



FireWise
UNITED KINGDOM
LEARNING ACADEMY

Electric Vehicle Fire Investigation Course 20-22 May 2025, Norway

- Abnormal Thermal Events
- Pre-burns & live burns
- HEV, EV and Traction Batteries
- Common faults & causes
- Investigator safety
- Approach & Methodology
- PPE, RPE & equipment
- Vehicle identification
- Information gathering & documentation
- Origin & Cause determination
- Shared learning
- Research



We can only reduce vehicle fires, whether they are caused by design, defect, a collision, carelessness, servicing fault or deliberate ignition, if we investigate fires correctly and thoroughly.

By investigating, and accurately identifying cause, we can improve vehicle design, improve safety, reduce fires and bring people to justice where a crime has been committed.

It is not always possible to find the definitive cause, but an investigator can rule out some causes and identify the area/point of origin.

“My power lies in not just what I know, but also in the questions I ask to seek out the correct answers. Sometimes those questions are to myself” Richard Dunbar 1988

COURSE DESIGN

From the Park Lodge International Vehicle Fire Investigation course's inception in 1999 when both Surrey Police and VOSA requested a training course, it has developed over the years and now attracts people from all over the world and from all sectors.

The course provides a balance of blended learning, the required theory, lots of practical application, and fantastic shared learning between delegates from different sectors and areas of expertise and experience.



The course is carefully designed to provide underpinning principles, which are then reinforced with practical sessions examining and investigating recently fire damaged vehicles, ensuring application of knowledge.

Our delegates come from all over the world and from many sectors, including Fire and Rescue, Law Enforcement, Forensics Services, Collision Investigation, Vehicle Examiners, Vehicle Standards

Agency, Insurance companies, Insurance assessors, engineers, Private Investigators, Vehicle Manufacturers, Fleet Operators, Bus companies, Airports, Military, Research establishments and other organisations.



COURSE DELIVERY

This will be the third dedicated Electric Vehicle Fire Investigation course that we have facilitated. We will have numerous Hybrids (HEV), full Electric (EV) and standalone Traction Batteries of varying sizes to burn and investigate. Some vehicles will be preburned the day before the course, at least one full EV will be placed into thermal runaway on the first morning of the course for all the delegates to safely view the phases of a Traction battery fire, before we place a Bridgehill vehicle fire blanket on the vehicle to contain it. The vehicle is then fully examined the following day once the thermal event has finished.



The course is a blend of theory and much practical; during the theory sessions we will explore causation, abnormal thermal events & fire development, approach & methodology, vehicle examination, documentation, evidence recovery and Investigator safety - the practical sessions will embed a systematic and safe approach to the investigations.

After each practical session there will be a review, and syndicate presentations on their investigations that they have undertaken. We facilitate discussion sessions throughout the three days to give everyone a chance to ask questions about or discuss the subject of Electric Vehicles and vehicle fire investigation - not often will we have so many worldwide specialists in one room, so we encourage the sharing of knowledge!



OUR TEAM

The Directing Staff are experienced in fire investigation and regularly direct the International Vehicle Fire Investigation courses in Ireland, as well as being fire investigation practitioners in their own right. The team is there to guide delegates to get the most out of the course and ensuring that everybody operates in a safe manner.

FOUNDER (now retired)

Richard Dunbar AMIRTE, AMSOE, MFIAI, PHEC (RCS-Edin), HonMIVR, MInstPet



Course Founder Richard served for over 35 years in the emergency services, in both the UK and East Africa (CFO).

A Transport Engineer and Associate Member of the Institute of Road Transport Engineers, Associate Member of the Society of Operational Engineers and an Honorary Member of the Institute of Vehicle Recovery.

Co-author of The Energy Institute's Code of Practice on the Product and Vehicle Recovery of Low Flash products transported by road tanker. Author of the Police 'Blue Book' on dealing with HAZMAT incidents, and the Police and Forensic Science Fire Investigation handbook.

