

PREPARATION KIT



AUTOMOBILE MECHANIC JOURNEYMAN

23
24



VERSION 11-2023

qualifying exam

WHY THE QUALIFICATION?

The professional qualification exam is an assessment tool that aims to certify that your knowledge and skills meet the standards qualifying a journeyman.

The exam is identical throughout Quebec. The qualification certificate obtained following successful completion is recognized in the other provinces of Canada and in France.

→ For the mechanic

it is the recognition of their skills and the improvement of their working conditions.

→ For the employer

it is the certification of the qualification of its staff.

→ For the public

it is a guarantee of confidence and safety.



SUGGESTED ROUTE TOWARDS QUALIFICATION



Self evaluation

Duration: 1 hour 30 minutes

Description: This allows you to evaluate candidate's skills. In other words, it is the portrait of the skills acquired and those missing.



Training



Link: www.cpcpa.ca/qualification-et-formation/formations

Description: Training is available depending on the skills to be worked on. With the help of the CPA training advisor in your region, it is possible to establish a training plan adapted to the needs of each candidate.



Qualifying exam

Exam: Automotive mechanics end of apprenticeship

Location: CPA in your region

Card: Journeyman(Class C)

Description: The qualification exam consists of two parts. The **theoretical component** must be passed to be eligible to register for the **practical component**.



THE THEORETICAL COMPONENT



CPA in your area



150 minutes

Number of questions: 115 from a bank (random)

Distribution of questions:

45 % knowledge

35 % understanding

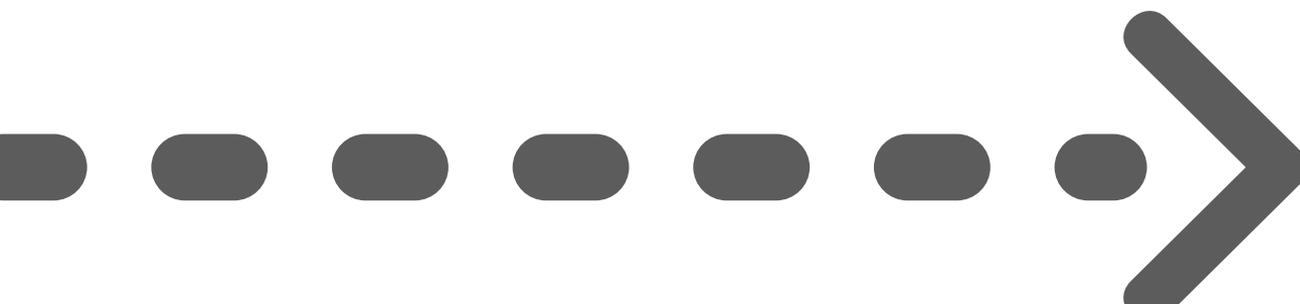
20 % diagnosis

Passing mark: 70%

Success: Access to the practical component

Right to retake exam: 3 months

It is possible to carry out a simulation of the house to get an idea of the style of question: [CLICK HERE](#)





Process

- ➔ A computer is assigned to each candidate upon arrival.
- ➔ The invigilator will remind you of the rules for conducting the exam.
- ➔ It is possible to raise your hand to ask questions relating to the use of the software or the computer only.
- ➔ The software allows you to navigate between questions, allowing for revision at the end.
- ➔ Cell phones, lighters, and other computer devices must be given to the supervisor upon arrival.
- ➔ You have the right to use your personal headphones if you wish (the software allows automated reading of questions).

THE PRACTICAL COMPONENT



CPA in your area



120 minutes

Number of questions: 53 (4 modules)

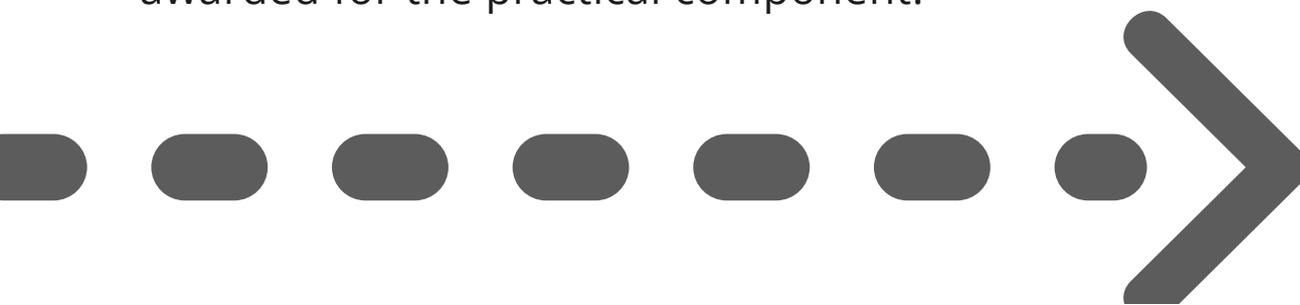
Passing mark: **Double threshold**

✓ 1st condition: Obtain an OVERALL grade of 60% and above

- If this condition is not met, the entire exam will have to be repeated.
- If this result is achieved, the second success condition must be fulfilled.

