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MEMORANDUM

ATTENTION	Senate	**DATE**	June 6, 2014
FROM	Gordon Myers, Chair Senate Committee on Undergraduate Studies	**PAGES**	1/1
RE:	Faculty of Applied Sciences (SCUS 14-11)		

For information:

Acting under delegated authority at its meeting of June 5, 2014 SCUS approved the following curriculum revision effective Spring 2015.

1. School of Computing Science (REVISED SCUS 14-11b)

   (i) Requirement changes to the SFU/ZJU Dual Degree Program

REVISED SCUS 14-11b

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MEMORANDUM

ATTENTION	Senate Committee on Undergraduate Studies	**DATE**	May 23, 2014
FROM	Ed Park, Associate Dean	**PAGES**	
RE:	Calendar Revisions for SFU/ZJU Dual Degree CMPT Program		

This is the updated calendar revisions for the SFU/ZJU Dual Degree Program in Computing Science, which was tabled back in the March SCUS meeting. The proposed revisions pertain to (i) broad-based admission, (ii) documentation of foundational courses that include Chinese courses, (iii) flexibility on residency requirements, and (iv) documentation of the rules for satisfying WQB requirements. In this revised submission, the previous confusion about the broad-based admission language has been sorted out in consultation with the Admissions Office.

Thank you,

Edward Park
Associate Dean

SFU/ZJU Dual Degree Computing Science Program Revisions
Robert D. Cameron and Ze-Nian Li
May 23, 2014

Introduction

The following calendar revisions are proposed for the SFU/ZJU Dual Degree Program in Computing Science. The revisions include the following elements.

1. Broad-based admission: all qualified applicants for direct admission to the program will be considered by the DDP admissions committee of the School of Computing Science on broad-based criteria. Applicants for admission by internal transfer from another SFU program should seek the advice of an Applied Sciences advisor.
2. Foundational curriculum details: the details of foundational curriculum for SFU-entry students, including the approved DDP Chinese Language courses, are spelled out.
3. The role of the ZJU lower division course plans is clarified, including the important note that not all ZJU courses automatically count for SFU credit.
4. The rules for satisfaction of WQB requirements are spelled out based on previously-approved Senate document S.08-22. In accord with that document, SFU-entry students completing the foundational SFU courses (incl. PHIL 120W) and the full lower course plans at ZJU (including Chinese language and culture courses) will have one B-Sci course remaining as well as their upper division writing requirement. Students exempted from the full Chinese language and culture courses may require one additional B-Hum and B-Soc course at SFU.
5. Residency requirements are updated to allow some upper division work at ZJU, subject to at least 30 of 45 required upper division credits to be completed at SFU.

Current	Proposed
# Computing Science Dual Degree ~~Major~~	# Computing Science Dual Degree Program
Bachelor of Science	Bachelor of Science
The school offers a dual program with Zhejiang University (ZJU) in China that leads to the ~~acquisition~~ of two bachelor's degrees – a bachelor of science from Simon Fraser University (SFU) and a bachelor of engineering from Zhejiang University.	The school offers a dual **degree** program **(DDP)** with Zhejiang University (ZJU) in China that leads to the **awarding** of two bachelor's degrees – a bachelor of science from Simon Fraser University (SFU) and a bachelor of engineering from Zhejiang University.
## Admission Requirements	## Admission Requirements
~~This is a direct admission program. Simon Fraser University applicants indicate their interest on the *Application for Undergraduate Admission to Simon Fraser University* by selecting the "BSc-CMPT (Simon Fraser University-Zhejiang University Dual Degree)" under Program/Plan in~~	**Students may be admitted directly upon entry to Simon Fraser University (secondary school applicants) or indirectly by transfer from another SFU program.** Admission is competitive and enrolment is limited. **Decisions will be made on the basis of a student's admission average in**

