

## **Course Name: Automotive Tech I**

**Course #: 721    Grades: 10 – 12    Level: 0    Sem: 5X    Credits: 2.5**

**Course Description:** Auto I is designed to introduce the student to operations of the automobile and is basically project oriented. Some of the topics covered will include the operation of various automotive systems, such as; fuel, brakes, electrical, steering, suspension as well as tire changing and wheel balancing with emphasis upon safety. This course contains 10 units.

Course Standards – NJ 2009 CCCS Standard 8, 8.2.12 A1, 8.1. 12.F.2

**Course Proficiencies:** The following is a list of proficiencies the students are expected to know and be able to perform as a result of successfully completing this course.

1. Know the proper exits to use in case of emergency.
2. Learn the proper use of safety equipment, automotive tools and automotive equipment.
3. Identify main systems and components of the automobile.
4. Locate systems and components.
5. Learn to change engine oil and oil filter.
6. Learn to correctly change a flat tire.
7. Learn how to jump-start a battery.
8. Learn how to maintain an automotive battery.
9. Understand and learn how to find automobile specifications.
10. Learn the four strokes of the gasoline/diesel engine.
11. Learn how to adjust/replace automotive belts.
12. Understand the principles/operation of various automotive systems.
13. Learn to perform a battery test, starter test and alternator test.
14. Learn and perform inspection tests on brake systems, steering systems, suspension systems and electrical systems.
15. Perform maintenance checks of automobile.
16. Rotate tires.
17. Balance tires.
18. Dismount/Remount tires.
19. Replace a starter.
20. Replace an alternator.
21. Replace spark plugs.

**Assessment:** The evaluation of student achievement in this course is based on the following:

1. Tests are given at the end of the course. These generally require one to two periods to complete.
2. Performance based assessments to assess student demonstration of skills are included within each unit.
3. Class work will be efficient with safe use of time demonstrated each period.