✓ 2nd condition: Obtain a mark of 50% or more in EACH module

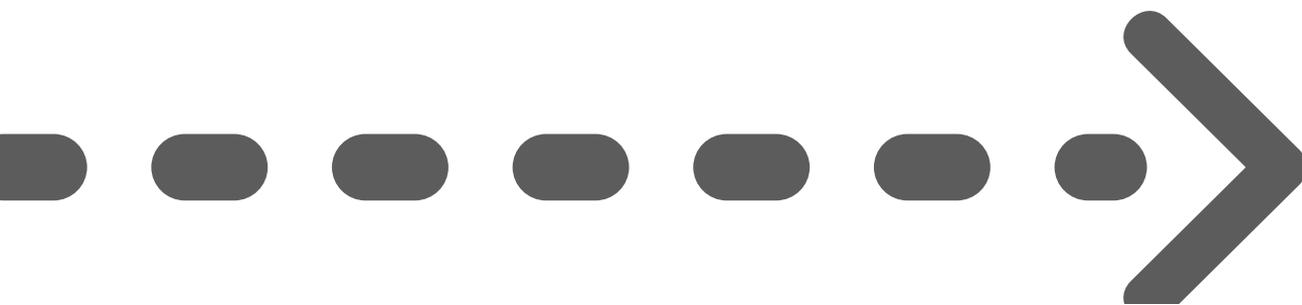
- If there is a failure in a module, the candidate is subject to a retake exclusively for the failed module (or failed modules).
- If the results for each module are achieved, the PASS mark is awarded for the practical component.



THE BLIND PRACTICAL (SUITE)

Success: Obtaining the journeyman card (class C)

Deadline for the right to retake the exam: every 3 months, respecting the 18-month period between the date of passing the theoretical exam and the date of the practical exam. After the 18-month period, you will have to repeat both parts (theoretical and practical).





Process

- There are 4 rooms for this exam, allowing you to complete the questions for the 4 modules evaluated.
- In each room there is an examiner.
- The examiner will remind you of the rules to follow while doing the exam.
- The examiner will read the question twice, then you will be able to perform the technical tasks or answer according to the question.
- Make sure you complete each of the steps necessary to safely carry out the tasks required of you.
- Safety shoes and safety glasses are required.
- It is possible to bring your own multimeter (marked "automotive").
- Cell phones, lighters, and other computer devices must be given to the supervisor upon arrival.

SKILLS



Steering, suspension, braking system, control systems, tires, hubs and wheel bearing

Know and recognize roles and functions

Understand how it works

Diagnose and understand problems

Brake system and control system



Steering, suspension, and control system



Tires, wheels, hubs, and wheel bearings



SKILLS



Engine and engine operating system

Know and recognize roles and functions

Understand how it works

Diagnose and understand problems

- Cooling systems Lubrication systems
- Engine assemblies
- Drive systems
- Fuel delivery systems and fuel injection systems
- Ignition systems
- Intake systems and exhaust systems
- Emission control system
- Diesel engine systems



