



**THOMPSON
RIVERS
UNIVERSITY**

A photograph of a university campus. In the foreground, a paved path winds through a green lawn. Several students are walking away from the camera. One student on the left has a large backpack. In the background, there are trees with some autumn-colored leaves, a modern building, and a hillside under a blue sky with light clouds.

Supporting Universities for a Better BC

A submission to the Select Standing Committee on Finance and Government Services October 2017

Welcome

On behalf of the Thompson Rivers University (TRU) Board of Governors, welcome to Kamloops.

Thank you for the opportunity to participate in a public discourse on the opportunities and challenges facing British Columbia and particularly Kamloops and the region.

Why is education one of the best long-term investments we can make in our children and our communities? A vigorous, innovative post-secondary education system ensures BC's citizens and communities will thrive in our rapidly changing, globalized, knowledge-based and entrepreneurial society. Further, as we say at TRU: "if you educate students here they will tend to stay, work and build the economy and raise their families here."

Thompson Rivers University helps BC build a strong, sustainable, innovative economy that benefits everyone; ensuring people from every background have the opportunity to reach their full potential.

Acknowledgement

We deeply acknowledge and thank the BC Government for its recent support for TRU's students with significant capital contributions to the construction of our new Industrial Training and Technology Centre and towards the imminent construction of our Nursing and Population Health building.

Trades professionals and technologists are more in demand than ever before and the knowledge needed in the work place is more sophisticated than ever. They build and run our houses, vehicles and cities and are essential to our society. We offer access to these occupations and thus access to meaningful and lucrative employment to people from all communities.

TRU aims to address the critical nurse shortages by expanding our capacity to meet the needs of rural, aging and First Nations communities. At present for every student admitted to the School of Nursing over seven applicants are turned away. Meanwhile the demand for nursing and health care professionals is outstripping supply.

Through this funding TRU will provide students with state of the art training and education in the trades and in health care; two areas of high interest and importance to our people. In addition, these facilities will empower hands-on-learning through research and innovation into the best ways to learn and teach modern technology and health care, and also how to translate new knowledge and understanding to directly improve people's lives.

Advancing the Fourth Industrial Revolution through Software, Computer and Electrical Engineering Degrees

An exciting high technology economy is blossoming in Kamloops. TRU is eager to support local business and industry to grow and diversify the economy of the region by developing the local talent to become the next generation of highly qualified experts and engineers in demand by modern society. However, while TRU has offered the first two years of an Engineering Transfer Program for over 30 years it does not offer the final two years of a full Bachelor of Engineering degree. Our program has

given more than 800 students a firm foundation but they had to leave Kamloops to complete their engineering degrees elsewhere – usually never to return.

Studies have shown that BC lags significantly behind Alberta, Ontario and Quebec in terms of the number of engineers produced. There are five qualified applicants for every engineering seat in BC. It is time to serve our students and the community with fully accredited engineering degree programs. In concert with the Research Universities Council of British Columbia and in consultation with Engineers Canada and the existing engineering schools in BC, and importantly, with local innovating entrepreneurs, TRU is developing fully accredited degrees with specializations in software, computer and electrical engineering (BEng and MEng).

TRU has the capacity and the ability to create a truly innovative and applied engineering program, unique to this region. Building on partnerships with our rapidly growing local technology industry, we wish to expand our existing two-year Engineering Transfer program to a four-year degree. The program will be grounded by co-operative education (mandatory) and other work-integrated learning opportunities—developed in collaboration with industry professionals and responsive to the needs of the technology sector—to create a transformative educational experience for our students.

At full capacity, our cluster of IT engineering degrees will contribute significantly to projected labour market needs, accommodating 350 students in the four-year program. Graduates from TRU Engineering will have extensive hands-on, real-world experience gained through both curriculum learning and industry practicums and co-op placements. Students in this program will be required to enrol in the Co-operative Education Program as a part of the degree and will be required to complete three work terms, developing experience in a real-world environment.



