Heavy Mechanical Trades Provincial Articulation Committee

MINUTES

BRITISH COLUMBIA COUNCIL ON ADMISSIONS AND TRANSFERS (BCCAT)

Virtual Online Meeting via ZOOM

June 15 & 16, 2021

Chair: Jamie Ubell, University of the Fraser Valley (UFV)

Vice Chair: Doug Noble, Okanagan College

Minute Recorder: Marta Cruz, UFV

Members Present:

Name	Member Institution	Email
Tony Upton	BCIT	aupton@bcit.ca
Robert (Bob) Glover	Camosun College	gloverr@camosun.bc.ca
Grant Eveneshen	College of New Caledonia	evenesheng1@cnc.bc.ca
Spencer Mellor	College of the Rockies	mellor@cotr.bc.ca
Doug Haycock	Northern Lights College	dhaycock@nlc.bc.ca
Doug Noble	Okanagan College	dnoble@okanagan.bc.ca
Bill Matzelle	Okanagan College	bmatzelle@okanagan.bc.ca
Bruce Brittain	Selkirk College	bbrittain@selkirk.ca
Lyle Hirowatari	Thompson Rivers University	<u>Ihirowatari@tru.ca</u>
Mike Shields	Thompson Rivers University	mshields@tru.ca
Russ Thompson	University of the Fraser Valley	russ.thompson@ufv.ca
Jamie Ubell	University of the Fraser Valley	jamie.ubell@ufv.ca
Don Weitzel	University of the Fraser Valley	don.weitzel@ufv.ca
Brendan Frith	Vancouver Community College	bfrith@vcc.ca
Jason Sutton	Vancouver Island University	Jason.sutton@viu.ca
Paul Mottershead	Vancouver Island University	Paul.Mottershead@viu.ca

Member Regrets:

Name	Institution	Email
Bruce Thompson	BCIT	Bruce Thompson@bcit.ca
Keshwan Naidu	BCIT	knaidu1@bcit.ca
Lee Achtemichuk	BCIT	lee_achtemichuk@bcit.ca
Mike Kerbrat	Coast Mountain College	mkerbrat@coastmountaincollege.ca
Randy Kemptster	College of New Caledonia	kempsterr1@cnc.bc.ca
Art Williams	College of New Caledonia	williamsa26@cnc.bc.ca
Ed Ditner	Northern Lights College	editner@nlc.bc.ca
Darren Watt	Thompson Rivers University	dwatt@tru.ca
Alan Kelly	Vancouver Community College	akelly@vcc.ca
Rick Cyr	Vancouver Community College	rcyr@vcc.ca

Paul Cory	Vancouver Community College	pcory@vcc.ca
Brian Phillips	Vancouver Community College	bphillips@vcc.ca
Robert Riquelme	Vancouver Community College	rriquelme@vcc.ca

Guests Present:

Name	Organization	Email
Fiona McQuarrie	BCCAT	fmcquarrie@bccat.ca
Thomas Rizco	ITA	trizco@itabc.ca
Mark Murray	CDX	mark.murray@cdxlearning.com
Paul Mottershead	SLP	Paul.Mottershead@viu.ca
Clint Ingham	J-Ball Electronics	clint@jballelectronics.com
David Gratton	ConsuLab	dgratton@consulab.com
Rick Martineau	ConsuLab	rmartineau@consulab.com
James Stephenson	Cummins Filtration	james.stephenson@cummins.com
Kent Maccarl	Cummins Filtration	kent.r.maccarl@cummins.com

June 15, 2020 / 8:30 am / Welcome / Presented via ZOOM platform online

Remarks from:

Jamie Ubell, Chairperson, UFV Faculty of Trades and Technology

- Welcomed everyone to the 2021 Heavy Mechanical Articulation.
- Jamie has been acting as Chair for the past two years 2020-2021.
- Jamie had been on sabbatical last year during COVID. Some apprenticeship programs
 were cancelled as a result of UFV not being able to replace Jamie during his sabbatical.
 Russ Thompson and Don Weitzel had been taking care of things.
- Hoping that the HMT Articulation will be in person next year.

Doug Noble, Vice Chairperson, Okanagan College

- Looking forward to the 2021 Articulation
- Good to see everyone

1. Meeting Called to Order

2. Approval of Agenda

MOTION: To adopt the Agenda as presented

Moved: Doug Noble Seconded: Jason Sutton All in favor. CARRIED

3. Minutes of the Articulation Committee Meeting of June 11 & 12, 2019

The minutes from June 16 & 17, 2020 were revised to correct the name of the institution for a few of the members.

Jamie informed the members that a new Vice Chair will need to be elected this year and he opened the floor for volunteer and/or nominations. Doug Noble will assume the role as the Chair.

4. BCCAT Report / Fiona McQuarrie

BCCAT Spring Report (See appendix A)

- In early May the BC transfer guide was expanded to include the equivalencies and the course articulation agreements for 7 institutions in BC, with institutions outside of BC.
- Joint Annual (JAM) meeting is held every November. Last year it was held online with over 350 attendees. This year it will also be held online. The call for registration opens in September and it will be held the first week of November. The meeting is open to anyone who would like to attend.
- Reports published and underway:
 - Published a report on: Data Governance
 - Published a report on: Who decides transfer, making a decision on transfer credits
 - o Report under way: Equity Diversion and Inclusion for institutions

- Report under way: students with lived experience and care to give them postsecondary education
- Report underway: Effects of COVID 19 and the shutdown with response to what institutions themselves did to respond to the shutdown with moving of courses, changes in policy and procedures, and how those changes might persist once campuses fully open again

5. ITA Report / Thomas Rizco

ITA Report (See appendix B)

Updates:

- The Provincial Government, ITA, and other interested parties are working to reinstate compulsory trade in BC. There are 10 trades to become mandatory; one of the trades is Heavy Duty Technician. The ITA will provide updates as they get more information. The consultation process will involve all stake holders
- SLEs are temporarily being waived due to COVID-19. The reimplementation date is September 1 2021, subject to safety guidelines. Any courses that start on or after September 01, 2021 will be required to write an SLE.
- o Transport Trailer Technician program is currently undergoing harmonization.
- Heavy Duty Equipment Technician program is scheduled to begin harmonization in October 2021
- Truck and Transport Mechanic program is scheduled to begin harmonization in November 2021
- Review of apprenticeship numbers
- SLE Statistics
- IPSE Statistics
 - National rates which include apprentices and challengers are 62%
 - o Provincial pass rates 71%

Coffee Break

6. Institutional Reports

Institutional Reports (See appendices C-H)

Each institution presented a report on the school and programs. This included institutional updates, budgets, program and or course update, COVID-19 challenges, student enrollment, staffing, and other items of interest.

- Vancouver Community college Brendan Firth
- Vancouver Island University Jason Sutton
- BCIT Tony Upton
- Camosun College Bob Glover
- College of New Caledonia Grant Eveneshen
- College of the Rockies Spencer Mellor
- Okanagan College Doug Noble

- Selkirk Bruce Britton
- TRU Darren Watt Lyle Hirowatari & Mike Shields
- University of the Fraser Valley Russ Thompson
- Coast Mountain College not present
- North Island College not present
- Northern Lights College not present

Lunch Break

7. CDX presentation / Mark Murray

- Mark is currently working on online course for the Commercial Vehicle second edition textbook. Once completed he will add it to the site for members to review and provide feedback.
- For assistance with the CDX site phone Mark
- Mark reviewed some of the different animations and how to navigate the webpages
- If Institutions would like an updated animation link or resources send Mark an email
- CDX blog site https://blog.cdxlearning.com/blog

8. SLP Report / Paul Mottershead

- A Personal Record Book is available, but not mandatory, for students to use with employers https://www.itabc.ca/sites/default/files/docs/recordbooks/heavy-duty-equipment-technician-record-book-may-2020.pdf
- Compulsory trades will be called Skill Trades Certification.
 - Phases one: Mechanical Trades: Steam fitter, Refrigeration Mechanic, sheet Metal and Gas fitter. Construction Electrician: Construction Electrician, Industrial Electrician, and Power Line Technician
 - o Phase two: Auto body, Automotive, and Heavy duty equipment technician
- Cross-Trade Pathways website <u>www.crosstrade.ca</u>
- Skills Canada may be doing Regionals in a decentralized model this year with Nationals held in Vancouver next year
- COVID-19
 - Material cost have increased
 - Apprenticeship enrollment have decreased
 - Utilization targets were waived during COVID-19
 - SLE have been waived during COVID-19 and will resume after September 01, 2021

9. Buy, Sell, or Trade

• A conversation was had about creating a list of Heavy Mechanical equipment that institutions would be able to buy, sell, or trade.

