

## AUTO 296-4Credits

### Student Learning Objectives/Job Description for Cooperative Education

As a cooperative education experience and employee the learning objectives are expected to include, but not be limited to the following:

1. Steering and Suspension tasks of at least 16 clock hours  
*Area tasks should include but not be limited to:*
  - a. Tie Rod inspection and replacement
  - b. Ball Joint inspection and replacement
  - c. Strut inspection and replacement
  - d. Leaf spring inspection
  - e. Power steering system inspection
  - f. Suspension alignment inspection and adjustment
  
2. Heating, Cooling and Air Conditioning tasks of at least 10 hours  
*Area tasks should include but not be limited to:*
  - a. Thermostat replacement
  - b. Heater hose replacement
  - c. Coolant system flush
  - d. Heater core inspection
  - e. Air Conditioning system inspection and service
  
3. Brake System tasks of at least 12 clock hours  
*Area tasks should include but not be limited to:*
  - a. Disc brake pad inspection and replacement
  - b. Disc brake system rotor inspection and service
  - c. Drum brake system shoe inspection and replacement
  - d. Drum brake system drum inspection and service
  - e. Hydraulic brake system fluid flush and bleed
  - f. Brake lathe operation
  - g. Parking brake adjustment
  
4. Engine mechanical tasks of at least 10 clock hours  
*Area tasks should include but not be limited to:*
  - a. Timing belt inspection and replacement
  - b. Cylinder head gasket inspection and replacement
  - c. Engine noise diagnosis
  - d. Motor mount inspection
  
5. Engine electrical tasks of at least 8 clock hours  
*Area tasks should include but not be limited to:*
  - a. Starter motor inspection and replacement
  - b. Alternator inspection and replacement
  - c. Ignition system functional tests

- d. Perform minor engine tune-up
- e. Perform major engine tune-up
- f. Oxygen sensor inspection
- g. Fuel injector inspection

6. Automatic transmission tasks of at least 6 clock hours

*Area tasks should include but not be limited to:*

- a. Fluid flush and refill
- b. System filter inspection and replacement
- c. Fluid leak inspection
- d. Torque converter operation inspection

7. Manual transmission task of at least 6 hours

*Area tasks should include but not be limited to:*

- a. Fluid replacement
- b. Clutch operation inspection
- c. Hydraulic clutch fluid replacement
- d. Differential fluid replacement
- e. Constant Velocity shaft inspection and environmental seal replacement