PRESENTED BY: Susan Detmer, Chair, Academic Programs Committee  
DATE OF MEETING: November 19, 2020  
SUBJECT: Degree-level certificate in Water Science  
COUNCIL ACTION: For Information Only  

SUMMARY:  
At its November 4, 2020 meeting, the academic programs committee approved the following motions:  

That the Academic Programs Committee approve the degree-level certificate in Water Science in the College of Arts and Science, effective May 2021  

That the Academic Programs Committee approve the termination of the minor in Water Science, effective May 2021.  

The College of Arts and Science proposed to convert the existing minor in Water Science to a stand-alone undergraduate degree-level certificate. The college is working to develop this into a program that will address the changing hydrologic cycle in the face of climate change. The minor has always been a popular option for students within the college, so by recreating this program as a certificate, the College of Arts and Science is hoping to attract students from across campus, as well as pre- and post-degree students.  

This 27-credit unit program will provide student theoretical and practical training in hydrologic science with an emphasis placed on a quantitative understanding and analysis of the hydrologic cycle.  

In reviewing the proposal, the academic programs committee appreciated the focus on hydrologic science and how this program will work with Indigenous communities to address issues related to climate change.  

This certificate program conforms to the Arts and Science certificate template and, therefore, can be approved by APC.  

ATTACHMENTS:  
- Proposal for Academic or Curricular Change – degree-level Certificate in Water Science  
- Program Termination Form – minor in Water Science
PROPOSAL IDENTIFICATION

Title of proposal: Degree-level Certificate in Water Science

Field(s) of Specialization: Water Science

Level(s) of Concentration: Degree-level Certificate

Degree College: Arts & Science

Contact person(s) (name, telephone, fax, e-mail):

Krys Chutko
Assistant Professor, Department of Geography and Planning
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306-966-4907

Alec Aitken
Professor and Head, Department of Geography and Planning
alec.aitken@usask.ca
306-966-5672

Proposed date of implementation: May 2021
Proposal Document

Note that this program revision will replace the Minor in Water Science with a Certificate in Water Science.

At the local, national, and international scales, there is a rapidly growing need for researchers and practitioners in water science. As a result of ongoing climate change, the hydrologic cycle is changing. This results in the increased occurrence of drought and flooding, increased risk to fresh water supplies, and an overall impact on the water resources that support human populations around the globe. The need for researchers and practitioners familiar with the role of water across these scales and the ability to measure, monitor, and forecast water availability and movement is critical to sustaining this essential resource through these changes. The University of Saskatchewan is ranked #1 in Canada in Water Resources Research and this certificate will continue building on this expertise, complementing the current BSc in Hydrology. This certificate will allow students within and beyond the College of Arts and Science to focus their education on water science concurrent with their major subject, and for practitioners outside the University to focus their training on water science. Water security is identified as a Signature Area of Research for the University, and this certificate aims to support this field starting at the undergraduate level. Hydrology is a core teaching and research area for many faculty members in the Department of Geography and Planning and will provide the highest quality teaching and training for these students.

College Statement
From Gordon DesBrisay, Vice-Dean Academic

I am pleased to confirm that the College of Arts and Science supports the replacement of the Minor in Water Science with a Degree-Level Certificate in this same area of study.

The College of Arts and Science is working to provide innovative program options that meet student needs and demand. The Minor in Water Science has always been a popular program, and, in the face of climate change, is now more relevant than ever. Recreating the program as a certificate will open it to students in all colleges, as well as to those students who are pre or post degree.

The Academic Programs Committee (BSc) approved the proposal on September 10, 2020, as did the College Faculty Council on October 14, 2020.
Program Description

Degree Level Certificate in Water Science

The Certificate in Water Science provides students with theoretical and practical training in hydrologic science. Emphasis is placed on a quantitative understanding and analysis of the hydrologic cycle, including the presence and movement of water in and between the primary storage pools: atmospheric moisture, surface runoff, soil moisture, groundwater, and surface storage in ponds, lakes, rivers, and oceans. The certificate provides students with an advanced knowledge of hydrologic processes as well as field instrumentation, data collection, and analysis for hydrologic study.

Major Average

The major average in the Certificate in Water Science includes the grades earned in:

- All courses eligible to be used in the program.

Residency Requirements

To receive a Certificate in Water Science, students must complete at least two-thirds of the following coursework (to the nearest highest multiple of 3 credit units) from the University of Saskatchewan.

- Minimum credit units required in the program

See Residency for additional details.