June 16, 2020 / 9:02 am / Call to Order / Presented via Zoom platform

10. Group discussion of challenges over the past year and moving forward in the new normal of post secondary training.

- J-Ball Electronic presentation/ Clint Ingham (see appendix I)
 - o Demonstrated the Texa program, products, features, and prices.
- A conversation was had about the benefits of having a Service Canada representative speak to the apprenticeship students. Institutions can email Brenda Giesbrecht, Citizen Services Specialist Community Outreach and Liaison Services, at Services Canada, to be connected with your designated Service Canada representative. (see appendix J)
- A conversation was had about the benefits of having a ITA advisor to speak to the
 apprenticeship students. Institutions can schedule a session with an Apprentice Advisor
 at the Industry Training Authority. The following link lists all the ITA advisors
 https://www.itabc.ca/our-trades-training-system/apprenticeship-advisors

Break

11. Consulab presentation on training aids

- Rick Martineau and Dave Gratton presented
 - o Consulab is a Hardware company that sells training equipment
 - o Demonstrated and explained the products, features, and price
 - o https://www.consulab.com/

Lunch Break

12. Cummins Presentation Coolant, fuel, and lube/filtration

- James (Jay) Stephenson and Kent Maccarl gave a presentation on Fleetguard. (see appendix K)
- Reach out to Jay Stephenson to schedule a tour in Tennessee to see the research and facility lab and see where the products are made.

13. Welcome to the new chair Doug Noble and Vice-Chair Daren Wat

MOTION: That Darren Watt be the Vice Chair for the upcoming year and Chair for the following year.

Moved: Lyle Hirowatari Second: Jason Sutton All in favor. CARRIED

14. 2021 Articulation Planning

- 2010 Okanagan College
- 2011 Vancouver Island University
- 2012 University of the Fraser Valley
- 2013 British Columbia Institute of Technology
- 2014 College of New Caledonia

- 2015 North Island College
- 2016 Okanagan College
- 2017 British Columbia Institute of Technology
- 2018 Thompson Rivers University
- 2019 University of the Fraser Valley
- 2020 Virtual University of the Fraser Valley
- 2021 Virtual University of the Fraser Valley

15. Location for next meeting

- 2022 Northern Lights College in Fort St. John or Dawson
 - \circ June $14^{th} 16^{th}$, 2022 (16^{th} is a training day)
 - o Tour of the Site C Dam | Clean Energy Project

MOTION: The 2021-2022 HMT Articulation be on the 14th and 15th and 16th of June on the Fort St. John's campus or the Dawson campus, at Northern Lights College.

Moved: Doug Noble Seconded: Russ Thompson All in favor. CARRIED

16. Suggestions for presenters

• Doug Haycock suggested the Central Board of Secondary Education (CBSE)

MOTION: To adjourn the meeting

Moved: Doug Noble Seconded: Russ Thompson All in favor. CARRIED

Adjourned at 2:17 pm

Appendix A

Transfer & Articulation

Joint Annual Meeting (JAM)

The Joint Annual Meeting (JAM) is an annual event hosted by BCCAT for articulation committee representatives and other participants in the BC Transfer System. In 2020, for the first time, JAM was held completely online. Over 350 registrants attended sessions on transfer-related topics, as well as participating in discussions and online networking.

Videos of all JAM sessions have been posted on <u>BCCAT's YouTube channel</u>.

SAVE THE DATE: November 2021. Online meeting. Registration will open on the BCCAT website in September.



2021 BCCAT Transfer Awards

The annual BC Transfer Awards honour individuals and groups that contribute to the success of the BC Transfer System.

Nomination forms for the 2021 awards will be available soon on the BCCAT website.

BCCAT Staff Update

BCCAT's Committees Coordinator, Ruth Erskine, is on leave. Anabella Chun, Committee & Technology Support Coordinator, is currently the primary BCCAT contact for the articulation committees. Anabella can be reached at achun@bccat.ca.

Articulation Committee Moodle Site Update

BCCAT currently offers articulation committees the opportunity to operate their own Moodle site, with hosting provided by a post-secondary partner. BCCAT staff are currently exploring options for a self-hosted service, with a goal of having a new hosting platform in place by fall 2021. BCCAT will update articulation committees about this change as information becomes available.



Articulation Committee Project (ACP) Funding The Articulation Committee Project (ACP) funding supports research projects by articulation committees into transfer- related issues, as well as research leading to new forms of transfer agreements. Applications for project funding in the 2021-22 fiscal year are due no later than August 23, 2021. <u>Application forms and information</u> on the ACP program are available on the BCCAT website.



BC Transfer Guide Updates BCCAT recently expanded the BC Transfer Guide (BCTG) to include Canadian and international equivalencies for six BC post-secondary institutions. Users now have access to over 60,000 non-BC equivalencies in the course search. BCCAT is continuing to work on adding more institutions and equivalencies in 2021.

In addition, the overall BC Transfer Guide website will be re-designed to provide an updated look and feel, and to give users greater access to information.

At present, only courses defined as "university-level" courses are eligible for listing in the BCTG. In 2021-22, a subcommittee of the BCCAT Transfer and Articulation Committee (TAC) will be reviewing this definition and making recommendations on the criteria for courses to be included in the course listings of the BC Transfer Guide.

Transfer Credit system (TCS) BCCAT is planning to develop a number of new features for the TCS in the upcoming year. These include the development of a dashboard to better manage articulations for faculty, a reciprocity feature to recommend reverse transfer opportunities, and the ability to add course attributes to transfer agreements that will provide expanded information about transferable courses.

Current Transfer & Articulation Projects

Criteria for Assessing Sending Institutions Outside the BC Transfer System

This project looks at the criteria used by BC Transfer System (BCTS) member institutions to assess the academic comparability of sending institutions that are not part of the BCTS. This project is scheduled for completion in summer 2021.

Examining Barriers to Articulation Maintenance

A recent review of transfer agreements in the BC Transfer Guide indicated that approximately 35% of all articulations have not been reviewed in 10 or more years. This has raised concerns about the currency of transfer information. A discussion at the 2020 JAM meeting indicated that articulation committees are concerned about the resources and effort needed to review out-of-date agreements.

In the next few months, BCCAT staff will develop a strategy to improve upon the regular maintenance of articulations. This will include both technological changes to the TCS, and building greater awareness at BC Transfer System member institutions. The goal of these activities is to build in a more regular practice of reviewing articulation agreements, while also taking into consideration resource implications at both the faculty and administrative areas.

New BCCAT Publications

PATH (

Find Your Path

This guide provides information for students, advisors, parents, and others about the BC Transfer Guide and the BC Transfer System.



Who Decides Transfer?

This report presents a review of policies and procedures at BC Transfer System member institutions around the roles or individuals that participate in making decisions on transfer credit requests. The report also makes recommendations for best practices in this area.



Micro-credentials: Trends in Credit Transfer and Credentialing

This report provides insights into current micro-credentialing practices, motivations, and perspectives at Canadian higher education institutions and beyond.



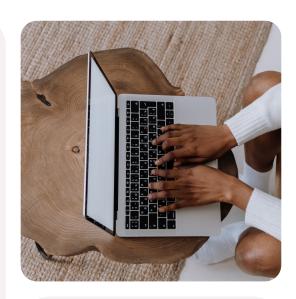
Block Transfer and Degree Partnerships

The report describes the volume, features and trends characterizing block transfer and degree partnership pathways in the BC Transfer System. It also identifies successful practices in recording block transfer and degree partnership agreements, and tracking their use.



Data Governance Policy Models

This report reviews data governance practices at BC post-secondary institutions, and makes recommendations for best practices in collecting, storing, and accessing.



BCCAT YouTube Channel

BCCAT now has its own YouTube channel. In addition to video of every session at the 2020 JAM, it also has informational videos on the BC Transfer System, and video "Transfer Stories" of students, staff, and faculty members in BC post-secondary institutions. Please like and subscribe!



Online Resources

- Articulation Committees Web Pages
- Meeting Calendar
- Articulation Resources
- Joint Annual Meeting (JAM)
- Articulation Committee Project (ACP)
 Funding Program
- Publications



BCCAT.ca

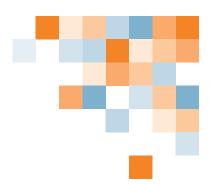
BCTransferGuide.ca

articulation@bccat.ca

@bccat org @bctransferguide

Appendix B





Report for Heavy Mechanical Trades Articulation Committee Meeting

June 15, 2021

1. Overview

This report is intended to provide the Articulation Committee with information pertaining to their programs, such as updates to Program Outlines, harmonization, transition plans, and exam statistics.

We in Program Standards want to continue to build ongoing communication and collaboration with our partners in training delivery. The best way to do this is to have regular contact between ITA's Program Standards team and the Chair, Co-chair, and System Liaison Person (SLP) of the Articulation Committee to address concerns as they come up throughout the year.

Any issues or concerns that arise from the Articulation Committee Meeting or throughout the year can be directed to the Committee Chair and SLP to bring forward to the Manager of Program Standards.

2. ITA Updates

Compulsory Trades

The Provincial Government is working with ITA and other interested parties to reinstate compulsory trades in BC. An <u>official announcement</u> regarding <u>Skilled Trades Certification (STC)</u> was made on June 11, 2021. Heavy Duty Equipment Technician is listed as one of ten trades selected for the initial phase of STC. ITA will provide updates as we receive them.

