FOR APPROVAL

TO: Arts & Science Council

SPONSOR: Dwayne Benjamin, Vice-Dean, Graduate Education

CONTACT INFO: vicedeangraduate.artsci@utoronto.ca

DATE: November 13 for November 20, 2019

AGENDA ITEM: 5

ITEM OF BUSINESS:
Closure of the Collaborative Specialization in Earth Sciences and Physics (Master’s and Doctoral Level)

JURISDICTIONAL INFORMATION:
The Arts & Science Council has delegated authority to approve major modifications that are defined in the University of Toronto Quality Assurance Process (UTQAP), including the closure of a graduate collaborative specialization.

GOVERNANCE PATH:
1. Graduate Curriculum Committee – October 31, 2019 (for approval)
2. Arts & Science Council – November 20, 2019 (final approval)
3. Office of the Vice-Provost, Academic Programs (for information), in turn reported to the Committee on Academic Policy & Programs (for information) – May 6, 2020

The Office of the Vice-Provost, Academic Programs will also report this major modification to the Ontario Universities Council on Quality Assurance in the summer of 2020.

HIGHLIGHTS:
The collaborative specialization in Earth Sciences and Physics (Master’s and doctoral level) was established in 2002 with the objective of providing graduate training in geophysics, an area that, at the time, was not situated in any one home graduate unit at the University. Offered by the Department of Earth Sciences and the Department of Physics, the specialization accommodated students who wished to do research on subjects which lay on the boundary between the interests of the University’s geophysicists (then primarily based in the Physics department) and its geologists (based in the Earth Sciences department). Demand for the specialization was steady, although enrolment numbers were generally small. However, it has outlived its usefulness, and consequently, interest has waned. Geophysics is no longer an area of research within the Physics department, having been effectively transferred to the Earth Sciences department. The specialization has had zero
enrolment in the last six years, and all students previously enrolled in the specialization have graduated. Other opportunities for collaboration between students and faculty interested in this area continue to exist – students in each department can take courses in the other, for example, and compose supervisory committees with faculty drawn from both departments.

The Chairs of the participating departments have agreed that the collaborative specialization should be formally closed through governance.

MOTION:

THAT the proposed closure of the Collaborative Specialization in Earth Sciences and Physics in the Faculty of Arts & Science, described in the attached proposal dated September 16, 2019, be approved with full effect on September 1, 2020.
University of Toronto  
Proposal for the Closure of an Existing Program  
(Graduate or Undergraduate)  

(This template has been developed in line with the University of Toronto’s Quality Assurance Process.)

The process followed for the closure of any program is the same as that required for the approval of any new such program.

<table>
<thead>
<tr>
<th>Closure Proposed:</th>
<th>Earth Sciences and Physics Collaborative Specialization</th>
</tr>
</thead>
<tbody>
<tr>
<td>Please specify precisely what is being closed:</td>
<td>i.e., Graduate diploma, field, certificate, option within a program (e.g., specialist, major, or minor), entire program, or degree (graduate or undergraduate)</td>
</tr>
</tbody>
</table>
| Department / Unit (if applicable): | Department of Earth Sciences  
Department of Physics |
| Faculty / Academic Division: | Arts & Science |
| Faculty / Academic Division contact: | Professor Dwayne Benjamin, Vice-Dean, Graduate Education  
Staff: Sharon Kelly |
| Department / Unit contact: | Professor Dick Bailey, Director |
| Effective date of administrative suspension of admissions | September 16, 2019 |
| Effective date program will be closed to new admissions: | September 2020 |
| Effective date of full closure of program: | September 2020 |
| (date by which students currently in the program will be expected to graduate) | |
| Version Date: | September 16, 2019 |
1 Brief Summary

This is a proposal to close the Collaborative Specialization in Earth Sciences and Physics, effective September 2020. The collaborative specialization, which operates at the Master’s level and the doctoral level, is offered through the Department of Earth Sciences and the Department of Physics.

There are no students currently enrolled in the specialization, and there has been no active enrolment since 2013 at the doctoral level, and 2014 at the Master’s level. All students who were previously enrolled in the collaborative specialization have graduated.

