

Automotive Service Technician

Transition Plan

Table of Contents

Abbreviations	3
Harmonization Overview	4
Transition Planning	5
Training Providers	5
Transition Plan	6
Pathways for Current Apprentices.....	7
Work-Based Training Hours (WBT)	8
Exams	9
Appendix A: Details of Gaps.....	10
Appendix B: Transition Map.....	13

Abbreviations

AST	Automotive Service Technician
CCDA	Canadian Council of Directors of Apprenticeship
CL	Current level (2015)
ER	Employer sponsor
FDN	Foundation program
HL	Harmonized level (Sept 2017)
NOA	Red Seal National Occupational Analysis
RSOS	Red Seal Occupational Standard; replaces NOA
SLE	Standardized Level Exam
TP	Training provider
TT	Technical training
TW	Trade worker
WBT	Work-based training

Harmonization Overview

The Canadian Council of Directors of Apprenticeship (CCDA) is responsible for the Red Seal Program, which develops common interprovincial standards and examinations. The CCDA is undertaking the Harmonization Initiative in 30 Red Seal trades by 2020. British Columbia is an active participant in this initiative.

The goal is to substantively align apprenticeship systems across Canada by making apprenticeship training requirements more consistent in the Red Seal trades.

Harmonization Priorities

1. Use of Red Seal trade name
2. Consistent total training hours (in-school and on-the-job)
3. Same number of training levels
4. Consistent sequencing of training content, including use of most recent Red Seal Occupational Standard (RSOS).

HARMONIZATION: What's changing for

AST

	Changing in BC?	What will it be?
TRADE NAME	YES	Automotive Service Technician*
NUMBER OF TRAINING LEVELS	NO	4
TOTAL HOURS Technical + work-based training	YES	7200 hours Increased by 420
TRAINING SEQUENCE order of subjects taught	YES	Some changes to sequence

Transition Planning

The re-sequencing of the Automotive Service Technician (AST) program through the Harmonization Initiative has resulted in significant changes to the sequencing of technical training.

We consulted with the 14 public post-secondary institutions that deliver the Automotive Service Technician program, and also considered the input of our internal partners. We evaluated a number of scenarios, and the transition plan outlined in this document was identified as the best option. We have also ensured that there are options for all current apprentices to complete their apprenticeship.

Training Providers

BC Institute of Technology

Camosun College

College of New Caledonia

College of the Rockies

Kwantlen Polytechnic University

North Island College

Northern Lights College

Coast Mountain College

Okanagan College

Selkirk College

Thompson Rivers University

University of the Fraser Valley

Vancouver Community College

Vancouver Island University

Note: Not all institutions teach every level.

