current Calendar entry for the item to be revised:**

   IENG 727-3 Prefabrication and Digital Manufacturing in Wood Construction This course introduces students to prefabrication. Topics cover state-of-the-art fabrication technology including CNC-machines and industrial robots, tooling options, material handling, and process flow. Students learn the basics of Design for Manufacturing and Assembly (DfMA) including machine interfacing, machining strategies, and how design decisions influence the ability to assemble and manufacture a structure to the highest standards and efficiency.

5. **Proposed revision with changes underlined and deletions indicated clearly using "~~strikethrough~~":**

   IENG 727-3 Prefabrication and Digital Manufacturing in Wood Construction This course introduces students to prefabrication. Topics cover state-of-the-art fabrication technology including CNC-machines and industrial robots, tooling options, material handling, and process flow. Students learn the basics of Design for Manufacturing and Assembly (DfMA) including machine interfacing, machining strategies, and how design decisions influence the ability to assemble and manufacture a structure to the highest standards and efficiency.
   Prerequisite: IENG 611-3, or by permission of the Program Chair

6. **Authorization:**

   SCCC Reviewed: April 17, 2023

   Program / Academic / Administrative Unit: School of Engineering

   Faculty(ies): Faculty of Science and Engineering

   Faculty Council Motion Number(s): FSE FC 2023.05.18.15

   Faculty Council Approval Date(s): My 18, 2023

   Senate Committee on Indigenous Initiatives Motion Number: not applicable

   Senate Committee on Indigenous Initiatives Meeting Date: not applicable

7. **Other Information**

   Attachment Pages: **0** pages

INFORMATION TO BE COMPLETED AFTER SENATE COMMITTEE ON ACADEMIC AFFAIRS MEETING

Brief Summary of Committee Debate:

Motion No.: SCAAF 202306.27

Moved by: Todd Whitcombe **Seconded by:** Allan Kranz

Committee Decision: CARRIED

Approved by SCAAF: June 14, 2023 _____
Date **Chair's Signature**

For recommendation to ✓, or information of _____ Senate.

UNBC UNIVERSITY OF NORTHERN BRITISH COLUMBIA

Motion Number (assigned by Steering Committee of Senate): **S-202306.29**

SENATE COMMITTEE ON ACADEMIC AFFAIRS

PROPOSED REVISION OF CALENDAR ENTRY

Motion: That IENG 731 should have IENG 722 and IENG 723 as prerequisites.

1. **Effective date:** September 2023

2. **Rationale for the proposed revisions:** IENG 731 builds upon concepts taught in IENG 722 and IENG 723, and command of these concepts is essential for success in IENG 727.

3. **Implications of the changes for other programs, etc., if applicable:** none

4. **Reproduction of current Calendar entry for the item to be revised:**

   IENG 731-9 Master of Engineering Project This course is the capstone project and can include various fields covered in the program. Students are encouraged to combine several topics to demonstrate integrated design skills. *Prerequisites:* IENG 723-3 minimum grade B- and IENG 723-3 minimum grade B

5. **Proposed revision with changes underlined and deletions indicated clearly using "~~strikethrough~~":**

   IENG 731-9 Master of Engineering Project This course is the capstone project and can include various fields covered in the program. Students are encouraged to combine several topics to demonstrate integrated design skills. *Prerequisites:* IENG 72~~3~~2-3 with a minimum grade B- and IENG 723-3 with a minimum grade B

6. **Authorization:**

   SCCC Reviewed: April 17, 2023

   Program / Academic / Administrative Unit: School of Engineering

   Faculty(ies): Faculty of Science and Engineering

   Faculty Council Motion Number(s): FSE FC 2023.05.18.17

   Faculty Council Approval Date(s): May 18, 2023

   Senate Committee on Indigenous Initiatives Motion Number: not applicable

   Senate Committee on Indigenous Initiatives Meeting Date: not applicable

7. **Other Information**

Attachment Pages: **0** pages

INFORMATION TO BE COMPLETED AFTER SENATE COMMITTEE ON ACADEMIC AFFAIRS MEETING

Brief Summary of Committee Debate:

Motion No.: SCAAF 202306.28

Moved by: Todd Whitcombe **Seconded by:** Allan Kranz

Committee Decision: CARRIED

Approved by SCAAF: June 14, 2023 _____
Date **Chair's Signature**

For recommendation to ✓, or information of _____ Senate.