Suspension and Relaunch of the Standard Level Exams (SLEs)

With the exceptional circumstances surrounding Covid-19, and in the best interests of apprentices and training providers, ITA made the decision to temporarily waive SLEs. Working with training providers and others through the **SLE Working Group**, a target date to reimplement SLEs has been set for September 1, 2021, subject to safety guidelines at that time. **Courses that start on or after September 1, 2021 will be required to write an SLE**.

3. Heavy Mechanical Trades: Program Updates

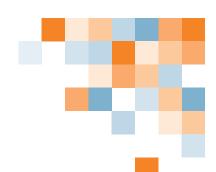
Harmonized Program

The current **Program Outlines and Program Profiles** are posted on the ITA website for <u>Transport Trailer Technician</u>, <u>Truck and Transport Mechanic</u>, <u>Heavy Duty Equipment Technician</u>, and <u>Diesel Engine Mechanic</u>.

Transport Trailer Technician: program currently undergoing harmonization. Red Seal Occupational







Standard workshops (RSOS) were conducted with BC representation in May 2021. ITA conducted a Red Flag Webinar on June 14, 2021. The purpose of the webinar was to collect BC's feedback on the proposed harmonized training sequencing of training topics and the degree to which BC can align with that sequencing.

Heavy Duty Equipment Technician: program is scheduled to begin harmonization in late October 2021.

Truck and Transport Mechanic: program is scheduled to begin harmonization in late November 2021.

4. Apprenticeship Numbers

Legend

Reporting/active = an apprentice for whom activity has been logged in the ITA Direct Access System (DA) within the last 18 months, e.g., course marks uploaded, or work-based hours reported

Non-reporting/inactive = an apprentice for whom no activity has been logged in DA within the last 18 months

TT= technical training (in-school)

0TT = apprentices who have a sponsor and have registered with ITA, but have not achieved any level of technical training

1TT/2TT = the highest level that an apprentice has achieved

Transport Trailer Technician Apprenticeship Numbers (Harmonized Program)

APPRENTICESHIP (Highest Level Achieved)	0TT	1TT	2TT	Total
Reporting:	19	5	4	28
Non-reporting:	28	4	4	36
Total:	47	9	8	64

Note: Data is as of March 1, 2021.

Transport Trailer Technician Apprenticeship Numbers (Old Program)

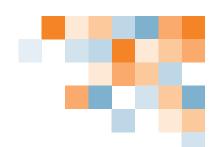
As of March 1, 2021, one apprentice remains under the old program and is working with ITA Completions department for successful completion of their program.

Transport Trailer Technician Apprenticeship Numbers by Region

Regional numbers are based on apprentice's address, not the school they attend. For a definition of College Regions, see *Appendix A*.







	REGION	0TT	1TT	2TT	Total
1	North	4	0	2	6
2	South East Interior	5	1	0	6
3	Island	0	1	0	1
4	Lower Mainland	38	7	6	51
	??	0	0	0	0
	Other	0	0	0	0
	Total	47	9	8	64

Note: Data is as of March 1, 2021.

Truck and Transport Mechanic Apprenticeship Numbers (Harmonized Program)

APPRENTICESHIP (Highest Level Achieved)	0TT	1TT	2TT	3TT	4TT	Total
Reporting:	179	148	129	166	115	737
Non-reporting:	252	61	56	55	27	451
Total:	431	209	185	221	142	1188

Note: Data is as of March 1, 2021.

Truck and Transport Mechanic Apprenticeship Numbers (Old Program)

APPRENTICESHIP (Highest Level Achieved)	0TT	1TT	2TT	3TT	4TT	Total
Reporting:	0	0	0	0	8	8
Non-reporting:	0	0	0	0	28	28
Total:	0	0	0	0	36	36

Note: Data is as of March 1, 2021.

Truck and Transport Mechanic Apprenticeship Numbers by Region

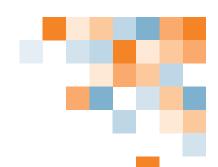
Regional numbers are based on apprentice's address, not the school they attend. For a definition of College Regions, see *Appendix A*.

	REGION	0TT	1TT	2TT	3TT	4TT	Total
1	North	101	36	27	37	22	223
2	South East Interior	89	43	37	39	20	228
3	Island	25	12	14	37	3	91
4	Lower Mainland	207	113	102	103	94	619
	??	6	1	5	5	2	19
	Other	3	4	0	0	1	8
	Total	431	209	185	221	142	1188

Note: Data is as of March 1, 2021.







Heavy Duty Equipment Technician Apprenticeship Numbers (Harmonized Program)

APPRENTICESHIP (Highest Level Achieved)	0TT	1TT	2TT	3TT	4TT	Total
Reporting:	367	388	369	323	194	1641
Non-reporting:	538	175	89	90	64	956
Total:	905	563	458	413	258	2597

Note: Data is as of March 1, 2021.

Heavy Duty Equipment Technician Apprenticeship Numbers (Old Program)

APPRENTICESHIP (Highest Level Achieved)	0TT	1TT	2TT	3TT	4TT	Total
Reporting:	0	0	0	0	12	12
Non-reporting:	0	0	0	1	73	74
Total:	0	0	0	1	85	86

Note: Data is as of March 1, 2021.

Heavy Duty Equipment Technician Apprenticeship Numbers by Region

Regional numbers are based on apprentice's address, not the school they attend. For a definition of College Regions, see *Appendix A*.

	REGION	0TT	1TT	2TT	3TT	4TT	Total
1	North	270	140	113	90	41	654
2	South East Interior	208	130	120	94	78	630
3	Island	128	105	70	56	64	423
4	Lower Mainland	262	171	149	163	67	812
	??	22	11	1	10	5	49
	Other	15	6	5	0	3	29
	Total	905	563	458	413	258	2597

Note: Data is as of March 1, 2021.

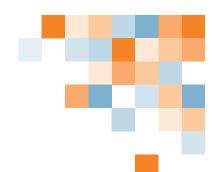
Diesel Engine Mechanic Apprenticeship Numbers (Harmonized Program)

APPRENTICESHIP (Highest Level Achieved)	0TT	1TT	2TT	Total
Reporting:	18	19	30	67
Non-reporting:	36	16	19	71
Total:	54	35	49	138

Note: Data is as of March 1, 2021.







Diesel Engine Mechanic Apprenticeship Numbers (Old Program)

APPRENTICESHIP (Highest Level Achieved)	0TT	1TT	2TT	Total
Reporting:	0	0	4	4
Non-reporting:	0	0	11	11
Total:	0	0	15	15

Note: Data is as of March 1, 2021.

Diesel Engine Mechanic Apprenticeship Numbers by Region

Regional numbers are based on apprentice's address, not the school they attend. For a definition of College Regions, see *Appendix A*.

	REGION	0TT	1TT	2TT	Total
1	North	8	9	16	33
2	South East Interior	7	4	4	15
3	Island	4	3	3	10
4	Lower Mainland	34	19	23	76
	??	1	0	2	3
	Other	0	0	1	1
	Total	54	35	49	138

Note: Data is as of March 1, 2021.

5. Heavy Mechanical Trades Exams

Updates

As mentioned, apprentices starting courses on, or after, September 1, 2021 will be required to write the SLE.

Exam Statistics Interpretation

When reviewing the statistics, the following should be considered:

Pass Rate The percentage of candidates who passed the exam

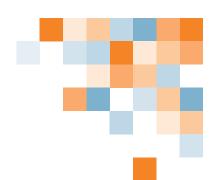
Average Exam Mark The mean final exam percentage of the total group

GAC Average The mean percentage scored on each General Area of

Competency by the total group







Standardized Level Exams (SLE)

- BC-only exam (developed and written in BC, content based on the Program Outline)
- Unless stated otherwise, all statistics are of first-time writes, for those writing with a class
- Challenger results are not included in these stats

Interprovincial Standard Exam (IPSE)

 National Pass Rate includes apprentice and challenger writes for all jurisdictions

Number of Writes

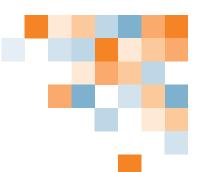
The validity of the statistics increases with the number of writes (i.e. when there is a larger sample size). Therefore, if an exam has a low number of writes (fewer than 100), the statistics alone cannot be used to determine the quality of the exam. This is because outliers (very low or high marks) will skew the results of the group with lower number of writes.

To determine exam quality, statistics must be analyzed in context with other factors including: student feedback on the exam, attributes of the student cohort, and extenuating circumstances.

This is especially important when comparing statistics across periods of time or for different groups. For example, a pass rate of 61% on 250 writes is not comparable with a pass rate of 34% on 50 writes.







