SFU GRADUATE AND POSTDOCTORAL STUDIES

MEMORANDUM

ATTENTION	Senate	**DATE**	June 18, 2020
FROM	Jeff Derksen, Chair of Senate Graduate Studies Committee (SGSC)		
RE:	Course Changes		

For information:

Acting under delegated authority at its meeting of June 8, 2020, SGSC approved the following curriculum items, effective **Spring 2021:**

Faculty of Applied Science

School of Computing Science

1) Course change (title, description, prerequisite, equivalency): CMPT 756
2) Course change (description, prerequisite): CMPT 767

Senators wishing to consult a more detailed report of curriculum revisions may do so on the Senate Docushare repository at https://docushare.sfu.ca/dsweb/View/Collection-12682

MEMORANDUM

Attention   Dr. Jeff Derksen   Date   May 5, 2020
    Dean, Graduate Studies

From   Dr. Parvaneh Saeedi   psaeedi@sfu.ca
    Faculty of Applied Science, Graduate Studies Committee

Re: FAS-CMPT: Course Change for Professional Computer Science

FAS School of Computing Science is proposing the following changes:

1) ~~Adding new graduate computing science courses to the program~~
2) Making CMPT 756 a required course which all students in the program need to take.
3) CMPT 756 will replace the section of the calendar where students are required to take one of require CMPT 705, CMPT 706, CMPT 757, CMPT 813, CMPT 780
4) ~~Removal of CMPT 705, CMPT 706 and CMPT 813 from course offerings~~

  Rationale for change:

1) ~~The new graduate computing science courses will be relevant to students in the Professional Computer Science program~~
2) ~~To provide a solid foundation in algorithms and software engineering to all students within the program~~
3) ~~To further unify the specializations within the program and strengthen the knowledge foundation of all students of the program.~~
4) CMPT 756 will cover relevant content for Professional Computer Science students which appears in CMPT 705 and CMPT 706. CMPT 756 will also cover topics which are relevant to students in this program and are not captured by CMPT 705 and CMPT 706. CMPT 813 course is seldom offered (offered 3 times in roughly 15 terms).

Please let me know if there are any questions or concern.

Regards,
Parvaneh Saeedi

MEMO

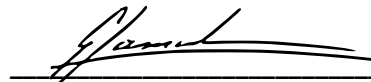| ATTENTION Parvaneh Saeedi, Associate Director	TEL
FROM Ghassan Hamarneh, Graduate Program Director	
RE ~~PMP Calendar Entry and~~ CMPT 756 Course Change	
DATE May 27th 2020	TIME

COURSE CHANGE PROPOSAL - Effective Spring 2021

CMPT 756

The title, description and prerequisites ofthis course are being changed to make the course relevant to students across all three specializations in the Professional Computer Science Master of Science program. The updated course will provide a solid foundation in algorithms and software engineeringto these students.

~~**CALENDAR ENTRY CHANGE – Effective Spring 2021**~~

- ~~Addition of new graduate computing science courses to the program~~
- ~~CMPT 756 will become a required course which all students in the program need to take.~~
- ~~CMPT 756 will replace the section of the calendar where students are required to take one of CMPT 705, 706, 757, 813, or 780.~~
- ~~Cmpt 705, 706, and 813 are removed as course offerings from the **program requirements** for the Master of Professional Computer Science (Master of Science).~~

_____

Ghassan Hamarneh
Graduate Chair, School of Computing Science

SFU SIMON FRASER UNIVERSITY
GRADUATE STUDIES & POSTDOCTORAL FELLOWS

Graduate Course Change

Attach a separate document if more space is required.

Course Subject/Number CMPT 756	Units 3	Effective Term and Year Spring 2021

Course Title	Systems for Big Data

Rationale for Change:

In the current Professional Computer Science program's curriculum, the students in all three specializations lack training in distributed systems and cloud architecture. Students also have less familiarity with algorithms. This course is being updated to fill these gaps.

Proposed Changes (Check all that apply)

☐ Course number ☐ Units* ☑ Title ☑ Description ☑ Prerequisite ☑ Other Equivalency

Complete only the fields to be changed

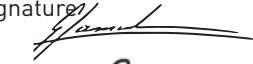| FROM	TO
Course Subject/Number	Course Subject/Number
Units	Units*
Course Title Systems for Big Data	Course Title (max 100 characters) Distributed and Cloud Systems
Course Short Title Systems for Big Data	Course Short Title (max 30 characters) Distributed and Cloud Systems
Description From health care to social media the world generates a tremendous amount of data every day, often too much to be processed on a single computer or even some-times a single data centre. In this graduate seminar we will learn about technologies and systems behind Big Data. In particular, we will discuss what challenges exist in processing and storing massive amounts of data. We will explore how these challenges are being solved in real-world systems as well as the limitations inherent in these designs.The evolution of these technologies will be explored by reading both current and historically significant research papers.	Description Students will learn principles and techniques for processing various data types at real-world scale using distributed and cloud computing resources. Fundamentals of approximation and distributed algorithms will be covered. Handling of large-scale image and video datasets, massive graphs, as well as structured and unstructured text datasets will be studied. Designing and building robust software systems using multicore processors, processor accelerators (e.g., Graphics Processing Units) and cloud resources will be introduced.
Prerequisite Operating Systems (CMPT 300) and Data Base Systems (CMPT 354), or equivalents.	Prerequisite None
Other 　　Equivalency: Students with credit for CMPT 886 when offered as a Special Topics course in Big Data may not take this course for further credit.	Other 　　Equivalency: none

* Program requirements may need to be revised when course units are changed. Please review the calendar and submit any relevant program revisions resulting from this course change.

