

# General Faculties Council GRADUATE ACADEMIC PROGRAM SUBCOMMITTEE Approved Minutes

Meeting #32 November 29, 2017, 2:00 p.m.

Voting Members

Lisa Young, Co-Chair Antony Ware, Academic Co-Chair Jalel Azaiez Hormoz Izadi Michael Sideris Jewel Spangler Joelle Welling

# *Non-Voting Members* Christine Johns Francine Smith Tanya Zdorenko

**Secretary** Susan Belcher

*Scribe* Cherie Tutt

# Regrets

Jim Field Quentin Pittman Angelique Saweczko

## Guests

Gopal Achari, Associate Dean (Graduate Studies), Schulich School of Engineering – present for Item 3 Philip Fong, Associate Professor, Department of Computer Science – present for Items 4 and 5 Frank Maurer, Department Head, Department of Computer Science – present for Items 4 and 5 Raymond Patterson, Professor, Haskayne School of Business – present for Items 4 and 5 Faramarz Samavati, Graduate Program Director, Department of Computer Science – present for Items 4 and 5

### Observers

Kelly Hoglund, Program Proposal Support Specialist – present for Items 3 - 5 Gillian Robinson, Senior Director (Strategic Operations), Faculty of Graduate Studies Heather Smith-Watkins, Analyst, Planning and Reviews – present for Items 3 -5

The Co-Chair called the meeting to order at 2:01 p.m. and confirmed quorum.

### 1. Approval of the Agenda

# **Moved/Seconded**

That the Agenda for the November 29, 2017 Graduate Academic Program Subcommittee meeting be approved.

Carried

A167

## 2. <u>Remarks of the Co-Chair and the Academic Co-Chair</u>

The Co-Chair reported that, due to the lengthy discussion of the Masters of Management proposal at the November 22, 2017 Graduate Academic Program Subcommittee (GAPS) meeting, the number of requested changes to the proposal, and the timeline to submit the proposal to the provincial government, a revised Masters of Management proposal will be sent to the Committee for an electronic vote on Monday.

The Academic Co-Chair made no remarks.

## 3. <u>Recommendation of the Creation of a Specialization in Interdisciplinary Engineering within the</u> <u>course-based Master of Engineering</u>

Documentation for this item was circulated with the Agenda. Gopal Achari, presented this item.

Highlights:

- The proponent outlined the reasons for creating a new Master of Engineering Specialization in Interdisciplinary Engineering (MEng IE) with sub-specializations in environmental engineering and project management, including better alignment between course content and the degree titles on the parchment, and administrative efficiency. It was explained that the MEng IE will create a framework for introducing new sub-specializations which have a focus in more than one field of engineering such as electrical and mechanical.
- In response to questions, it was explained that:
  - The environmental engineering sub-specialization has courses available to students across all five of the SSE's Departments, however, there could be sub-specializations in the MEng IE that are only offered across two Departments
  - It will not be an option for students to complete the MEng IE without an area of subspecialization, and the briefing note will be updated to reflect this
  - It is possible that a new sub-specialization could have unique admission requirements, but all applications will be reviewed centrally
  - If a new sub-specialization is developed it would come through the University's approval process, but would not need provincial government approval
  - The MEng IE is a 30 unit course-based program, but a student may take more than 30 units
  - There are no new courses being proposed at this time, but it is anticipated that, as the program grows there will be hiring and additional course sections offered
  - The SSE attracts students who are underemployed/unemployed and who are looking to expand their skillset, and these numbers may increase with specific marketing and with the re-opening of the project management sub-specialization
- The Committee discussed concerns regarding the consultation and approval process within the SSE for the creation of the MEng IE. It was noted that the SSE Faculty Council and the SSE Post-Graduate Studies Committee have not yet recommended the MEng IE proposal. The Co-Chair reported that, due to time constraints, this proposal was allowed to come to the Committee at

this time, however, any recommendation by the Committee would be contingent on the Faculty's recommendation and the proposal will not proceed to the Academic Planning and Priorities Committee without this.