We know from our local partners that the creation of an innovation hub in Kamloops is, just as in Vancouver, reliant on access to software, computers and electrical engineers. These future TRU BEng and MEng graduates will directly affect many sectors of society including manufacturing, transportation, energy, healthcare, government, media, and more. This will serve to grow a more diverse, and green local economy and give our students access to a rapidly expanding technological society. We are determined that they will not be left behind.

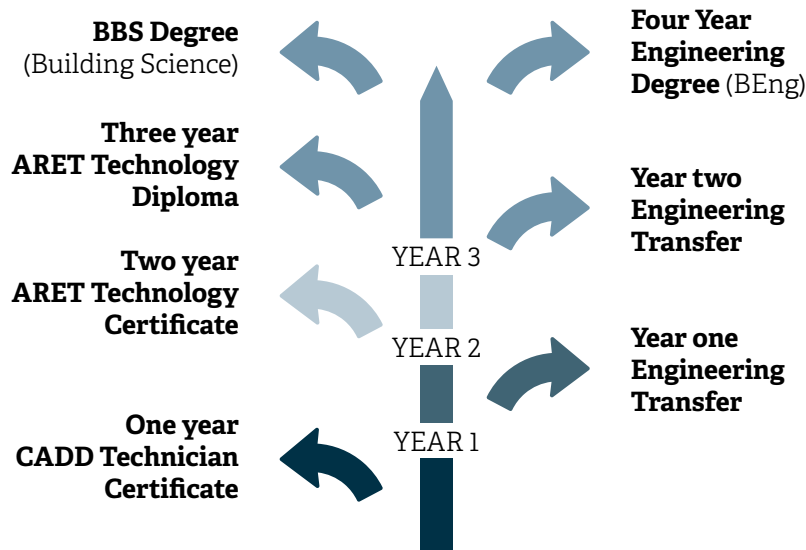
These graduates will become the next generation of leaders and professionals in Kamloops and the surrounding region, adding to BC's talent pool and capacity for innovation and economic diversity.

TRU has programming and student awards in place to support current first-year engineering transfer students in completing a four-year TRU engineering degree in software, computer and electrical engineering.

We ask the Province to help us fund the TRU BEng and MEng programs. We have been able to internally fund the first two years and we need the BC Government to fund the third and fourth years. These degrees will help establish Kamloops and British Columbia as a preferred location for new and emerging technologies, ensuring that the benefits of technology and innovation are felt around the province.

ALTERNATIVE PATHWAYS

The proposed BEng program is designed to be flexible, with alternative entry and exit points to allow students to be the best they can be. An example of this flexibility using TRU's Architectural Engineering Program is illustrated.



Entry level-Highschool Direct or Pre-Engineering Certificate

New Models for Universities Require a New PSE Funding Model

The present post-secondary funding model is about 15 years old. Block grant funding appears to have been generally static for 12 years and decreased recently. However, PSE has undergone dramatic changes especially in BC where a second revolution in access to PSE had given rise to new types of universities with new mandates, and where additional types of student services have arisen. A major overhaul of the way universities are funded is needed to match the changes in PSE in the past 15 years. These changes include diversity of mandates, different students with different needs, pedagogy, and enterprise management. Today's outdated model is insufficient to meet the evolving needs of our students and our region.

DIVERSITY OF MANDATES

New universities have been created, leading to a broad diversity of university mandates including TRU's mandates of open access and comprehensive programming and research. TRU serves multigenerational university-goers as well as first-generation students, including "rurban" students, Indigenous students, first-generation students from immigrant communities, working students, mature students, students with disabilities, students who are care givers, and geographically isolated students. TRU has a campus in Williams Lake and five regional offices. As we recruit, retain and graduate more students, we contribute to their success and the sustainability of their communities and we also address BC's highly qualified personnel (HQP) gap provincially. The value added to our students' prosperity and that of their communities in the interior is priceless.