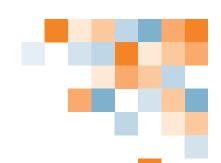
Exam Statistics

Heavy Duty Equipment Technician IPSE					
Year	2016	2017	2018	2019	2020
Number of Writes	299	210	260	232	207
Pass Rate	90%	85%	79%	75%	71%
National Pass Rate*	63%	59%	61%	61%	62%
Average Exam Mark	77%	76%	75%	74%	73%
Average per Block A - Common Occupational Skills	89%	77%	79%	82%	76%
Average per Block B - Engines & Engine Support Systems	73%	78%	72%	76%	76%
Average per Block C - Hydraulic, Hydrostatic & Pneumatic Systems	77%	71%	80%	73%	68%
Average per Block D – Drivetrain Systems	74%	76%	71%	71%	74%
Average per Block E - Steering, Suspension, Brake Systems, Wheel Assemblies & Undercarriage	72%	78%	76%	72%	75%
Average per Block F - Electrical & Vehicle Management Systems	81%	76%	71%	73%	72%
Average per Block G - Environmental Control Systems	87%	86%	80%	82%	84%
Average per Block H – Structural Components, Accessories & Attachments	74%	73%	76%	69%	71%

^{*}National Pass Rates combine results from both challengers & apprentices.





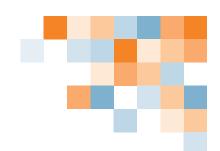


Truck & Tra	nsport M	echanic I	PSE		
Year	2016	2017	2018	2019	2020
Number of Writes	101	127	128	131	125
Pass Rate	92%	91%	80%	72%	78%
National Pass Rate*	45%	45%	49%	43%	50%
Average Exam Mark	80%	79%	77%	74%	75%
Average per Block A - Common Occupational Skills	95%	86%	88%	85%	87%
Average per Block B - Engine & Supporting Systems	79%	80%	76%	77%	72%
Average per Block C - Air Systems & Brakes	75%	77%	78%	75%	73%
Average per Block D – Electrical & Electronic Systems	78%	81%	80%	73%	79%
Average per Block E - Drive Train	76%	72%	68%	64%	71%
Average per Block F - Steering, Chassis/Frames, Suspension, Wheels, Hubs & Tires	84%	80%	77%	79%	74%
Average per Block G - Cab	80%	77%	73%	77%	70%
Average per Block H – Trailers	91%	83%	77%	72%	73%
Average per Block I – Climate Control	80%	84%	80%	66%	68%
Average per Block J – Hydraulic Systems	77%	77%	76%	71%	82%

^{*}National Pass Rates combine results from both challengers & apprentices.





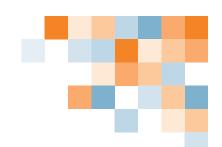


Transport Trailer Technician IPSE*						
Year	2016	2017	2018	2019	2020	
Number of Writes	1	5	5	5	4	
National Pass Rate**	26%	25%	26%	21%	30%	
Average Exam Mark	-	65%	60%	56%	65%	
Average per Block A - Common Occupational Skills	-	60%	63%	53%	71%	
Average per Block B - Suspension Systems	-	68%	61%	59%	71%	
Average per Block C - Brake Systems	-	69%	62%	58%	71%	
Average per Block D – Axels & Wheel End Assemblies	-	60%	50%	43%	50%	
Average per Block E - Trailer Chassis, Bodies & Coupling Units	-	59%	62%	53%	64%	
Average per Block F - Lighting & Wiring Systems	-	53%	55%	60%	47%	
Average per Block G - Hydraulic Systems	-	80%	64%	60%	65%	
Average per Block H – Heating & Refrigeration Units	-	85%	70%	85%	81%	

^{*} BC Pass Rate unavailable due to small cohort number.

^{**} National Pass Rates combine results from both challengers & apprentices.

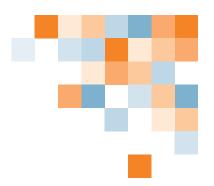




Diesel Engine Mechanic (HMT) CofQ*					
Year	2016	2017	2018	2019	2020
Number of Writes	3	1	6	11	4
Average Exam Mark	76%	-	75%	67%	73%
Average per GAC A - Occupational Skills	84%	-	81%	84%	98%
Average per GAC B - Brakes	69%	-	74%	60%	95%
Average per GAC C - Hydraulics	82%	-	76%	67%	68%
Average per GAC D – Electrical	77%	-	77%	65%	67%
Average per GAC E - Frames, Steering, Suspension	69%	-	61%	61%	78%
Average per GAC F - Trailer	83%	-	88%	80%	67%
Average per GAC G - Heating, Ventilation, Air Conditioning	67%	-	56%	58%	69%
Average per GAC H - Engines & Supporting Systems	75%	-	75%	66%	62%
Average per GAC J - Structural Components & Accessories	100%	-	83%	100%	75%

Note: BC Pass Rate unavailable due to small cohort number.





Appendix A: College Regions

REGIONS

- 1.NORTH
- 2. SOUTH EAST INTERIOR
- 3. ISLAND
- 4. LOWER MAINLAND

COLLEGE REGION	Abbrev.	Region
Camosun (Victoria, Sooke, Sidney, Brentwood Bay, Galiano)	СМ	3
Capilano (West Vancouver, North Vancouver, Whistler, Bowen Island)	CP	4
Douglas (Burnaby, Coquitlam, Maple Ridge, New Westminster, Anmore)	DG	4
Fraser Valley (Abbotsford, Chilliwack, Hope, Mission, Yale)	FV	4
Kwantlen (Delta, Langley, Richmond, Surrey, White Rock, Aldergrove)	KW	4
New Caledonia (Burns Lake, Mackenzie, Prince George, Vanderhoof)	NC	1
North Island (Campbell River, Comox, Courtenay, Port Alberni, Tofino)	NI	3
Northern Lights (Dawson Creek, Fort St John, Tumbler Ridge, Taylor)	NL	1
Northwest (Terrace, Smithers, Prince Rupert, Houston, Aiyansh, Kitimat)	NW	1
Okanagan (Kelowna, Penticton, Salmon Arm, Vernon, Oliver, Osoyoos)	OK	2
Rockies (Cranbrook, Creston, Fernie, Golden, Invermere)	RK	2
Selkirk (Nelson, Castlegar, Trail, Kaslo, Grand Forks, Robson, Rossland)	SL	2
Thompson Rivers (Kamloops, Williams Lake, Merritt, Lytton, Clinton)	TR	2
Vancouver	VC	4
Vancouver Island (Nanaimo, Gabriola, Parksville, Nanoose Bay, Duncan)	VI	3
Undefined (out-of-province = AB, ON, SK, YT)	unde	OTHER
Not mapped to a college region	??	??

Appendix C

Heavy Mechanical Articulation

INSTITUTIONAL REPORT

BRITISH COLUMBIA COUNCIL on ADMISSIONS AND TRANSFERS (BCCAT)

Meeting Date(s): June 15 – June 16, 2021

Institution/Campus Location: Thompson Rivers University, Kamloops BC

Name: Lyle Hirowatari Email Ihirowatari@tru.ca

1. Institutional Update:

- General: Thompson Rivers University faces challenges as any other institution in BC.
 Budget, space utilization, tooling requirements.
- Budgets/Facilities: Budgeting "Central Budgeting", could use more space.
- Student/Enrollment: In the 2020-2021 year the following programs were scheduled.

HMT LEVEL 1, 1 Class

HMT LEVEL 2, 5 Classes

HMT LEVEL 3, 4 Classes

HD LEVEL 4, 2 Classes

TRK LEVEL 4, 1 Class

Foundation, 3 Classes

Enrollment has been very good, full classes of 16 in Apprenticeship & 16 in Foundation.

Note: Due to Covid, class size for Foundation was capped at 16.

- Staffing: 2 Apprenticeship Instructors, 3 Foundation Instructors.
- Instruction/Open Education Resources: Using CDX text & Online CDX supporting media.
- Institutional return to campus plan has been implemented for September 2021, dependent on BC Health protocol.

2. Program/Course Update:

- Curriculum Developments: Use of CDX materials. Text books, workbooks & online training.
- Transfer Credit Applications or Alterations: N/A
- Issues: Budgeting to purchase equipment, supplies (Centralized Budget), Space Utilization, Tooling requirements.
- Research/Projects: Building mechanical modules to support learning. Ongoing.

3. **Other Items of Interest:** Covid-19, finding challenges to adapt theory to online delivery and practical with "social distancing measures" & "sanitization of work areas".

Appendix D

Heavy Mechanical Articulation

INSTITUTIONAL REPORT

BRITISH COLUMBIA COUNCIL on ADMISSIONS AND TRANSFERS (BCCAT)

June 15 2021	
Okanagan College	
dnoble@okanagan.bc.ca	

1. Institutional Update

- 5 Full time teachers
- 3 subs (2 young & 1 mid-late 50's)
- 2 Apprenticeship instructors
- 3 Foundation Instructors (1 new hire as Mark Scorah has retired)

2. Program/Course Update

Currently a full class for apprentice is 12 and Foundation is 16. Come September we will be returning to 16 students across the board. To deal with COVID we continued running 16 apprentices through each intake, however we had 2 classes with 2 instructors and a full class was 8, so having this extra instructor did impact our budget but overall it was a great year.

