

Automotive Service Technician Apprenticeship Level 1 – ASTA1 Trades Training

Program Outline

PROGRAM IMPLEMENTATION DATE:	Pre 1992
OUTLINE EFFECTIVE DATE:	January 2023
PROGRAM OUTLINE REVIEW DATE:	September 2028

GENERAL PROGRAM DESCRIPTION:

This program covers the program competencies specified by the Industry Training Authority (ITA) for Level 1 of the 4-Level Automotive Service Technician Apprenticeship program. Apprentices receive technical and practical training related to diagnosing and repairing driveline systems, electrical systems, steering and suspension, braking, control systems, restraint systems, tires and wheels, hybrid and electrical vehicles as well as body components, accessories and trim. Safe work practices related to the automotive service industry are emphasized and reinforced throughout the program delivery.

Credentials Granted: Upon successful completion of the 7 week Level 1 Automotive Service Technician program, students receive:

- Level 1 Technical Training Credit of the Automotive Service Technician Apprenticeship program from the Industry Training Authority.

Delivery: This program can be delivered face to face or hybrid (online with face-to-face components).

Time for this program: 7 weeks

Structure of Instructional Hours:

Instructional Activity	Duration
Instructional Hours	28 hrs/wk
Directed Studies	2 hrs/wk
Hours per Week	30 hrs/wk
Total Program Hours	210 hrs

Type of Practicum	Duration
Theory	70%
Practical Skills	30%
Total	100%

Program Outline Author or Contact:

John White, Automotive Service Technician RSE, PID

Signature

APPROVAL SIGNATURES:

Department Head

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Dean of Trades and Technology

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Department Head Signature

Dean Signature

EDCO

Valid from: January 2023 – September 2028

Education Council Approval Date

PROGRAM ADMISSION REQUIREMENTS AND TRANSFER CREDIT:

Admission Requirements: Sponsored Automotive Service Technician Apprentice

Flexible Assessment (FA):

Credit can be awarded for this program through FA

Yes

No

Prior Learning Credit:

Apprentices that have extensive work experience in a trade (in BC or elsewhere) but have never been certified must apply through the Industry Training Authority (ITA) to challenge the certification for advanced placement in a program. Refer to the ITA website (<http://www.itabc.ca/apply-apprenticeship/challenging-exams>) for details regarding the challenge procedure. Trade specific requirements can be found for each trade in the Trades Program Profiles on the ITA website.

Prior Program Number: N/A

Textbooks and Required Resources:

Textbook selection varies by instructor and may change from year to year. At the Program Outline Effective Date the following textbooks were in use:

AST – Level 1: COTR Custom Package

Please see the instructor's syllabus or check COTR's online text calculator <https://textbook.cotr.bc.ca/> for a complete list of the currently required textbooks.

TECHNICAL TRAINING CONTENT AND PROGRAM COMPETENCIES:

- AMST 101 PERFORM SAFETY-RELATED FUNCTIONS**
- Maintain safe work environment
 - Use personal protective equipment (PPE) and safety equipment
- AMST 102 USE TOOLS, EQUIPMENT AND DOCUMENTATION**
- Use tools and equipment
 - Use fasteners, tubing, hoses and fittings
 - Use hoisting and lifting equipment
 - Use technical information
- AMST 103 USE COMMUNICATION AND MENTORING TECHNIQUES**
- Use communication techniques
- AMST 104 DIAGNOSE AND REPAIR DRIVELINE SYSTEMS**
- Diagnose and repair drive shafts and axles
- AMST 105 DIAGNOSE AND REPAIR ELECTRICAL SYSTEMS AND COMPONENTS**
- Diagnose and repair basic wiring and electrical systems
 - Diagnose and repair starting and charging systems and batteries
- AMST 106 DIAGNOSE AND REPAIR STEERING AND SUSPENSION, BRAKING, CONTROL SYSTEMS, TIRES, WHEELS, HUBS AND WHEEL BEARINGS**
- Diagnose and repair steering and control systems
 - Diagnose and repair suspension and control systems
 - Diagnose and repair braking and control systems
 - Diagnose and repair tires, wheels, hubs and wheel bearings
- AMST 107 DIAGNOSE AND REPAIR RESTRAINT SYSTEMS, BODY COMPONENTS, ACCESSORIES AND TRIM**
- Diagnose and repair wind noises, rattles and water leaks
 - Diagnose and repair interior and exterior components, accessories and trim
 - Diagnose and repair latches, locks and movable glass
- AMST 108 DIAGNOSE AND REPAIR HYBRID AND ELECTRIC VEHICLES (EV)**
- Implement specific safety protocols for hybrid and electric vehicles (EV)