Requirements (27 credit units)

3 credit units from the following:

- MATH 110.3 Calculus I
- MATH 123.3 Calculus for Engineers
- MATH 125.3 Mathematics for the Life Sciences
- MATH 176.3 Advanced Calculus

3 credit units from the following:

- EVSC 210.3 Environmental Physics
- PHYS 115.3 Physics and the Universe

21 credit units from the following:

- GEOG 120.3 Introduction to Global Environmental Systems
- GEOG 225.3 Hydrology of Canada
- GEOG 290.3 Field Methods and Laboratory Analysis
- GEOG 325.3 Principles of Fluvial Systems
- GEOG 328.3 Groundwater Hydrology
- GEOG 390.3 Methods in Hydrometeorology
- GEOG 427.3 Advanced Hydrology

Note: Students may receive credit for either the Minor in Water Science or the Certificate in Water Science, not both.
Program(s) to be deleted: Water Science - Minor

Effective date of termination: May 2021

1. List reasons for termination and describe the background leading to this decision.

The Minor in Water Science will be replaced by the proposed Degree Level Certificate in Water Science. This change will offer students outside of the College of Arts & Science, students who do not wish to complete a degree, and students who have already completed a degree the opportunity to take the classes and receive the certificate.

2. Technical information.

2.1 Courses offered in the program and faculty resources required for these courses.

No courses are taught uniquely for this program.

2.2 Other resources (staff, technology, physical resources, etc.) used for this program.

Conversion from the Minor to the Certificate may increase the number of individual graduates at Convocation. Other than this, the resources used by this program is unchanged.

2.3 Courses to be deleted, if any.

No courses will be deleted.

2.4 Number of students presently enrolled.

22 students are currently, officially, enrolled in the minor (information taken from Degree Works). As many students do not take steps to declare a Minor until they apply to graduate, this is not necessarily an accurate reflection of the number of students working to receive this qualification.

2.5 Number of students enrolled and graduated over the last five years.

This information is not available through Degree Works or Crystal Reports. Students who are continuing in the program as of May 2021 will have the option to receive either the Minor or the Certificate.

3. Impact of the termination.

3.1 What if any impact will this termination have on undergraduate and graduate students? How will they be advised to complete their programs?
No impact on current students. The courses will all continue to be offered, and students can complete this program within a 10 year period from the time they started.

3.2 What impact will this termination have on faculty and teaching assignments?

None. Courses will continue to be offered.

3.3 Will this termination affect other programs, departments or colleges?

No impact on other programs.

3.4 If courses are also to be deleted, will these deletions affect any other programs?

N/A

3.5 Is it likely, or appropriate, that another department or college will develop a program to replace this one?

Certificate proposed to replace Minor.

3.6 Is it likely, or appropriate, that another department or college will develop courses to replace the ones deleted?

N/A

3.7 Describe any impact on research projects.

No impact. Water Science will continue to be an area of study.

3.8 Will this deletion affect resource areas such as library resources, physical facilities, and information technology?

No impact.

3.9 Describe the budgetary implications of this deletion.

No impact.

External

3.10 Describe any external impact (e.g. university reputation, accreditation, other institutions, high schools, community organizations, professional bodies).

3.11 Is it likely or appropriate that another educational institution will offer this program if it is deleted at the University of Saskatchewan?

Replacing the Minor with a Certificate will increase the profile of the program, and provide a greater number of students to choose to earn a credential in this area of study.

Other

3.12 Are there any other relevant impacts or considerations?
Because students in any College may be awarded a Certificate, the change from a Minor to a Certificate may increase the number of students choosing this area of study. This could raise awareness of this option at the University of Saskatchewan.

3.13 Please provide any statements or opinions received about this termination.

N/A

(Optional)

4. Additional information. Programs which have not undergone recent formal reviews should provide additional relevant information about quality, demand, efficiency, unique features, and relevance to the province.

N/A
Notice of Intent – Certificate in Water Science

1. **Overview of the program**

   The proposed program is a change from the Minor in Water Science to a Certificate in Water Science. The Certificate will offer a focused examination of Earth’s hydrologic cycle, paying particular attention to the storage and movement of atmospheric, surface, and subsurface water supplies, as well as their measurement and analysis. The Certificate will complement the current B.Sc in Hydrology program offered by the Department of Geography and Planning, and draws on the teaching and research expertise of the Centre for Hydrology, Global Water Futures, and the Global Institute for Water Security, all based at the University.