SKILLS



Communication between modules

Know and recognize roles and functions

Understand how it works

Diagnose and understand problems

Fault Codes



Data Test



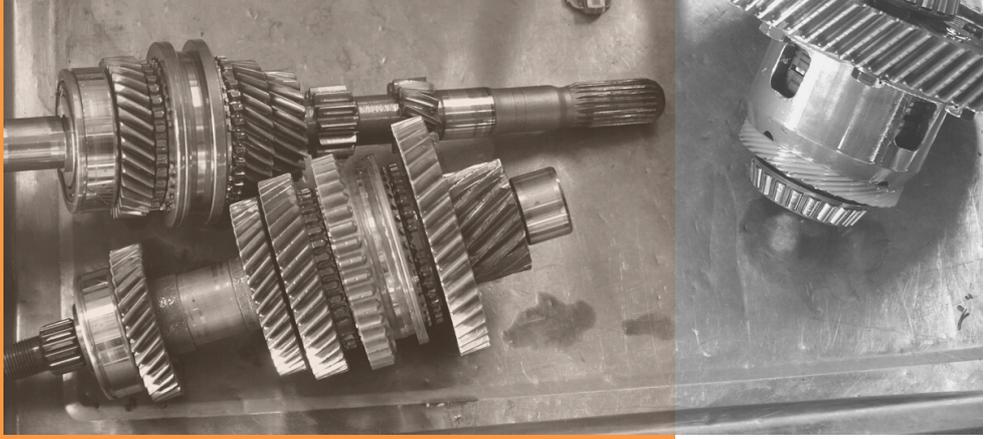
Results



Circuits and Components



SKILLS



Driveshaft lines

*Know and recognize
roles and functions*

*Understand how it
works*

*Diagnose and
understand problems*

Automatic transmissions
and transaxles



Driveshafts and axles



Transfer cases



Final drives



Clutches



Manual transmissions and
transaxles



SKILLS



Electrical systems and comfort thermostats

Know and recognize roles and functions

Understand how it works

Diagnose and understand problems

Starting systems, charging systems and batteries



Basic wiring and electrical systems



Lighting systems and windshield wiper systems



Entertainment Systems



Optional electrical accessories



Display instruments



Electrical accessories



Air Flow Control Systems



Refrigerant system



Heating system





SKILLS



Hybrid vehicles and electric vehicles

Hybrid and electric system safety protocols



Hybrid and electric vehicle systems



Know and recognize roles and functions

Understand how it works

Diagnose and understand problems

SKILLS



Restraint systems, body components, accessories and trim

Know and recognize roles and functions

Understand how it works

Diagnose and understand problems

Restraint systems



Causes of wind noise, rattling, water infiltration



Interior and exterior components, accessories and trim



Latches, locks and movable windows



SKILLS



Professional skills

	<i>Know and recognize roles and functions</i>	<i>Understand how it works</i>	<i>Diagnose and understand problems</i>
Safety and PPE	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Tools, equipment and technical information	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

TRAINING



Automobile Mechanics Electricity



Training duration

In person **33 hours**

Online **27 hours**

Electricity



Description

At the end of this training, the participant will be able to understand and master the concepts of basic electricity as well as the operation of the different systems that ensure the proper functioning of a motor vehicle.

Course Objectives

- Be familiar with the nature of electricity, the particularities of the components and the different connections that form an electrical circuit.
- Master the main functions of your multimeter in order to measure the different electrical properties of a circuit.
- Recognize the many symbols and interpret electrical plans.
- Be familiar with the different types of batteries on the market, their characteristics and the methods to validate their condition.
- Know how an alternator works, the new strategies used by the on-board computers and access to their data.
- Become familiar with the use of the multimeter and current clamp to determine the integrity of the main power circuit of the starter and the charging system.
- Conduct tests and diagnostic approaches on charging and starting systems when they have problems.

TRAINING



Electronics

Description

At the end of this training, the participant will be able to understand and master the basic concepts of electronic systems.

