# Confined Space



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### About Us

Industry Training Services was formed in 2000 by civil engineer Brendan Crealey. From humble beginnings in a business unit in Maghery Co. Tyrone the company has grown to what it is today, Ireland's Leading Health and Safety Training Provider serving sectors such as construction, utilities, manufacturing, telecommunications and more. ITS work closely with clients to develop bespoke health and safety training solutions which are tailored to their requirements. We offer a flexible approach to training, delivering courses at our training centre in Portadown, our Dublin HQ and in various other locations across Ireland, including at the clients' premises.

ITS offer a number of accreditations and courses to give clients the advantage of demonstrating their competence in health and safety from a trusted professional body.



Managing Director

**Experience**: Established in 2000, we have built up invaluable industry experience and extensive knowledge over the years. Our experienced trainers bring industry-specific expertise, enhancing the quality of our training sessions.

**Knowledge:** Our knowledgeable staff possess expertise in all our services, ensuring that our clients receive accurate and valuable information to support decision making.

**Integrity**: At the heart of our business lies a commitment to providing clients with expert advice on services, ultimately saving our clients valuable time and money. Moreover, we are dedicated to actively contributing to the reduction of fatalities and injuries in the industries we serve.

**Reputation:** We have earned our exceptional reputation through years of dedicated service, with many of our clients being with us since our inception.

# Qualifications

**Level 3 Award in Learning and Development** 

All of our trainers hold a Level 3 Award in Learning and Development Training. This formally certifies individuals to a nationally accredited standard to ensure they have the ability to effectively teach others (in the post 16 education sector).

### **Assessor Awards**

These awards are designed for anyone assessing and carrying out quality assurance in all occupational sectors including accredited learning and non-accredited learning qualifications.

### **Our Training Team**

Our expert trainers boast extensive experience across various business sectors, guaranteeing the delivery of tailored and relevant training that addresses the specific needs of your business and site. They excel in preparing you to handle real-life scenarios and specific hazards effectively.



# **Course Accreditations**

As Ireland's only accredited provider of mobile confined space training, we can offer City and Guilds or CABWI Confined Space Training for low, medium, and high-risk environments, depending on your chosen accrediting body.





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### **City & Guilds**

All trainers hold the relevant qualifications to deliver and assess a comprehensive suite of confined space training and assessments mapped against the National Occupational Standard (NOS) for confined spaces.

Alongside these qualifications our instructors have years of industry experience in confined space management, in several sectors such as: Fire and Rescue, the water industry and utilities

### CABWI

Our trainers can also deliver CABWI certified Confined Space training courses. CABWI is a nationally recognised awarding body, specialising in vocational qualifications for the water and wider utilities industries. They offer qualifications relating to water quality, and safety during street works and in confined spaces. However, CABWI certification is also open to participants who work within other industry sectors outside of water and utilities.

### **ITS Certified**

Alternatively, our ITS certificates, if preferred, are in alignment with the industry accredited courses. ITS certifications are suited to personnel who do not require a specific industry accreditation. We can also develop confined space training courses tailored to the particular environment or circumstances your workers are faced with if you require something a bit more unique.

CPD points are available for all participants who require them with 1 hour of training equating to 1 CPD point.

# **Introduction to Confined Spaces**

A confined space is any space that is large enough and configured in such a way that an employee can bodily enter and perform work, has limited or restricted means for entry or exit, and is not designed for continuous employee occupancy.



Examples of confined spaces include tanks, vessels, silos, storage bins, hoppers, vaults, pits, manholes, tunnels, equipment housings, ductwork, pipelines, basements, and roof spaces.

Confined spaces can conceal a series of hazards that pose serious risks to those who enter them. These confined spaces may exist in a wide array of settings, from industrial facilities and construction sites to agricultural environments. Understanding and effectively managing these spaces is not only a legal obligation but a moral imperative to ensure the safety and well-being of individuals who encounter them.

They share common traits: limited access points and restricted means of egress. Such confinement can lead to the accumulation of hazardous atmospheres, the risk of engulfment, and entrapment, making these spaces inherently dangerous.

### Importance of Confined Space Safety

The consequences of overlooking the hazards within confined spaces can be severe, leading to injuries, illnesses, and, tragically, loss of life. Recognising these dangers and developing the knowledge and strategies to mitigate them is paramount.

### Real life instances and their consequences

Every year in the UK and Ireland, a significant number of individuals suffer fatal or severe injuries whilst working in confined spaces. Incidents have occurred in various sectors such as manufacturing, utilities, maritime, construction, offshore, and agriculture.

# Confined Space Training with ITS

Industry Training Services (ITS) deliver a range of accredited confined space training courses suitable for workers who are exposed to low, medium, and highrisk environments.



Training is delivered at our purpose-built training centre in Portadown, Co. Armagh, at our Dublin HQ, and using our Confined Spaces Mobile Training Unit which can be driven and set up in less than 30 minutes at the clients' premises/site, anywhere in Ireland. We can also deliver confined space courses at various other regional venues across Ireland to minimise travel time and costs for participants.

ITS provide all necessary equipment such as breathing apparatus, gas monitors, and rescue equipment.

Our courses are designed to provide a realistic confined space experience. Both the training centre and mobile unit have vertical and horizontal entry points and over 30 metres of crawl space, in line with awarding body requirements. These varying entry points allow a range of different scenarios to be simulated.