   The program will consist of 27 credit units, 21 of which will be required GEOG courses and 6 of which will be selected from a list of relevant introductory MATH, PHYS, and/or EVSC courses. With the exception of the introductory courses, the Certificate offers the same courses as the Minor.

2. **University and/or societal need**

   As a result of global climate change, Earth’s hydrologic cycle is changing. This has been observed over many decades as shifts in dominant weather patterns, changes to the magnitude and frequency of drought and flood events, glacier and ice sheet melt, and an increasing risk to global fresh water supplies. All of these impacts are anticipated to continue into the future and, in many cases, are expected to amplify. These impacts are observed on all spatial scales, from local to global. The risk to current and future human populations is great. Therefore, there is a great need for educators, researchers, and practitioners of water science to understand, measure, and forecast the changes and the risk of the growing water insecurity. This program will continue to provide this training at the undergraduate level.

3. **Student demand for the program**

   The Minor in Water Science has been a popular option for students for several years. In the 2019-20 year, 29 active students were registered in the program, 18 of which are in non-Geography and Planning major programs. The purpose of changing the Minor to a Certificate is to make the program available to students outside the College, in particular for Engineering students, and for practitioners outside the University, while also maintaining the availability of the program to students within the College.

4. **Assessment of perceived need within the National Context**

   Canada has long been recognized as a country rich in water resources. However, these resources are under threat from the impacts of global climate change. To assess, understand, and anticipate current and future availability of these water resources, a well-educated cohort of water scientists is required. The proposed program intends to contribute to this need. The University of Saskatchewan is a national leader in water science research through the Centre for Hydrology, Global Water Futures, Global Institute for Water Security, and its relationship to the National Hydrology Research Centre of
Environment and Climate Change Canada. This certificate program aims to support and continue this reputation for excellence.

5. **Relationship to University, college and divisional integrated plans**

The Certificate in Water Science is intended to play a supporting role in the University’s national and international reputation as a leader in water resources research. Water security is identified as a Signature Area of Research for the University, and this program will support this starting at the undergraduate level. The University’s mission to foster excellence in teaching, discovering, preserving, and applying knowledge is supported by this program. The program is intended to help generate a cohort of highly qualified undergraduate students that may continue their studies at the graduate level in the Department of Geography and Planning or elsewhere at the University. The goals of the Certificate in Water Science align well with the University Plan 2025.

6. **Relationship to other programs offered by the College of Arts and Science**

This program is intended to complement and will not compete with the BSc in Hydrology offered by the Department of Geography and Planning. The Minor in Water Science, which the Certificate will be replacing, has been a popular addition to students’ majors, particularly those in the BSc in Geology and BSc in Environment Biology programs. It is anticipated that this relationship will continue after changing the program to a certificate. Program requirements include mathematics and physics course options, thus emphasizing multi-disciplinary training for students.

7. **Relationship to programs offered elsewhere**

Program requirements include the option of 3 credit units of soil science, offered by the College of Agriculture and Bioresources. The change to a certificate program is intended to attract students from outside the College of Arts and Science, in particular from the College of Engineering where a strong background in water resources engineering exists. This program may also be used as a stepping-stone in the process for Professional Geoscientist certification by the Association of Professional Engineers and Geoscientists of Saskatchewan (note that the program does not offer all courses necessary for certification).

8. **Is there justification to proceed regardless of any perceived duplication?**

Since this certificate program is replacing a minor program, there is no duplication.

9. **Resources for the program**

This certificate program consists entirely of courses already offered on an annual basis as part of the B.Sc in Hydrology program or as introductory courses in other programs. Therefore, no new courses or teaching assignments are required. Any increase in enrollment in these courses are anticipated to be
taken up with minimal impact or cost. An exception may be the program’s field courses, particularly GEOG 290. An increase in enrollment in this course would require a larger laboratory space than the current one (KIRK 46). Suitable space likely already exists on campus, it would just need to be made available. Financial resources for new laboratory equipment and the maintenance of existing equipment will come from Geography and Planning’s annual budget allocation and from the annual Arts and Science Capital Equipment Grant. Financial support for field travel is provided by the Experiential Learning Fund through the Gwenna Moss Centre for Teaching and Learning. Field vehicle support is provided by the Global Institute for Water Security. A sessional instructor for the capstone GEOG 427 course is currently supported by a CRC Tier 1 position in the Department of Geography and Planning.

