

SEACOAST SCHOOL OF TECHNOLOGY
Student Competency Profile
Automotive Technologies – CIP 470604

Student: _____

YOG/Completed Program:

 Matthew Lobdell, Instructor

 Paul Yergeau, Instructor

 Margaret E. Callahan, Principal

Technical Competencies & Performance Indicators

Understand the concepts, techniques, and procedures of engine systems in order to repair and maintain engine systems. *General Engine Repair	
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.

Understand the concepts, procedures and techniques of automatic transmission & transaxle in order to repair and maintain automatic transmission & transaxle. *Automatic/Transmission & Transaxle	
4.	Evaluate condition and perform maintenance and light repair of the automatic transmission & transaxle.

Understand the concepts, procedures and techniques of manual drive train and axles in order to repair and maintain manual drive train and axles. *Manual Drive Train And Axles	
5.	Evaluate condition and perform maintenance and light repair of the manual transmission & transaxle.

Understand the concepts, procedures, and techniques of Suspension and Steering Systems in order to repair and maintain Suspension and Steering Systems. *Suspension and Steering Systems	
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.

Understand the concepts, procedures and techniques in order to repair and maintain braking systems. *General, Hydraulic, Drum, and Disc Brake Systems	
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.

Understand the procedures and techniques of Electrical/Electronic Systems in order to repair and maintain Electrical/Electronic Systems. *Electrical /Electronic Systems	
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.

Understand Heating and Air Conditioning (HAC) Systems in order to repair and maintain Heating and Air Conditioning (HAC) Systems. *HAC Systems	
19.	Evaluate condition and perform maintenance/light repair of heating and air conditioning.

Understand the procedures and techniques, and routine(s) in Engine Performance. *Engine Performance	
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.

Understand the personal and environmental safety practices in accordance with local, state, and federal regulations. *Personal and Environmental Safety	
	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.

Understand the necessary employability skills to achieve success in today's workplace.	
	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.

Rating Scale

1. No Exposure
2. Novice – Learner requires significant supervision.
3. Proficient – Learner demonstrates skills regularly.
4. Mastery – Learner demonstrates skills numerous times without supervision

Career Ready Practices (CRP)

1. Demonstrate creativity and innovation.
2. Model integrity, ethical leadership and effective management.
3. Attend to personal health and financial well-being.
4. Consider the environmental, social and economic impacts of decisions.
5. Act as a responsible and contributing citizen and employee.
6. Communicate clearly, effectively, and with reason.
7. Apply appropriate academic and technical skills.
8. Employ valid and reliable research strategies.
9. Use technology to enhance productivity.
10. Work productively in teams while using cultural/global awareness.
11. Utilize critical thinking to make sense of problems and persevere in solving them.
12. Plan education and career path aligned to personal growth.

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