

## SEACOAST SCHOOL OF TECHNOLOGY Automotive Technologies Competencies

<b>Technical Competencies</b>
1. Identify and describe the operation of the engine.
2. Evaluate condition and perform maintenance and light repair of the engine.
3. Evaluate condition and perform maintenance and light repair of the lubrication and cooling system.
4. Evaluate condition and perform maintenance and light repair of the automatic transmission & transaxle.
5. Evaluate condition and perform maintenance and light repair of the manual transmission & transaxle.
6. Evaluate the condition and perform maintenance and light repair of suspension and steering systems.
7. Evaluate the condition and perform maintenance and light repair of wheels and tires..
8. Identify and describe operation of hydraulic and related systems.
9. Evaluate condition and perform maintenance and light repair of brake hydraulic and related systems.
10. Evaluate condition and perform maintenance and light repair of drum brakes.
11. Identify and describe the operation of disc brakes.
12. Evaluate condition and perform maintenance and light repair of disc brakes.
13. Evaluate condition and perform maintenance/light repair of miscellaneous parts of braking system.
14. Identify and describe operation of basic electrical systems.
15. Evaluate condition and perform maintenance and light repair of basic electrical systems.
16. Identify and describe operation of battery, starting and charging systems.
17. Evaluate condition and perform maintenance and light repair of battery, starting and charging systems.
18. Evaluate condition and perform maintenance and light repair of lightening and accessories.

19. Evaluate condition and perform maintenance/light repair of heating and air conditioning.
20. Evaluate condition and perform maintenance/light repair of general engine performance.
21. Evaluate condition and perform maintenance/light repair of computerized engine controls.
22. Evaluate condition and perform maintenance/light repair of fuel air induction and exhaust systems.
23. Research applicable customer, vehicle and service information.
24. Identify, describe and demonstrate shop and personal safety procedures.
25. Identify, describe and demonstrate proper use of tools and equipment.
26. Identify, describe and demonstrate proper vehicle preparation.
27. Identify, describe and demonstrate proper customer service.
28. Identify and describe general Hybrid safety precautions.
<b>Core Competencies</b>
29. Discuss and assess business creation possibilities and the process of opening your own shop.
30. Identify and discuss the traits and behaviors of an entrepreneur (leadership, personal assessment, personal management).
31. Demonstrate personal growth, community leadership, democratic principles and social responsibility by participating in activities/events offered through student organizations.
32. Decision-Making & Problem-Solving: Demonstrate and apply good decision-making and problem-solving skills by outlining issues in situations/problems and determining, collecting, and organizing information needed in order to formulate a solution.

33. Self-Management: Demonstrate and apply self-management skills by adhering to regulations, being responsible and following through on commitments.
34. Communication Skills: Demonstrate and apply effective communications skills: verbal, written, visual and listening.
35. Ability to Work with Others: Demonstrate and apply the necessary skills in order to work effectively with others.

36. Information Use – Research, Analysis & Technology
37. Mathematical Concepts: Demonstrate mathematical and computation skills as applied to real world situations.
38. Career Development: Demonstrate personal/career development skills by completing a career plan.