10. Risks

The risks associated with changing the Minor in Water Science to a certificate program are minimal. All associated courses are offered regularly as required courses in other programs. Any increases in enrollments are anticipated to be absorbed by the relevant courses. Increased enrollment in the two field courses poses the only known risk, as enrollment in these courses is capped due primarily to space limitations: GEOG 290 by limited laboratory space; and GEOG 390 by a field site use agreement with Duck’s Unlimited Canada. These limitations are not exclusive to this certificate program and therefore will be addressed when relevant by the Department of Geography and Planning.

11. Anticipated start date

The program is proposed to begin in May 2021. All of the courses in the program are currently taught on an annual basis. The only constraint is the process to propose and approve the program.
Re: Certificate in Water Science

Duffy, Christopher <duffy@math.usask.ca>
Fri 2020-05-15 11:07 AM
To: Sowa, Artur <sowa@math.usask.ca>
Cc: Chutko, Krystopher <krys.chutko@usask.ca>

Hi Artur and Krys —

Yes, I think we are happy to support this initiative. As you mentioned, this is unlikely to impact our enrolment in a major way, as I expect such interested students would already be registered in a first-year calculus course.

Cheers,

Chris

Christopher Duffy
Assistant Professor
Department of Mathematics and Statistics
University of Saskatchewan
christopher.duffy@usask.ca

On May 15, 2020, at 9:33 AM, Sowa, Artur <sowa@math.usask.ca> wrote:

Dear Krys,

Thank you for consulting with me directly ahead of the Course Challenge. The proposal of certificate in Water Science strikes me as an interesting initiative, and I am glad the foundational math courses you have listed are an important part of it. Of course we need to analyse the potential impact on our resources.

I have CC’ed Dr. Chris Duffy, an incoming co-chair of our Undergraduate Committee, as he may provide further advice. If we see no red flags, we will be happy to provide a letter of support.

All the best,
Artur

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Artur Sowa, Ph.D.
Professor & Department Head
Department of Mathematics and Statistics
University of Saskatchewan

106 Wiggins Road, Saskatoon, SK S7N 5E6, CANADA
Home page: https://math.usask.ca/~sowa/
Good morning Dr. Sowa. I would like to bring to your attention some programming changes I am working on in the Department of Geography and Planning. For several years we have offered a Minor in Water Science, particularly to students in GEOG and GEOL programs but a few others have joined as well. The certificate requirements are listed below. I am sharing this with you because there are a number of first-year MATH courses included as they are prerequisites to the capstone GEOG 427 course. The greatest impact of this certificate on your courses will be related to enrollment, although I suspect it will be minor as GEOG and GEOL students, as well as other natural sciences students interested in the certificate are already taking the courses. We hope to attract new students from outside the College and University, so a small increase in enrollment may occur. The 3 cu required of 12 cu listed should keep students spread out as well.

As part of my submission to the Course Challenge I have identified the Department of Mathematics and Statistics as being potentially impacted by this certificate. Do you see any issues with the inclusion of the MATH courses? If yes, please let me know and I will make the appropriate changes. If not, would you be able to provide me with a written statement of support that I can share with the College? I intend to submit this to the College before early August, so I would appreciate any feedback before then.

Thank you,

Krys

Certificate Requirements (27 credit units)

3 credit units from the following:

- MATH 110.3 Calculus I
- MATH 123.3 Calculus for Engineers
- MATH 125.3 Mathematics for the Life Sciences
- MATH 176.3 Advanced Calculus

3 credit units from the following:

- EVSC 210.3 Environmental Physics
- PHYS 115.3 Physics and the Universe

21 credit units from the following:

- GEOG 120.3 Introduction to Global Environmental Systems
- GEOG 225.3 Hydrology of Canada[CK1]
- GEOG 290.3 Field Methods and Laboratory Analysis[CK2]
- GEOG 325.3 Principles of Fluvial Systems
- GEOG 328.3 Groundwater Hydrology
- GEOG 390.3 Methods in Hydrometeorology
- GEOG 427.3 Advanced Hydrology
Note: Students registered in the Minor in Water Science cannot complete the Certificate in Water Science.

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Dr. Krystopher Chutko

Department of Geography and Planning
University of Saskatchewan

[CK2]
Re: Fw: Certificate in Water Science

Tanaka, Kaori <kat221@mail.usask.ca>
Tue 2020-06-30 12:34 AM
To: Chutko, Krystopher <krys.chutko@usask.ca>; Koustov, Alexandre <sasha.koustov@usask.ca>

Dear Krys,

I am terribly sorry I haven’t managed to get back to you till now.

