SFU OFFICE OF THE ASSOCIATE VICE-PRESIDENT, ACADEMIC

MEMORANDUM

ATTENTION	Senate	**DATE**	October 15, 2021
FROM	Wade Parkhouse, Chair	**PAGES**	1/1
	Senate Committee on Undergraduate Studies		
RE:	New Course Proposal		

For information:

Acting under delegated authority at its meeting of October 14, 2021 SCUS approved the following curriculum revision effective Summer 2022.

a. Faculty of Applied Sciences (SCUS 21-68)

1. School of Computing Science

    (i) New Course Proposals: CMPT 403 – 3, System Security and Privacy

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.

COURSE SUBJECT CMPT   **NUMBER** 403

COURSE TITLE LONG — for Calendar/schedule, no more than 100 characters including spaces and punctuation

System Security and Privacy

COURSE TITLE SHORT — for enrollment/transcript, no more than 30 characters including spaces and punctuation

System Security and Privacy

CAMPUS where course will be normally taught: ☑ Burnaby ☐ Surrey ☐ Vancouver ☐ Great Northern Way ☐ Off campus

COURSE DESCRIPTION — 50 words max. Attach a course outline. Don't include WQB or prerequisites info in this description box.

Starting from cybersecurity principles, students will learn to protect systems from attacks on data confidentiality, integrity, system availability, and user privacy. By modeling system security, students will learn to find weaknesses in software, hardware, networks, data storage systems, and the Internet, and identify current security practices to protect these systems.

REPEAT FOR CREDIT ☐ YES ☑ NO   Total completions allowed [   ]   Within a term? ☐ YES ☐ NO

LIBRARY RESOURCES

NOTE: Senate has approved (S.93-11) that no new course should be approved by Senate until funding has been committed for necessary library materials. Each new course proposal must be accompanied by the email that serves as proof of assessment. For more information, please visit www.lib.sfu.ca/about/overview/collections/course-assessments.

RATIONALE FOR INTRODUCTION OF THIS COURSE

This course introduces the many aspects of system security and privacy in a holistic manner; any vulnerability in a system is a potential exploit and a cybersecurity professional needs to be able to analyze any such weakness. As a 4th year cybersecurity course that connects software security, cryptography, data security, and network security, it fills a niche in the current CMPT program. This course also introduces important privacy concepts and issues that are increasingly concerning in a data-rich world. We also cover legal and ethical aspects of cybersecurity and how technical solutions interact with them.

Interest in this course may also bolster intake for the Cybersecurity Specialization of the Master of Science in the Professional Computer Science Program.

SCHEDULING AND ENROLLMENT INFORMATION

Effective term and year (e.g. FALL 2016)   SUMMER 2022

Term in which course will typically be offered   ☐ Spring   ☑ Summer   ☐ Fall

Other *(describe)* [   ]

Will this be a required or elective course in the curriculum?   ☐ Required   ☑ Elective

What is the probable enrollment when offered?   Estimate: 80

UNITS

Indicate number of units: 3

Indicate no. of contact hours: 3   Lecture   0   Seminar   1   Tutorial   0   Lab   0   Other; explain below

OTHER

[   ]

FACULTY

Which of your present CFL faculty have the expertise to offer this course?

Tao Wang

WQB DESIGNATION

(attach approval from Curriculum Office)

[   ]

PREREQUISITE AND / OR COREQUISITE

CMPT 300 with a minimum grade of C-

EQUIVALENT COURSES [For more information on equivalency, see Equivalency Statements under Information about Specific Course components.]

1. SEQUENTIAL COURSE [is not hard coded in the student information management system (SIMS).]

Students who have taken (*place relevant course(s) in the blank below (ex: STAT 100)*) **first** may not then take this course for further credit.

2. ONE-WAY EQUIVALENCY [is not hard coded in SIMS.]

(*Place relevant course(s) in the blank below (ex: STAT 100)*) will be accepted in lieu of this course.

3. TWO-WAY EQUIVALENCY [is hard coded and enforced by SIMS.]

Students with credit for (*place relevant course(s) in the blank below (ex: STAT 100)*) may not take this course for further credit.

Does the partner academic unit agree that this is a two-way equivalency? ☐ YES ☐ NO
Please also have the partner academic unit submit a course change form to update the course equivalency for their course(s).

4. SPECIAL TOPICS PRECLUSION STATEMENT [is not hard coded in SIMS.]

FEES

Are there any proposed student fees associated with this course other than tuition fees? ☐ YES ☑ NO

COURSE – LEVEL EDUCATIONAL GOALS (OPTIONAL)

RESOURCES

List any outstanding resource issues to be addressed prior to implementation: space, laboratory equipment, etc:

All resources including suggested readings will be openly available for students through the course website.

OTHER IMPLICATIONS

Final exam required ☑ YES ☐ NO

Criminal Record Check required ☐ YES ☑ NO

OVERLAP CHECK

Checking for overlap is the responsiblity of the Associate Dean.

Each new course proposal must have confirmation of an overlap check completed prior to submission to the Faculty Curriculum Committee.

Name of Originator

Tao Wang