



v c c . c a

ATAP 3011: Automotive Service Technician Harmonized Apprentice Level 3

EFFECTIVE DATE

September 2018

DEPARTMENT

Automotive Tech Apprenticeship

DESCRIPTION

This course provides Automotive Service Technician Level 3 Apprentices with the skills and knowledge required for the Automotive Service Technician Harmonized Level 3 certification as set by the Industry Training Authority (ITA). Learners will apply advanced electrical and electronic principles, use advanced wiring diagrams, electrical equipment and describe computer controlled system. The learner will also identify, service, and describe fuel types, and fuel delivery systems including direct injection. The learner will service and repair electronic ignition, and engine management systems; and describe air induction, exhaust systems, and gasoline emission control devices. The learner will describe and repair network computer control and multiplexing systems as well as describing mechanical transfer cases and servicing electrical accessories. Upon successful completion of this course, apprentices will be able to progress to Automotive Service Technician Harmonized Level 4 technical training.

CREDITS

9.0

YEAR OF STUDY

1st Year Post-secondary

PREREQUISITES

Successful completion of Automotive Service Technician Harmonized Level 2 Apprenticeship

COREQUISITES

None

COURSE LEARNING OUTCOMES

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

- 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
- Identify type of networking systems
- Diagnose and repair networking systems
- Diagnose and repair mechanical transfer cases
- Diagnose and repair electrical options and accessories

PRIOR LEARNING ASSESSMENT & RECOGNITION (PLAR)

None

HOURS

Lecture: 85

Lab: 125

INSTRUCTIONAL STRATEGIES

Instructional time is (approximately) 40% classroom and 60% practical activity. Classroom activities are lectures, demonstrations, audio-visual presentations and exercises. Practical experience takes place in an active shop setting. The extensive workshop experience provides reinforcement of theoretical concepts, develops hand skills, and familiarity with repair procedures, electronic equipment and standard safety procedures.

GRADING SYSTEM

Percentages-ITA

PASSING GRADE

70%

EVALUATION PLAN

Type	Percentage	Assessment activity
Final Exam	30	
Quizzes/Tests	40	Quizzes measure each general area of competency within the course as per ITA 2017 AST outline.
Lab Work	30	

COURSE TOPICS

- Gasoline Engine support systems
- Wiring and electronics
- Fuel delivery systems
- Fuel injection systems
- Emission control systems
- Engine management
- Vehicle Networking Systems
- Mechanical transfer cases
- Electrical options

LEARNING RESOURCES

None

Notes:

- Course contents and descriptions, offerings and schedules are subject to change without notice.
- Students are required to follow all College policies including ones that govern their educational experience at VCC. Policies are available on the VCC website at:
<https://www.vcc.ca/about/governance--policies/policies/>.
- To find out how this course transfers, visit the BC Transfer Guide at <https://www.bctransferguide.ca>.

Broadway campus

1155 East Broadway
Vancouver, B.C. Canada
V5T 4V5

Downtown campus

250 West Pender Street
Vancouver, B.C. Canada
V6B 1S9

Annacis Island campus

1608 Cliveden Avenue
Delta, B.C. Canada
V3M 6P1

604.871.7000

VCC.ca

Generated at: 4:04 am on Jan. 20, 2021