University of Toronto
Closure of an Existing Undergraduate Program Proposal

Section 1

Closure Proposed:	**Specialist Program in Mathematics and its Applications**
Department / Unit:	**Computer & Mathematical Sciences**
Faculty / Academic Division:	**University of Toronto Scarborough**
Faculty / Academic Division contact:	Annette Knott, Academic Programs Officer, Office of the Dean aknott@utsc.utoronto.ca
Department / Unit contact:	**Lisa Jeffrey**
Effective date program will be closed to new admissions:	**Fall 2012**
Effective date of full closure of program: *(date by which students currently in the program will be expected to graduate)*	**Summer 2017 (or so)**
Version Date:	**August 22, 2011**

Section 2

1. Brief Summary:

- Please clarify precisely what is being closed:

Specialist program in Mathematics and its Applications

- What is the relationship between what is being closed and any remaining offerings:

Three streams of this program (Teaching, Statistics, Design-Your-Own) will continue as streams of the reorganised Specialist Program in Mathematics (see Major Modification Proposal form for that program).

- If only part of a program is being closed, please clarify the relationship between this and those portions of the program that will remain open.

N/A.

2. Academic Rationale:

- Background *(e.g. when was the program first created; how long has it been offered; what is its past success)*:

The Specialist Program in Mathematics and its Applications was created in 1999-2000 or 2000-2001. Two of its streams (Statistics and Teaching) have been reasonably successful in attracting students on a sustained basis. The Computational Physical Sciences, Computer Science, and Design-your-own streams have been less successful in that regard (see table with enrolment figures below).

The more popular streams of the program will continue as streams of the restructured Specialist Program in Mathematics (see Major Modification Proposal form for that program). The program requirements for the continuing streams are slightly adjusted to make them more consistent with those of other streams of the restructured Specialist Program, allowing easier transfer between streams and clearer understanding of the purpose of the different streams. The special Design-your-own stream is also continuing for reasons explained below.

- What has led to the decision to close the program?

The desire to streamline, rationalise, and simplify the various options for mathematics specialist programs.

- Please provide a full academic rationale:

The present structure of the mathematics specialist programs is somewhat haphazard, and confusing to students. The programs' requirements have pedagogically unsound inconsistencies reflecting their legacies.
Under the proposed new structure, the two present programs will be amalgamated into a single specialist program with multiple streams. This structure will better reveal the commonalities and differences between the different program options, making their purpose clearer to students. In the revised program we have also eliminated the unnecessary inconsistencies between programs that exist at present, thereby enhancing the ability of students' to switch between program streams as their interests in mathematics and their career objectives develop and solidify.

In this process of program clarification and consolidation, we will eliminate two streams of the present Specialist Program in Mathematics and its Applications: Computational Physical Sciences, and Mathematics and Computer Science. These are streams that have attracted few students (see table below for historical enrolments in all mathematics specialist programs); furthermore, students who are interested in pursuing studies along the lines of these programs can do so in two ways: either through the Design-your-own stream of the proposed specialist program or by suitable double-major combinations (Mathematics and Physics, or Mathematics and Computer Science, respectively).

The Design-your-own stream of the Specialist Program in Mathematics and its Applications is not being eliminated, even though historically it also has had low enrolments. This is partly for the reason just mentioned and partly in recognition of the fact that some of those few students who have completed this program have been exceptionally strong ones with unusual interests. This is certainly a group of students that we want to continue to serve despite its small size. We note that the Design-your-own stream has no special resource implications: all its required courses are also required for other mathematics programs.

PROGRAM ENROLMENTS	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11
CS – Joint Mathematics (discontinued)	8	5	10	10	6	4	3	1
Math & App – Computational Physical Science	14	13	6	5	5	3	2	2
Math & App – Design Your Own	2	4	8	5	5	4	2	4
Math & App - Statistics	19	14	20	20	23	22	22	24
Math & App - Teaching	13	14	18	16	11	8	12	6
Figures include both coop and non-coop.								