UNIVERSITY OF NORTHERN BRITISH COLUMBIA

Motion Number (assigned by Steering Committee of Senate): S-202306.30

STEERING COMMITTEE OF SENATE

PROPOSED MOTION

Motion: That the Terms of Reference for the Senate Committee on Academic Affairs (SCAAf) and subsequently the Senate Handbook be approved.

Effective Date: Upon approval of Senate

Rationale: That SCAAf be granted the dispensation to consider quorum, as 'a majority', without the requirement for a specific number of students to be present as currently stated in the formal terms of reference. This would take immediate effect, and be formally incorporated into a revised terms of reference recommended to Senate in due course. We will continue efforts to fill the available student membership positions, and continue to share agenda packages with committee members well ahead of the scheduled SCAAf meeting to allow the opportunity for any student members to review motions and share concerns ahead of the meeting should they not be available to attend.

Context:

It is very often a challenge to meet the student requirement for quorum for any given SCAAF meeting, despite there being a majority of members present. There are many potential reasons for this including student conflict with lecture or exam times, summer internships or other work commitments, as well as limited student access to space and internet availability if off campus.

At the April, May, and June 2023 SCAAf meetings the student requirement for quorum was not met (needing at least two students). Instead, for April and May, an electronic vote was conducted within the week following each meeting, where quorum was eventually met, and motions passed. For June, anticipating we may not have quorum, students were asked well ahead of time to share any comments on motions of concern. No issues were brought forward by the student members. Given this context, and when student quorum was not met at the June meeting, the committee members present did not object to the meeting formally proceeding, rather than again going to an electronic vote where quorum would still not be guaranteed. All motions were considered and passed without objection. These recent compromises are non-desirable, yet considered reasonable and necessary for university business to proceed in a timely manner. The proposal is brought forward to enable the committee to confidently and legitimately proceed with meetings and motion approvals without having to so frequently consider and implement electronic voting or end up with over-burdened agendas due to motions rolling over from multiple previous meetings.

Motion proposed by: Steering Committee of Senate on the recommendation of the Committee Secretary, Chair and Vice-Chair of the Senate Committee on Academic Affairs

Academic Program: Not applicable

Implications for Other Programs / Faculties? None

Faculty: Not applicable

Faculty Council / Committee Motion Number: N/A

Faculty Council / Committee Approval Date: N/A

Attachment Pages (if applicable): 1 pages

SENATE COMMITTEE ON ACADEMIC AFFAIRS (SCAAf)

Terms of Reference:

- To be responsible for advising Senate on academic planning at UNBC.
- To consider and make recommendations to Senate on new undergraduate and graduate programs and major modifications to existing undergraduate and graduate programs.
- To consider and make recommendations to Senate on course additions or deletions.
- To consider and make recommendations to Senate on new and revised Undergraduate and Graduate Academic Regulations.
- To review periodically the activities of the Centre for Teaching, Learning and Technology and make recommendations on the Centre to Senate and to address any other Senate related teaching matter.
- To be responsible for the development and implementation of a program review process, and to make recommendations to Senate relating to the outcome of reviews.
- To review, for approval or recommendation as appropriate, affiliation agreements with other institutions.
- To advise Senate on matters of importance to the regional nature of UNBC and to inform the University community, through Senate, of the regional mandate of the institution.
- To facilitate and maintain relationships with other post-secondary institutions within Canada.
- To advise Senate on inter-institutional arrangements within Canada, with the exception of the protocol and affiliation agreements between UNBC and First Nations and Aboriginal communities and educational institutions for which responsibility is assigned to the Senate Committee on Indigenous Initiatives (SCCI).
- To review and make recommendations to Senate on existing undergraduate and graduate programs for purposes of assessment and possible expansion, curtailment, or discontinuance.
- To recommend to Senate graduate courses which are cross-listed with undergraduate courses.
- To advise on enrolment management issues.
- To consider and advise Senate on matters relating to the internationalization of the University community.
- To facilitate the development of academic agreements between UNBC and various international partners.
- To review and advise Senate on current international agreements and exchanges and make recommendations regarding their renewal.
- To approve, in exceptional and extraordinary circumstances, external international proposals; and to report to Senate as soon as practicable such approvals and the justification for them.
- To review from time to time the operation of the Library, for report to Senate.
- To establish policies regarding the conservation of heritage objects and collections that are owned by or in the possession of the university or any of its faculties, divisions, departments or other agencies.
- To advise Senate on all matters concerning undergraduate and graduate research and research policy at the University
- To recommend to Senate the establishment of Research Chairs

Membership:

President (*ex officio*)
Vice President Academic and Provost (Chair)
Vice President, Research and Innovation (Vice Chair)
University Librarian
Three Faculty Deans
Four Faculty Senators
Four Faculty Members (all who may be Senators), including:

a) Two Faculty Members (representing the two Faculties not currently represented by the sitting Deans on the committee)

*Ideally, from the eight faculty positions there will be faculty representation from each of the five Faculties, professional programs and the regions.

