



ST. ANN'S ACADEMY

POST-SECONDARY UPDATE

Information for High School Students and Parents

EDUCATION & CAREER PROFILE: Railway Conductor



RIDING THE RAILS: Careers on the railway are still an option in Canada

The Railway Conductor (RWCD) training program, a four-month full-time program that was designed and developed in partnership with the Railway Association of Canada and delivered under the guidance of an Industry Steering Committee of representatives from Canadian railway companies, is offered by only five post-secondary institutions in Canada. In our province, it's available at the BC Institute of Technology [BCIT] in Burnaby.

RAILWAY CONDUCTOR

Railway Conductor programs prepare students for careers in operations in the Canadian railway industry. Conductors work as members of a train crew in either road or yard service, and are involved with switching cars, making or splitting up trains in yards or moving cars between yards, sidings or tracks according to instructions originating with yard and train planners. The role of the Conductor is an important link between customer satisfaction and maintaining efficient operations.

The program typically combines classroom instruction with hands-on learning in lab facilities, industrial sites and rail yards, to simulate real working conditions. Students learn the Canadian Rail Operating Rules, and key skills such as switching and marshalling cars, handling dangerous goods, performing inspections, and keeping records.

Canadian English-Language Railway Conductor Programs are offered at:

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| • British Columbia Institute of Technology (BCIT) | Vancouver |
| • Southern Alberta Institute of Technology (SAIT) | Calgary |
| • Red River College (RRC) | Winnipeg |
| • Lambton College | Sarnia |
| • Confederation College | Thunder Bay |

Wondering if the railway conductor career path is the right one for you? One way to find out is to check out the unique self-assessment tool on the BCIT website page for this program.

BCIT: The following is from the BCIT website pages for this program.

Application Process: This is a continual intake program with applications processed throughout the year.

Entrance Requirements: Applicants meeting all entrance requirements will be accepted on a first qualified basis as long as space remains. When available intakes are full, qualified applicants are wait-listed. Applicants must meet all entrance requirements prior to applying.

Academic Requirements:

English: two years of education in English with one of the following:

- English 12 (50%) or Communications 12 (67%) **or**
- Three credits of post-secondary English, Humanities or Social Sciences (50%) from a recognized institution **or**
- BCIT English Trades Pre-entry Test (for applicants who have two years of education in an English-speaking country only)

Math: one of the following: Any Math 11 (50%) **or** BCIT Math Trades Pre-entry Test

Costs:

Tuition: See the BCIT website for the current information on their Full-time Tuition Fees. In addition to full-time BCIT tuition fees, other program expenses include:

- Books & Supplies Costs: Including personal protective clothing – \$725 est.
- Hotel Costs: Up to three nights (during off-campus practicum activities)
- Required SCSA approved safety glasses, work gloves, and footwear: Footwear must be steel-toed, leather, ankle covering boots
- Rain gear is also recommended (hoods cannot be worn while in the railway yard).

Program Length: 17 weeks, full-time

Grading: Student learning is evaluated throughout the program. To complete the program, the minimum passing grade is 70% in each course, except RWCD 1050 and RWCD 1052 for which the minimum passing grade is 85%. To qualify for graduation, students must pass all courses.

BCIT Program Location: Annacis Island Campus - Delta, BC

Information Sessions: Free information sessions are offered during the year for this program; check the program webpage for dates and times.

Job Opportunities: The railway industry overall will be facing rates of retirement turnover as high as 70% over the next 8 to 10 years which will result in a demand for graduates. BCIT's Railway Conductor program prepares graduates for employment in Class 1 railways and shortlines in North America, industrial railways, sidings and spurs at grain elevators, dockyards, rail suppliers and regional carriers.

Check the following company websites for potential employment:

BNSF Railway	Canadian National Railway	VIA Rail Canada
Canadian Pacific	PNR Railworks	Southern Railway of BC
Railway Association of Canada's career page		

Graduates can expect good salaries in the starting range of \$45,000 - \$65,000 per year, and opportunities for advancement to positions of greater responsibility.