- Explain alignment with the unit's academic plan:

Academic plan is not affected, as there are no resource implications

3. Impact on other programs/units of the proposed closure:

- Provide evidence of consultation with any programs/units/faculties that will be affected by the closure:

DPES has been consulted regarding the elimination of the Computational Physical Sciences stream — see email exchange below.

Date: Tue, 17 May 2011 14:15:17 -0400
From: DPES Chair <dpeschair@utsc.utoronto.ca>
To: Vassos Hadzilacos <vassos@cs.toronto.edu>
Cc: Lisa Jeffrey <jeffrey@utsc.utoronto.ca>, Charles Dyer <dyer@utsc.utoronto.ca>
Subject: Re: Computational Physical Sciences stream of Specialist in Math & its Applications
X-Mailer: Apple Mail (2.1082)

Vassos
We have no objection to this. Although not an immediate plan, we may consider
+offering something of this nature ourselves in the future and I assume you will not
+have any objection (of course more consultation would take place at that time).
Bill

On 2011-05-04, at 4:52 PM, Vassos Hadzilacos wrote:
> Hi Bill,
>
> As a heads-up, this stream is slated for deletion next year. It has
> had low enrolments for some time (in the last six years, starting with
> 05-06: 6, 5, 5, 3, 2, 2) and it fits awkwarly with the rest of the
> Specialist in Mathematics and its Applications program.
>
> The two students presently in this program will, of course, be allowed
> to complete it. Students who might have wished to pursue it can either
> go for the "Design Your Own" stream of the same program, or they can do
> a double major in Mathematics and Physics.
>
> I am copying Charles. Please forward this to anyone else who may have
> a stake in this, and let me know of any concerns.
>
> Best regards,
>
> Vassos

- What are the positive and negative implications that need to be considered in the closure?

The positive effects of the proposed change are discussed in Section 2.2 (Rationale). We are not aware of any negative effects.

- Describe any impact on the nature and quality of the division's program of study:

None

- Describe any impact of closure on other units including inter-divisional and inter-institutional agreements/contracts:

None

- Will the courses that supported this program, or program option continue to be offered?

Yes, the same courses will continue to be offered.

4. Student Accommodation:

a. Current enrolment showing breakdown by year in program / option being closed:

Undergraduate

	Year one	*Year two*	*Year three*	*Year four*
Current enrolment	*#*	*#*	*#*	*#*
CS-Joint Mathematics (discontinued)	0	0	0	1
Math & App – Computational Physical Science	0	1	0	1
Math & App – Design Your Own	0	1	1	0
Math & App - Statistics	0	11	4	8
Math & App - Teaching	1	1	2	2

b. Detail concerning how students in progress will be accommodated:

- Will students be allowed to complete their program or transferred to another program:

Yes

- If students will be transferred to another program, comment on the ease with which they can complete the requirements of the new program (show evidence of consultation if relevant):

Not relevant

- Deadline by which accommodated students must complete the program

Not relevant

- What are their options if they have not completed the program by that deadline?

N/A

- Capacity/course availability to accommodate affected students.

Not relevant

- Can inactive students reactivate to the closed program?

They can reactivate to the new name of the program (Specialist in Mathematics).

c. How will students be notified of the change?

By the Calendar. The Department will also organise meetings to announce the changes to our programs to our students during Fall 2011.

d. *What impact will the proposed closure have on the range of academic options available to students in the future? (ie. are there other programs or options that will fill the void that may/may not be created by the closure?):*

None

5. Faculty / Staff Accommodation:

What is the impact of the closure, if any, on faculty and staff? None

6. Governance Process:

Levels of Approval Required	***Date***
Departmental Curriculum Committee	June 27, 2011
Dean's Office Sign-Off	September 27, 2011
Provostial Sign-Off	
P&C	November 25, 2011
UTSC Academic Committee *(Approval of closure of Minor programs where there is a continuing Major or Specialist)*	December 6, 2011
Submission to Provost's Office	December 7, 2011
AP&P *(Approval of closure of undergraduate Majors and Specialists; Undergraduate Minors where there is no Major/Specialist)*	
Inclusion in Annual report to Quality Council	
Inclusion in Annual report to MTCU (in case of closure of degree)	