Students (all who may be Senators), including:

a) Graduate Student
b) Graduate Student
c) Undergraduate Student
d) Undergraduate Student

One Lay Senator

One Regional Representative (any faculty, student or employee member from the regional campuses in Fort St. John, Terrace and Quesnel or Affiliated Institutions)

Director, Business Services and Continuing Studies

Director, Centre for Teaching, Learning and Technology

Secretary of Senate (non-voting)

Chair:	Vice President Academic and Provost
Committee Secretary:	Administrative Manager – Strategic Initiatives & Operations
Recording Secretary:	Executive Assistant, Vice President Academic and Provost
Quorum:	Majority~~, including at least two students~~
Reporting Month:	September
Sub-Committees:	SCAAf Art Acquisition Subcommittee

UNBC UNIVERSITY OF NORTHERN BRITISH COLUMBIA

Motion Number (assigned by Steering Committee of Senate): _____

SENATE COMMITTEE ON ACADEMIC AFFAIRS

NEW COURSE APPROVAL MOTION FORM

Motion: That the new course CHEM 742-3 Organic Structure Determination be approved as follows:

A. Description of the Course An advanced treatment of organic chemistry. This course is designed to provide complete training in the practical aspects of modern structure determination. This course will focus on using the latest NMR, MS, and spectroscopic methods to determine constitution along with relative and absolute configuration of organic compounds, including theory and practical aspects to allow students to make informed decisions about experimental design and execution for structure elucidation.

1. **Proposed semester of first offering:** September 2023

2. **Academic Program:** MSc Chemistry and MSc Biochemistry

3. **Course Subject, Number*, and Credit hours (e.g. CHEM 210-3):** CHEM 742-3

4. **Course Title:** Organic Structure Determination

5. **Goal(s) of Course:** It is intended to be an advanced course introducing students to the techniques required for sophisticated structural elucidation of natural products and other organic molecular moieties. It will cover a broad class of investigative techniques (i.e. multi-nuclear NMR; high-res mass spectroscopy) which will support students in a number of disciplinary areas and allow students to work with molecular species.

6. **Calendar Course Description:**

This course is an advanced treatment of organic chemistry, and is designed to provide complete training in the practical aspects of modern structure determination. Students have the opportunity to make informed decisions about experimental design and execution for structure elucidation employing theoretical and practical aspects, and utilizing the latest NMR, MS, and spectroscopic methods to determine constitution and configuration (relative and absolute) of organic compounds.

7. **Credit Hours:** 3 credit hours (Normally, UNBC courses are 3 credit hours and may not be repeated for additional credit. If this course falls outside the norm, please complete sections “a)” and “b)” below).

   a) **Can the course be repeated for credit if the subject matter differs substantially?**

   Yes* _____ No X

   b) **Is variable credit available for this course?** Yes _____ No X

8. **Contact Hours (per week):**

   Lecture 3 Laboratory _____

Seminar _____ Other (please specify) _____

9. **Prerequisites (taken prior:** none

10. **Prerequisites with concurrency (taken prior or simultaneously):** none

11. **Co-requisites (must be taken simultaneously):** none

12. **Preclusions:** none

13. **Course Equivalencies:** N/A

14. **Grade Mode:** NORMAL (i.e., alpha grade)

15. **Course to be offered:** each semester _____
each year _____
alternating years X

16. **Proposed text / readings:** Silverstein "Spectrometric Identification of Organic Compounds"

B. Significance Within Academic Program

1. **Anticipated enrolment** 5

2. **If there is a proposed enrolment limit, state the limit and explain:** N/A

3. **Required for:** Major: MSc Chemistry Minor: _____ Other: _____

4. **Elective in:** Major: MSc Biochemistry Minor: _____ Other: _____

5. **Course required by another major/minor:** N/A

6. **Course required or recommended by an accrediting agency:** N/A

7. **Toward what degrees will the course be accepted for credit?** MSc Chemistry; MSc Biochemistry

8. **What other courses are being proposed within the Program this year?** None

9. **What courses are being deleted from the Program this year?** None

C. Relation to Other Program Areas

1. **Identify courses in other UNBC Programs that overlap with this course; describe the overlap and comment on its significance:** None – the course is very specific to organic chemistry.