Current	Proposed
~~the School of Computing Science, Faculty of Applied Sciences.~~ Admission is competitive and enrolment is limited. The program begins each fall term. Applicants must meet the standard requirements for admission to Simon Fraser University and the School of Computing Science. ~~Concurrent to the Simon Fraser University admission application,~~ students must also submit a "Statement of Interest" to the Simon Fraser University-Zhejiang University Admissions Committee, School of Computing Science. Applicants will be selected based on their "Statement of Interest" and their academic standing. For more details, consult an Applied Sciences advisor.	**combination with the required supplemental information. Admission for secondary school applicants is a two-step process; Applicants must meet the competitive admission average calculated on specific secondary school coursework (http://www.sfu.ca/students/admission-requirements.html) and they must also submit the following materials through the DDP website (https://services.cs.sfu.ca/ddp/): (a) a completed Statement of Interest Form, (b) a resume outlining school achievements, extracurricular activities, and employment history if any, and (c) names, titles and email-addresses of two referees. At least one of the referees must be from a teacher/counselor/principal who can comment on academic potential and maturity for the Dual Degree Program.** The program begins each fall term**, but students may be admitted in any term.** **Internal transfer applicants should seek the advice of an Applied Sciences advisor for academic and language-placement assessment.**
Continuation Requirements *[unchanged]* **Prerequisite Grade Requirement** *[unchanged]*	**Continuation Requirements** *[unchanged]* **Prerequisite Grade Requirement** *[unchanged]*
	Program Overview **Simon Fraser University Students** Students admitted first to Simon Fraser University complete a five-year curriculum typically starting with 30 units of foundational and Mandarin courses at SFU. Students then spend two years at Zhejiang University typically completing 45-60 units including all lower division requirements. Upon returning to SFU, students typically complete their degree programs with 30-45 units

Current	Proposed
	of upper division computing science courses. ### Zhejiang University Students Students admitted first to Zhejiang University complete a four-year curriculum starting with two years including all lower division courses required by the Dual Degree Program curriculum at Zhejiang University (typically 60-66 units). Zhejiang students then travel to Simon Fraser University to complete the remaining two years of course work (typically 54-60 units) including 39-45 units of upper division computing science courses.
## Program Requirements For specific information about the program and course plans, consult an Applied Sciences Advisor. ### Simon Fraser University Students **Prep / Year 0** Students with no previous knowledge of Chinese languages will complete a five year curriculum with customized intensive Mandarin courses at Simon Fraser University in addition to some foundational courses in the Prep/0th year, and Chinese immersion in the summer. ### Simon Fraser University and Zhejiang University Students **Year 1 and Year 2** Zhejiang University students complete lower division courses required by the Dual Degree Program curriculum at Zhejiang University (equivalent of 60 Simon Fraser University units). Simon Fraser University students complete lower division courses required by the Dual Degree Program curriculum at Simon Fraser University (Year 0) and Zhejiang University (Year 1 and 2)	## Program Requirements ### Lower Division Requirements ### Simon Fraser University Students Students starting at Simon Fraser University complete 15 units of foundational courses plus customized Mandarin courses prior to attending Zhejiang University. Course substitutions may be approved in consultation with an advisor. **Foundational Courses** CMPT 120 - Introduction to Computing Science and Programming I (3) MATH 151 - Calculus I (3) MATH 152 - Calculus II (3) MATH 240 - Algebra I: Linear Algebra (3) PHIL 120W - Introduction to Moral Philosophy (3) **Mandarin Courses** Students with no previous knowledge of Chinese languages complete the following courses. CHIN 180 - Intensive Mandarin Chinese for Beginners I (3) CHIN 181 - Intensive Mandarin Chinese for Beginners II (3) CHIN 182 - Mandarin Chinese Conversation (3) CHIN 280 - Intensive Mandarin Chinese for

Current	Proposed
(equivalent of at least 60 Simon Fraser University units).	Beginners III (3) CHIN 281 - Intensive Mandarin Chinese for Beginners IV (3) Students with some previous knowledge of Chinese languages are assessed for placement by the DDP Chinese language instructor. Students may be required to take one or more of the following courses. CHIN 190 - Heritage Mandarin Chinese I (3) CHIN 191 - Heritage Mandarin Chinese II (3) CHIN 290 - Heritage Mandarin Chinese III (3) CHIN 291 - Heritage Mandarin Chinese IV (3) Upon completion of Mandarin courses at Simon Fraser University, students are further assessed by the DDP Chinese Language instructor. Some students may be exempted from further Mandarin studies by taking and passing the HSK level 5 Exam with a score of 180 or higher. All other students must take the Zhejiang non-credit Mandarin summer immersion program prior to commencing academic study at Zhejiang University. **Zhejiang University Course Plans** Students complete lower division requirements following one of the two-year Dual Degree course plans set by Zhejiang University. These plans may include additional Mandarin instruction dependent on language assessment. All plans meet the minimum unit residency requirements of Zhejiang University including the core computing science course work. However, some electives used to satisfy Zhejiang university requirements may not be allowed for SFU credit. The SFU DDP program advisor will have lists of Zhejiang elective courses that are pre-approved for SFU credit. Block DDP credit will appear on the SFU transcript for course work completed at Zhejiang University. Students receive 40 units of block DDP credit for the core courses including 3 units of B-Sci credit, 6 units of Q credit and 3 units of B-Soc credit. All course plans include at least 6