We fully support the inclusion of PHYS 115 in the list of electives for the Certificate in Water Science.

Thank you so much! All the best, cheers, Kaori

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From: Chutko, Krystopher <krys.chutko@usask.ca>
Sent: Monday, May 11, 2020 12:05 PM
To: Koustov, Alexandre <sasha.koustov@usask.ca>
Subject: Certificate in Water Science

Hello Dr. Koustov. I would like to bring to your attention a programming change I am working on in the Department of Geography and Planning. For several years we have offered a Minor in Water Science, particularly to students in GEOG and GEOL programs but a few others have joined as well. The certificate requirements are listed below. I am sharing this with you because PHYS 115 is included as it is a prerequisite to the capstone GEOG 427 course. The greatest impact of this certificate on your course will be related to enrollment, although I suspect it will be minor as GEOG and GEOL students, as well as other natural sciences students interested in the certificate may already take the course. We hope to attract new students from outside the College and University, so a small increase in enrollment may occur.

As part of my submission to the Course Challenge I have identified the Department of Physics and Engineering Physics as being potentially impacted by this certificate. Do you see any issues with the inclusion of PHYS 115? If yes, please let me know and I will make the appropriate changes. If not, would you be able to provide me with a written statement of support that I can share with the College? I intend to submit this to the College before early August, so I would appreciate any feedback before then.

Thank you,

Krys

Certificate Requirements (27 credit units)

3 credit units from the following:
- MATH 110.3 Calculus I
- MATH 123.3 Calculus for Engineers
- MATH 125.3 Mathematics for the Life Sciences
- MATH 176.3 Advanced Calculus

3 credit units from the following:
- EVSC 210.3 Environmental Physics
• PHYS 115.3 Physics and the Universe
21 credit units from the following:
• GEOG 120.3 Introduction to Global Environmental Systems
• GEOG 225.3 Hydrology of Canada
• GEOG 290.3 Field Methods and Laboratory Analysis
• GEOG 325.3 Principles of Fluvial Systems
• GEOG 328.3 Groundwater Hydrology
• GEOG 390.3 Methods in Hydrometeorology
• GEOG 427.3 Advanced Hydrology

Note: Students registered in the Minor in Water Science cannot complete the Certificate in Water Science.

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Dr. Krystopher Chutko

Department of Geography and Planning
University of Saskatchewan

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Kaori Tanaka, Professor
Chair, Undergraduate Affairs Committee (UAC)
Department of Physics & Engineering Physics
University of Saskatchewan
116 Science Place, Saskatoon
SK S7N 5E2 Canada
Tel: 306-966-6406
Fax: 306-966-6400
Email: kaori.tanaka@usask.ca

"The purpose of computing is insight, not numbers" - R. W. Hamming
Consultation with the Registrar Form

This form is to be completed by the Registrar (or his/her designate) during an in-person consultation with the faculty member responsible for the proposal. Please consider the questions on this form prior to the meeting.

Section 1: New Degree / Diploma / Certificate Information or Renaming of Existing

1. Is this a new degree, diploma, or certificate? Yes \[X\] No
   Is an existing degree, diploma, or certificate being renamed? Yes \[X\] No
   If you’ve answered NO to each of the previous two questions, please continue on to the next section.

2. What is the name of the new degree, diploma, or certificate?

3. What is the credential of this new degree, diploma, or certificate? [Example - D.M.D. = Doctor of Dental Medicine]
   Cert.

4. If you have renamed an existing degree, diploma, or certificate, what is the current name?

5. Does this new or renamed degree / diploma / certificate require completion of degree level courses or non-degree level courses, thus implying the attainment of either a degree level or non-degree level standard of achievement?
   Degree level

6. If this is a new degree level certificate, can a student take it at the same time as pursuing another degree level program? Yes \[X\] No

7. If YES, a student attribute will be created and used to track students who are in this certificate alongside another program. The attribute code will be:
   CWS - In Cert in Water Science - suggested Banner code and description

8. Which College is responsible for the awarding of this degree, diploma, or certificate?
   Arts and Science [AR]

9. Is there more than one program to fulfill the requirements for this degree, diploma, or certificate? If yes, please list these programs.

10. Are there any new majors, minors, or concentrations associated with this new degree / diploma / certificate? Please list the name(s) and whether it is a major, minor, or concentration, along with the sponsoring department.
    No - WRSC Water Science exists in Banner

11. If this is a new graduate degree, is it thesis-based, course-based, or project-based?
Section 2: New / Revised Program for Existing or New Degree / Diploma / Certificate Information

1. Is this a new program?
   Yes [X] No

2. Is an existing program being revised?
   Yes [X] No

If you’ve answered NO to each of the previous two questions, please continue on to the next section.

