

Level:

N/A

Entry Qualification:

Attendance on the basic awareness course is a prerequisite for attending this advanced course.

Duration / Assessment:

0.5 days

Study Method:

Classroom

Location(s):

MIRA Technology Institute

Aim of the Course

This is a further half-day course and attendance on the basic awareness course is a prerequisite for attending this advanced course. This course is aimed at engineers and technicians who are working on and modifying the electrical traction systems in electric or hybrid vehicles.

Course Outline:

- Brief review of processes and terminology used with respect to electrical protection
- Brief review of typical electrical architectures and systems design for high voltage safety and high voltage fault management
- Basic principles for safe electrical working, to include:
 - Risk assessments and Safe Systems of Work
 - Permits to work
 - Personnel competence and qualification
 - Use of personal protective equipment and appropriate tools
 - Workshop safety practices
 - Isolation of electrical equipment before work
 - Confirmation that electrical equipment is not live before work
 - Testing procedures for ensuring electrical circuits are safe to work on, and remain so until work is complete.
 - Available resources e.g. HSE Publications
- Safe working techniques in electric and hybrid vehicle testing, build and maintenance, to include:
 - Handling and storage of high voltage components (specifically batteries)
 - Vehicle or prototype build
 - Testing – test procedures during build (e.g. confirming no high voltage present during assembly) and for testing of completed vehicles
 - Crash testing and destructive component testing
 - General maintenance procedures for electric and hybrid vehicles
 - Rework or repair of electric and hybrid vehicles
 - Disposal – of removed components during maintenance or end-of-life
- Practical demonstration of safe working techniques
- End-of-course test and issue of course completion certificate

We are also able to provide a refresher version of this course to keep your workforce up to date.

Further Information

To find out more about this course or to book, please contact us by email: training@horiba-mira.com