Current	Proposed
	required units of additional block credit including 3 units of B-Hum and 3 units of B-Soc credit. Students required to take the additional Chinese language and culture courses receive up to 9 units of further block credit including 3 units of B-Hum and 3 units of B-Soc credit. Block credit may be assigned for additional pre-approved electives, while electives not on the approved list may be individually assessed. Courses completed at Zhejiang University are not transfer units. They are marked as DDP units on the Simon Fraser University transcript. **Zhejiang University Students** After successful completion of the two-year Dual Degree program curriculum at Zhejiang University, Zhejiang University students receive 60 units of block DDP credit on the SFU transcript plus up to 6 additional units of assigned upper division CMPT credit. The block DDP credit includes 6 units of B-Hum credit, 6 units of B-Soc credit, 6 units of B-Sci credit, 6 units of B-undesignated and 6 units of Q credit. Zhejiang students must complete 6 units of W credit at Simon Fraser University.
Year 3 and Year 4 All Simon Fraser University and Zhejiang University students complete 60 units at Simon Fraser University (including a minimum of 45 upper division units). Core courses required for Simon Fraser University students in Prep/Year 0 and courses for all students required by Zhejiang University in Years 1 and 2 are available from an Applied Sciences Advisor. **Dual Degree Credential** Students will receive two degrees, one each from Simon Fraser University and Zhejiang University after completing lower division courses at Zhejiang University and upper division courses at Simon Fraser University.	**Upper Division Requirements** All SFU and ZJU students complete the following upper division courses or equivalent. Students should consult an advisor before commencing upper division requirements. Course substitutions may be approved in consultation with an advisor. **Breadth Requirement** Six courses from five of the six Table 1 areas of concentration must be completed including CMPT 300 Operating Systems I (3) CMPT 307 Data Structures and Algorithms (3) CMPT 371 Data Communications and Networking (3) CMPT 354 Database Systems I (3) **Depth Requirement** Twelve units of additional CMPT courses numbered CMPT 400 or above must be completed

Current	Proposed
All students complete the following Simon Fraser University upper division courses CMPT 300 - Operating Systems I (3) CMPT 307 - Data Structures and Algorithms (3) CMPT 320 - Social Implications - Computerized Society (3) CMPT 354 - Database Systems I (3) CMPT 371 - Data Communications and Networking (3) CMPT 376W - Technical Writing and Group Dynamics (3) MACM 316 - Numerical Analysis I (3) two 300 division CMPT courses from two different Table I computing science concentrations as specified here: artificial intelligence, computer graphics and multimedia, or programming languages and software (See Table I computing science concentrations below) four 400 division or higher CMPT courses from Table I Computing Science Concentrations CMPT 497 - Dual Degree Program Capstone Project (6)	(excluding CMPT 415, 416 and 498, which may be included by special permission). **Additional Requirements** CMPT 320 Social Implications - Computerized Society (3) CMPT 376W - Technical Writing and Group Dynamics (3) MACM 316 Numerical Analysis I (3) CMPT 497 Dual Degree Program Capstone Project (6)* * CMPT 497 can be replaced by two approved CMPT 400 level courses (6 units)
Table I – Computing Science Concentrations *[unchanged]*	**Table I – Computing Science Concentrations** *[unchanged]*
Minimum Unit and Residency Requirement Students must complete at least 54 units at Zhejiang University including at least 34 computing science core course units. Students must also complete at least 54 units at Simon Fraser University. Students admitted from Zhejiang University must complete at least 39 upper division units of these minimum 54 units at Simon Fraser University. Courses completed at Zhejiang University are not transfer units. They are marked as DDP units on the Simon Fraser University transcript.	**Minimum Unit and Residency Requirements** Students must complete a minimum of 120 SFU-equivalent units overall including at least 45 upper division units. Students must complete at least 54 ZJU units at Zhejiang University including at least 34 computing science core course units. Students must also complete at least 54 units at Simon Fraser University including at least 30 upper division computing science course units.