



PROJECT SNAPSHOT

Expansion of pathways in engineering

Type: Pathways Development

Project Number: 2019-36 or P1936

Project Lead: Algonquin College

Collaborators: Algonquin College of Applied Arts and Technology (Lead Institution), University of Ottawa

Project Summary

To enhance student mobility in the Ottawa area, this project will support Algonquin College and the University of Ottawa in establishing reciprocal pathways to help students enhance their skills in STEM. This project will focus on creating a bilateral pathway between Algonquin College's Civil Engineering Technology Advanced Diploma and the University of Ottawa's Bachelor of Applied Science in Civil Engineering.

Project Rationale

The exploration of student mobility between Algonquin College and the University of Ottawa identified that students were interested in obtaining a technical education after completing theory-based learning at a university. This was demonstrated by an increase in applicants who have completed prior postsecondary education (both incomplete and complete programs) from uOttawa to Algonquin programs. Similarly, it was noted that graduates from Algonquin were seeking degree completion options at uOttawa. This project aimed to formalize these pathways to reduce barriers for students. Additionally, statistical analyses at uOttawa had also

demonstrated better retention of local students compared to non-local students, further motivating the creation of formalized pathways between Algonquin and uOttawa.

Additionally, applicant data from the Ontario College Application Centre (OCAS) indicated that over 550 students with previous education at the University of Ottawa applied to continue studies at Algonquin College in the 2017/2018 academic year. Data collected by uOttawa indicated that in the last two years, almost 190 new students with previous education at Algonquin College registered annually (out of 900 who applied) in all levels of undergraduate programs, as well as in graduate programs and with special student status. This preliminary review of student movement between the two institutions supports the relevance of previously developed pathways and suggests several opportunities to formalize articulations for pathways that students are forging themselves. Due to the lack of formal pathways, students are not receiving the maximum number of course exemptions possible, as well as potentially differing numbers of course exemptions. Creating these formal pathways would not only facilitate the transfer of students and ensure the greatest recognition of their past studies but will also assist in the tracking of and the provision of support services to these students.

Outcomes

1. The development of formal pathways between Algonquin College and the University of Ottawa, specifically in STEM-related programs. The indicator of success was the completion of the a formal pathway.
2. This outcome was achieved by developing a list of courses recognized for transfer credit between both institutions as well as a program sequence for students to follow.
3. Main project report: detailed report that captures project activities and recommendations. The indicator of success was the completion of a project report which summarized the project activities, processes and outcomes. This outcome was achieved.
4. Pathway snapshot: document that shares the pathways developed, and their potential impact for students. The indicator of success was the completion of a pathway snapshot that summarizes the pathway developed as well as describes its positive impact on students. This outcome was achieved.

Pathway(s) Development

Key Steps

The key steps taken to explore pathway viability and develop the pathway are detailed in section "3.0 Development of Transfer Pathways" in the Final Report document.

Pathways Created

A bilateral pathway from Algonquin College's Civil Engineering Technology Advanced Diploma and the University of Ottawa's Bachelor of Applied Science in Civil Engineering was created during this project.

Challenges

Due to the COVID-19 pandemic, final details to formalize the agreement have been paused temporarily.

Student Outcomes

By leveraging both programs, students will be able to obtain significant theoretical knowledge and applied skills to meet the demands of the ever-changing workforce. While this pathway is comparable to the existing pathways or those soon to be completed in this field (Lakehead, Queen's), it is the first of its kind in the National Capital Region.

Both Algonquin College and the University of Ottawa are proud to offer high quality engineering programs and look forward to supporting students in the successful pursuit of continuing their educational journeys through this bilateral agreement. Through this pathway, students of both institutions will benefit from applying previously obtained credits towards another credential. This will result in time savings and subsequently financial savings for the student.

Student Credential

Students from Algonquin College's Civil Engineering Technology Advanced Diploma will be able to pathway to the University of Ottawa's Bachelor of Applied Science in Civil Engineering. Conversely, students the University of Ottawa's Bachelor of Applied Science in Civil Engineering will be able to pathway to Algonquin College's Civil Engineering Technology Advanced Diploma.

Student Time Savings

Students who have completed Algonquin College's Civil Engineering Technology Advanced Diploma program who choose to pathway into the University of Ottawa's Bachelor of Applied Science in Civil Engineering program will be able to complete the degree by completing a bridging term (made up of three courses) plus an additional four full terms. This can save students two years towards the completion of the credential.

Students who have completed the University of Ottawa's Bachelor of Applied Science in Civil Engineering who choose to pathway into Algonquin College's Civil Engineering Technology Advanced Diploma will be able to complete the diploma by completing an additional one and a half year program of study (three terms). This can save students three teams year towards the completion of the credential.

Student Financial Savings

Through this pathway, students of both institutions will benefit from applying previously obtained credits towards another credential. As a result of this, students will benefit from time savings and subsequently financial savings as well.

Graduates of Algonquin College's Civil Engineering Technology Advanced Diploma entering the University of Ottawa's Bachelor of Applied Science in Civil Engineering program will save four terms which is a potential savings of over \$21,000.00. This was calculation is based estimated 2020-2021 tuition fees, supplemental fees, and incidental fees.

Graduates of the University of Ottawa's Bachelor of Applied Science in Civil Engineering program entering Algonquin College's Civil Engineering Technology Advanced Diploma will save three terms which is a potential savings of over \$5,600.00. This was calculation is based the estimated 2020-2021 tuition fees, supplemental fees, and incidental fees.

Student Flexibility

This bilateral pathway creates an improved credit recognition processes between both institutions. Consequently, the transfer process for students seeking to pathway between the two institutions has been simplified and better encourages students to choose this option.

Student Work Alignment

This pathway does not contribute towards professional accreditation alignment. However, it does contribute to the completion of credentials in the science, technology, engineering and math (STEM) fields, and many such career opportunities that have emerged in recent years in Canada. As more organizations seek to modernize their businesses, the demand for people who can fill STEM-related jobs has increase. This pathway helps to meet this demand.

Institutional Outcomes

There were no changes to institutional practices, policies, and/or institutional culture as a result of this project.

Sector or System Implications

Please refer to section "5.0 Promising Practices and Lessons Learned" in the Final Report document.

Tips/Advice

Lean into the work done by other institutions in terms of interpreting the accreditation requirements of a third party organization.

Tools and Resources

There were no tools, templates, reports, or presentations developed as part of this project. The list of proposed courses for the modified program of study were attached in an earlier section of this form and a proposed pathway completion sequence is included in the Final Report document.