For more information visit:

BCIT Railway Conductor: www.bcit.ca/study/programs/2070ipcert#overview

Railway Association of Canada: <http://www.railcan.ca/careers/careers>

This information has been compiled from these two websites. It is meant to provide high school students and their parents with a general understanding of the career, and the post-secondary education options and requirements for entry into this career field. Information and regulations are subject to change at any time, as the discretion of the institutions and agencies involved.

A FEW THINGS NEW AT TRU

Graduating high school students at St. Ann's have literally hundreds of choices when it comes to post-secondary options, but the reality is that the majority of graduates will make Thompson Rivers University their destination come September.

There are many reasons for staying close to home, at least for the first year or two, and the cost advantage is probably the single biggest one. That said, there are so many other advantages and opportunities at TRU today that even if cost was not a barrier, it would still be a first choice for many.

What's new at TRU?

For students about to leave high school, as well as those near the end of their Grade 11 year, there are a number of exciting new program initiatives and major new facilities planned for the years ahead.

EARLY CHILDHOOD EDUCATION

Early Childhood Education Diploma – In addition to the requirements of Grade 12 graduation and English 12 [73% minimum], the “work experience” component of the admission requirements to this program has been updated as follows:

“25 hours of work experience in a licensed group preschool or childcare facility under the supervision of a certified ECE.”

NEW: Bachelor of Education STEM – Secondary

This new secondary education degree is for math and science degree graduates. It will allow them to add a secondary education degree to their science degree in an intensive 12-month program, starting in July of next year [2018].

NURSING: Bachelor of Science in Nursing

The application deadline for Fall 2018 will be extended by two weeks, to January 31, 2018. This will give students more time to complete the extensive requirements for this highly competitive admissions process.

NURSING: Master of Nursing

This new graduate degree coming to TRU will offer both course- and thesis-based options, and will include three streams of specialty study, including Aboriginal Health Leadership. It will be the only graduate nursing degree in BC with a definitive indigenous stream.

BUSINESS: Bachelor of Business Administration

The highly successful BBA degree is adding options for students, including a Major or Minor in Supply Chain Management. It's also adding new Minors in Project Management, Leadership, and Financial Markets & Institutions, and there are future plans for a new Major in Digital Marketing; already there are at least two new courses in this field planned for this fall.

Finance Majors at TRU are now eligible to write the CFA Institute Certification exam after graduation without having to take any additional courses, now that TRU has been officially included in the CFA University Recognition program. TRU offers a BBA degree in Finance, as well as a Post-Baccalaureate Diploma for graduates of non-business degrees.

ENGINEERING

The application deadline for admission to the Engineering Transfer program is March 1st, and next year students looking to specialize in Electrical or Computer Engineering will be able to complete two full years at TRU before transferring to UVIC for the final two years.

TRU also continues to work on securing funding to launch their own complete Engineering degree program. The three specialties being planned are all related to technology, with Computer, Electrical and Software Engineering options. At this point it's still very much a work in progress, but if the funding does materialize, one can expect to see the program move forward quickly. Current Grade 10 and 11 students with an interest in these fields of engineering could be the first to benefit.

TRADES: Millwright trade is now called Industrial Mechanics

The former "Millwright" trade is now known as the Industrial Mechanic program, and the Foundation [entry-level] training in this field is now offered at TRU, where there are also plans to expand to the apprenticeship level at some point in the near future.

TRADES: Instrumentation and Control Technician

New at TRU is the Instrumentation and Control Technician program, which is also now a Red Seal trade. Graduates of this program, often called Industrial Instrumentation Mechanics, are technicians who are trained to install, repair, maintain and adjust a wide range of instruments used to measure and control industrial processes, especially in pulp and paper, manufacturing and petrochemical production industries. Admission to the program requires English 12 and Math 11 with good Algebra skills; it's also highly recommended that students have Physics 11, along with Math 12.