2. **Is a preclusion required?** Yes _____ No X

3. **If there is an overlap, and no preclusion is required, please explain why not:** N/A

4. **Has this overlap been discussed with the Program concerned?** N/A

5. **In offering this course, will UNBC require facilities or staff at other institutions?**
Yes _____ No X

If yes, please describe requirements:

6. **Is this course replacing an existing course that is included in one or more transfer agreements with external institutions?**

   Yes_____ No __X__

   If "yes," please contact the Articulation Officer in the Office of the Registrar.

D. Resources required

1. **Please describe ADDITIONAL resources required over the next five years to offer this course.**

   i. **Faculty Staffing:** none

   ii. **Space (classroom, laboratory, storage, etc.):** none

   iii: **Library Holdings:** See attached form

   iv. **Computer (time, hardware, software):** none

E. Additional Attached Materials: None

F. Other Considerations

1. **First Nations Content*:** Yes** _____ No __X__
   Whether a new course has First Nations content is to be determined by the relevant Faculty Council(s).

   ****If "yes,"** refer the motion to the Senate Committee on Indigenous Initiatives **prior to** SCAAF.

2. **Other Information:**

3. **Attachment Pages (in addition to required "Library Holdings" Form):** __0__ pages

G. Authorization

SCCC Reviewed: May 23, 2023

1. **Faculty(ies):** Faculty of Science and Engineering

2. **Faculty Council Motion Number(s): 2023.06.08.01**

3. **Faculty Council Approval Date(s): June 8, 2023 (E-VOTE)**

4. **Senate Committee on Indigenous Initiatives Motion Number:** N/A

5. **Senate Committee on Indigenous Initiatives Meeting Date:** N/A

Motion Number (assigned by SCS): _____

SENATE COMMITTEE ON SCHOLARSHIPS AND BURSARIES (SCSB)

PROPOSED MOTION

Motion: That the new Terms and Conditions for the Pharmasave Prince George Scholarship be approved.

Rationale: To activate the Pharmasave Prince George Scholarship commencing the 2023-2024 Academic Year.

Proposed By: Carolyn Chrobot, Development Officer – Community Engagement

Research & Innovation Contact: Carolyn Chrobot, Development Officer – Community Engagement

Faculty/Academic Department: N/A

Indigenous Content: No (Determined by the Development Officer)

Date to SCSB: Mar 22, 2023

TO BE COMPLETED AFTER SCSB MEETING

Brief Summary of Committee Debate:

Motion No.: **SCSB20230517.04**

Moved by: Palmer **Seconded by:** Stathers

Committee Decision: CARRIED **Attachments:** 2 pages

Approved by SCSB: May 17, 2023

Date

Kathy Stathers

Chair's Signature

For Information of Senate & Board

AWARDS GUIDE INFORMATION:

Award Category: In-course

Award Name: Pharmasave Prince George Scholarship

Awards Guide Description/Intent: Pharmasave Prince George is proud to support student-athletes with the intention of becoming pharmacists. They stand behind their community with a passion to support students involved in athletics and health sciences, connecting UNBC students with the pharmacy industry.

Donor: Pharmasave Prince George

Value: $500

Number: One

Award Type: Scholarship

Eligibility: Available to a full-time student-athlete, enrolled in the School of Health Sciences who has completed 60 credit hours. First preference will be given to a student who demonstrates an interest in becoming a pharmacist.

Criteria: Academic Proficiency

Effective Date: Established 2023

Recipient Selection: Senate Committee on Scholarships and Bursaries on recommendation by the UNBC Athletics Office

Motion Number (assigned by SCS): _____

SENATE COMMITTEE ON SCHOLARSHIPS AND BURSARIES (SCSB)

PROPOSED MOTION

Motion: That the new Terms and Conditions for the Vohora LLP Scholarship be approved.

Rationale: To activate the Vohora LLP Scholarship commencing the 2023-2024 Academic Year.

