Vehicle Safety Systems

Anti-Lock Braking Systems (ABS)
The ABS continuously monitors individual wheel speed. If lockup is sensed, brake pressure is automatically modulated when the brakes are applied to prevent slippage. ABS enables reduced stopping distances on a variety of road surfaces while maintaining vehicle stability. Keep steady pressure on the brake pedal rather than pumping the brake pedal. Pedals on air brake systems should not be pumped regardless.

Automatic Traction Control (ATC)
The ATC operates by applying the service brake to a spinning wheel so torque can be transferred through the differential to the wheel that has traction. If both sets of drive axle wheels are spinning this system reduces engine torque until traction is sensed.

Roll Stability Control (RSC)
The RSC is integral to the anti-lock braking system. It becomes active when the vehicle senses lateral acceleration that exceeds acceptable thresholds. RSC works in stages by reducing engine torque, engaging the engine brake or retarder, and then applying the service brakes until lateral acceleration falls below thresholds.

Electronic Stability Control (ESC)
Stabilizes the vehicle during cornering by detecting loss of steering control. Applies brakes to individual wheels and may reduce engine power until steering control is regained.

The function of these systems is to augment good driving practices and assist during emergency evasive maneuvers. There are no systems integral to the vehicle that prevent loss of control due to reckless behavior.