DIFFERENT STUDENTS, DIFFERENT NEEDS

It is generally acknowledged that students who attend an open access university like ours often require more attention. For example, the transition rate of high school graduates in the interior is generally lower than that in major urban centres. Therefore, an "access" university like TRU must invest more per FTE to recruit students by supporting transitions from high school to university, then to support their retention through to graduation and, upon graduation, more to support transition to employment. This requires orientation, advising, remedial learning centres, counselling, etc. But BC's funding allocation to TRU predates its creation by about five years and does not take into account such needs.

PEDAGOGY HAS CHANGED

The student engagement revolution, inquiry/problem-based learning, case studies, web-based learning, "blended learning", experiential learning, work-integrated learning, and learning and teaching technologies are just a few examples of the massive changes that have taken place inside and outside the classroom in the past 15 years.

Perhaps work-integrated learning is presently the most significant opportunity for change underway in university education. Praised by employers and students alike this concept includes co-ops, internships, apprenticeships, practicums and clinical placements, community service, research assistantships and work study.

STUDENT SUPPORT HAS CHANGED

New kinds of student supports and services are expected today compared to 15 years ago including digital admission and registration, co-ops, internships, mentor programs, work study, summer programs (to reduce time to graduation), career services, service learning, volunteer learning, web-based learning management systems, social media support, entrepreneurship, innovation and, accommodation for disabilities.

TRU has developed a Sexual Violence and Misconduct Policy in accordance with BC's act and we are committed to making our campus a safe and respectful environment for everyone through education and prevention and specialized counsellors.

Our students report high rates of mental health issues such as depression, anxiety, PTS disorder, schizophrenia and other illnesses. Our ability to provide increased services is being highly taxed by these needs.

And, of great importance, the Universities and Colleges of BC are committed to the recommendations to universities in the Truth and Reconciliation Report. Reconciliation is Canada's issue of our time and while a start has been made much more will be required.

SELF-FINANCED STUDENT ACCOMMODATION

Housing affordability is not only an issue in major urban centers; it is also an issue in Kamloops, where the vacancy rate is around 1%. Prior to 2007 universities could undertake self-financed projects such as residences but the introduction of the Government Reporting Entity (GRE) precluded universities from engaging in funded debt. This prohibition on self-financed capital projects has stopped residence construction even though these have supporting revenue streams. This has resulted in high demand and students have increasingly turned to private accommodation, driving up rental costs. Not only will new residences help university students, they will help alleviate housing pressures in local communities. They will also provide well-paid construction jobs in communities. TRU needs to develop affordable student housing aligned with the primary economic demographic that TRU serves. In addition, TRU's student profile and accessibility mandate makes "family housing" options in apartment units an unfilled need.

We ask the BC Government to develop a method whereby universities like TRU will safely and responsibly engage in self-financed capital projects once more.

The stark reality is that TRU like the rest of BC's universities have hit a wall with a system of funding that does not adequately support BC's diversity of institutions and the diversity of modern student learning support. TRU is dedicated to excel at all of these features of a modern university but the outdated 15-year-old funding model no longer allows us to offer a full-service university to our region and our province. The funding formula and the funding allocation in support of BC's PSE institutions are long overdue for modernization and reinvestment.

We agree with our students in the belief that BC's funding model for its post-secondary education system must evolve with the evolving needs of the province's students, communities and institutions. We call upon the province to re-evaluate the funding model for post-secondary education.

Conclusion

GOING FORWARD

The initiatives outlined in this submission have the potential to fundamentally change the educational and research landscapes of TRU while supporting the creation of a strong, sustainable, innovative provincial economy. These projects will help British Columbians from every background and every corner of the province to reach their full potential – creating skilled workers for the future and new knowledge and understanding for the benefit of all people. Together we are building a Better BC.

Thank you for your consideration.



