

What You Should Already Know

There is no prerequisite to this course. I will approach this course as if I were teaching someone with no previous experience with automotive maintenance. All the necessary background information will be given in the lessons. If you already have some experience with automotive maintenance, this course will still help you understand the systems that, working together, make your car go.

Learning Outcomes

After successfully completing this course you should be able to do the following:

Unit 1: You Can Maintain Your Own Vehicle

- Outcome 1: Explain the purpose of this course and identify the basic building blocks of your vehicle.
- Outcome 2: Identify the components of the cooling system and their purpose.
- Outcome 3: Identify the components of the power train and suspension systems and their purpose.

Unit 2: Wheels: Balding at an Early Age

- Outcome 1: Identify causes of tire wear pattern.
- Outcome 2: Determine appropriate methods to correct tire problems.
- Outcome 3: Identify steps to safely remove and replace a flat or damaged tire.

Unit 3: Oil: Easing the Daily Grind

- Outcome 1: Describe in simple terms how an engine works.
- Outcome 2: Explain the function of oil in an automobile engine.
- Outcome 3: Determine the best type of oil for your car.
- Outcome 4: Identify steps to safely remove and dispose of old, dirty oil and replace it with new oil and a new filter.

Unit 4: The Electrical System: Lights, Battery, Action

- Outcome 1: Identify components of the electrical system and how they work.
- Outcome 2: Diagnose electrical problems.
- Outcome 3: Describe the steps to safely replace the battery and the alternator.

Unit 5: Brakes: Coming to a Complete Stop

- Outcome 1: Explain the difference between drum and disc brakes.
- Outcome 2: Determine if and when to replace brakes.
- Outcome 3: Identify the steps to safely change drum and disc brakes.

Unit 6: Tune-up or Tune Out

- Outcome 1: Explain the reasons for a tune-up.
- Outcome 2: Identify the parts of a spark plug and determine whether or not the spark plugs need replacing.
- Outcome 3: Identify the steps to safely replace spark plugs and the air filter.

Unit 7: The Importance of Service

- Outcome 1: Identify all engine fluid reservoirs.
- Outcome 2: Determine the best methods to check engine fluid levels.
- Outcome 3: Indicate the function of each engine fluid.

Course Materials

All necessary information for this course will be provided in the lessons. Although it is not required, having an automobile you can practice on would be beneficial.

[\(Back to top\)](#)

Assignments

Units

This course consists of seven units. Each unit has several Self Check exercises as well as a unit quiz, both of which are explained below.

Unit Quizzes

Each unit will conclude with a unit quiz, which is a series of multiple choice or matching questions. The questions will only test you on the knowledge gained in that particular unit.

Self Check

At the end of each topic you will have the opportunity to answer some questions that are designed to check your mastery of the subject. These questions will not be graded.

[\(Back to top\)](#)

Exams

The final exam is a fifty question multiple-choice test.

Grading

The following tables show the weight for each graded event and the grading scale used for this course.

Graded Event	Quantity	Weight
Unit Quizzes	7	10% each
Final Exam	1	30%