DIRECTING STAFF

Martin Lown BEM, IAAI-CFI, MFireInv, GFireE, MIAAI, IMI L3



Previous 30 years' service in the UK Fire and Rescue Service
Qualified, competent and experienced Certified Fire Investigator (CFI)
Director and Lead Tutor of FireWiseUK Learning Academy.
Director and active Vehicle Fire Investigator of Phoenix Forensic Service Provider Ltd.
Advanced Investigative Practice, Expert Witness (APAEWE)
Professional Member of UK-AFI, CE-AFI, IAAI, IFE, IAATI and ITAI

Stephen Elliott CAE, MIAAI, IAAI FIT (V), IMI L3



Former British Army Royal Engineer
IMI Certified Automotive Engineer (CAE)
23 years' service in UK Fire and Rescue Service
Full time qualified, competent and experienced Fire Investigator and Vehicle Fire Investigation Technician, Director of Rotae Vehicle Fire Investigations Ltd.
Advanced Investigative Practice
Member of IAAI, IMI, IAATI and ITAI

COURSE OUTCOMES

Each delegate will have an understanding and working knowledge of:

- Electric Vehicles, HV systems & 'abnormal thermal events' (Thermal Runaway & Cascade)
- Vehicle 'fire science' and fire development
- The importance of sympathetic firefighting, evidence identification and gathering
- The methodical approach & scientific method of vehicle fire investigation
- Vehicle identification (post fire)
- Gathering information, including understanding Emergency Response Guides (ERGs)
- Investigating the vehicle history, fire event & witness evidence
- 'Reading' burn patterns and post abnormal thermal event/fire indicators
- Identifying the area and point(s) of origin
- Common faults and potential causes of Hybrid and Full Electric Vehicle fires
- Required PPE, RPE, related equipment and hygiene/decontamination
- Investigator safety – 'making safer' the vehicle using our 'IAIIM' protocol and working with HV and stored/stranded energy
- Conducting fire investigation on Electric Vehicles safely, thoroughly and accurately
- Appreciation of other Interested Parties interest and approach



See comments and course feedback from previous delegates on our LinkedIn pages!



VENUE

The Electric Vehicle Fire Investigation Course is run at the Best Western Leto Arena, Kolonivegen 43, N-2072, Dal, Norway, a 15-minute drive or short transfer from Oslo Airport, Gardermoen.

The Hotel offers 24-hour front desk, free WiFi internet, free private parking and access to a partnering fitness centre. All bedrooms have cable TV, a writing desk and a modern bathroom with a shower. Accessible rooms are available.

Accommodation Pricing: Bed & Breakfast NOK1615.40 One course evening buffet NOK265

The course is delivered from the Hotel Conference suite and the adjoining burn site (quarry).



Course dates 20-22 May 2025

Course cost £2,100.00 per delegate (plus UK VAT 20% where applicable, EU B2B applies).

Excludes accommodation – book directly with hotel, please state that you are attending the EVFI course (a number of rooms have been reserved). <https://www.letoaena.no/home>

Joining instructions are sent to each delegate, upon booking, giving directions to the hotel, toll road information, PPE requirements and timings.

The Vehicle Fire Investigation courses can be delivered anywhere in the world (with a few exceptions) - please make contact for discussion info@firewiseacademy.co.uk

POST COURSE

Supporting information and a copy of the presentations are provided electronically for each delegate through Dropbox, and a certificate of attendance is issued.



BOOKINGS

Email info@firewiseacademy.co.uk

BOOKING CONDITIONS

A booking is provisional until confirmation from the client is received, and a quote or tax invoice is raised and issued. Bookings need to be confirmed 8 weeks prior to the course to secure the place. Invoices must be paid in full 21 days before the start of the course.

Once the booking has been confirmed in writing (by post or e-mail), FireWiseUK Learning Academy will send the client an invoice and a full set of joining instructions, or briefing documents.

Where a confirmed booking has been accepted by FireWiseUK Learning Academy and is subsequently cancelled or transferred to a later date at the request of the client, FireWiseUK Learning Academy reserves the right to apply the following conditions.

1. if the cancellation is made six weeks or more before the commencement of the first event, the invoice will be refunded, less a 10% administration charge.
2. if cancellation is made between six weeks and four weeks before the commencement of the event, 50% of the invoice will be refunded.
3. if the cancellation is made less than four weeks before the commencement of the event, no part of the invoice will be refunded.
4. an event booking may be transferred, providing that such a transfer request is received six weeks or more before the commencement of the event. A transfer received inside the six-week period will be treated as a cancellation and the conditions in 2 and 3 above will apply to the transfer.
5. Transfers must be made within the same calendar year or condition 1 above will apply.
6. Fees: for a single event must be paid at least 21 days in advance of the commencement of the event. For multi events, 50% must be paid at least 21 days in advance of the commencement of the first event and the remainder 7 days before the last event.

FireWiseUK Learning Academy

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