Also come September we will be returning F2F, success rates in apprenticeship is near 100%. It sounds as if app # are dropping and we are struggling to fill some classes. This is very new news to myself and have little info to support this. We will likely remain with the 4th year apprenticeship online, as majority of our material is theory for 4th year, and no need for students to commute daily for "classroom time"

3. Other Items of Interest:

We have a new Dean, who recently started with OC. He came from Ontario, with HD background as he started an equipment training course at the college he worked at, and he then set up a R&M with the HD class

Appendix E

Heavy Mechanical Trades (HMTPAC)

INSTITUTIONAL REPORT

BRITISH COLUMBIA COUNCIL on ADMISSIONS AND TRANSFERS (BCCAT)

June 15-16 2021

Selkirk College, Silver King Campus

Bruce Brittain

bbrittain@selkirk.ca

1. Institutional Update

- Heavy Mechanical Foundation 1 36 week curriculum
- 25,000 operating budget, 6000 sq.ft shop
- Full enrollment 18 students
- New staff Bruce Brittain 1 full time and 1 relief instructor
- Instruction/Open Education Resources

2. Program/Course Update

- Following ITA curriculum
- Transfer Credit Applications or Alterations
- Student engagement with online or remote learning
- Research/Projects

3. Other Items of Interest

Appendix F

Heavy Mechanical Trades Provincial ARTICULATION COMMITTEE

INSTITUTIONAL REPORT

BRITISH COLUMBIA COUNCIL on ADMISSIONS AND TRANSFERS (BCCAT)

Meeting Date(s): June 2021

Camosun College/Interurban Campus/Victoria

Name: Robert Glover email: gloverr@camosun.bc.ca

1. Institutional Update

• Academic courses went online. Trades did a combination of online and mask-to-mask training.

2. Program/Course Update

- Status guo for student enrollment.
 - I. Foundation class of 18 students with only half allowed in the shop at one time. Shop times are 8:00 to 11:00 am and 12:00 to 3:00 pm.
 - II. Apprentice classes of 16 students with only half allowed in the shop at one time. Shop times are 8:00 to 11:00 am and 12:00 to 3:00 pm.
- Staffing: 1 full time instructor, 1 part time instructor (70% workload), 1 full time toolroom attendant, 1 part time toolroom attendant. Brought on a brand new instructor in September of 2020 to teach the Foundation class.
- Shifted textbooks to mostly CDX for both Foundation and apprentice classes. Using the BC A Line books for Foundation and Hydraulic Systems for Mobile Equipment by Timothy Dell for Level 4 HD.
- Foundation waitlist at 2 to 3 year wait.
- Apprentice HMT Levels 2 and 3 near capacity, TTM Level 4 at 12 students and HDET Level 4 at 9 students.
- Issues: Finding, training and retaining part time instructor(s); Foundation waitlist increased but no plans for second class, storage of large training apparatus limiting active shop space.

3. Other Items of Interest

• College shutdown in March 2020 caused Foundation class to miss Hydraulics, HD Equipment portion of Line E and HVAC. These students will have a gap in their training.

Appendix G

HEAVY MECHANICAL TRADES PROVINCIAL ARTICULATION COMMITTEE

INSTITUTIONAL REPORT

BRITISH COLUMBIA COUNCIL on ADMISSIONS AND TRANSFERS (BCCAT)

Meeting Date(s): 15/16 JUN, 2021	
BCIT - ANNACIS ISLAND CAMPUS	
Name: Tony Upton	email:aupton@bcit.ca

• Institutional Update

- General: Surviving Covid with no outbreaks at our Campus. Gearing up to return to in-person classes starting in September. We will be increasing in-school attendance and numbers throughout the summer and ultimately open up restricted areas for full Campus return in the fall
- Budgets/Facilities: Potential for budget reductions therefore spending is curtailed for nonessential items
- Students/Enrollment: 102 on waitlist for foundation. 2 foundation classes and term 2 diploma over the summer. Then 1 level 1, 2 level 2's, 2 level 3's, 1 TTM 4, 2 HD 4's, Term 3 Diploma in the Fall term
- Staffing: We have added
 - 1 new part time foundation instructor Gerry Ciriani formerly with coast mtn. bus
 - 1 full time H/D instructor Wayne Wylie formerly with Finning
 - 1 full time TT instructor Sebastian Prszestaki formerly with Peterbilt and CMB
 - 1 full time contract foundation instructor
 - 1 Admin assistant

We have had 1 retiree. Mark Mutter

Instruction/Open Education Resources

Program/Course Update

• Curriculum Developments: Diploma program is up and running. We are into term 2. Great feedback so far.

Foundation program review underway

- Transfer Credit Applications or Alterations
- Issues: covid?
- Research/Projects: ERRTH testing ongoing. (Emission Reduction Research Test Hub)

• Other Items of Interest:

We are in active discussions with VCC (but no decisions yet) to have a program transfer of their
heavy mechanical Apprenticeship training. They are contemplating moving away from heavy
mechanical apprenticeship training delivery and we would include their apprenticeship intakes into
BCIT's calendar, and hire VCC instructors and support staff who would like to continue working at
the Annacis Island Campus. As we share the same facility now it could be a relatively smooth
transition. VCC may still deliver some foundation intakes



Appendix H

Heavy Mechanical Articulation

INSTITUTIONAL REPORT

BRITISH COLUMBIA COUNCIL on ADMISSIONS AND TRANSFERS (BCCAT)

Date June 15 th and 16th	
The College of New Caledon	ia
evenesheng1@cnc.bc.ca	

1. Institutional Update

We are operating as close to normal as we can with all the modifications required by the Covid Protocols. Our class sizes were reduced to 12 students from 16. We are currently operating with 6 instructors. Our shop covers 25,000 square feet, with a 25,000 square foot yard for a total of 50,000 square feet operating space. Our classes have been delivered on Zoom and a strict shop schedule is in place to allow for social distancing. We originally were allowed 16 students at a time in the shop but it has been upgraded to 24 students now.

2. Program/Course Update

We currently run 2 foundation classes and one class of CTC students per year. We usually do 1-2 1st year classes, 2 second year classes, 2 third year classes, 2 fourth year Heavy Duty Courses and 1 fourth year Truck and transport classes.

A lot of our curriculum is based on content that we have made ourselves. Foundations follows the ITA books but I don't believe they go deep enough in certain areas. Apprenticeship levels use the Alberta books (and our own curriculum).

 Other Items of Interest: We ran some full day online classes with full day shop times, this was well received from out of town students since they only needed to travel and pay for accommodation on shop days.

Note: Some instructors believe that students should be marked absent if their cameras are off during online class. Most of our instructors agree that online instruction can be a struggle.

Appendix I

Educational Institution Packages

As part of J-Ball Electronics continued commitment to putting the right tools into the hands of future technicians and mechanics, we are pleased to announce that in partnership with TEXA USA, we are now able to offer Educational Institution Packages.

We understand the rising cost of diagnostic software is pressuring program budgets so our Educational Institution Packages include *FREE lifetime software updates*, all five diagnostic license types (for the price of the Truck license), access to TEXA's troubleshooting database and technical support (toll-free & online).

Our standard kit comes with Automotive, Off-Highway and Truck cables but each kit is fully customizable to suit your program's needs.



\$11,500 CAD + Shipping & Taxes













Key Features at a Glance



Systems Scan

This function automatically scans all control units on the vehicle, displays errors detected, relevant error codes, and descriptions. Read and reset errors with a single click, and run diagnostics directly from the error detection screen.



Emission Systems

Today's vehicles employ sophisticated exhaust management and aftertreatment systems to meet stringent emission standards. TEXA allows the technician to perform diagnostic tests, forced regeneration, read/reset error codes, and configure replacement components.

Request a Live or Online Demonstration

We know buying diagnostic tools is difficult, that's why we have several ways to try TEXA before purchasing:

- 1. Live online demonstrations to explore diagnostic coverage and tests for your trucks and equipment.
- 2. Our local agent brings the tool to your shop to perform diagnostic tests.
- 3. Try one of our fully-functional demo kits in your shop for a month.

Call 1-855-326-8863 or visit our website at www.jballelectronics.com for more info.



Test drive function

Record diagnostic information during vehicle operation to identify faults that can not be detected in the shop. Upon completion of the test drive analyze trip data, parameters and fault codes and associated conditions the instant the fault occurred.





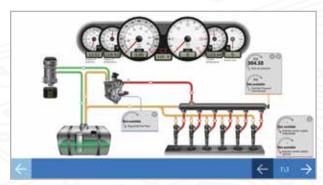
Graphic Dashboards

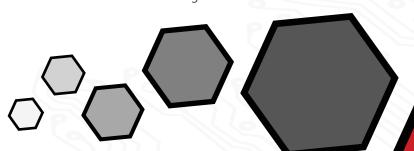
Graphic Dashboards display large amounts of system parameters to simplify monitoring of ABS, Emissions, Injection and Transmission during operation and diagnosis.



Supreme Service

Peace of mind that you have an experienced team supporting you. Toll free technical support and customized on-demand training from J-Ball Electronics and online support from TEXA.





Toll-Free: 1-855-326-8863 Website: www.jballelectronics.com

Educational Package Price Comparison to Retail

TEXA Educational Institution Packages include *FREE lifetime software updates*, all five diagnostic license types (for the price of the Truck license), access to TEXA's troubleshooting database and technical support (toll-free & online).

