

EV SAFETY Training and Operativity

SAFETY PROCEDURE AND TRAINING FOR ELECTRIC VEHICLES

Car shop and dealer





PROFESSIONAL EV COURSE.

Road emergency

SAFETY PROCEDURE AND TRAINING FOR ELECTRIC VEHICLES

ELECTRIC VEHICLES PROFESSIONAL TRAINING COURSES

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EVE S.r.l. v.a.t. 02454420221 via Manzoni 7, 38068 Rovereto (TN) -Italy-

About us



Electric Vehicle Experience

Since our inception, EVE TRAINING has had one goal, to deliver the best electric vehicles adoption consulting services.

In the fast evolution of motors, EVE TRAINING is bringing the best in race car engineering and driver engineering together, for a unique consulting experience with the new Electric Vehicles environment context.

Additionally, as the regulations are now including the Electric Vehicles as an integral part of the car environment, attention should go out to increasing their performance and safety procedure and best practice. EVE TRAINING can driver the stakeholders 'needs at the highest level possible.

Thanks to the parent company's support "**EVE CONSULTING**" (<u>www.eve.srl</u>) With several years of experience in specific electric vehicles development techniques: simulation, on-track guidance, and skill enhancement, stakeholders are given the attributes to get the maximum out of their goals.

Driver training



EV Driving Course Key Elements:

- 1. Key differences between EV and ICE (Internal combustion engines)
- 2. Differences in performance and power delivery compared to ICE (Internal combustion engines)
- 3. Performance characteristics of your specific EV
- 4. How to maximise battery range
- 5. Charging your EV
- 6. Pedestrian and cycle awareness (dealing with near-silent lower speeds)
- 7. Speed awareness in your EV
- 8. Forward planning and observation
- 9. Vehicle stability and control
- 10. Acceleration sense and throttle use in EVs
- 11. Understanding auxiliary controls
- 12. Learning safer driving on rural and urban roads, and also motorways
- 13. Learning how to perform manoeuvres at low speed in your EV
- 14. Identify and removing bad habits, which could be impacting on your overall level of safety

Fleet manager



What are some benefits of EV Fleet Management?

Reducing carbon emissions and battling climate change remains the single, largest benefit of using an EV Fleet. And, although EVs are still far from reaching their potential in terms of the number of vehicles on the road, there are hectic efforts afoot by Governments, manufacturers, and policy-makers to increase their adoption, and thereby, its benefits.

1) **Real-Time Charging Insights:** Perhaps the biggest advantage of an EV fleet management system is that it gives real-time charging information. This is crucial for Fleet Managers in calculating the distance that each fleet vehicle is capable of undertaking. With an EV fleet, that is the starting point of allocating and dispatching vehicles on daily delivery routes.

2) Easy integration with cloud systems: The biggest advantage of cloud-based EV management software in managing an EV fleet is that the integration is simple. Since EVs are in-built with such cloud software, both can be easily integrated. This facilitates the easy exchange of data, communication, real-time tracking (etc.)

3) Helps Stay Complaint: By Extention of the point above, the ease of data transfer and reports created using this data (e.g. hours logged, number of times batteries have been charged, etc.) make it easier for EV Fleet Managers to adhere to all the regulatory compliances that EVs are required to maintain.

7) Eliminates fuel consumption: Fuel costs are the highest costs in maintaining and running a fleet of vehicles. Therefore, switching to EVs shaves a huge chunk off of these operating costs and creates a positive impact on the bottom line.

5) **Reduced maintenance costs:** EVs reduce vehicle downtime – and therefore, overall fleet maintenance costs – since they have lesser moving parts and require minimal replacement of components.

6) **Increased Efficiency:** EV fleet systems provide Fleet Managers with a holistic view of the entire fleet operation and enable them to monitor fleet activity efficiently. Fleet Managers have a real-time perspective of all aspects of the fleet operation including vehicle locations, ETA, ongoing jobs, completion status, deliveries (etc.) and can also maintain direct communication with their fleet drivers as they proceed through their daily schedules.