2 Rationale

Background:

- You may wish to speak to when the program was first created / how long has it been offered / past success of the program
- What has led to the decision to close the program?
- Please provide a full academic rationale
  - You may wish to refer to changing enrolment; changing disciplinary landscape; shifting expertise of the professoriate; poor quality of the academic offering; overlap with other existing programs
  - Where appropriate, you may want to quote from recent unit or program reviews.
  - Explain alignment with the unit’s academic plan

The Master’s level collaborative specialization in Earth Sciences and Physics was created in 2002 with the doctoral level following two years later, in 2004. The specialization provided academic training in geophysics, an area that, at the time, was not situated in any one home graduate unit at the University. It was designed to accommodate students who wished to do research on subjects which lay on the boundary between the interests of the University’s geophysicists (primarily based in the Physics department) and its geologists (based in the Earth Sciences department). Students, via formal departmental commitments to the specialization, were guaranteed access to a suitable mixture of courses and cross-departmental supervisory committees. The program also served to give geophysics higher visibility to prospective graduate students.

While enrolment numbers were generally small, demand for the program was steady, and it attracted high quality students. However, the specialization has now outlived its usefulness. Geophysics is no longer an area of research within the Physics department, having been effectively transferred to the Earth Sciences department. As such, the context for which the specialization was designed has disappeared and demand for the specialization has waned, with zero enrolment in the specialization over the last 6 years. Further, the objectives of the specialization will continue to be met with other opportunities for collaboration. Students in each department can take courses in the other, and both departments permit advisory committee members to be drawn from other departments.
3 Impact on other programs/units of the proposed closure

- Please provide evidence of consultation with any programs/units/faculties that will be affected
- What are the positive and negative implications that need to be considered in the closure
- Impact on the nature and quality of the division's program of study
- Impact of closure on other units including inter-divisional and inter-institutional agreements/contracts
- Please mention if the courses that supported this degree, program, or program option will continue to be offered

The two participating units in the collaborative specialization, the Department of Earth Sciences and the Department of Physics, support its closure, as does its current director. The Chairs of both departments have been consulted, along with the sole faculty member who holds a joint appointment across the two departments.

The specialization’s core course, ESS 1101H, is provided every year as part of the Department of Earth Science’s regular offerings. Outside of the core course, students in the specialization are required to take a certain ratio (roughly equal) of courses in each of the two departments; in other words, neither department maintained specific courses for the sake of the specialization. Students interested in this area of study can continue to take relevant courses across the departments.

4 Student Accommodation

Please include:

- Current enrolment showing breakdown by year in the program / option being closed

<table>
<thead>
<tr>
<th>Table 1: Graduate Breakdown</th>
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<tbody>
<tr>
<td>Current enrolment Masters</td>
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<tr>
<td>Current enrolment PhD</td>
</tr>
</tbody>
</table>

- Provide details concerning how students in progress will be accommodated
  - Will students be allowed to complete their program or be transferred to another program. (In the latter instance please comment on the ease with which they can
complete the requirements of the new program and show evidence of consultation if relevant)
  o Deadline by which accommodated students must complete the program – if there are grounds for concern, what are their options if they have not completed the program by that deadline?
  o Capacity/course availability to accommodate affected students
  o Can inactive students reactivate to the closed program?
• What will the impact of the proposed closure be on the range of academic options available to students in the future? (i.e. are there other programs or options that will fill the void that may/may not be created by the closure?)
• Consultation with students
  o Please provide details concerning consultation with students around the proposed change including:
    ▪ Meetings / Town halls/ Emails /Questionnaires
    ▪ Describe any response/ feedback received
  o How will students be notified of the change following approval?

All students previously enrolled in the collaborative specialization have completed their degree programs. No actively registered or lapsed students remain in the specialization.

Faculty / Staff Accommodation

• What is the impact, if any, on faculty and staff of the closure?

The specialization, while active, required no additional resources, with its administration borne by the two participating departments. There will be no impact on faculty and staff. No additional faculty, administrative or technical staff are associated with the specialization.

5 Governance Process

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<thead>
<tr>
<th>Decanal / Provostial Sign-Off</th>
<th>Levels of Approval Required</th>
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<tbody>
<tr>
<td>Faculty/Divisional Council (approval of closure of minors, where there is a continuing (specialist or major)</td>
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<tr>
<td>Submission to Provost’s Office</td>
<td>May 2020</td>
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<tr>
<td>AP&amp;P(approval of program closures: undergrad specialists/majors; minors where there is no specialist of major; graduate fields or diploma, and collaborative programs)</td>
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Proposal for the Closure of an Existing Program
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<tr>
<th>Academic Board (approval of degree, graduate program, diploma closures)</th>
<th>Not applicable</th>
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<tbody>
<tr>
<td>Executive Committee of Governing Council (executive confirms degree, grad program, closures)</td>
<td>Not applicable</td>
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<tr>
<td>Inclusion in Annual report to Quality Council</td>
<td>July 2020</td>
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<tr>
<td>Inclusion in Annual report to MTCU (in case of closure of degree)</td>
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