

VEHICLE TECHNOLOGY AND TRENDS 2024

VT024E01

Course Format: Online training with posttest

I-CAR Credit Hours: 1

I-CAR Points: 0.25

This course helps satisfy ProLevel training requirements for the following roles:



Non-Structural Technician



Assessor



Structural Technician



Estimator

To prepare collision repairers to work on the latest model introductions and redesigns, this annual look-forward focuses on the 2024 model year and some of the electrical, mechanical, and construction trends sweeping through the industry. You will learn about improvements in advanced driver assistance systems (ADAS) and a rise in electric vehicle production. You will look at repair considerations for lighter vehicle construction materials. You also will explore new features and repair considerations for 2024 domestic models and Asian and European imports.

Course Content

Module 1—Industry Trends

This module discusses industry trends for 2024. These include alternatives to gasoline such as hydrogen and synthetic gasoline. It also covers the increased use of aluminium for a stronger, lighter vehicle, the trend toward smaller-displacement turbocharged engines, and technology such as artificial intelligence, smartphone apps to control the vehicle, and the increased use of touchscreens.

Module 2—North American Vehicle Makers

This module, discusses new, updated, and future vehicle models from North American vehicle makers. This includes 2024 and 2025 vehicles from General Motors such as the all-new Corvette E-ray, and the RAM REV. Select EV start-up companies are also featured including Mullen, Canoo and Lucid.

Module 3—Asian Vehicle Makers

This module discusses select 2024 and 2025 models from Asian vehicles. These include Prologue and ZDX from Honda and Acura, the IONIQ 7 and GV80 Coupe from Hyundai and Genesis, the EV5 and EV9 BEVs from Kia, Mazda's all-new CX-90, the redesigned Crosstrek and Impreza from Subaru, and the Grand highlander and TX from Toyota and Lexus. In addition, VinFast has the new-for-2024 VF6 and VF7 models.

Module 4—European Vehicle Makers

This module discusses select 2024 and 2025 vehicles from European manufacturers and includes BMW and Mini with their new 5 Series, Mini Aceman, and Countryman. Also identified are the new eSprinter cargo van, E-class, and GLC Coupe from Mercedes-Benz. The new 2024 ID.7 and upcoming 2025 Tiguan from Volkswagen are highlighted, as well as Volvo's 2024 EX90 and XC40.



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After completing this course, you will be able to:

- Recall alternative power source trends and technology.
- Identify trending vehicle designs.
- Recall examples of vehicle technology advancements.
- Identify the new and updated General Motors vehicles for 2024.
- Identify the new and updated Ford vehicles for 2024.
- Recall electric vehicle start-up companies and their vehicles.
- Recall new 2024 Honda and Acura vehicles.
- Identify Hyundai and Genesis 2024 and future vehicles.
- Describe Kia 2024 and future vehicles.
- List new 2024 Mazda vehicles.
- Identify redesigned 2024 Subaru vehicles.
- Describe Toyota and Lexus 2024 vehicles.
- Identify new 2024 VinFast vehicles.
- Recall redesigned and new 2024 BMW and Mini vehicles.
- List new 2024 Land Rover vehicles.
- Identify redesigned and new Mercedes-Benz 2024 vehicles.
- List Audi and Volkswagen 2024 and future vehicles.
- Recall redesigned and new 2024 Volvo vehicles.