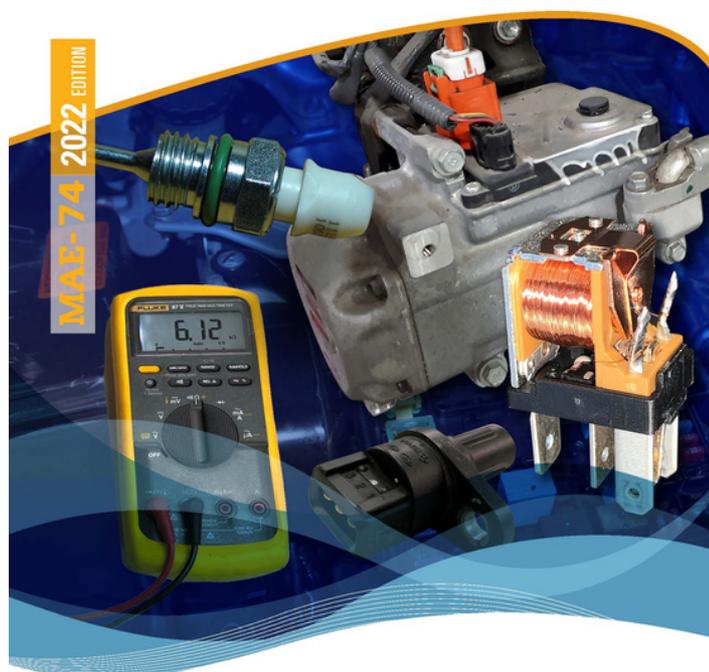
Course Objectives

- Understand and verify the operation of the various sensors and actuators of computer-controlled systems.
- Understand how fuel systems work.
- Understand how safety devices work.
- Locate the high voltage components of each type of system and explain their role and operation.
- Determine the potential danger of high voltage components.
- Proceed to defuse/disarm systems on different types of vehicles in a safe manner.
- Application of regulations during maintenance of the air conditioning systems of a motor vehicle.

Developed by the CPCPA,
the CFA and our partners



Automobile Mechanics Electronics



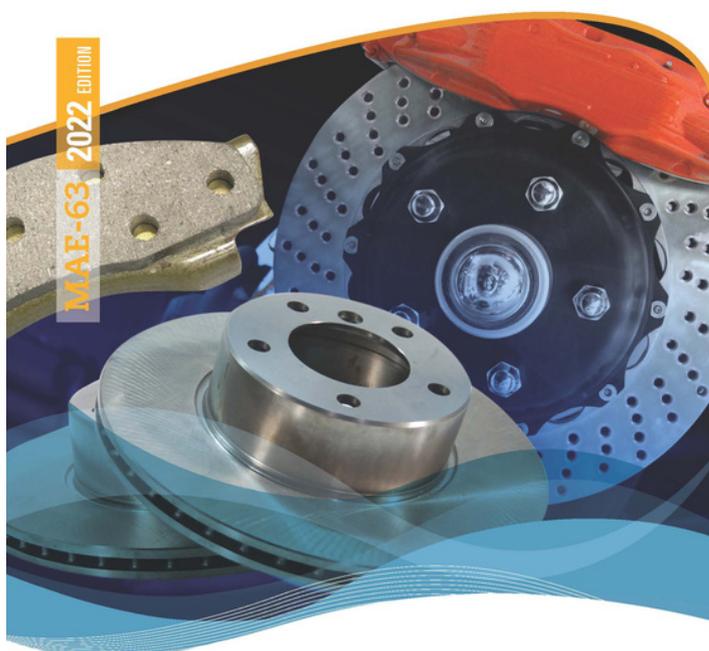
Training duration

In person **18 hours**
Online **13 hours**

TRAINING



Automobile Mechanics Brakes



Training duration

In person **12 hours**

Online **13 hours**

Brakes



Description

At the end of this training, the participant will be able to understand and master the operation of the basic brake system and to carry out its maintenance.

Course Objectives

- Identify the common elements of a brake system.
- Identify the different systems.
- Study and understand how a brake system works.
- Carry out an inspection of a brake system.
- Study of brake fluids.
- Learn how to perform fluid changes and bleed the brake system.
- Learn to use specific tools for brake diagnosis.
- Carry out the various tasks related to a repair of the brake system.

TRAINING



Engine

Description

At the end of this training, the participant will be able to identify different engine components and perform maintenance and repair.

Course Objectives

- Updating knowledge of the definition and physical principles of the internal combustion engine, the operation of four-stroke engines, supercharging and engine characteristics.
- Updating theoretical knowledge of the cylinder block, the cylinder head and their components as well as the principle of distribution.
- Updating knowledge of lubrication and cooling systems and their components.
- Updating knowledge on maintenance, checks and adjustments of different components.
- Updating knowledge of the operation of diesel engines, different injection systems, maintenance and diagnosis as well as different pollutants.

Developed by the CPCPA,
the CPA and our partners



Automobile Mechanics
"Engine"



Training duration

In person **24 hours**

Online **24 hours**

TRAINING

Developed by the CFCFA,
the CFA and our partners



Automobile Mechanics
« Transmission, suspension
and steering system »



Training duration

In person **27 hours**

Online **23 hours**

Transmission, suspension and steering system



Description

At the end of this training, the participant will be able to understand and master the operation of the basic brake system and to carry out its maintenance.

Course Objectives

- Identify the common elements of a brake system.
- Identify the different systems.
- Study and understand how a brake system works.
- Carry out a check of a brake system.
- Study of brake fluids.
- Learn how to perform fluid changes and bleed brake systems.
- Learn to use specific tools for brake diagnosis.
- Carry out the various tasks related to the repair of the brake system.

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