

Automotive Engineering

Emergency Vehicle Criteria Checklist

We're going to engineer an emergency vehicle for: (Check One)



☐ A hurricane

This vehicle must be able to drive through deep water and float. Hurricanes often have very strong winds, so it needs to be strong enough to hold up if it's hit by falling branches or debris.

Specialized Criteria: Vehicle body that can hold up in water



☐ A blizzard

This vehicle must be able to drive through deep snow. Blizzards often have very strong winds, so it needs to be strong enough to hold up if it's hit by falling branches or debris.

Specialized Criteria: Wheels that can go through snow



☐ An earthquake

This vehicle must be able to drive over damaged roads and rubble. After earthquakes, pieces of buildings sometimes fall, so it needs to be strong enough to hold up if something falls on it.

Specialized Criteria: Wheels that can go over damaged roads and rubble

All emergency vehicles must be safe and have:

Exterior Criteria (Outside):	Interior Criteria (Inside):
<input type="checkbox"/> 1 body	<input type="checkbox"/> 2 seats for emergency staff
<input type="checkbox"/> 4 wheels	<input type="checkbox"/> 2 seats for people who need help
<input type="checkbox"/> 2 axles	<input type="checkbox"/> Storage space for first aid supplies
<input type="checkbox"/> Windows	<input type="checkbox"/> Storage space for food and water
<input type="checkbox"/> Doors	

Brainstorming Questions:	Your team's criteria:
What kind of wheels will your vehicle need?	
What special interior feature can make your vehicle more helpful in the emergency?	
What special exterior feature can help gather information about the weather, like the wind speed or temperature?	
What materials will make your vehicle most useful in the emergency? Does it need to be strong or waterproof?	
Most importantly, how can you make your vehicle as safe as possible?	

What else? Add any other criteria for your emergency vehicle.	
<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>