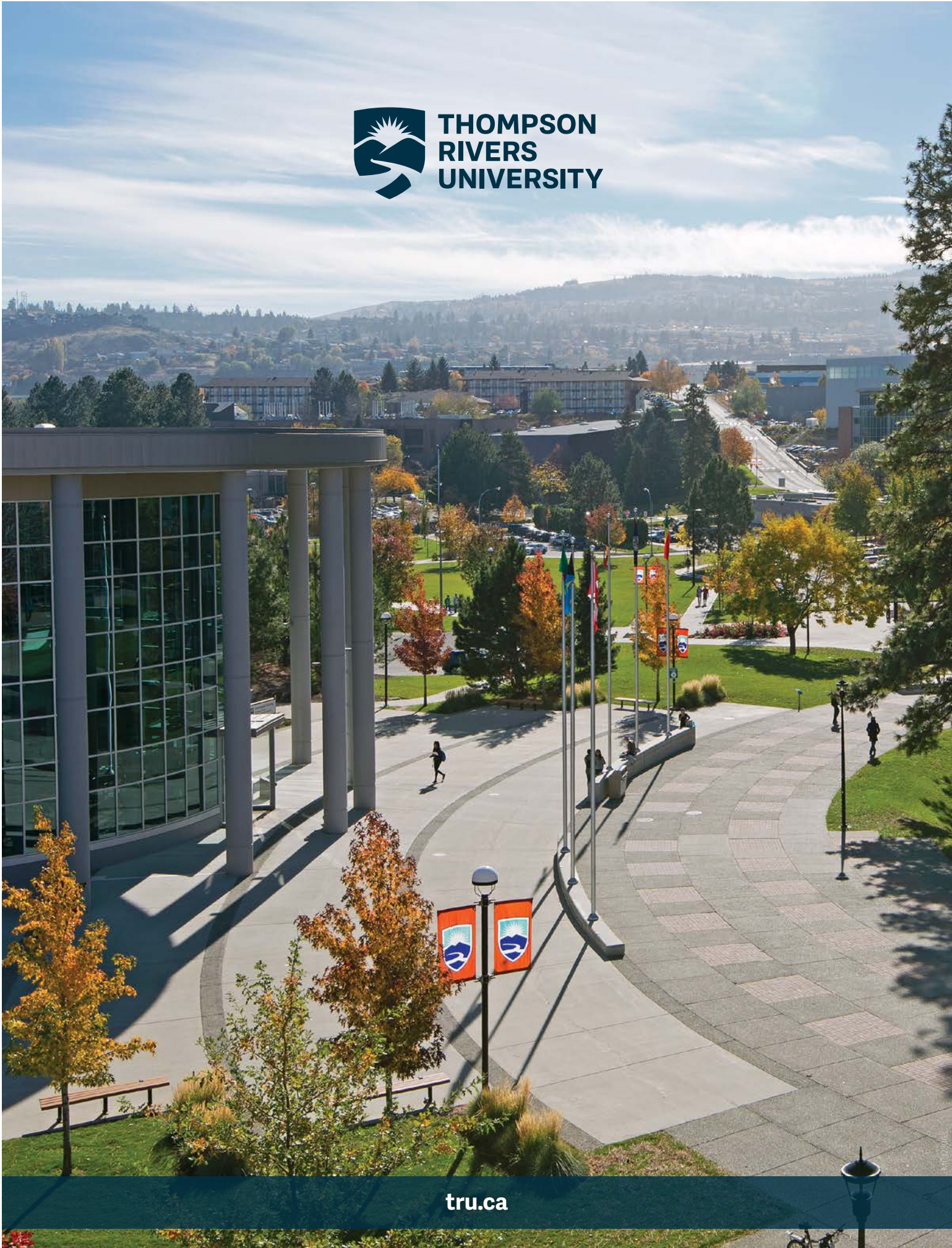
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