

VEHICLE TECHNOLOGY AND TRENDS 2018

VT018E01

Course Format: Online training with posttest

I-CAR Points: 0.25

Estimated Duration: 1 hour

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



Non-Structural Technician



Estimator



Aluminium Technician



Structural Technician



Assessor



Refinish Technician



Production Management

Vehicle Technology and Trends 2018 is a one-hour online course that will cover features and collision repair procedures for several 2018 models, including North American, Asian and European. Manufacturing trends are increasing, with more vehicle makers turning to electric propulsion and thinking about autonomy. Safety features are also trending in a big way.

Course Content

Module 1—Trends and Industry Influences

The course kicks off with an industry overview of new technology. Topics of discussion include using steel for lightweighting, directing the front upper rail downward, the trend toward pure-electric vehicles, the ability to talk to vehicles through smartphones, and advanced safety features becoming more standard.

New equipment, materials and procedures to be covered include bumper tab pliers for use when nitrogen welding plastic, 3M Aerosol Cavity Wax, and the fact that Ford is launching a company that sells parts to fix competing vehicles.

Module 2— North American Vehicle Makers

This module will cover North American manufacturers. Ford Motor Company's plans for the F-150 include a V6 turbo diesel engine and a 2020 hybrid. General Motors has a 100% steel Chevrolet Traverse. The module will conclude with a review of Tesla Motors models that are self-driving hardware-equipped, but not switched on yet.

Module 3— Asian Vehicle Makers

Next the course will provide an overview of the Asian automotive market. The topic on Honda and Acura give us a look at the 2018 Odyssey and the three members for the Honda Clarity family, which now include a pure-electric and plug-in electric to go along with the Clarity Fuel Cell vehicle. The Hyundai Genesis is now its own brand name and will include safety items such as Automatic Braking for Pedestrians and Protection Driver Attention Alert. Toyota has changed its high-selling Camry model for 2018. Nissan has a new hybrid.

Module 4—European Vehicle Makers

The European Vehicle Makers module begins with a discussion on the mixed material Mercedes-Benz E-Class Coupe and the mixed material Audi A8 for 2018. The module concludes with a look at the 2018 Volvo XC60, and Volvo's commitment to go electric.

Module 5—Near Future Trends

The future trends module will preview the Lucid Air, a trail ride for Toyota, and a new Volkswagen microbus, Mercedes-Benz is showing off High-definition headlamps.



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Learning Objectives

- Explain the role of new steels in new vehicle construction
- Describe Evasive Steering Assist technology
- Discuss the trend among OEMs to make advanced driver-assist systems standard
- Understand how OEMs are introducing autonomous vehicles before their time
- Summarise the latest headlamp innovations
- Explain Ford's continuing surge towards the use of Aluminium
- Recognise GM's new approach at body repair information
- Identify the 2018 family of Honda Clarity models
- Describe the mixed material Audi A8