The program competencies and technical training content delivered in this program follow the Industry Training Authority Program Outline for this trade.

See instructor’s syllabus for the detailed outline of weekly readings, activities and assignments.

AUTOMOTIVE SERVICE TECHNICIAN LEVEL 1			
COTR COURSE	SUBJECT COMPETENCIES	THEORY WEIGHTING	PRACTICAL WEIGHTING
AMST 101	Perform Safety-Related Functions	7%	7%
AMST 102	Use Tools, Equipment and Documentation	10%	10%
AMST 103	Use Communication and Mentoring Techniques	1%	0%
AMST 104	Diagnose and Repair Driveline Systems	3%	5%
AMST 105	Diagnose and Repair Electrical Systems and Components	25%	33%
AMST 106	Diagnose and Repair Steering, Suspension, Braking, Control Systems, Tire Wheels, Hubs and Wheel Bearings	45%	45%
AMST 107	Diagnose and Repair Restraint Systems, Body Components, Accessories and Trim	5%	0%
AMST 108	Diagnose and Repair Hybrid and Electric Vehicles (EV)	4%	0%
	Total	100%	100%
In-School Theory/Practical Subject Competency Weighting		70%	30%
Final in-school percentage score		IN-SCHOOL %	
In-school Percentage Score Combined theory and practical subject competency multiplied by		80%	
Standardized Level Exam Percentage Score The exam score is multiplied by		20%	
Final Percentage Score		FINAL %	

Pass Requirements:

In order to pass this program, students are required to

- achieve a minimum overall 70% final percentage score

SAFETY:

WorkSafeBC regulations apply to all trades programs. Students are expected to follow all safe work practices and have high regard for the safety of others as well as of themselves. Students are responsible to wear personal protective equipment (PPE) as directed. At a minimum, students must provide and wear approved safety footwear and eyewear at all times in the shop. Additional PPE may be required for specific tasks. Students are expected to wear clothing suitable for working safely in the shop.

STUDENTS MUST PROVIDE THEIR OWN

- steel-toed leather work boots
 - safety glasses
 - coveralls
 - gloves
 - pens, pencils, three-ring binder
 - calculator
 - paper
 - multimeter
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EXAM POLICY:

Students must attend all required scheduled tests and exams that make up a final grade at the appointed time and place.

Individual instructors may accommodate for illness or personal crisis. Additional accommodation will not be made unless a written request is sent to and approved by the appropriate Department Head prior to the scheduled exam.

Any student who misses a scheduled test or exam without approval will be given a grade of “0” for the exam.

PROGRAM GRADE

Program grades are assigned as follows:

COM	Completed to defined standard $\geq 70\%$
NCG	No Credit Granted $< 70\%$

Successful completion of the in-school training for each level is defined as a final score of 70% or greater. (ITA website)

ACADEMIC POLICIES:

See www.cotr.bc.ca/policies for general college policies related to program activities, including grade appeals, cheating and plagiarism.

PROGRAM CHANGES:

Information contained in program outlines is correct at the time of publication. Content of the programs is revised on an ongoing basis to ensure relevance to changing educational, employment, and marketing needs. The instructor endeavours to provide notice of changes to students as soon as possible. The instructor reserves the right to add material to programs.