APPLIED SUSTAINABLE RANCHING DIPLOMA

This unique TRU program is based at the Williams Lake campus, but it's offered on what's called a "block blended learning" model that only requires students to actually come to campus every six weeks.

The rest of the program combines online modules with hands-on experience. Students are expected to be living and working on a ranch, which can be anywhere; last year one student actually lived and worked on a ranch in Brazil.

This two-year diploma focuses on sustainable business operations in the ranching industry, and graduates can transfer into the third year of the Bachelor of Agriculture degree at Olds College, in Alberta.

SCHOLARSHIPS AND AWARDS

For current Grade 10 and 11 students, important information to understand about qualifying for Entrance Scholarships. While almost all Entrance Scholarships open to students entering TRU each fall are based on a combination of academics [GPA] and school and community involvement, the increasing number of students applying for entrance awards is pushing the GPA component up.

For these awards, TRU uses marks from completed Grade 12 courses, but as St. Ann's is not a semester school, applications from SAA students are evaluated on the basis of their GPA calculated from Grade 11 academic courses.

Students should also be aware that the minimum average of successful entrance awards applicants is around 90%. This makes final marks in Grade 11 critically important for students who hope secure one of these substantial awards.

While this information is specific to TRU, it would fair to suggest that the highly competitive nature of entrance scholarships is the same or even higher at other provincial universities.

CREATIVE NON-FICTION CONTEST

If you are a student who loves creative writing, and entering Grade 12 in September, TRU is offering a prize of one year's tuition [that's up to \$5,500] in a contest this fall.

The contest, open only to new students applying to TRU for Fall 2018 requires writing a creative 1,500 -2,000 word essay on the "Human Experience". The application deadline is not until December 15, 2017. Check the TRU website for more details in the early fall.

ACADEMIC SUPPORT FOR STUDENTS ON CAMPUS

University is different from high school in so many ways, including the kinds of academic support available, especially during that first year. Among the options at TRU are a series of one-credit courses called Student Success [STSS]. The focus of these courses ranges from improving study skills or communications to learning to develop and maintain a healthy balance in their lives at university. Check out the details under 'Courses' on the TRU website.

NEW FACILITIES

The TRU campus is about to experience another construction boom. Work is already underway on the major new addition to the Trades and Technology Centre, and it won't be too long before they break ground for the long-awaited Nursing and Population Health Building.

Both projects, which cost around \$30 million each, will also have a negative impact on parking on campus, as will the start of the first building in the unique campus village initiative called 'The Reach'. It should also be noted that the cost to park is going up at TRU, making it all the more sensible for students to be using their U-Pass, the all-access transit pass that's included in their annual Student Union Fees.

The Highest Paying In-Demand Jobs in Canada for 2017

What will the most in-demand jobs in Canada be this year? It seems that most of them will be in the mining, oil and health industries. You don't necessarily need a degree to get some of these jobs but you do need some form of post-secondary education and training to acquire the right skills.

These are "average" salary figures, which means they can vary depending on where a job is located and the employer, and these salary figures don't take into account such things as the benefits that may come with a position.

20. Trade Workers

Machinist Average Salary: \$51,000

About half of Canada's manufacturers are experiencing labour shortages as many skilled trade workers are nearing retirement while younger people tend to choose university education over vocational training. That means that there are countless opportunities for welders, assemblers, machinists, industrial painters and mechanics.

19. Office Managers and Administrative Assistants

Office Manager Average Salary: \$46,000
Administrative Assistant Average Salary: \$37,000

Where there are offices, there is a demand for office managers and administrative assistants with a good ability to multitask. The most in-demand of these jobs are focused around accounting practices such as payroll or accounts administration.

18. Hydropower Experts

Hydrologist Average Salary: \$60,000

Canada is a world leader in the hydropower industry and the increasing demand for clean energy means that more jobs will become available in this field. Experts in demand in this sector not only include engineers, hydrologists and technicians but also environmental scientists, ecologists and biologists.