4) Enhanced Fleet Safety: At the end of the day, the safety of all stakeholders of a fleet operation is paramount and the fleet companies are directly responsible for it. EV management systems monitor whether the assigned safety protocols are maintained and take prompt corrective measures where required.

8) Improves profitability: With its low-maintenance and other improved performance parameters (not to mention the tax-sops being offered by authorities the world over), EV usage comes with a lot of improved profitability. Using EV fleet management software to maintain an efficient operation further adds to the bottom line.

Road emergency



Upon course completion you should be able to:

- 1. Safely conduct emergency scene size-up and management.
- 2. Identify an alternative fuel vehicle.
- 3. Effectively immobilize the vehicle for scene safety
- 4. Disable the vehicle's High Voltage and SRS systems.
- 5. Conduct occupant rescue more safely.
- 6. Execute AFV recovery and disposal.

Car shop and dealer



For Dealers and Manufacturers

We offer in-person and web-based electric vehicle dealer training, plus tools for dealers to confidently sell EVs and to support the specific needs of EV customers.

EV Sales Training includes:

- 1. fundamentals of evs as a product category
- 2. ev charging basics.
- 3. nationwide and local ev incentives
- 4. utility rates and ev programs
- 5. tools tutorial and setup
- 6. ev sales best practices





At **EVE RACING** we value enthusiasm in the sport. Through recent years we have picked up on areas that are challenging when you start in motorsport or aspire to be in motorsport.

The Racing School is every driver's gateway to motorsports and racing. This is Racing combines classroom sessions with practical hands-on seat time. The Racing School is a prerequisite for racers interested in obtaining a club, professional or international racing license. In this unique program, students master the fundamentals of racing in classroom and driving sessions.

Vehicle dynamics, the proper racing line, race style downshifting, threshold braking, and cornering techniques. All these subjects are important in helping the racer find their "limit" inside the race car and discovering the car's true capability. The students then head out to pit lane where instructors provide a hands-on introduction to the Formula car in preparation for on-track training. The racing downshifting exercise takes place before turning the first on track laps of the school in lead-follow sessions.

There is a substantial amount of time spent on stop box lapping sessions while getting instant feedback in the race car. Stop box lapping gets the racer as comfortable as possible in the car with extensive repetition, feedback and progression lap after lap. Students will also do additional braking exercises and learn to read the various racing competition flags used.

At the end the students puts everything that they have learned to the test. Students will practice real racing starts and restarts, complete several passing and drafting exercises, and get plenty of open lapping sessions.

Electric Vehicles environment

Over the past years, EVE RACING identified the increasing concern about racing electric vehicles (EVs) such as hybrid electric, plug- in hybrid electric, and battery electric vehicles. As a result, workshops were conducted to identify the best practices associated with transport of these vehicles on board vessels. The participants were requested to complete a survey prior to the event to facilitate discussion. The best practices identified during the workshop include:

VEHICLE STOWAGE

- On Car Carrier and Truck Carrier company, EVs should be located in a designated area.
- Damaged vehicles should be located in a designated area; this should be on the weather deck where available.

CHARGING

- Only owned cables and connectors should be used in charging operations.
- Charging should only be from power sockets designed and approved for charging purposes. Such sockets are to be capable of being disconnected from the shipboard power system at a location accessible if the vehicle being charged is on fire.

FIRE DETECTION

- A video monitoring system should be installed to supplement the fire detection system for cargo areas intended for the carriage of EVs. The intent is for early location identification and early activation of the applicable firefighting system.
- Fire patrol frequency should be increased for areas carrying EVs.
- Portable thermal imaging devices should be provided and used by the crew performing patrols space containing EVs.

TEAM TRAINING

- Training should be provided for crew who may respond to a fire involving EVs. team involved in firefighting should be capable of recognizing EVs, understand the risk posed by high voltage equipment in EVs and be aware of the possible release of toxic gas.
- The the involved in patrolling areas containing EVs should be provided with and trained on the use of thermal imaging cameras.

FIREFIGHTING

Fixed water deluge or mist system should be provided to cover the areas that carry EVs. A fixed monitor system can be used in open areas.