



ASTA1 – Automotive Service Technician Apprenticeship Level 1

Trades

Effective Term & Year: Fall 2022

Program Outline Review Date: 2028-09-01

Program Area: Trades Apprenticeship Training

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:

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

Delivery Methods: Hybrid (Face-to-Face and Online)

Program Duration: 7 weeks

Instructional Activity and Hours:

Activity	Hours
Instructional Hours (hrs/wk)	28 hrs/wk
Directed Studies (hrs/wk)	2 hrs/wk
Total (hrs/wk)	30 hrs/wk

Total Program Hours 210 hours

Content Weighting:

Activity	Percentage
Classroom, Directed Studies or Online Instruction	70%
Seminar/Tutorials	30%

Admission Requirements:

Sponsored Automotive Service Technician apprentice.

Flexible Assessment:

Credit cannot be awarded for this program through Flexible Assessment.

Program Transfer Credit:

For information about block transfer agreements between programs in British Columbia, Alberta, and elsewhere, please visit <http://www.cotr.bc.ca/transfer>.

To minimize transfer issues, check with an academic advisor at the institution that will receive the transfer credits.

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.

Program Competencies and Technical Training Content:

Upon successful completion of this program, students will be able to:

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)

Evaluation and Assessment:

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

Students must provide their own:

- steel-toed leather work boots
- safety glasses
- coveralls
- gloves
- pens, pencils, three-ring binder
- calculator

- paper
- multimeter

Academic Policies:

College of the Rockies policies related to courses can be found at <https://cotr.bc.ca/about-us/college-policies/> and include the following:

- Policy 2.4.3 Students with Documented Disabilities
- Policy 2.4.4 Student Conduct (plagiarism, other cheating, behavioral misconduct)
- Policy 2.5.8 Academic Performance
- Policy 2.5.3 Grade Appeal
- Policy 2.4.9 Student Concerns Re Faculty

Program Grade

COM	NCG
Completed to the defined standard – 70% or greater	No Credit Granted – less than 70%

Program Changes:

Information contained in program outlines is correct at the time of publication. Content of the program 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.

Industry Training:

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

Safety Catalog:

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.

Course Descriptions: Refer to Course Outlines – <https://outlines.cotr.bc.ca/course/>