3. If YES, what degree, diploma, or certificate does this new/revised program meet requirements for?

4. What is the name of this new/revised program?

5. What other program(s) currently exist that will also meet the requirements for this same degree(s)?
   n/a

6. What College/Department is the academic authority for this program?
   Arts and Science [AR] / Geography and Planning [GEPL]

7. Is this a replacement for a current program?
   Yes [X] No

8. If YES, will students in the current program complete that program or be grandfathered?

9. If this is a new graduate program, is it thesis-based, course-based, or project-based?

10. If this is a new non-degree or undergraduate level program, what is the expected completion time?
    1 year (27 credit units total)
Section 3: Mobility

Mobility is the ability to move freely from one jurisdiction to another and to gain entry into an academic institution or to participate in a learning experience without undue obstacles or hindrances.

1. Does the proposed degree, program, major, minor, concentration, or course involve mobility? Yes [ ] No [X]  
   If yes, choose one of the following:
   - Domestic Mobility (both jurisdictions are within Canada) [ ]
   - International Mobility (one jurisdiction is outside of Canada) [ ]

2. Please indicate the mobility type (refer to Nomenclature for definitions).
   - Joint Program [ ]
   - Joint Degree [ ]
   - Dual Degree [ ]
   - Professional Internship Program [ ]
   - Faculty-Led Course Abroad [ ]
   - Term Abroad Program [ ]

3. The U of S enters into partnerships or agreements with external partners for the above mobility types in order to allow students collaborative opportunities for research, studies, or activities. Has an agreement been signed? Yes [ ] No [ ]

4. Please state the full name of the agreement that the U of S is entering into.

5. What is the name of the external partner?

6. What is the jurisdiction for the external partner?
Section 4: New / Revised Major, Minor, or Concentration for Existing Degree Information (Undergraduate)

1 Is this a new or revised major, minor, or concentration attached to an existing degree program? 
   Yes [ ] No [x] Revised [ ]
   If you've answered NO, please continue on to the next section.

2 If YES, please specify whether it is a major, minor, or concentration. If it is more than one, please fill out a separate form for each.

3 What is the name of this new / revised major, minor, or concentration?

4 Which department is the authority for this major, minor, or concentration? If this is a cross-College relationship, please state the Jurisdictional College and the Adopting College.

5 Which current program(s), degree(s), and/or program type(s) is this new / revised major, minor, or concentration attached to?

Section 5: New / Revised Disciplinary Area for Existing Degree Information (Graduate)

1 Is this a new or revised disciplinary area attached to an existing graduate degree program? 
   Yes [ ] No [x] Revised [ ]
   If you've answered NO, please continue on to the next section.

2 If YES, what is the name of this new / revised disciplinary area?

3 Which Department / School is the authority for this new / revised disciplinary area? (NOTE - if this disciplinary area is being offered by multiple departments see question below.)

4 Which multiple Departments / Schools are the authority for this new / revised disciplinary area?

4a Of the multiple Departments / Schools who are the authority for this new / revised disciplinary area and what allocation percentage is assigned to each? (Note - must be whole numbers and must equal 100.)

4b Of the multiple Departments / Schools who is the primary department? The primary department specifies which department / school policies will be followed in academic matters (ex. late adds, re-read policies, or academic misconduct). If no department / school is considered the primary, please indicate that. (In normal circumstances, a department / school with a greater percentage of responsibility - see question above - will be designated the primary department.)

5 Which current program(s) and / or degree(s) is this new / revised disciplinary area attached to?
Section 6: New College / School / Center / Department or Renaming of Existing

1. Is this a new college, school, center, or department?  
   Yes [ ] No [X]

2. Is an existing college, school, center, or department being renamed?  
   Yes [ ] No [X]

3. Is an existing college, school, center, or department being deleted?  
   Yes [ ] No [ ]

   If you've answered NO to each of the previous two questions, please continue on to the next section.

4. What is the name of the new (or renamed or deleted) college, school, center, or department?  

5. If you have renamed an existing college, school, center, or department, what is the current name?  

6. What is the effective term of this new (renamed or deleted) college, school, center, or department?  

7. Will any programs be created, changed, or moved to a new authority, removed, relabelled?  

8. Will any courses be created, changed, or moved to a new authority, removed, relabelled?  

9. Are there any ceremonial consequences for Convocation (ie. New degree hood, adjustment to parchments, etc.)?  

Section 7: Course Information - as per current set-up

1 Is there a new subject area(s) of course offering proposed for this new degree? If so, what is the subject area(s) and the suggested four (4) character abbreviation(s) to be used in course listings?

