FAIRLEIGH DICKINSON UNIVERSITY
Vancouver Campus

Gildart Haase School of Computer Sciences and Engineering

Master of Science in Applied Computer Science

Program Evaluation Summary

May 12, 2025

Master of Science in Applied Computer Science (MSACS)

Strengths

1. **Program Relevance:** The program is offered at a geographical area where the job market for IT professionals is prevalent.

2. **Program Quality:** The program provides excellent opportunities for continuation of education at graduate level, training, and conducting research in the computing field.

3. **Research Opportunities:** Students willing to perform research could choose the other electives specialization that has two research and thesis-based courses.

4. **Internship Opportunities:** Each of the specializations in the MSACS program has internship courses that would help students gain valuable industry experience.

5. **Applied Nature:** The content in the courses is practical with students required to complete projects and hands-on exercises.

6. **Industry Connections:** The MSACS program has a Program Advisory Committee, whose members are from industry, regularly providing inputs regarding employment trends.

Program Review

The Master of Science in Applied Computer Science (MSACS) program was reviewed by a panel of external academics comprising of Dr. Mirela Gutica (BCIT), Dr. Mehrdad Oveisi (UBC), and Dr. Amir Amintabar (BCIT) in 2024. The panel chaired by Dr. Gutica reviewed the Self-Study Report (SSR) of the MSACS program and then conducted a site visit on the FDUV Campus and met with administrators, faculty, staff, and students of the program. The review panel reported that the SSR was professionally written and that they were impressed with the program. The panel also provided a list of recommendations and feedback on the program regarding faculty, students, curriculum, and other aspects of the program and of the FDUV Campus.

Challenges

1. **Research Funding:** Because FDU Vancouver is an American university in Canada, the university does not qualify for Canadian or US Tri-Council research funding.

2. **Additional Resources:** Lack of student tutors and markers due to budgetary constraints.

3. **Foundation Courses:** Since students from non-STEM background could be admitted into the program, there is a need for additional foundation courses to equip them with coding skills.

4. **Class Size:** The current class size of 50 students is quite large for pedagogical reasons.

Actions Taken

1. **Professional Development:** Tenure-track and tenured faculty members get research release time of two courses per year every year. They can also apply for research grants through the Grant-in-Aid program at FDU.

2. **Course Support:** FDUV will consider hiring more senior students to serve as peer tutors to help their fellow students and markers to assist the instructors.

3. **Preparatory Courses:** The MSACS Curriculum Committee will review the foundational courses to ensure that those courses prepare students well for the MSACS program. Special attention will be given to object-oriented programming component of the program.

4. **Pedagogical Experience:** FDUV will try to gradually reduce the class size of MSACS courses from 50 to a maximum of 25 students, subject to budget and faculty resource constraints.

Program Response

1. We have clarified on the MSACS website that students wishing to do research and thesis could choose the other electives specialization after completing their core courses.

2. We have renamed two of the core courses in the program based on reviewer's recommendation.

3. We have added an additional free elective into the other electives specialization based on reviewer's recommendation.

4. An additional foundation course has been added into the program to help students with their programming skills.

5. FDUV Campus regularly conducts job fairs, invites industry professionals to give talks, and assists students in obtaining internship.