	Initial P	urchase		
Hardware	Retail	Educational Package		
Panasonic FZ-55 ToughBook	\$ 3,000.00	\$ 3,000.00		
Navigator TXTs	\$ 3,240.00	\$ 3,240.00		
American Truck Cable (T22)	\$ 364.50	\$ 364.50		
Off-Highway Cable Case	\$ 2,497.50	\$ 2,497.50		
Rugged Case for Laptop & TXTs	\$ 355.81	\$ 355.81		
Software & Subscriptions			Optional Annua	al Subscriptions
Automotive Diagnostic Software	\$ 2,025.00	no charge	Retail	Educational Package
Automotive TEXPACK Subscription	no charge	no charge	\$ 803.25	no charge
Automotive iSupport Subscription	\$ 405.00	no charge	405.00	no charge
Supercar Software (upgrade to Auto)	\$ 1,620.00	no charge		
Marine Diagnostic Software	\$ 1,822.50	no charge		
Marine TEXPACK Subscription	no charge	no charge	\$ 607.50	no charge
Marine iSupport Subscription	\$ 270.00	no charge	\$ 270.00	no charge
Off-Highway Diagnostic Software	\$ 2,025.00	no charge		
Off-Highway TEXPACK Subscription	no charge	no charge	\$ 803.25	no charge
Off-Highway iSupport Subscription	\$ 405.00	no charge	\$ 405.00	no charge
Powersport Diagnostic Software	\$ 1,012.50	no charge		
Powersport TEXPACK Subscription	no charge	no charge	\$ 607.50	no charge
Powersport iSupport Subscription	\$ 405.00	no charge	\$ 405.00	no charge
Truck Diagnostic Software	\$ 2,160.00	\$ 2,160.00		
Truck TEXPACK Subscription	no charge	no charge	\$ 1,073.00	no charge
Truck iSupport Subscription	\$ 405.00	no charge	\$ 405.00	no charge
	\$ 22,147.81	\$ 11,617.50	\$ 5,784.50	no annual fees

1 year of software updates (TEXPACK) is included with Retail & Educational packages.
TEXA Online Technical Support & Troubleshooting Database (iSupport) is an optional subscription service.
Subscriptions are optional, diagnostic functions continue to work without an active subscription.
Lifetime technical support is provided by J-Ball Electronics in all TEXA packages.

TEXA Marine Diagnostic Tools

TEXA is a multi-brand diagnostic tool for modern marine engines and is the official diagnostic tool for Tohatsu. Package options are available for Pleasurecraft vs Industrial applications and the TXB diagnostic adapter for Marine & Powersports vs the TXT diagnostic adapter for all types of vehicles (Auto, Commercial Truck, Marine, Off-Highway, Powersports).



Diagnostic Adapter Options	
TEXA Navigator TXTs - if also working on Automobiles, Commercial Truck & Off-Highway	\$3,240.00
TEXA Navigator TXB - if only working on Marine & Powersports	\$1,485.00
Powersport Software Options	
Marine Basic - Inboard Pleasurecraft, Outboards, Personal Watercraft	\$1,012.50
Marine Plus - Everything in Marine Basic plus Inboard Diesel, Industrial & Genset Engines	\$1,822.50
Software Update & Technical Support Subscriptions	
TEXPACK 12 Month Software Update Subscription	\$607.50
iSupport 12 Month Online Technical Support Subscription	\$270.00
Laptop Options	
Standard Laptop (Acer, Asus, HP, etc.)	\$1,000.00
Panasonic Toughbook FZ-55 Semi Rugged Laptop	\$3,000.00
Panasonic Toughbook CF-33 Rugged Tablet (add \$750.00 for keyboard module)	\$4,500.00

TEXA does not require an active TEXPACK subscription to function. The first year of software updates are included with purchase, we recommend iSupport but it is optional. There are no skip fees if your subscription lapses, pay the annual software subscription fee to be brought up to date and receive 12 months of updates. J-Ball Electronics provides toll-free technical support.

The annual subscription renewal fee includes:

- **TEXPACK** Software updates including diagnostic tests for new engines/vehicles as they are developed, fixes to software bugs.
- **iSupport** Ability to call/email TEXA for technical support, submit feature requests, submit errors in diagnosis, integrated truck fault code database.

Marine Cable Options

Cable	e/Part #	Cable Description		\$ CAD
SO4990		Marine Essential Cables w/ Case		\$ 911.25
3903689		Marine Power Supply and Adapter Kit for Navigator TXT		\$ 230.85
3905015		Personal Watercraft Kawasaki		\$ 166.05
3902358	AM01	Marine Main		\$ 145.80
3903008	AM01 CAN	Marine CAN		\$ 152.55
3902407	AM02	*Honda	4	\$ 31.05
30912247	AM04	*Mercury and Mariner Group 2 pin	4	\$ 43.20
3902450	AM05	*Mercury and Mariner Group 4 pin	4	\$ 48.60
3902413	AM06	*Yamaha/Selva Marine	4	\$ 43.20
3902417	AM08	Volkswagen, Hyundai, FNM		\$ 249.75
3902467	AM09	*Volvo Penta KAD-TAMD	+	\$ 31.05
3904048	AM10	*/**Universal cable complete with pinout adapters	4	\$ 198.45
3902659	AM11	FPT		\$ 184.95
3902864	AM12	*Steyr	4	\$ 93.15
3902865	AM13	*Evinrude	4	\$ 71.55
3902907	AM14	*10 pin Volvo, Mercruiser, Crusader, PCM (MEFI-1,2,3,4,4B)	4	\$ 60.75
3902931	AM15	*Yanmar	4	\$ 81.00
3092960	AM16	**Volvo, Mercruiser, Crusader, Ilmor, Indmar, PCM (MEFI-5/EGC OBD	4	\$ 60.75
		M-socket		
3903502	AM18	**8 pin rectangular Volvo Penta EGC-EVC	4	\$ 168.75
3903560	AM22	*4 pin Suzuki	4	\$ 71.55
3904277	AM24A	Cummins, Mercruiser Diesel, VM (not D-Tronic), Kohler		\$ 314.55
3904778	AM25	**Mercury, Mariner, Cummins Group cable from 2010	4	\$ 103.95
3905159	AM26	Volvo Penta EGC 05/05>05/07		\$ 210.60
3095265	AM27	*Mercruiser VM D Tronic	4	\$ 121.50
3905286	AM28	MTU/MDEC		\$ 334.25
3905397	AM29	Caterpillar Perkins		\$ 344.25
3906219	AM30	Tohatsu		\$ 384.75
3906891	AM31	MAN		\$ 222.75
3907103	AM32	**Steyr for engines with CAN Protocol	4	\$ 105.30
3907642	AM33	**Yanmar for engines with CAN Protocol	4	\$ 90.45
3907811	AM34	MTU engines based on Mercedes		\$ 243.00
3907812	AM35	Cummins QSK19		\$ 234.90
3907989	AM36	Scania		\$ 128.25
3908533	AM37	Tohatsu for MFS9.9, MFS 15E, MFS 20E		\$ 129.60
3908632	AM38	MTU		\$ 453.60
3909234	AM40	Volvo Penta	4	\$ 145.80
3910120	AM43	OBDM	4	\$ 129.60
3910127	AM44	Mercury	+	\$ 129.60
3906015	AP43	BRP Group Diagnosis and Key Programming		\$ 445.50
3909435	AP56A	BRP Power Supply	4	\$ 141.75

* To be used with AM01 Main Cable ** To be used with AM01 CAN Cable

= Cables requiring use of power supply adapter		= Included in Marine Essentials Cable Case	
--	--	--	--

Marine Power Supply Cables Explained

Some marine cables do not supply power through the diagnostic cable as indicated in the Marine Cable Options table.

Using a Navigator TXT Diagnostic Adapter with Marine Cables

The cable end circled below requires the use of either the Main Cable (black junction box) or the CAN Cable (red junction box) along with the Navigator TXT cable and power supply from the Marine Power Supply cable pack. Diagnostic cables with the round 16 pin end connect directly to the Navigator TXT Marine Base Cable.



Using a Navigator TXB Diagnostic Adapter with Marine Cables

The cable end circled below requires the use of either the Main Cable (black junction box) or the CAN Cable (red junction box) along with the Navigator TXB power cable.

Diagnostic cables with the round 16 pin end connect directly to the Navigator TXB.



TEXA Off-Highway Packages

All TEXA Off-Highway packages include:

- TEXA Navigator TXTs Diagnostic Adapter
- 1 Year Software Updates and Technical Support
- Off-Highway Cable Case



Diagnostic Tool Only Kit	
TEXA Off-Highway installed on your laptop	\$8,167.50
Diagnostic Laptop Kits	
TEXA Off-Highway with Standard Laptop (Acer, Asus, HP)	\$9,167.50
TEXA Off-Highway with Panasonic Toughbook FZ-55 Semi Rugged Laptop	\$11,167.50
TEXA Off-Highway with Panasonic Toughbook CF-33 Rugged Tablet (+ \$750.00 for keyboard)	\$12,667.50
Refurbished Diagnostic Laptop Kits	
TEXA Truck with Refurbished Panasonic CF-31 Rugged Laptop	\$ 8,867.50

TEXA Software Renewals	
TEXA Off-Highway - Annual Renewal	\$1,208.25

TEXA does not require an active subscription to function. The first year of software updates and technical support is included with purchase. There are no skip fees if your subscription lapses, pay the annual software subscription fee to be brought right up to date and receive 12 months of updates.

