



# Automotive Service Technician Apprenticeship Level 3 – ASTA3

## Trades Training

### Program Outline

PROGRAM IMPLEMENTATION DATE: Pre 1998  
OUTLINE EFFECTIVE DATE: January 2023  
PROGRAM OUTLINE REVIEW DATE: September 2028

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#### GENERAL PROGRAM DESCRIPTION:

This 7-week program delivers the skills, knowledge and training required for Level 3 of the 4-level Automotive Service Technician Apprenticeship program. Program competencies covered include servicing and testing gasoline engine support systems, vehicle networking systems, driveline systems, electrical systems and components. This program includes classroom theory, demonstrations and practical hands-on training in a fully functioning automotive shop. Safe work habits are important in this trade and are emphasized, reinforced and practiced throughout the program.

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**Credential Granted:** Upon successful completion of the 7-week Level 3 Automotive Service Technician Apprenticeship program, students receive:

- Level 3 Technical Training credit of the Automotive Service Technician Apprenticeship program from the Industry Training Authority (ITA).

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**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%
<b>Total</b>	<b>100%</b>

**Program Outline Author or Contact:**

John White, Automotive RSE, PID

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Signature

**APPROVAL SIGNATURES:**

Department Head

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Department Head Signature

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Dean Signature

EDCO

Valid from: January 2023 – September 2028

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Education Council Approval Date

**PROGRAM PREREQUISITES AND TRANSFER CREDIT:**

**Prerequisites:** Sponsored Automotive Service Technician apprentice who has successfully completed Level 2 technical training

**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 Course 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 (most current edition):

AST – Level 3: COTR Custom Package  
Automotive Fuel and Emissions Control Systems

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.

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## **TECHNICAL TRAINING CONTENT AND PROGRAM COMPETENCIES:**

- AMST 301      Diagnose and Repair Gasoline Engine Support Systems**
- Diagnose and repair advanced wiring and electronics
  - Diagnose and repair gasoline fuel delivery and injection systems
  - Diagnose and repair gasoline ignition systems
  - Diagnose and repair engine management systems
  - Diagnose and repair gasoline intake and exhaust systems
  - Diagnose and repair gasoline emissions control systems
- AMST 302      Diagnose and Repair Vehicle Networking Systems**
- Identify type of networking system
  - Diagnose and repair networking systems
- AMST 303      Diagnose and Repair Driveline Systems**
- Diagnose and repair mechanical transfer case
- AMST 304      Diagnose and Repair Electrical Systems and Components**
- Diagnose and repair electrical options and accessories

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.

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<b>AUTOMOTIVE SERVICE TECHNICIAN LEVEL 3</b>			
<b>COTR COURSE</b>	<b>SUBJECT COMPETENCIES</b>	<b>THEORY WEIGHTING</b>	<b>PRACTICAL WEIGHTING</b>
AMST 301	Diagnose and Repair Gasoline Engine Support Systems	64%	65%
AMST 302	Diagnose and Repair Vehicle Networking Systems	15%	10%
AMST 303	Diagnose and Repair Driveline Systems	2%	0%
AMST 304	Diagnose and Repair Electrical Systems and Components	19%	25%
	Total	100%	100%
<b>In-School Theory/Practical Subject Competency Weighting</b>		70%	30%
<b>Final in-school percentage score</b>		<b>IN-SCHOOL %</b>	
<b>In-school Percentage Score</b> Combined theory and practical subject competency multiplied by		<b>80%</b>	
<b>Standardized Level Exam Percentage Score</b> The exam score is multiplied by		<b>20%</b>	
<b>Final Percentage Score</b>		<b>FINAL %</b>	

**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.

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**PROGRAM GRADE:**

Program grades are assigned as follows:

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

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

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**ACADEMIC POLICIES:**

See [www.cotr.bc.ca/policies](http://www.cotr.bc.ca/policies) for general college policies related to course activities, including grade appeals, cheating and plagiarism.

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**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.