Proposed By: Tara Mayes, Development Officer – Donor Relations

Research & Innovation Contact: Tara Mayes, Development Officer – Donor Relations

Faculty/Academic Department: N/A

Indigenous Content: Yes

Date to SCSB: March 17, 2023

***SCII Vetting Process: (Section to be completed by SCII Committee Recording Secretary)**
SCII Motion Number: SCII202304.04
SCII Meeting Date: April 4, 2023
SCII Brief Summary of Committee Discussion: CARRIED

TO BE COMPLETED AFTER SCSB MEETING

Brief Summary of Committee Debate: .

Motion No.: SCSB20230517.05

Moved by: Palmer **Seconded by:** Zogas

Committee Decision: CARRIED **Attachments:** 1 page

Approved by SCSB: May 17, 2023 Kathy Hein

Date **Chair's Signature**

For Information of Senate & Board

AWARDS GUIDE INFORMATION:

Award Category: In-course

Award Name: Vohora LLP Scholarship

Awards Guide Description/Intent: Founded in Prince Rupert, BC in 1975, Vohora LLP is a full-service chartered professional accounting firm. They have grown significantly and established offices in Vancouver, Surrey, Mission, Terrace and Smithers. Vohora LLP is excited to support and encourage accounting students from northern BC who are interested in entering the accounting industry and pursuing their professional designations.

Donor: Vohora LLP

Value: $5,000

Number: Two

Award Type: Scholarship

Eligibility: Available to a full-time undergraduate student enrolled in the Bachelor of Commerce program with a declared Major in Accounting who has completed 60 credit hours and is a resident of northern British Columbia. First preference will be given to an Indigenous student.

Criteria: Academic proficiency

Effective Date: Established 2023

Recipient Selection: Senate Committee on Scholarships and Bursaries on recommendation by the UNBC Awards Office

Motion Number (assigned by SCS): _____

SENATE COMMITTEE ON SCHOLARSHIPS AND BURSARIES (SCSB)

PROPOSED MOTION

Motion: That the revised Terms and Conditions for the Access Engineering Consultants Ltd. Scholarship be approved.

Rationale: To revise the Access Engineering Consultants Ltd. Scholarship commencing the 2023-2024 Academic Year.

Proposed By: Carolyn Chrobot, Development Officer – Community Engagement

Research & Innovation Contact: Carolyn Chrobot, Development Officer – Community Engagement

Faculty/Academic Department: N/A

Indigenous Content: No (Determined by the Development Officer)

Date to SCSB: March 22, 2023

TO BE COMPLETED AFTER SCSB MEETING

Brief Summary of Committee Debate: .

Motion No.: **SCSB20230517.06**

Moved by: Palmer **Seconded by:** Hanlon

Committee Decision: CARRIED **Attachments:** 1 page

Approved by SCSB: May 17, 2023
Date

Chair's Signature

For Information of Senate & Board

AWARDS GUIDE INFORMATION:

Award Category: In-course

Award Name: Access Engineering Consultants Ltd. Scholarship

Awards Guide Description/Intent: Access Engineering Consultants Ltd. (Access) is a hard-working, values-driven local engineering firm, inspired by the community of Prince George. They are proud to offer this award to an engineering student interested in a career in structural engineering. Access is excited to support the UNBC Engineering Program and contribute to the growth of the industry in Prince George.

Donor: Access Engineering Consultants Ltd.

Value: $2,500

Number: One

Award Type: Scholarship

Eligibility: Available to a full-time undergraduate student in the Civil Engineering Program who has completed at least 60 credit hours. First preference will be given to a student who demonstrates an intention of pursuing a career in structural engineering.

Criteria: Academic excellence

Effective Date: Established 2023

Recipient Selection: Senate Committee on Scholarships and Bursaries on recommendation by the UNBC Awards Office

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Motion Number (assigned by SCS): _____

SENATE COMMITTEE ON SCHOLARSHIPS AND BURSARIES (SCSB)

PROPOSED MOTION

Motion: That the revised Terms and Conditions for the College Heights Veterinary Clinic Ltd Award be approved.

Rationale: To revise the College Heights Veterinary Clinic Ltd Award commencing the 2023-2024 Academic Year.

Proposed By: Carolyn Chrobot, Development Officer – Community Engagement

Research & Innovation Contact: Carolyn Chrobot, Development Officer – Community Engagement

Faculty/Academic Department: N/A

Indigenous Content: No (Determined by the Development Officer)

Date to SCSB: March 28, 2023

TO BE COMPLETED AFTER SCSB MEETING

Brief Summary of Committee Debate: .

