

Quantitative Risk Assessment (QRA)

Course overview

This course is tailor-made for anyone with a strong interest in gaining a thorough understanding of the different aspects of Quantitative Risk Assessment (QRA), allowing the learner to assess and evaluate the risk arising from all foreseeable Major Accident Hazards (MAH) identified within a facility.

The content is learner-centred with high interconnectedness between learners and instructors. The course would include tasks and world examples relevant for practice, delivered in an interactive and engaging approach. The course design is structured and guided with clear expectations, coupled with knowledge validation aligned with outcome.

Delivery: Classroom, Face-to-face or Virtual
Duration: 3 days

SOG
ACADEMY

This course is delivered in partnership with Synergen OG.



Learning Outcomes

By the end of the course, learners will understand:

- Understand the importance of conducting QRA
- Understand the methodology of conducting QRA
- Outline the use and application of QRA in various industries
- Understand what is Hazard and Major Accident Hazard
- Overview of techniques in performing Hazard Identification and the importance
- Understand techniques in modelling different types of hazard scenarios and understand how these scenarios impact personnel and asset risk
- Understand how Event Tree is developed
- Understand risk assessment of non-hydrocarbon related such as ship collision, dropped object, etc
- Understand how the fire and explosion, and non-hydrocarbon hazard results are translated into personnel risk
- Able to interpret the results from a QRA

and how to evaluate the key risk drivers to determine means to further reduce the risks

- Understand the concept of As Low As Reasonably Practicable (ALARP) and how to achieve ALARP

This course examines the following five critical aspects:

- Hazard Identification (HAZID)
- Fire and Explosion Assessment (Consequence Modelling & Frequency Assessment)
- Non-Hydrocarbon Hazard Analysis (NHHA)
- Quantitative Risk Assessment (QRA)
- Risk Reduction through ALARP Principle

Who should attend?

This course is aimed at anyone with a strong desire to develop their understanding of quantitative risk assessment process safety and personnel at all organisational levels with an emphasis on operational/maintenance supervisors, facilities engineers, design personnel and workforce members with responsibility for site safety.

CPD
The CPD Certification Service

Certificate

Participants who fulfil the course requirements and complete all required exercises will be awarded a Certificate of course completion. Our courses are CPD certified.

Enquire via our website