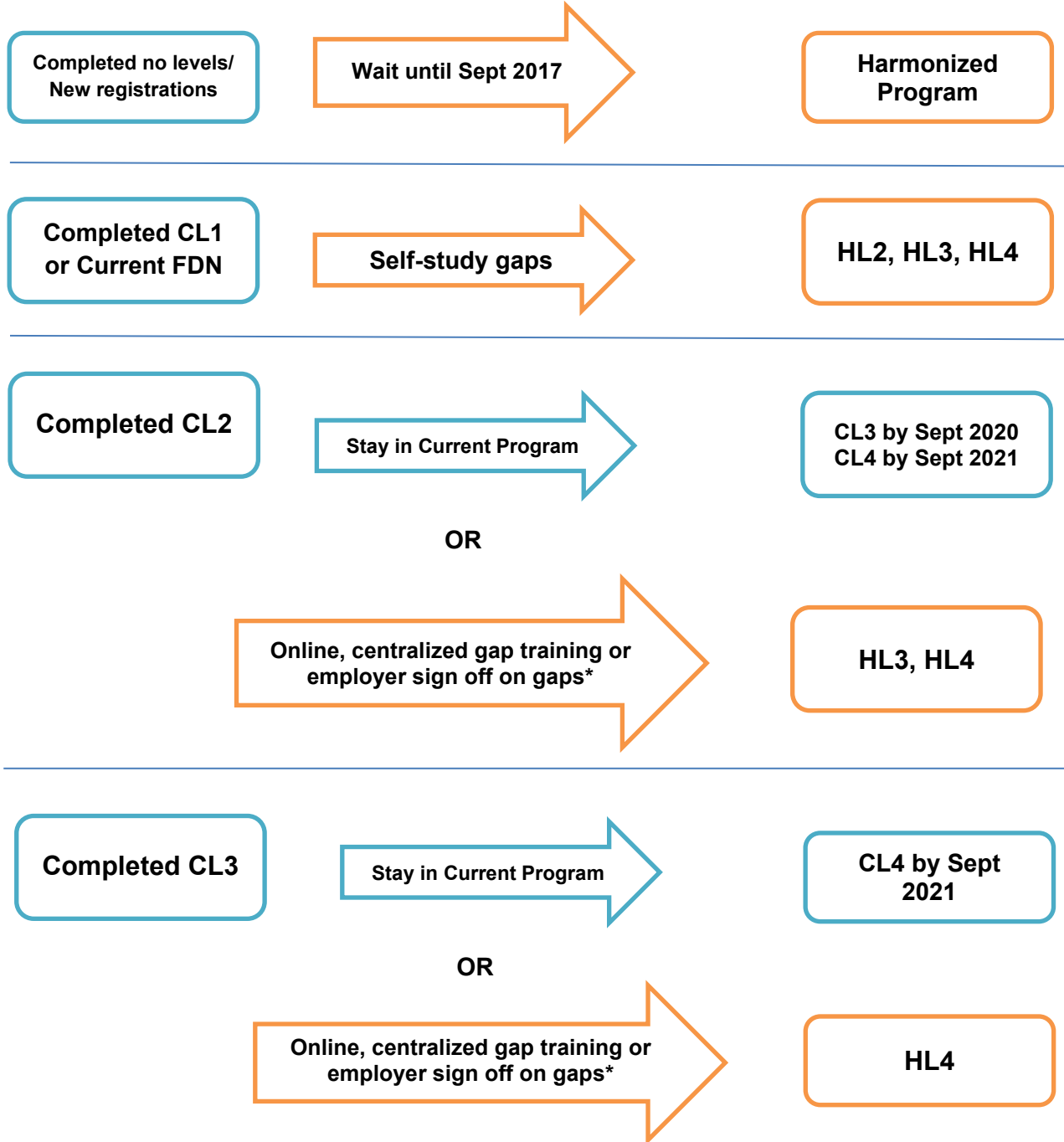
Transition Plan

Implementation Timelines	
Level 1/ Foundation/ Youth	September 1, 2017
Level 2	September 1, 2017
Level 3	September 1, 2018
Level 4	September 1, 2019

Year 0 16/17	CL1	CL2	CL3	CL4
Year 1 17/18	HL1	HL2	CL3	CL4
Year 2 18/19	HL1	HL2	HL3 CL3	CL4
Year 3 19/20	HL1	HL2	HL3 CL3	HL4 CL4
Year 4 20/21	HL1	HL2	HL3	HL4 CL4
Year 5 21/22	HL1	HL2	HL3 **	HL4 **

** Online, centralized Gap Training offered by Northern Lights College for CL2s and CL3s who need to transition to the harmonized program.

Pathways for Current Apprentices



*If you completed CL2 or CL3, please contact the [Apprenticeship Advisor](#) in your region before you take technical training in the Harmonized Program. Online, centralized Gap Training is offered by Northern Lights College.

Work-Based Training Hours (WBT)

The following changes to training time for AST will come into effect **September 1, 2017**:

- Increased technical training hours in order to accommodate content added to the Red Seal Occupational Standard (RSOS) (**increase of 30 hours at Level 2 and 30 hours at Level 4**)
- Increased work-based training (WBT) hours in order to align with the harmonized standard of 7,200 hours of total training (**increase of 360 hours**)

Apprenticeship Pathway

Current Program	Hours
Technical Training	780
Level 1 = 210 hours	
Level 2 = 180 hours	
Level 3 = 210 hours	
Level 4 = 180 hours	
Work-based Training Hours	6,000
Current Total Training Hours	6,780