2 If there is a new subject area(s) of offerings what College / Department is the academic authority for this new subject area?

3 Have the subject area identifier and course number(s) for new and revised courses been cleared by the Registrar?

4 Does the program timetable use standard class time slots, terms, and sessions? Yes [ ] No [ ]
   If NO, please describe.

5 Does this program, due to pedagogical reasons, require any special space or type or rooms? Yes [ ] No [ ]
   If YES, please describe.

NOTE: Please remember to submit a new “Course Creation Form” for every new course required for this new program / major. Attached completed “Course Creation Forms” to this document would be helpful.
Section 8: Admissions, Recruitment, and Quota Information - as per current set-up for certificate programs

1. Will students apply on-line? If not, how will they apply?

2. What term(s) can students be admitted to?

3. Does this impact enrollment?

4. How should Marketing and Student Recruitment handle initial inquiries about this proposal before official approval?

5. Can classes towards this program be taken at the same time as another program?

6. What is the application deadline?

7. What are the admission qualifications? (IE. High school transcript required, grade 12 standing, minimum average, any required courses, etc.)

8. What is the selection criteria? (IE. If only average then 100% weighting; if other factors such as interview, essay, etc. what is the weighting of each of these in the admission decision.)

9. What are the admission categories and admit types? (IE. High school students and transfer students or one group? Special admission? Aboriginal equity program?)

10. What is the application process? (IE. Online application and supplemental information (required checklist items) through the Admissions Office or sent to the College/Department?)

11. Who makes the admission decision? (IE. Admissions Office or College/Department/Other?)

12. Letter of acceptance - are there any special requirements for communication to newly admitted students?

13. Will the standard application fee apply?

14. Will all applicants be charged the fee or will current, active students be exempt?

15. Are international students admissible to this program?
Section 9: Government Loan Information

NOTE: Federal / provincial government loan programs require students to be full-time in order to be eligible for funding. The University of Saskatchewan defines full-time as enrollment in a minimum of 9 credit units (operational) in the fall and/or winter term(s) depending on the length of the loan.

1 If this is a change to an existing program, will the program change have any impact on student loan eligibility?

2 If this is a new program, do you intend that students be eligible for student loans?
   Yes

Section 10: Convocation Information (only for new degrees)

1 Are there any ‘ceremonial consequences’ of this proposal (ie. New degree hood, special convocation, etc.)?
   No

2 If YES, has the Office of the University Secretary been notified?

3 When is the first class expected to graduate?
   As early as Fall Convocation 2021

4 What is the maximum number of students you anticipate/project will graduate per year (please consider the next 5-10 years)?
   15 students - projected student enrollment per year

Section 11: Schedule of Implementation Information

1 What is the start term?
   202105 [May 2021]

2 Are students required to do anything prior to the above date (in addition to applying for admission)?
   Yes  No  X
   If YES, what and by what date?

Section 12: Registration Information

1. What year in program is appropriate for this program (NA or a numeric year)?
   (General rule = NA for programs and categories of students not working toward a degree level qualification.)
   Numeric year

2. Will students register themselves?
   Yes [X] No [ ]
   If YES, what priority group should they be in?
   As per current set-up

Section 13: Academic History Information - as per current set-up

1. Will instructors submit grades through self-serve?
   Yes [X] No [ ]

2. Who will approve grades (Department Head, Assistant Dean, etc.)?

Section 14: T2202 Information (tax form)

1. Should classes count towards T2202s?
   Yes [X] No [ ]

Section 15: Awards Information

1. Will terms of reference for existing awards need to be amended?
   Yes [X] No [ ]

2. If this is a new undergraduate program, will students in this program be eligible for College-specific awards?
   Not eligible for awards for degree graduates but eligible for entering student and continuing student awards (where mandatory minimum credit units are met)

Section 16: Government of Saskatchewan Graduate Retention (Tax) Program

1. Will this program qualify for the Government of Saskatchewan graduate retention (tax) program?
   Yes [X] No [ ]
   To qualify the program must meet the following requirements:
   - be equivalent to at least 6 months of full-time study, and
   - result in a certificate, diploma, or undergraduate degree.
Section 17: Program Termination