Motion No.: **SCSB20230517.07**

Moved by: Palmer **Seconded by:** Zogas

Committee Decision: CARRIED **Attachments:**

Approved by SCSB: May 17, 2023 **Chair's Signature**

Date

For Information of Senate & Board

AWARDS GUIDE INFORMATION:

Award Category: General

Award Name: College Heights Veterinary Clinic Ltd Award

Awards Guide Description/Intent: The owners of College Heights Veterinary Clinic came from Argentina to Canada, looking for a better life for their family. They moved to Prince George, and, in 2012 opened their clinic. They love the life and community in Northern BC, and decided to establish this award for students from low income families who wish to attend UNBC and, if they are doing well, continue to support them for the duration of their diploma/degree. The recipient can be working towards any career and is encouraged to stay in the North after graduation.

Donor: College Heights Veterinary Clinic Ltd

Value: $1500

Number: One

Award Type: Award

Eligibility: Available to a full-time undergraduate or graduate student who is a resident of Northern British Columbia. First preference will be given to students who plan to pursue a career in Northern British Columbia following their studies.

Criteria: Demonstrated financial need and academic proficiency.

Note: This award is renewable for up to three years, subject to the recipient maintaining the criteria of academic proficiency for this award.

Effective Date: Established 2020, revised 2023

Recipient Selection: Senate Committee on Scholarships and Bursaries on recommendation by the UNBC Awards Office.

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Motion Number (assigned by SCS): _____

SENATE COMMITTEE ON SCHOLARSHIPS AND BURSARIES (SCSB)

PROPOSED MOTION

Motion: That the revised Terms and Conditions for the Pretivm Award with a name change to Newcrest Award be approved.

Rationale: To revise the Pretivm Award commencing the 2023-2024 Academic Year.

Proposed By: Tara Mayes, Development Officer – Donor Relations

Research & Innovation Contact: Tara Mayes, Development Officer – Donor Relations

Faculty/Academic Department: N/A

Indigenous Content: No (Determined by the Development Officer)

Date to SCSB: March 29, 2023

TO BE COMPLETED AFTER SCSB MEETING

Brief Summary of Committee Debate: .

Motion No.: **SCSB20230517.08**

Moved by: Palmer **Seconded by:** Zogas

Committee Decision: CARRIED **Attachments:** 1 page

Approved by SCSB: May 17, 2023 

Date **Chair's Signature**

For Information of Senate & Board

AWARDS GUIDE INFORMATION:

Award Category: General

Award Name: Newcrest Award

Awards Guide Description/Intent: Newcrest Mining Ltd. (“Newcrest”), headquartered in Melbourne, Australia, has established a strong presence in northern British Columbia with two operating mines in the region – the Brucejack Mine, located approximately 65 km north of Stewart, and the Red Chris Mine, approximately 80 km south of Dease Lake. Newcrest’s vision is to be the Miner of Choice and to be valued by both its people and its communities. As part of this commitment, local hires are given preference for all positions whenever possible, and Newcrest works directly with community employment coordinators to connect locals with job opportunities at the mines and its office in Smithers. The total mine site workforce includes approximately 1,300 people in Brucejack and 1,200 in Red Chris, working on rotation in management, trades, logistics, mining, milling and a spectrum of mine and camp support roles.

With this award, Newcrest wants to support students from northern BC pursuing a degree in Natural Resources, Environmental Studies, Human Resources, Computer Science or Engineering Programs.

Donor: Newcrest Mining Ltd.

Value: $5,000

Number: One

Award Type: Award

Eligibility: Available to a full-time undergraduate or graduate student enrolled in a Natural Resources, Environmental Studies, Human Resources, Computer Science or Engineering Program. Undergraduate students must have completed 60 credit hours. First preference will be given to a resident of northern British Columbia.

Criteria: Demonstrated financial need and academic proficiency.

Note: This award is renewable for up to one year, subject to the recipient maintaining the criteria of academic proficiency.

Effective Date: Established 2021, revised 2023

Recipient Selection: Senate Committee on Scholarships and Bursaries on recommendation by the UNBC Awards Office.