Harmonized Program	Hours
Technical Training	840
Level 1 = 210 hours	
<u>Level 2 = 210 hours</u>	
Level 3 = 210 hours	
<u>Level 4 = 210 hours</u>	
Work-based Training Hours	6,360
Harmonized Total Training Hours	7,200

Challenge Pathway and Sign-off Authority

Current Program	Hours
Work-based Training Hours	6,000
ITA Formula for Calculating Challenge WBT	X 1.5
Current Challenge WBT Hours	9,000

Harmonized Program	Hours
Harmonized Work-based Training Hours	6,360
ITA Formula for Calculating Challenge WBT	X 1.5
Harmonized Challenge WBT Hours	9,540

NOTE: If an apprentice completes training in current program, the WBT hours for that program will apply. If they transition, they will have to complete the WBT hours for the harmonized program but will be given a document assessment of 360 hours, so they won't experience it as increased WBT hours.

Exams

Exams for the Harmonized Program

ITA exams will be revised and aligned to the content of the harmonized Program Outline according to the schedule below. CofQ are not piloted, and so will be ready for first cohort of harmonized levels as follows:

Exam	Exam Development	Exam Launch
HL1 (CofQ)	Spring 2017	September 2017
HL2 (CofQ)	Spring 2017	September 2017
HL3 (CofQ)	Spring 2018	September 2018
HL4 (SLE)*	Spring 2019	November 2019

*HL4 is an SLE, and so will be piloted and therefore, it will not be ready for the first cohort of HL4 students. Marks for this cohort will be based on in-class assessment only. HL4 students will write the IP, as usual.

Appendix A: Details of Gaps

GAP A: CL1→HL2

Gap (Missing Content)

This table lists the content that a student will be **missing** if they have completed Current Level 1 (CL1) and then take Harmonized Level 2 (HL2).

	Competency	Objectives	Practical	Gap Hours
H1	Diagnose and repair drive shafts and axles	Service drive shafts and axle shafts	Assess driveline angles	12
M1	Implement specific safety protocols for hybrid and electric vehicles (EV)	Describe hybrid and electric vehicle safety	No	3
			Total Gap Hours	15

Overlap (Repeated Content)

This table lists the content that a student will be **repeating** if they have completed Current Level 1 (CL1) and then take Harmonized Level 2 (HL2).

	Competency	Overlap Hours
G6	Service anti-lock brake systems	14
I5	Describe electronic suspension systems	6
H5	Power steering	6
	Total Overlap Hours	26

GAP B: CL2→HL3

Gap (Missing Content)

This table lists the content that a student will be **missing** if they have completed Current Level 2 (CL2) and then take Harmonized Level 3 (HL3).

	Competency	Objectives	Practical	Gap Hours
H2	Diagnose and repair manual transmissions and transaxles	Service manual transmissions and transaxles	Inspect manual transmissions and transaxle components Calculate gear ratios	33
H4	Diagnose and repair clutches	Service clutch systems	No	8
H7	Diagnose and repair final drive assemblies	Service final drive (differentials) assemblies	Perform backlash measurement and adjustment	23
H1	Diagnose and repair drive shafts and axles	Service drive shafts and axle shafts	Assess driveline angles	12
			Total Gap Hours	76

Overlap (Repeated Content)

This table lists the content that a student will be **repeating** if they have completed Current Level 2 (CL2) and then take Harmonized Level 3 (HL3).

	Competency	Overlap Hours
A5	Service electrical accessories	15
D3	Describe air induction and exhaust systems	3
	Total Overlap Hours	18

Gap C: CL3→HL4

Gap (Missing Content)

This table lists the content that a student will be **missing** if they have completed Current Level 3 (CL3) and then take Harmonized Level 4 (HL4).

