



COURSE OUTLINE

Course Name: Fuel Delivery Systems

Department Head/Coordinator: Jason Devisser

School or Centre:	Department:	
School of Transportation Trades	Automotive Service Technician	
Course History:	Year of Study:	
New Course	2nd Year Post-secondary	
Name of Replacing Course (if applicable):	Course Number:	IAST2030
	Number of Credits:	3

Course Pre-requisites (if applicable):

None

Course Co-requisites (if applicable):

None

PLAR (Prior Learning Assessment & Recognition)

No Yes (details below):

Course Description:

Students learn fuel types, alternate fuels and fuel delivery systems which are the main focus of this course. Topics also include carburetors and fuel injection systems.

Instructional Strategies:

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. All modules are designed to enable the student to work independently and in groups.

Course Learning Outcomes:

At the end of this course students will be able to:

- Identify and describe fuel types, characteristics and composition
- Identify and describe the design, components and operation of carburetors
- Identify and describe the design and operation of fuel delivery systems
- Inspect, diagnose and service fuel delivery systems
- Identify and describe the design, components and operation of gasoline fuel injection systems
- Inspect, diagnose and service fuel injection systems
- Identify, describe characteristics and evaluate alternate fuels
- Identify and describe the design, components and operation of alternate fuel systems

Program Learning Outcomes:

- Practice working safely including complying with WorkSafeBC and WHMIS regulations
- Apply employability and communication skills while working in a businesslike manner
- Utilize hand, measuring, and power tools and equipment safely and effectively
- Provide general automotive maintenance services including lubrication and fluids, belts and hoses, exterior lamps, body trim and hardware, tires and wheels, non friction bearings and spindles and hubs
- Assess, diagnose and service hydraulic, drum brake, disc brake, power assist and anti-lock brake systems
- Assess, diagnose and service steering systems
- Assess, diagnose and service suspension systems
- Describe and diagnose electrical, electronic, and ignition systems
- Analyze and diagnose On Board Diagnostic (OBD) System Data using advanced electrical test equipment including computer controls, multiplex and network systems
- Identify and service fuel delivery systems, fuel types, alternate fuels, and gasoline fuel injection components
- Describe and test engine management systems including input sensors and output actuators
- Describe new vehicle technology and hybrid systems
- Describe and service vehicle Pre and Post Combustion Systems, emissions, Test OBD-II Evaporative Emission System, and Perform exhaust gas analysis

Course Topics and Sequence Covered:

Fuel types
Carburators
Fuel delivery systems
Gasoline fuel injection systems
Alternate fuels
Alternate fuel 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-vcc/policies/index.cfm>

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

FOR COMMITTEE USE ONLY

Date Approved by Education Council:		Date Approved by VCC Board (if applicable):	
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