



**Certificate**

# Automotive Technology - Alternative Fuels

## Year One (Sample schedule)

### Quarter One (Fall)

- ATEC 231 Hybrid & Electrical Vehicle I .....5
- ATEC 241 Alternative Fuels I .....5

### Quarter Two (Winter)

- ATEC 232 Hybrid & Electrical Vehicle II .....6
- ATEC 242 Alternative Fuels II .....5
- ENGL&101 English Composition .....5

### Quarter Three (Spring)

- ATEC 233 Hybrid & Electrical Vehicle III .....5
- ATEC 243 Alternative Fuels III .....4
- ATEC 251 Alternative Fuels Applications I .....4
- ATEC 252 Alternative Fuels Applications II .....5

### (Fall/Winter/Spring)

- AMATH 121 Applied Math/Prof Tech I or  100 level  
Math Course .....5
- HUMDV 120 Human Relations .....3

**Total Credits Required 57**

## Specifics

### Length of Program

Courses with prerequisites, and the placement level of the student, may extend the Length of Program listed on this page.

### Which Quarter Can I begin?

The typical student schedule is based on entering the program during the fall quarter, however some programs allow students to enter in the winter or spring as well. Since not all do, please confirm with an advisor whether this program must be started during a specific quarter or not.

### Details

**Completion Award:** Certificate  
**Length of Program:** 3 Quarters  
**Program Code:** 712

### Program Coordinator (contact with questions)

Mike Hansen (360) 417-6540  
 Office: Q-7 [mhansen@pencol.edu](mailto:mhansen@pencol.edu)

**Apply online:** <http://pencol.edu/GetStarted>



## Certificate

# Automotive Technology - Alternative Fuels

### Program Description

Peninsula College's Automotive Technology program is designed, in consultation with the college's automotive technology advisory committee, to meet the needs of the modern-day workplace. The Alternative Fuels certificate program will be the first of its kind on Washington's North Olympic Peninsula. Emphasis is on the use of sophisticated equipment to keep automobiles operating in an environmentally sound and physically safe condition. Successful completion of this program leads to an Associate of Applied Science degree in Automotive Technology.

### Special Features

- The Automotive Technology program is certified by the National Automotive Technicians Education Foundation (NATEF).
- This program offers a proficiency certificate relating to several specific areas of Alternate Fuels Technology including hybrid, diesel hybrid, compressed natural gas, liquefied propane gas, ethanol and electric.

### Student Learning Outcomes

When this program is completed, the student will be able to:

- Recognize unsafe situations that may occur in an automotive repair shop; identify the safety precautions that should be taken; relate the proper application of safety procedures; demonstrate safe operation of available equipment.
- Demonstrate use of appropriate hand tools and a broad understanding of basic test equipment.
- Apply a systematic approach; communicate effectively with owner/operators; project proper company image; demonstrate integrity/sound judgment; exhibit positive attitude/self-esteem; exhibit initiative (self-starter); demonstrate good housekeeping, planning, and organizational skills; show attention to details.
- Perform necessary technical adjustments; verify actual symptoms; demonstrate knowledge of subassembly and components; use appropriate manuals and diagnostic tools; evaluate cost of corrective actions; demonstrate ability to interpret results, apply math to solve technical problems, and use specialized equipment.
- Demonstrate manual dexterity, resourcefulness, creativity, and mechanical skills; use sensory perceptions and logical approach to problem-solving/trouble-shooting.
- Interpret and understand manuals, drawings, specifications, and procedures; demonstrate proper reading and application of technical literature; use correct terminology; complete industry ASE testing.

### Program Prerequisites

Automotive Service Technician jobs are already ranked as 'very good' by the Bureau of Labor Statistics, Occupational Outlook Handbook, 2008-2009 meaning that jobs are plentiful even during the current economic downturn. Increases are projected at 14%, compared to 10% for all occupations and over 110,000 new jobs are projected over the decade). With the ongoing acquisition of certified education and training, automotive technicians may expect advancement from entry level technician to mid-level and master technician position and on to lead technician/foreman, services manager and general manager. Standard Occupational Classification 49-3023 Automotive Service Technicians and Mechanics.

### Career Opportunities

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### Potential Positions and Earning

Automotive Sales Persons, Maintenance Managers, Service Writers, Parts Counter Persons, Skilled Automotive Technician

**For current employment and wage estimates, please visit and search for the relevant occupational term:**  
[www.bls.gov/oes](http://www.bls.gov/oes)

### Test Fees

Placement test (one time cost): .....\$20.00

### Approximate Additional Costs

Books, supplies and miscellaneous fees  
(per quarter)..... \$125.00 - \$300.00  
Tools .....\$3000.00  
ASE Testing .....\$200.00