Notice of the Final Oral Examination
for the Degree of Master of Applied Science

of

CHENG LEI

BSc (Beijing University of Technology, 2008)

“Student Performance Prediction Based on Course Grade Correlation”

Department of Electrical and Computer Engineering

Thursday, March 7, 2019
10:00 A.M.
Engineering Office Wing
Room 230

Supervisory Committee:
Dr. Kin Fun Li, Department of Electrical and Computer Engineering, University of Victoria (Supervisor)
Dr. Fayez Gebali, Department of Electrical and Computer Engineering, UVic (Member)

External Examiner:
Dr. Alex Thomo, Department of Computer Science, UVic

Chair of Oral Examination:
Dr. Mauricio Garcia-Barrera, Department of Psychology, UVic

Dr. David Capson, Dean, Faculty of Graduate Studies
Abstract

This research explored the relationship between an earlier-year technical course and one later year technical course, for students who graduated between 2010 and 2015 with the degree of bachelor of engineering. The research only focuses on the courses in the program of Electrical Engineering (EE) at the University of Victoria (UVic). Three approaches based on the two major factors, coefficient and enrolment, were established to select the predictors including Max(Pearson Coefficient), Max(Enrolment), and Max(P), the combination of the two factors. The prediction algorithm used is linear regression and the prediction results were evaluated by Mean Absolute Error (MAE) and prediction precision. The results show that there is no strong evidence that the techniques and methodologies used in this research could be used reliably for student performance in one course based on another course.