



COURSE OUTLINE

Course Name: Automotive Service Technician Harmonized Apprentice Level 4

Course Number: ATAP 4011

Number of Credits: 9.0

Effective Date: September 2019

Course Description:

This course provides Automotive Service Technician Level 4 Apprentices with the skills and knowledge required for the Automotive Service Technician Harmonized Level 4 certification as set by the Industry Training Authority (ITA).

Learners will apply mentoring techniques, describe and repair Diesel engine support systems, as well as intake, exhaust and emission related diesel components. The learner will also identify, service, and describe automatic transmission and transaxle all-wheel drive systems, as well as four wheel drive components. The learner will service and repair instrumentation, entertainment and display systems; heating, ventilation and air conditioning systems; and body restraint components. The learner will describe and repair hybrid and electric vehicle systems.

School or Centre:

Trades, Technology & Design

Year of Study:

4th Year Post-secondary

Course History:

New Course

Name of Replacing Course (if applicable):

Course Pre-requisites (if applicable):

ATAP 3011 Automotive Service Technician Harmonized Apprentice Level 3

Course Co-requisites (if applicable):

PLAR (Prior Learning Assessment & Recognition)

No Yes (details below):

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.

Course Learning Outcomes:

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

- 1 Use mentoring techniques
- 2 Diagnose and repair diesel engine support systems
- 3 Diagnose and repair automatic transmissions and transaxles
- 4 Diagnose and repair all-wheel (AWD) systems
- 5 Diagnose and repair instrumentation, entertainment systems and displays
- 6 Diagnose and repair heating, ventilation, air conditioning and comfort control systems
- 7 Diagnose and repair restraint systems, body components, accessories and trim
- 8 Diagnose and repair hybrid and electric vehicle systems

Program Learning Outcomes:

Evaluation/Grading System

Grading System	Specify if 'Other':	Specify Passing Grade:
Percentages		70%

Components and Weighting of the Assessment/Evaluation Plan:

Type	Percentage	Evaluation Plan (provide a brief explanation for each component especially if value exceeds 35%):
Lab Work	30	successful completion of Achievement criteria as per ITA 2017 AST outline.
Final Exam	30	
Quizzes/Tests	40	Quizzes measure each general area of competency within the course as per ITA 2017 AST outline.
Total		100

Learning Environment/Type

Instruction Type	Hours Per Instruction Type	Comments
J - Classroom/Online (Mixed Mode)	85	
K - Shop/Teaching Kitchen	125	
Total		210

Resource Material(s):

Resources are items in addition to tuition that the student is responsible for purchasing. Course resource information will be supplied by the department/instructor.

Course Topics:

Mentoring techniques
Diesel fuel delivery and injection systems
Diesel intake and exhaust systems
Diesel emission control systems
Automatic transmissions and transaxles
All-wheel drive systems
Instrumentation, entertainment systems and displays
Heating , ventilation and air conditioning systems
Air flow control and heating systems
Refrigerant systems
Restraint systems
Hybrid and electric vehicle systems

VCC Education and Education Support Policies

There are a number of **Education** and **Education Support** policies that govern your educational experience at VCC, please familiarize yourself with them.

The policies are located on the VCC web site at:

<http://www.vcc.ca/about/governance--policies/policies/>

To find out how this course transfers, visit the BC Transfer Guide at www.bctransferguide.ca.

FOR COMMITTEE USE ONLY

Approved by Curriculum Committee:	Nov 21, 2018	Approved by Education Council:	Dec 11, 2018
-----------------------------------	--------------	--------------------------------	--------------