Deleted: Pretivm Award

Deleted: Pretium Resources Inc. (“Pretivm”) headquartered in Vancouver has been a corporate citizen of Northern British Columbia since it was first formed in 2010 to advance the Brucejack Mine project located approx. 65km north of Stewart. As Brucejack grew in scope, so did the need for supplies, services and employees, which has benefitted the communities in the region. Pretivm is committed to hiring locally for all positions whenever possible, and work directly with community employment coordinators to connect locals with job opportunities at the Brucejack Mine and its office in Smithers. Terrace, Smithers, Stewart, New Hazelton, and other surrounding communities are integral to the success of Pretivm and contribute significantly to employment at the Brucejack Mine. The total mine site workforce includes approximately 1,300 people (including employees and contractors) working on rotation in management, trades, logistics, underground mining, milling and a spectrum of mine and camp support roles.¶
This award has been established to support students pursuing a degree in Natural Resources, Environmental Studies, Human Resources, Computer Science or Engineering Programs.

Deleted: Pretium Resources Inc.

Deleted: N

Deleted: .

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Motion Number (assigned by SCS): _____

SENATE COMMITTEE ON SCHOLARSHIPS AND BURSARIES (SCSB)

PROPOSED MOTION

Motion: That the revised Terms and Conditions for the Pretivm Indigenous Award with a name change to Newcrest Indigenous Award be approved.

Rationale: To revise the Pretivm Indigenous Award commencing the 2023-2024 Academic Year.

Proposed By: Tara Mayes, Development Officer – Donor Relations

Research & Innovation Contact: Tara Mayes, Development Officer – Donor Relations

Faculty/Academic Department: N/A

Indigenous Content: Yes (Determined by the Development Officer)

Date to SCSB: April 25, 2023

***SCII Vetting Process:** **(Section to be completed by SCII Committee Recording Secretary)**
SCII Motion Number: SCII202305.03
SCII Meeting Date: May 3, 2023
SCII Brief Summary of Committee Discussion: Committee discussed the selection of the specific Nations.

TO BE COMPLETED AFTER SCSB MEETING

Brief Summary of Committee Debate: .

Motion No.: **SCSB20230517.09**

Moved by: Palmer **Seconded by:** Bankole

Committee Decision: CARRIED **Attachments:** 1 page

Approved by SCSB: May 17, 2023 

Date **Chair's Signature**

For Information of Senate & Board

AWARDS GUIDE INFORMATION:

Award Category: General

Award Name: Newcrest Indigenous Award

Awards Guide Description/Intent: Newcrest Mining Ltd. (“Newcrest”), headquartered in Melbourne, Australia, has established a strong presence in northern British Columbia with two operating mines in the region – the Brucejack Mine, located approximately 65 km north of Stewart, and the Red Chris Mine, approximately 80 km south of Dease Lake. Newcrest’s vision is to be the Miner of Choice and to be valued by both its people and its communities. As part of this commitment, local hires are given preference for all positions whenever possible, and Newcrest works directly with community employment coordinators to connect locals with job opportunities at the mines and its office in Smithers. The total mine site workforce includes approximately 1,300 people in Brucejack and 1,200 in Red Chris, working on rotation in management, trades, logistics, mining, milling and a spectrum of mine and camp support roles. With this award, Newcrest wants to support Indigenous students from northern BC pursuing a degree at UNBC.

Donor: Newcrest Mining Ltd.

Value: $8,500

Number: One

Award Type: Award

Eligibility: Available to an Indigenous full-time undergraduate or graduate student. Undergraduate students must have completed 60 credit hours. First preference will be given to a Tahltan, Gitanyow or Nisga’a individual. Second preference will be given to an Indigenous resident of northern British Columbia.

Criteria: Demonstrated financial need and academic proficiency.

Note: This award is renewable for up to one year, subject to the recipient maintaining the criteria of academic proficiency.

Effective Date: Established 2021, revised 2023

Recipient Selection: Senate Committee on Scholarships and Bursaries on recommendation by the UNBC Awards Office.

Deleted: Pretivm Indigenous Award

Deleted: Pretium Resources Inc. (“Pretivm”) headquartered in Vancouver has been a corporate citizen of Northern British Columbia since it was first formed in 2010 to advance the Brucejack Mine project located approx. 65km north of Stewart. As Brucejack grew in scope, so did the need for supplies, services and employees, which has benefitted the communities in the region. Pretivm is committed to hiring locally for all positions whenever possible, and work directly with community employment coordinators to connect locals with job opportunities at the Brucejack Mine and its office in Smithers. Terrace, Smithers, Stewart, New Hazelton, and other surrounding communities are integral to the success of Pretivm and contribute significantly to employment at the Brucejack Mine. The total mine site workforce includes approximately 1,300 people (including employees and contractors) working on rotation in management, trades, logistics, underground mining, milling and a spectrum of mine and camp support roles.¶
This award has been established to support Indigenous students pursuing a degree at UNBC.