- A member of the Committee also reported that there is concern within the SSE that the involvement of each Department has not been fully established and that the content of the MEng IE may not be significantly interdisciplinary
- The Committee suggested that:
  - The need for the MEng IE should be better explained in the proposal documents given that students can already complete the environmental engineering and project management sub-specializations, and, in particular, it should be explained what problems will be solved by creating the MEng IE
  - A note be added after the table in the "Student Demand Analysis" section to explain the probable reason(s) for a drop in the total number of applications in 2016 and 2017
  - Consultation with students should take place to gauge interest/demand for an interdisciplinary program, such as the MEng IE
  - The "Labour Market Analysis" section should be strengthened, and the inclusion of letters of support from industry would be beneficial
  - More information be included in the proposal on what comparative programs and how the creation of a MEng IE aligns with current practices in the field
- The Committee decided not to proceed with the motion given the reported substantial concerns that remain to be addressed at the Faculty-level regarding this proposal and the Committee's requests for further information to be included in the proposal

Secretary's Note: The motion for this item was withdrawn.

## 4. <u>Recommendation of the Creation of a Post-Baccalaureate Certificate in Fundamental Data Science</u> <u>and Analytics and a Post-Baccalaureate Diploma in Data Science and Analytics</u>

## 5. <u>Recommendation of the Creation of Certificates in Information Security: a Post-Baccalaureate</u> <u>Certificate in Network Security and a Post-Baccalaureate Certificate in Software Security</u>

Secretary's Note: Agenda Items 4 and 5 were addressed together.

Documentation for this item was circulated with the Agenda. Frank Maurer, Faramarz Samavati, Philip Fong, and Raymond Patterson, presented these items.

Highlights:

 The proponents explained the rationale for the creation of a Post-Baccalaureate Certificate in Fundamental Data Science and Analytics, a Post-Baccalaureate Diploma in Data Science and Analytics, a Post-baccalaureate Certificate in Network Security, and a Post-baccalaureate Certificate in Software Security, including increasing demand from industry for data scientists and information security specialists, and demand from professionals looking for retraining opportunities

- It was reported that the proponents are also developing proposals for professional Masters programs for both streams and that the Post-Baccalaureate Certificates and the Post-baccalaureate Diploma are stackable credentials
- In response to questions, it was explained that:
  - The admission requirements require students to have taken some courses in relevant subject areas
  - The estimated enrolment numbers are based on consultation with students, industry, and from existing program numbers, and it is anticipated that there will be no issues filling spots
  - The enrolment numbers are based on Canadian students, but it is believed, that once the programs are established, there could be international interest
  - Once the programs are established there may also be opportunities for other Faculties to be involved, and it was suggested that interested Faculties contact the Data Science Task Force for more information
  - The programs will be advertised in advance as being either full-time or part-time to ensure that a cohort will be established for each type of registration. It will also be possible to offer courses over evenings, weekends or in block week formats to ensure accessibility.
  - Students can attend convocation and graduate with a Post-Baccalaureate Certificate or Diploma
- The Committee discussed:
  - The admission requirements for the programs, in particular relating to students who do not have the required subject area courses or for individuals who need to refresh. It was explained that the proponents are exploring options to develop preparatory courses, possibly through Continuing Education.
  - The proposed tuition for the Post-Baccalaureate Certificates and the Post-baccalaureate Diploma, and it was confirmed that the tuition is in line with similar programs and that the programs are intended to be offered on a cost recovery basis
- The Committee suggested that the entrance requirements for the Post-baccalaureate Certificate in Fundamental Data Science and Analytics and the Post-baccalaureate Diploma in Data Science and Analytics be changed from "one course in either calculus or linear algebra or equivalent work experience" to "one course in either calculus or linear algebra or equivalent"

### Moved/Seconded

That the Graduate Academic Programs Subcommittee recommend that the Academic Planning and Priorities Committee approve the creation of a Post-baccalaureate Certificate in Fundamental Data Science and Analytics, as set out in the proposal provided to the Committee.

Carried

### Moved/Seconded

That the Graduate Academic Programs Subcommittee recommend that the Academic Planning and Priorities Committee approve the creation of a Post-baccalaureate Diploma in Data Science and Analytics, as set out in the proposal provided to the Committee.

Carried

### Moved/Seconded

That the Graduate Academic Program Subcommittee recommend that the Academic Planning and Priorities Committee approve the creation of a Post-baccalaureate Certificate in Network Security, as set out in the proposal provided to the Committee.

Carried

### Moved/Seconded

That the Graduate Academic Program Subcommittee recommend that the Academic Planning and Priorities Committee approve the creation of a Post-baccalaureate Certificate in Software Security, as set out in the proposal provided to the Committee.

Carried

### 6. Other Business

There was no other business.

#### 7. Adjournment

#### Moved/Seconded

That the Graduate Academic Program Subcommittee adjourn the November 29, 2017 meeting.

Carried

The meeting was adjourned at 3:40 p.m.

Susan Belcher University Secretary