REMINDER: All course changes must be identified on a cover memo and confirmed as approved when submitted to FGSC and SGSC.
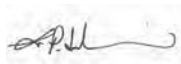
▶ CONTACT PERSON

Department / School / Program	Contact name	Contact email
School of Computing Science	Jiannan Wang	jnwang@sfu.ca

▶ DEPARTMENTAL APPROVAL

Department Graduate Program Committee	Signature	Date
Ghassan Hamarneh		Mar. 8, 2020
Department Chair	Signature	Date
Mohamed Hefeeda		8 March 2020

▶ FACULTY APPROVAL

Faculty Graduate Studies Committee (FGSC)	Signature	Date
Parvaneh Saeedi		May 5, 2020

▶ SENATE GRADUATE STUDIES COMMITTEE APPROVAL

Senate Graduate Studies Committee (SGSC)	Signature	Date
Jeff Derksen		June 18, 2020

ADMINISTRATIVE SECTION (for DGS office only)
Course Attribute: _____
Course Attribute Value: _____
Instruction Mode: _____
Attendance Type: _____

If different from regular units:
Academic Progress Units: _____
Financial Aid Progress Units: _____

MEMORANDUM

Attention   Dr. Jeff Derksen   Date   June 1, 2020
      Dean, Graduate Studies

From   Dr. Parvaneh Saeedi   psaeedi@sfu.ca
      Faculty of Applied Science, Graduate Studies Committee

Re: FAS-CMPT: ~~New course proposal (CMPT 863)~~ and Course Change (CMPT 767)

1. A Special Topics course (CMPT 888, CMPT 985) has been piloted by professor Chilana since Spring 2017, with increased demand for each offering. FAS School of Computing Science is proposing to make this a permanent course offered to graduate students under CMPT 863.

2. The description of CMPT 767 is changed to eliminate the prerequisites that no longer exist

Please let me know if there are any questions or concerns.

Regards,
Parvaneh Saeedi

COMPUTING SCIENCE

MEMO

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ATTENTION	**Parvaneh Saeedi, Associate Director**
FROM	Ghassan Hamarneh, Graduate Program Director
RE	Course Change – CMPT 767
DATE	March 27, 2020

COURSE CHANGE PROPOSAL - Effective Spring 2021

CMPT 767 – Visualization

The description of this course is being changed to eliminate the prerequisites that no longer exist.

If you have any questions, please let me know.

Ghassan Hamarneh
Graduate Chair, School of Computing Science

SFU SIMON FRASER UNIVERSITY
GRADUATE STUDIES & POSTDOCTORAL FELLOWS

Graduate Course Change

Attach a separate document if more space is required.

Course Subject/Number CMPT 767	Units 3	Effective Term and Year Spring 2021

Course Title Visualization

Rationale for Change: Removing prerequisites as they no longer exist

Proposed Changes (Check all that apply)

☐ Course number ☐ Units* ☐ Title ☑ Description ☑ Prerequisite ☐ Other _____

Complete only the fields to be changed

FROM	TO
Course Subject/Number	Course Subject/Number
Units	Units*
Course Title	Course Title (max 100 characters)
Course Short Title	Course Short Title (max 30 characters)
Description Advanced topics in the field of scientific and information visualization are presented. Topics may include: an introduction to visualization (importance, basic approaches and existing tools), abstract visualization concepts, human perception, visualization methodology, 2D and 3D display and interaction and their use in medical, scientific, and business applications.	Description Advanced topics in data visualization. Topics covered may include principles of data representation, data presentation, data interaction, data physicalization, data and visualization literacy, data visualization and diversity, open data, and public and personal data visualization.
Prerequisite CMPT 316, 461 or equivalent (by permission of instructor).	Prerequisite None
Other	Other

* Program requirements may need to be revised when course units are changed. Please review the calendar and submit any relevant program revisions resulting from this course change.

REMINDER: All course changes must be identified on a cover memo and confirmed as approved when submitted to FGSC and SGSC.
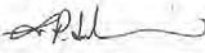
▶ CONTACT PERSON

Department / School / Program	Contact name	Contact email
School of Computing Science	Sheelagh Carpendale	sheelagh@sfu.ca

▶ DEPARTMENTAL APPROVAL

Department Graduate Program Committee	Signature	Date
Ghassan Hamarneh		28 Mar. 2020
Department Chair	Signature	Date
Mohamed Hafeeda		28 March 2020

▶ FACULTY APPROVAL

Faculty Graduate Studies Committee (FGSC)	Signature	Date
Parvaneh Saeedi		June 1, 2020

▶ SENATE GRADUATE STUDIES COMMITTEE APPROVAL

Senate Graduate Studies Committee (SGSC)	Signature	Date
Jeff Derksen		June 18, 202

ADMINISTRATIVE SECTION (for DGS office only)
Course Attribute: _____
Course Attribute Value: _____
Instruction Mode: _____
Attendance Type: _____

If different from regular units:
Academic Progress Units: _____
Financial Aid Progress Units: _____