The annual subscription renewal fee includes:

- \$803.25 TEXPACK
 - Software updates including diagnostic tests for new engines/vehicles as they are developed, fixes to software bugs.
- \$405.00 iSupport
 - Ability to call/email TEXA for technical support, submit feature requests, submit errors in diagnosis. iSupport is optional when subscribing to TEXPACK.

Off-Highway Cable Options

(Off-Highway Cable Case includes cables highlighted in grey - \$3,080.70 value if purchased separately)

Ca	ble/Part #	Cable Description		\$ CAD
SO49C8		Off Highway Essential Cables w/ Case		\$2,497.50
3910328		Empty Cable Case		\$129.60
3905031		Truck/OHW Power Supply and Adapter Kit		\$403.65
3902211		New Holland Diagnosis Button Cable for TM 2nd Series	4	\$81.00
3902219		CNH Group Bridged Connector for HH Menu		\$141.75
3905786		9 Pin OBD-Deutsch		\$81.00
3903430	3151/T02B-A	Adapter Cable for FPT/Iveco for 3151/T02B (Adapter #13)	*	\$162.00
3902144	3151/T02B	lveco/FPT 30 Pin Cable Euro 2 and Euro 3	4	\$263.52
3151/T07	3151/T07	Universal Truck Cable with Pin-Out Kit	4	\$279.45
3903429	3151/T09A	Mercedes Benz Euro 2 and Euro 3	4	\$222.75
3151/T11B	3151/T11B	Volvo Truck Cable	*	\$222.75
	T17	ZF 1st Generation	*	\$182.25
3901982	3151/T27	Deutz Cable	*	\$263.25
3901868	3151/T28	Volvo Penta 1	*	\$182.25
3903918	3151/T29A	Volvo Penta 2 Cable (+8 Pin Adapter N°16)	*	\$303.75
3903437	3151/T32A	Same-Deutz-Claas Cable	*	\$182.25
3902189	3151/T33	Fendt Cable	4	\$152.55
3902284	3151/T34	Bosch Fan and Hydraulic Rexroth Cable	4	\$263.25
3902509	3151/T37	9 Pin Cable for SISU, Sauer, Danfoss, and Carraro Transmission	4	\$132.30
3902892	3151/T38	Deutsch 9 Pin Cable for Caterpillar and Perkins	*	\$202.50
3902897	3151/T39	Massey Ferguson Cable	4	\$162.00
3902919	3151/T40	Valtra Cable	4	\$152.55
3903112	3151/T41	ZF 2nd Generation	4	\$182.25
3903493	3151/T42	New Holland TN Series Cable	4	\$344.25
3904143	3151/T43	Claas and Renault Cable	*	\$263.25
3904144	3151/T44	Carraro Lifter (MF, JD & Claas) Cable	*	\$141.75
3904547	3151/T47	Volvo Construction Cable	*	\$162.00
3906709	3151/T50	Cummins Industrial Application Cable	*	\$162.00
3905474	3151/T53	Landini/McCormick Cable	4	\$101.25
3905787	3151/T54	Hitachi Construction Cable	4	\$82.35
3906462	3151/T55	Kubota Engine Cable	4	\$81.00
3907644	3151/T58	Construction Bobcat Diagnosis Cable	*	\$126.90
3907742	3151/T60	Scania Engine Diagnosis Cable for Doosan Vehicles	*	\$95.85
3907749	3151/T61	Construction 14-Pin Caterpillar Cable (from 2015)	+	\$267.30
3907899	3151/T62	MTU MDEC-II Engine Cable	4	\$252.45
3908093	3151/T63	Construction Doosan Engine Cable	4	\$118.80
3908971	3151/T65	Construction Yanmar Engine Cable	4	\$121.50
3908999	3151/T66	Construction Hyundai CE Cable	4	\$251.10
3909073	3151/T67	Construction Komatsu CE Cable	*	\$129.60
3909475	3151/T69	Doosan Engine Cable	*	\$137.70
3910268	3151/T71	Denoxtronic 2 Module Cable	*	\$483.30
3910263	3151/T72	ZF-USB	*	\$45.90
3910440	3151/T73	Cobus D89	4	\$102.60

= Cables requiring use of power supply		= Included in Off-Hwy Cable Case
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Off-Highway Power Supply Cables Explained

Most off-highway diagnostic ports do not supply power through the diagnostic cable. External power must be provided to the Navigator TXT using power cables. The Navigator TXT will accept 8 to 32 Volts.



Two cables will be needed for each off-highway diagnosis plus one of the power supply cables:

- 1. 3902990 The base cable for all other off-highway cables.
- 2. 3902235 The TXT power interface inserts into the back of the TXT then connects to one of:
 - o 3902216 Cigarette Lighter power adapter
 - o 3900324 3 Pole Style plug
 - o 7200054 Battery clamps for direct connection to the vehicle battery
 - o 7200056 30' Extension cord

TEXA Powersport Diagnostic Software

TEXA is the official diagnostic tool of Benelli, Betamotor, Bimota, Brough Superior, Ducati, Fantic, Moto Morini, MV Agusta, SWM and SYM Italia and provides coverage for motorcycles & scooters, all terrain vehicles, watercraft, snowmobiles and powersport motors from around the world.



Diagnostic Adapter Options		
TEXA Navigator TXTs - if also working on Automobiles, Commercial Truck & Off-Highway	\$3,240.00	
TEXA Navigator TXB - if only working on Marine & Powersports	\$1,485.00	
Powersport Software Options		
North American Brand Coverage	\$337.50	
Worldwide Brand Coverage		
Software Update & Technical Support Subscriptions		
TEXPACK 12 Month Software Update Subscription	\$607.50	
iSupport 12 Month Online Technical Support Subscription	\$405.00	

TEXA does not require an active TEXPACK subscription to function. The first year of software updates are included with purchase, we recommend iSupport but it is optional. There are no skip fees if your subscription lapses, pay the annual software subscription fee to be brought up to date and receive 12 months of updates. J-Ball Electronics provides toll-free technical support.

Powersport Cable Options - Canadian Pricing

Cable	/Part #	Cable Description	\$ CAD
S0 ²	193D	Bike Essential Case (cables listed in grey below)	\$1,485.00
3903689		Bike and Marine power supply and adapter kit	\$230.85
3904606		Adapter for BMW G450X***	\$113.40
3905015		Kawasaki personal watercraft cable kit	\$156.82
3906954		Honda immobilizer adapter kit	\$132.60
3910306		Bike Cable Case (empty)	\$315.90
	AP01	Bike main cable	\$182.25
	AP02	* Aprilia Sagem cable	\$40.50

* Requires use of AP01 Bike Main Cable	
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	AP03	* Aprilia Synerject cable	\$40.50
	AP05	Triumph/Victory/OBD cable	\$198.45
	AP06	Honda blink-code	\$255.15
	AP07	Universal cable with pinout adapters	\$275.40
	AP08	* Peugeot main cable	\$56.70
	AP09A	BMW slow-code cable up to 1999	\$282.15
	AP11	* Kawasaki cable up to 2010	\$32.40
	AP12	Suzuki and Cagiva reprogramming cable	\$506.25
	AP14	Aprilia cable for SVX (Supermoto), RXV/MXV (Enduro)	\$141.75
	AP15	* Suzuki	\$44.55
3900802	AP18	Buell cable	\$105.30
3901198	AP20	* Honda	\$105.30
3901414	AP22	Kawasaki Z750/Z1000 series from 2007 to 2009	\$141.75
3092404	AP23	Ducati cable from 2010	\$125.55
3902486	AP24	BMS Piaggio	\$130.95
3904267	AP25	Bimota cable	\$152.55
3902649	AP26	** Racing bike power cable	\$97.20
3902877	AP27	Kawasaki Racing Bike power cable	\$28.35
3902880	AP29	Kawasaki VN/Vulcan, Concours/GTR 1400 2007 to 2009	\$141.75
3902958	AP30	Kawasaki motocross cable	\$91.80
3903439	AP31	Kawasaki cable from 2010	\$140.40
3903782	AP32	* SYM/TGP cable	\$99.90
3903933	AP33	* Benelli/Keeway motorcycle & scooter cable	\$141.75
3904267	AP34	MV Agusta cable from 2012	\$152.55
3904538	AP36	* Benelli/Keeway/Aeon/Quadro scooter cable	\$60.75
3904608		BMW from 1999 - Husqvarna from 2011	\$226.80
	AP38	Daelim cable	\$101.25
3904841	AP39	KTM/Husaberg cable	\$121.50
3904960		SYM cable for electric vehicles	\$162.00
3906015		Cable kit for diagnosis and key programming BRP Group	\$445.50
	AP44	* Official Ducati charge maintainer for extended diagnosis	\$64.80
	AP45	Polaris/Indian/Victory cable	\$109.35
3905469		* Kymco cable	\$85.05
3906418	AP48	SYM cable for Dell'Orto systems	\$94.50
3906945	AP50	TGB ATV diagnosis serial cable	\$85.05
3907938	AP51	SWM cable	\$112.50
	AP52	Benelli/Athena-OBDII cable	\$116.10
	AP53	Moto Morini for Euro 4	\$210.60
3908405	AP54	Benelli (CAN Protocol) and Parsun	\$126.90
3908814	AP55	Power supply for diagnosis of SWM vehicles	\$97.20
390900	AP56	BRP Power Supply Adapter	\$141.75
	AP57	Harley Davidson cable	\$162.00
3909849	AP58	OBD Euro 5	\$137.70
3909878	AP59	Yamaha	\$121.50
3909911	AP60	Aprilia Moto Guzzi	\$106.65
		•	\$137.70
3909921	AP61	Royal Enfield	\$137

