



DRIVER SAFETY TRAINING WEEKLY

New Vehicle Technology – Science to Use in Your Car



Each new automotive year brings more technology to the vehicles we drive. Scientists, engineers, and automotive specialists working together are helping to make our vehicles safer, more user-friendly, and more interactive. Technological advancements that used to be found only on the most expensive models, are now found on models available to all buyers. Do your homework and find the best technology for you and your family.



The 10 BEST RECOMMENDED AUTOMOTIVE TECHNOLOGIES AVAILABLE

1. **Connected Mobile Apps:** Smartphones have changed the way we live and operate. Phone apps (applications) that connect to your vehicle can do things like lock/unlock your doors, adjust the temperature, and of course, make safe, hands-free phone calls.
2. **Teen Driver Technology:** Some vehicles are equipped with teen driver limitations built-in that can notify you if the car is driven over a certain speed, disable the stereo if seatbelts aren't used, and even keep the stereo from being turned up past 7 — never mind full blast! General Motors also offers a Teen Report Card to be sent to the parents, noting such things as ABS activation or other important actions that occur with the vehicle.
3. **Stolen Vehicle Tracking Software:** General Motors' OnStar, Fiat-Chrysler's Uconnect, & BMW's Connected Drive utilize GPS technology to assist in locating a vehicle if it's stolen or missing. Additional tools associated with the software can even slow or shut down the vehicle when activated, to prevent further movement.
4. **Apple CarPlay or Android Auto:** Plugging your cell phone into the vehicle can allow the vehicle to become an extension of the phone, using the capabilities associated with the phone to play music, access apps or maps, and connect directly to the phone's functions, including voice commands.
5. **Adaptive Cruise Control:** Sensors built into the vehicle can control acceleration and braking to allow your vehicle to match speeds and slow down depending on the traffic around you. In "stop-and-go" traffic, this can reduce stress, frustration, and the redundant use of controls to manage the vehicle.
6. **Rear Cross-Traffic Alert:** Thanks to sensors built into the rear of the car, the system can alert you to approaching vehicles, pedestrians, or other moving objects that might wander behind your car without you noticing. Loud beeps are standard with these systems, but some cars can even automatically brake before a collision occurs.
7. **Lane Departure Warning:** Lane departure warning systems use cameras to determine if a car has drifted across a marked lane line, giving a visual or audible notification (or even a vibration through the seat or steering wheel) that you've moved too far out of your lane. The system turns itself off when you use a directional, so there's no fear of accidental engagement. More advanced tech, sometimes called Lane Keeping Assist, can even help nudge you back into the proper lane, which can be a literal life-saver if you were heading into opposing traffic.
8. **Automatic Emergency Braking:** Automatic Emergency Braking or AEB uses a variety of sensors to determine if a forward collision crash is imminent and automatically applies the brakes to diminish the severity or avoid a crash entirely. **This technology should definitely be considered when looking at new vehicles.**
9. **360-Degree Camera View:** By combining cameras on every side of the car with some clever computing power, your car's display can show a virtual top-down view of your surroundings. It can show the sides of your garage, whether you're lined up in the parking spot at the grocery store, or provide invaluable assistance while parallel parking.
10. **Automatic Headlights & High-Beam Assist:** Light sensors integrated with headlights can automatically turn them on when needed during weather or hours of darkness. High-Beam Assist can turn on the vehicle's high-beam lights when there are no other vehicles approaching, to enhance safety and provide better lighting in poor conditions.

Road & Track