1. Is this a program termination?
   Yes [X] No [ ]
   If yes, what is the name of the program?
   Water Science Minor

   Currently available on the following programs:
   - BA3Y
   - BA4Y
   - BAHON
   - BAHOND
   - BASC4Y
   - BASHON
   - BFAHON
   - BSC3Y
   - BSC4Y
   - BSCHON
   - BSCHOND

2. What is the effective date of this termination?
   [202105 [May 2021]]

3. Will there be any courses closed as a result of this termination?
   Yes [ ] No [X]

4. Are there currently any students enrolled in the program?
   Yes [X] No [ ]
   If yes, will they be able to complete the program?
   A search in Degree Works for active students returns 22

5. If not, what alternate arrangements are being made for these students?
   Students will have the option to either complete the Water Science minor or to receive the Certificate in Water Science

6. When do you expect the last student to complete this program?
   Students have 10 years to complete

7. Is there mobility associated with this program termination?
   Yes [X] No [ ]
   If yes, please select one of the following mobility activity types.
   Dual Degree Program
   Joint Degree Program
   Internship Abroad Program
   Term Abroad Program
   Taught Abroad Course
   Student Exchange Program
Partnership agreements, coordinated by the International Office, are signed for these types of mobility activities. Has the International Office been informed of this program termination?

Yes [ ] No [ ]
Section 18: Proposed Tuition and Student Fees Information

1. How will tuition be assessed?

2. If fees are per credit, do they conform to existing categories for per credit tuition? If YES, what category or rate?
   Yes

3. If program based tuition, how will it be assessed? By credit unit? By term? Elsehow?

4. Does proponent’s proposal contain detailed information regarding requested tuition?
   Yes [x] No 
   If NO, please describe.

5. What is IPA’s recommendation regarding tuition assessment? When is it expected to receive approval?

6. IPA Additional comments?

7. Will students outside the program be allowed to take the classes?
   Yes

8. If YES, what should they be assessed? (This is especially important for program based.)
   Standard undergraduate tuition

9. Do standard student fee assessment criteria apply (full-time, part-time, on-campus versus off-campus)?
   Yes

10. Do standard cancellation fee rules apply?
    Yes

11. Are there any additional fees (e.g. materials, excursion)? If yes, see NOTE below.
    No

12. Are you moving from one tuition code (TC) to another tuition code?
    Yes [x] No 
    If YES, from which tuition code to which tuition code?

13. Are international students admissible to the program? If yes, will they pay the international tuition differential?
    Yes, will pay the international tuition differential
NOTE: Please remember to submit a completed "Application for New Fee or Fee Change Form" for every new course with additional fees.
### Section 19: TLSE - Information Dissemination (internal for TLSE use only)

1. Has TLSE, Marketing and Student Recruitment, been informed about this new / revised program?  
   - Yes [ ]  No [ ]
2. Has TLSE, Admissions, been informed about this new / revised program?  
   - Yes [ ]  No [ ]
3. Has TLSE, Student Finance and Awards, been informed about this new / revised program?  
   - Yes [ ]  No [ ]
4. Has CGPS been informed about this new / revised program?  
   - Yes [ ]  No [ ]
5. Has TLSE, Transfer Credit, been informed about any new / revised courses?  
   - Yes [ ]  No [ ]
6. Has ICT-Data Services been informed about this new or revised degree / program / major / minor / concentration?  
   - Yes [ ]  No [ ]
7. Has the Library been informed about this new / revised program?  
   - Yes [ ]  No [ ]
8. Has ISA been informed of the CIP code for new degree / program / major?  
   - Yes [ ]  No [ ]
9. Has Room Scheduling/Scheduling Hub/Senior Coordinator of Scheduling been informed of unique space requirements for the new courses and/or informed of program, course, college, and department changes?  
   - Yes [ ]  No [ ]
10. Has the Convocation Coordinator been notified of a new degree?  
    - Yes [ ]  No [ ]
11. What is the highest level of financial approval required for this submission? Check all that apply.  
    a. None - as it has no financial implications  
       - [ ]
    b. Fee Review Committee  
       - [ ]
    c. Institutional Planning and Assessment (IPA)  
       - [ ]
    d. Provost's Committee on Integrated Planning (PCIP)  
       - [ ]
    e. Board of Governors  
       - [ ]
    f. Other  
       - [ ]

### SIGNED

**Date:**  

**Registrar (Russell Isinger):**

**College Representative(s):**

**IPA Representative(s):**