Deleted: Pretium Resources Inc.

Deleted: N

Deleted: .

Deleted: .

Motion Number (assigned by SCS): _____

SENATE COMMITTEE ON SCHOLARSHIPS AND BURSARIES (SCSB)

PROPOSED MOTION

Motion: That the revised Terms and Conditions for the Pretivm Women's Award with a name change to Newcrest Women's Award be approved.

Rationale: To revise the Pretivm Women's Award commencing the 2023-2024 Academic Year.

Proposed By: Tara Mayes, Development Officer – Donor Relations

Research & Innovation Contact: Tara Mayes, Development Officer – Donor Relations

Faculty/Academic Department: N/A

Indigenous Content: No (Determined by the Development Officer)

Date to SCSB: March 29, 2023

TO BE COMPLETED AFTER SCSB MEETING

Brief Summary of Committee Debate: .

Motion No.: **SCSB20230517.10**

Moved by: Palmer **Seconded by:** Zogas

Committee Decision: CARRIED **Attachments:** 1 page

Approved by SCSB: May 17, 2023 Kathy Lewis

Date **Chair's Signature**

For Information of Senate & Board

AWARDS GUIDE INFORMATION:

Award Category: General

Award Name: Newcrest Women's Award

Awards Guide Description/Intent: Newcrest Mining Ltd. (“Newcrest”), headquartered in Melbourne, Australia, has established a strong presence in northern British Columbia with two operating mines in the region – the Brucejack Mine, located approximately 65 km north of Stewart, and the Red Chris Mine, approximately 80 km south of Dease Lake. Newcrest’s vision is to be the Miner of Choice and to be valued by both its people and its communities. As part of this commitment, local hires are given preference for all positions whenever possible, and Newcrest works directly with community employment coordinators to connect locals with job opportunities at the mines and its office in Smithers. The total mine site workforce includes approximately 1,300 people in Brucejack and 1,200 in Red Chris, working on rotation in management, trades, logistics, mining, milling and a spectrum of mine and camp support roles. With this award, Newcrest wants to support female or female-identifying students from northern BC pursuing a degree in Natural Resources, Environmental Studies, Human Resources, Computer Science or Engineering Programs.

Donor: Newcrest Mining Ltd.

Value: $5,000

Number: One

Award Type: Award

Eligibility: Available to a full-time undergraduate or graduate student who identifies as female and is enrolled in a Natural Resources, Environmental Studies, Human Resources, Computer Science or Engineering Program. Undergraduate students must have completed 60 credit hours. First preference will be given to a resident of northern British Columbia.

Criteria: Demonstrated financial need and academic proficiency.

Note: This award is renewable for up to one year, subject to the recipient maintaining the criteria of academic proficiency.

Effective Date: Established 2021, revised 2023

Recipient Selection: Senate Committee on Scholarships and Bursaries on recommendation by the UNBC Awards Office.

Deleted: Pretivm

Deleted: Pretium Resources Inc. (“Pretivm”) headquartered in Vancouver has been a corporate citizen of Northern British Columbia since it was first formed in 2010 to advance the Brucejack Mine project located approx. 65km north of Stewart. As Brucejack grew in scope, so did the need for supplies, services and employees, which has benefitted the communities in the region. Pretivm is committed to hiring locally for all positions whenever possible, and work directly with community employment coordinators to connect locals with job opportunities at the Brucejack Mine and its office in Smithers. Terrace, Smithers, Stewart, New Hazelton, and other surrounding communities are integral to the success of Pretivm and contribute significantly to employment at the Brucejack Mine. The total mine site workforce includes approximately 1,300 people (including employees and contractors) working on rotation in management, trades, logistics, underground mining, milling and a spectrum of mine and camp support roles.¶
This award has been established to support students pursuing a degree in Natural Resources, Environmental Studies, Human Resources, Computer Science or Engineering Programs.

Deleted: Pretium Resources Inc.

Deleted: N

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Deleted: .