17. Tourism and Hospitality Workers

Cleaner Average Salary: \$29,000

Entry- to mid-level jobs are plentiful in the tourism and hospitality industry throughout Canada, and one of the jobs that has the highest number of openings is cleaning.

16. Tourism and Hospitality Professionals

Average Salary: \$50,256

The tourism and hospitality industry is constantly looking for qualified managers. These include chefs as well as restaurant and food service managers all across Canada.

15. Lawyers

Average Salary: \$76,000

As fewer people choose law as a career, opportunities for qualified lawyers will grow. These include jobs for criminal defence and corporate lawyers.

14. Financial Analysts

Average Salary: \$58,000

Financial analysts should see a resurgence of opportunities too, especially in Toronto, home of the TSX. However, cities like Vancouver, Ottawa and Montreal with strong business sectors will be good places to look for finance jobs too.

13. Accountants

Average Salary: \$50,000

If, as predicted, the oil and gas industry recovers in 2017 the financial sector will see renewed growth too. Accountants top the list of in-demand professionals in the field.

12. Drivers

Average Salary: \$51,000

Drivers are needed to get goods across Canada. In addition, transit drivers are in demand to keep the public transport system running smoothly.

11. Logistics Workers and Managers **Logistics Manager Average Salary: \$64,000**

Due to Canada's sheer size and the rise of e-commerce, people who can organize the storage, transportation and delivery of goods across the country are in high demand. They include warehouse workers, forklift operators, order clerks, materials handlers and logistics and warehouse managers. Most opportunities are concentrated in Central and Western Canada.

10. Engineers **Structural Engineer Average Salary: \$65,392**

It is estimated that about a fifth of Canada's engineers are 55 or older. With so many people nearing retirement in a field that already experiences labour shortages, young engineers, from construction to mining, will find plenty of opportunities not only to land a good job but also to quickly advance through the ranks.

9. Education Jobs **High School Teacher Average Salary: \$51,583**

The education sector still offers many opportunities. These include jobs for skilled teachers, counsellors and education services managers.

8. Marketing Analysts **Average Salary: \$51,000**

With market trends changing all the time, businesses need to stay up to date and ahead of the pack. Marketing analysts who can make sense of market-related data and come up with good business strategies continue to be in demand, especially in business centres like Toronto, Vancouver and Montreal.

7. Information Security Analysts **Average Salary: \$66,000**

There are thousands of tech jobs available in Canada but they fill up quite quickly because there is so much talent out there. One of the most in-demand tech jobs is that of information security analyst because businesses want to protect their data and find creative solutions to prevent security breaches.

6. HR Recruiters **Average Salary: \$44,000**

HR as an industry is still going strong as younger people enter the workforce. Recruiters are in demand because several industries experience labour shortages and need someone who can help them find talented workers.

5. Mental Health and Social Services Professionals **Average Salary: \$45,403**

Mental health and social services professionals are needed to look after the mental and social well being of all who live in Canada. These fields are growing as societal pressures increase. Most jobs are found in the public sector.

4. Registered Nurses**Average Salary: \$66,000**

Registered nurses are among those most in demand in the health care field. As with most health care jobs, the public sector is the largest employer of registered nurses.

3. Physicians and Dentists**Physician Average Salary: \$116,000****Dentist Average Salary: \$104,000**

Health care is still a hot industry and as Canada's population ages, opportunities for doctors and dentists are increasing. Most of these jobs are found in the public sector.

2. Miners, Oil and Gas Drillers**Average Salary: \$67,000 - \$69,000**

There is still a big demand for skilled miners, oil and gas drillers and similar occupations. While these jobs are found in most provinces, they're mainly concentrated in Alberta as well as Saskatchewan, Manitoba and British Columbia.

1. Primary Production Managers**Average Salary: \$69,830**

According to the Canadian Occupational Projection System (COPS), production management jobs have the highest projected growth rate for 2011-2020, at 3.02%. With about 70% of Canada's manufacturing output coming from Ontario and Quebec, these are the two best provinces in which to find job opportunities.