	Competency	Objectives	Practical	Gap Hours
G2	Diagnose and repair networking systems	Service networking systems Service multiplexing systems Service module software	Perform a functional test on a multiplexing system Determine if there is an updated software version for a control module	12
H1	Diagnose and repair drive shafts and axles	Service drive shafts and axle shafts	Assess driveline angles	12
H2	Diagnose and repair manual transmissions and transaxles	Service manual transmissions and transaxles	Inspect manual transmissions and transaxle components Calculate gear ratios	33
H4	Diagnose and repair clutches	Service clutch systems	No	8
H7	Diagnose and repair final drive assemblies	Service final drive (differentials) assemblies	Perform backlash measurement and adjustment	23
			Total Gap Hours	88

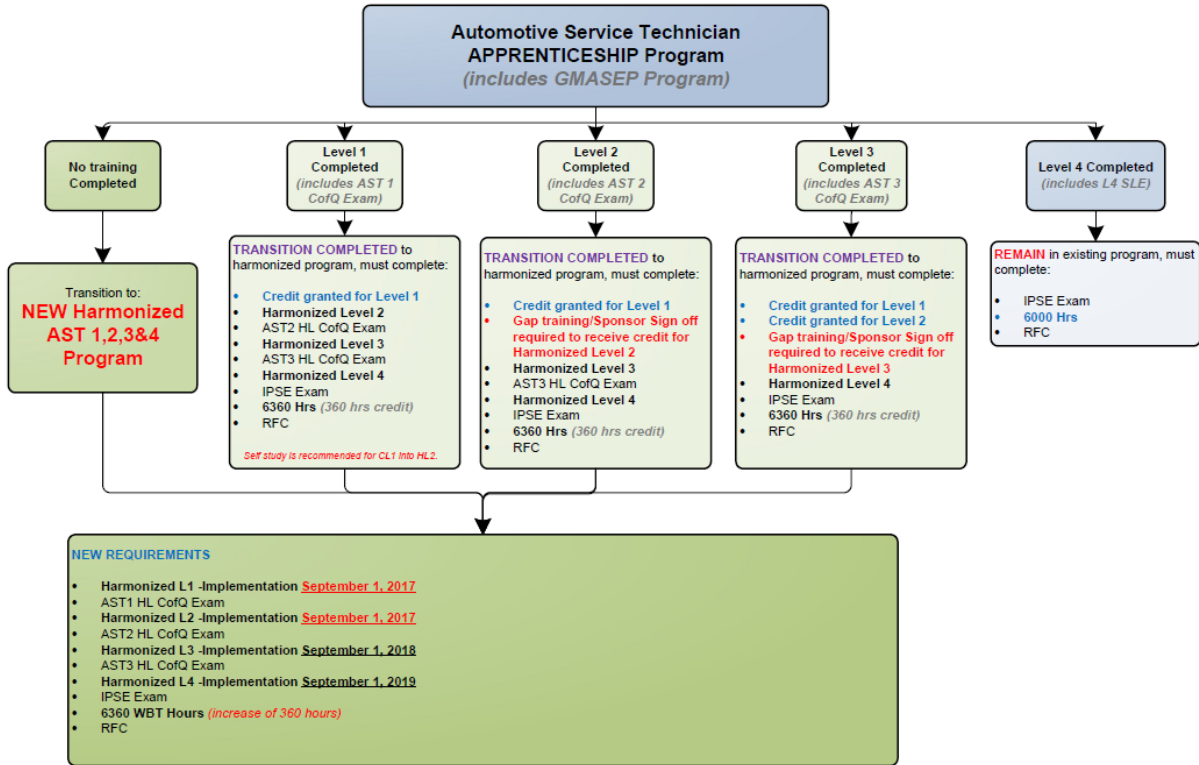
Overlap (Repeated Content)

This table lists the content that a student will be **repeating** if they have completed Current Level 3 (CL3) and then take Harmonized Level 4 (HL4).

	Competency	Hours
F3	Diagnose and repair diesel emission control systems	6
F1	Diagnose and repair diesel fuel delivery and injection systems	16
F2	Diagnose and repair diesel intake and exhaust systems	2
I5	Diagnose and repair instrumentation, entertainment systems and displays	4
J1	Diagnose and repair air flow control and heating systems	6
J2	Diagnose and repair refrigerant systems	30
L1	Diagnose and repair restraint systems	10
	Total Overlap Hours	74

Appendix B: Transition Map

Automotive Service Technician 1, 2, 3 & 4 Transition Map EFFECTIVE September 1, 2017



Last Updated: October 5, 2021