High Voltage Electrical Safety Training

Date:	**On Request**
Duration:	**0.5 Days**
Location:	**Private Virtual or In-Person**
Price:	**On Request**

Why SRES?

At SRES, our training courses are guided by industry professionals with extensive real-world experience, providing you with practical insights and knowledge to excel in the rapidly evolving fields of Functional Safety, Cybersecurity, and Responsible AI.

Course Overview:

This half-day training course is designed for professionals involved in automotive high voltage (HV) systems development. This training is important for OEM and supplier professionals working in the field of HV component and systems product development for EV (Electric Vehicle), PHEV (Plug-in Hybrid EV), HEV (Hybrid EV) and FCEV (Fuel Cell EV). Participants will learn how to design and implement safety measures to protect against electrical hazards, following industry standards and regulations such as FMVSS 305 / CMVSS 305, UNECE R100, ISO 6469, and SAE J1766 as well as show the interdependence to the automotive functional safety standard ISO 26262. Those are essential standards for vehicle self-certification in North America (FMVSS.CMVSS 305) and type approval in Europe (UNECE R100). The training covers the various layers of protection required to ensure safe HV system design, operation, and compliance.

Training Objectives:

- **Understand HV safety standards:** Learn how to design electrical systems compliant with key automotive HV safety standards and regulations, including FMVSS 305 / CMVSS 305, UNECE R100, ISO 6469, and SAE J1766
- **Apply multi-layered protection strategies:** Implement layers of protection to protect against electrical hazards like shock and system failure.
- **Optimize safety designs:** Ensure systems include essential physical, sneak circuit, electrical/electronic, and process protection layers for HV systems.

Agenda:

Introduction to High Voltage Electric Safety

- Overview of HV systems
- Importance of electrical safety
- Protective provisions

Automotive HV Safety Standards

- FMVSS 305 / CMVSS 305
- UNECE R100
- ISO 6469
- SAE J1766
- ISO 26262

Layered Protection Strategies

- Physical Protection
- Sneak Circuit Protection
- Electrical/Electronic (E/E) Protection
- Process Protection

To register, please contact: www.sres.ai trainings@sres.ai +1.248.885.3380