



EXPERT HAZARD AWARENESS COURSE – ONLINE

Spadeadam Research & Development

DNV GL's advanced course is delivered by industry experts and is accredited by the IChemE. Delegates are encouraged to learn about the hazards faced in the oil & gas, chemical and energy industries. The trainers have been involved in Major Hazard research for over 40 years and this is a unique opportunity to learn about the risks faced in industry from those who have conducted pioneering research leading to step changes in the safety.

Objectives and scope

DNV GL's **four-session online offering** of the accredited expert course provides an understanding of dispersion, explosions and fires following the accidental release of flammable gases and liquids. The online course uses video material from historical and current experimental research at DNV GL Spadeadam Research & Development, combined with reference to major accidents, to provide a practical understanding of the physical mechanisms and their relevance to process safety.

COURSE DATES AND COSTS

The course runs throughout the year, here are the details of forthcoming dates for 2021:

- March Dates: 10th, 16th, 17th & 24th
- April Dates: 7th, 14th, 15th & 21st

The price for attendance at these online sessions is:

**£200 per delegate per session, or
£700 per delegate for all four sessions**
discount available for FABIG members.



Course Content

Online lectures (via Teams) will cover the following three topics:

Lecture 1: Outflow and dispersion, including:

- Factors affecting fluid outflow from a loss of containment event.
- Important considerations on vapour production, dispersion and build-up of flammable clouds.
- Relevance to releases on onshore and offshore facilities and from pipelines.

Lecture 2(a): Explosion Mechanisms

- Why and when we get damaging overpressures
- Major vapour cloud explosions and relevance of deflagration to detonation transition in real site conditions

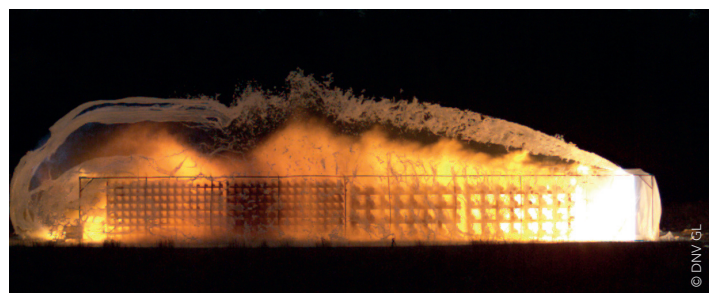
Lecture 2(b): Explosion Effects

- Selection of modelling tools for explosions and their effects
- Explosion loading and mitigation

Lecture 3: Fires, including:

- Types of fires.
- Fire characteristics and how these relate to the potential consequences and mitigation for real facilities.
- Modelling of fire events

The relevance of the technical aspects will be reinforced with workshops focused on several major accidents coupled with sessions to prompt discussion and further leaning on particular topics.



CONTACT

For further information or to book please contact:

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 and ask for hazard awareness training.