Appendix J



Applying for Employment Insurance Important Notice

Employment Insurance (EI) provides temporary income support to people who have become unemployed through no fault of their own and are actively looking for work, as well as people who are not working due to special circumstances, such as illness, becoming a parent or caring for a sick relative. Service Canada handles the processing of EI claims and benefit payments. This document is intended for individuals who have become unemployed and its aim is to assist those individuals to apply for EI benefits.

When to apply

Apply for EI benefits **as soon as you stop working**. You do not need to wait for your Records of Employment to submit your EI application.

Submitting an application

To submit an application, visit <u>Canada.ca</u>. Select <u>Employment Insurance and leave</u>, and then click on the type of benefits that best suits your situation. Finally, follow the instructions to start your online application to claim El benefits.

At the end of the online application process, you will be presented with a confirmation page. It contains a lot of useful information, including the next steps. Take some time to read it.

Submitting your Records of Employment

Missing Records of Employment can delay the processing of your claim.

- Paper Records of Employment: If your employer uses paper Records of Employment, you must obtain copies of your Record(s) of Employment from all employers you have worked for during the last 52 weeks. After you submit your application online, you must mail or submit the first part (employee's copy) of the paper Record(s) of Employment in-person to a Service Canada Centre as soon as possible so that your application can be processed. The mailing address of the Service Canada Centre to which you should send the Record(s) of Employment will be displayed at the end of the online application process.
- Electronic Records of Employment: Electronic Records of Employment include a serial number beginning with W, S or Y. If your employer sends the Record of Employment electronically to Service Canada, they do not have to provide you with a copy because a copy has been electronically submitted to Service Canada. However, you can retrieve the Record of Employment and print them using My Service Canada Account.

Next Steps

To receive the benefits for which you may be entitled, you must submit a report every two weeks. Failure to do so **can mean a loss of benefits**. There are two options available to complete and submit your reports:

- 1. You may use the Internet Reporting Service by visiting the website at <u>Canada.ca</u>, then select <u>Employment Insurance and leave</u>.
- 2. You may also use the Telephone Reporting Service by dialing 1-800-531-7555.

Information about your Employment Insurance (EI) claim

You can obtain information about your EI benefits claim by consulting My Service Canada Account on Canada.ca or by calling us toll free at 1-800-206-7218.

My Service Canada Account

Under the Most requested section of the Canada.ca website, select Sign in to an account.

My Service Canada Account allows you to access your Employment Insurance information on a secure site. It is **fast, easy, useful and secure**. If you have a current or a previous employment insurance claim, you can:

View:

- details on your El claims;
- · electronic Records of Employment that your employers have submitted;
- · payment information, including deduction details;
- · your previous claims;
- · important messages from Service Canada;

Update:

 your personal information including your postal address, your phone number and your bank account information for direct deposit;

View and print:

• your EI tax slips (T4Es).

Additional information: Reactivating your EI claim

If you started a new claim for EI benefits within the past 52 weeks, and there are weeks still payable on that file, you must submit an **online application** to **renew (reactivate) your claim**.

In some circumstances, it could be more advantageous to terminate a claim and create a new one because this may increase the amount of your benefits or the length of your benefit period. If you prefer to terminate your existing claim and begin another one, **you must first contact us** by calling 1-800-206-7218.

Your decision to terminate a claim is final and cannot be changed. Here are some points for consideration to help you make a decision:

- Have you worked since the start of that existing claim?
- Have you worked enough insurable hours to meet the qualifying requirements for a new claim?
- Do you know that there is a waiting period of one (1) week for which you will not be paid on a new claim?

If, for any reason, your claim cannot be reactivated, your application will be considered as a new claim.

Fast Facts for Apprentices

Apprenticeship Supports:

Industry Training Authority www.itabc.ca

Work BC Apprentice Services Provincial Supports Service Canada Employment Insurance

Steps involved:

1. WORK BC PROVINCIAL SUPPORTS

(check off when done!)

The Online Employment Services
(OES) portal is used to apply for
WorkBC Apprentice Services
Financial Supports and to obtain the
16 Digit Reference Code.

Online Employment Services (OES) is at:
http://apply.workbc.ca When
prompted, use your BCeID to login and
start your application. If you don't have a
BCeID, you can register for one by following the
links provided in the online application.

You will receive an email notification via the OES regarding EI Reference Code once you have submitted your completed application. Be sure to check your junk mail if you don't see it in your inbox.

If you do not receive an email before your course start date, please contact your WorkBC Apprentice Services Contractor for assistance.

2. SERVICE CANADA EMPLOYMENT INSURANCE

(check off when done!)

After you have your 16 Digit
Reference Code, you are ready to apply for Employment Insurance. As an apprentice, you can apply up to 7 days before your last day of work.

Enter your 16 Digit Reference Code on the page titled Reference Code (are you part of a group of employees in an Apprenticeship program. If you do not, your claim will be delayed and you will not get your Provincial Benefits.

Establish a My Service Canada
Account. Check course dates are
correct and ROE is received.

Complete your first Employment
Insurance Report on the Internet
Reporting Service. You will need
your 4 digit Access Code that is mailed to you,
within 10 days of applying. You <u>MUST</u>
complete this Report to get your claim
established. Your exemption for reporting will
start when your course starts.

FREQUENTLY ASKED QUESTIONS:

1. Why do I have to do a report? I did not have to before.

Since apprentices have been able to apply 7 days ahead of their last day of work, apprentices MUST do their first report to get their claim established and then the exemption starts on their claim.

2. I cannot find by El Reference Code.

You need to contact_WorkBC Apprentice Services: www.workbcapprenticeservices.ca Phone: 1-844-428-4730 or Email: apprenticeservices@workbc.ca

3. I did not use my 16-digit reference code when I applied. What do I do?

Call **Service Canada** -- 1-800-206-7218 or on line service request -- <u>Canada.ca/service-canada-e-service</u>. A Service Canada officer will contact you within two business days.

4. It is taking a long time to finalize my El Claim. I need financial help.

Apply for the **Canada Apprentice Loan** on line or call 1-855-844-5670 for an application or assistance.

5. I applied for the Apprentice Grants weeks ago and have not heard anything. Whom do I call?

Direct line for Apprenticeship Grants: 1-866-742-3644

6. When can I apply for my Incentive Grants?

After year/level 1 and 2, when you receive your progression letter from ITA.

7. When can I apply for Tax Credits?

Tax Credits are available after year/level 3 and 4, when you do your taxes, Provincial form, through Canada Revenue Agency.

8. How do I get my progression letter?

On your ACCESS account with Industry Training Authority (ITA): www.itabc.ca – Check the website and contact the Advisor in your area.

Service Canada, Citizen Services Specialists:

<u>brenda.giesbrecht@servicecanada.gc.ca</u> / 778-836-8042 dianne.stoesz@servicecanada.gc.ca / 778-788-4990

Appendix K

Fleetschool Live Unlisted Video Links

Welcome to Fleetguard:

https://www.youtube.com/watch?v=oqtaQeJ6xNo&ab_channel=CumminsFiltration

Basics of Filtration & Filter Media:

https://www.youtube.com/watch?v=bNKac9du4hM&ab channel=CumminsFiltration

Air Filtration: https://www.youtube.com/watch?v=uityhUjpuo4&ab channel=CumminsFiltration

Lube Filtration: https://www.youtube.com/watch?v=wwyTD61jFyw&ab_channel=CumminsFiltration

Fuel Filtration Part 1:

https://www.youtube.com/watch?v=0yCSdh0kIoU&ab channel=CumminsFiltration

Fuel Filtration Part 2:

https://www.youtube.com/watch?v=-Co95VG 9oc&ab channel=CumminsFiltration

Cooling System Basics Part 1:

https://www.youtube.com/watch?v=h7C5iRKwTEU&ab channel=CumminsFiltration

Cooling System Basics Part 2:

https://www.youtube.com/watch?v=PySDKCuvrfo&ab_channel=CumminsFiltration