The mobile training unit has the added bonus of supporting companies to reduce their carbon footprint. As the unit can be brought to client premises, it reduces the need for participants to travel to a training venue, which saves time, money, and positively impacts the environment.

### The training will cover topics such as:

- » The characteristics and hazards of confined spaces.
- » The equipment and protective gear to use when entering confined spaces.
- » The procedures for entering and exiting confined spaces safely.
- » The importance of air monitoring and testing before and during entry.
- » Emergency procedures for rescuing workers trapped or injured in a confined
- » space. The legal requirements for confined space entry and safety.



Scan to view our Confined Space Mobile Training Unit

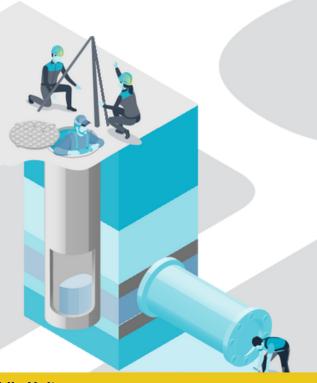
Creating awareness of the risks, participating in practical training, and regular refresher training can save lives.



# Benefits of the Confined Space Mobile Training

### **Realistic Confined Space Experience**

Trainees can practice in a controlled environment that mimics the challenges of actual confined spaces. This handson experience is invaluable for building confidence and competence amongst workers. The Confined Space Mobile Training Unit has facilities for both vertical and horizontal entry points with over 30m crawl space. These varying entry points allow a range of different scenarios to be simulated.





### **Mobile Unit**

Training is delivered on clients' own site. Instead of sending your workforce off-site, the training unit comes directly to your location. This eliminates the need for expensive travel arrangements, accommodation, and minimises downtime. Employees can receive training without being away from the workplace for extended periods, resulting in substantial cost savings for your organisation.

### **Experience**

ITS boasts over 23 years of invaluable industry experience and extensive knowledge. Our experienced trainers bring industryspecific expertise with years of experience in confined space management within the fire & rescue and water industries, enhancing the quality of our training sessions.



### **On-Site Training**

Conducting training on-site allows your team to bond and learn together. It fosters collaboration and reinforces the importance of looking out for one another in confined spaces.

### **Rapid Set-Up**

From arrival on site, the unit can be up and running in less than 30 minutes with all equipment provided by ITS including:

- Breathing apparatus
- Gas monitors
- Rescue equipment



### **Environmental Impact**

By reducing the need for employees to travel for training the mobile unit can help companies to lower carbon footprint and adopt a greener approach to workplace safety.

### **CPD** Points

CPD points available for participants – 1 hour = 1 CPD point



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It's crucial for employers and workers involved in confined space work to be aware of the regulations and comply with them fully. Non-compliance can result in serious legal consequences and, more importantly, can jeopardise the safety of workers.

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> Specific guidance and additional regulations may apply to particular industries or situations, so it's advisable to consult with relevant regulatory bodies and seek professional advice when necessary to ensure full compliance.

#### A HSE

for Working in Confined Spaces

> Safe work in confined spaces Confined Spaces Regulations 1997



Approved Code of Practice and guidance

# ITS Certified Confined Space Training





### We provide two main ITS Certified Confined Space courses. These are:

- Confined Space Safe Entry, Escape Breathing Apparatus and Self Rescue (1 Day).
- Confined Space Safe Entry and Full Breathing Apparatus (2 Days).

### We also provide tailored solutions such as:

- Confined Space for Managers
- Confined Space Risk Assessment

# Aim

These courses are designed to ensure that delegates who need to enter such workplaces understand the requirements of the law, the need for risk assessments and safe systems of work and how to apply these practically. This includes competent use of the appropriate equipment, to enable entry to be made safely.

# Who Should Attend?

These courses are predominantly intended for practical users who need to enter spaces which are substantially enclosed and where there is a potentially hazardous working environment.

# **Training Location**

At ITS Portadown HQ, Dublin HQ or at the client's own site via our Mobile Confined Space Training Unit.



Candidates must be fit to enter Confined Spaces and wear breathing apparatus. Self-declaration form to be completed. Discounts available for group bookings I Contact us for a quote. For Mobile Unit Training practical training elements will be restricted to a maximum of 8 participants.

# City & Guilds Accredited Confined Space Training





# We provide eight main City & Guilds Accredited Certified Confined Space courses. These are:

- Level 2 Award in Working in Low Risk Confined Spaces (6160-01)
- Level 2 Award in Working in High Risk Confined Spaces (6160-03)
- Level 2 Award Entrant and Entry Controller for Confined Spaces, Medium Risk (6160-09)
- Level 3 Award in Control Entry and Arrangements for Confined Spaces, High Risk (6160-05)
- Level 3 Award in Supervising Team Undertaking Work in Confined Spaces (6160-05)
- Level 3 Award in Direct Emergency Rescue and Recovery of Casualties from Confined Spaces (6160-07)
- Level 3 Award in Working as a Member of a Rescue and Recovery Team in Confined Spaces (6160-08)
- Level 4 Award in Plan, Manage and Review Legislative and Safety Compliance for Work in Confined Spaces (6160-06)

# Who Should Attend?

These courses are predominantly intended for practical users who need to enter spaces which are substantially enclosed and where there is a potentially hazardous working environment.

# Aim

The aim of these courses unit is to reflect the national occupational standard for risk related confined space environment. These courses cover both water and nonwater industry areas.

# **Training Location**

At ITS Portadown HQ, Dublin HQ or at the client's own site via our Mobile Confined Space Training Unit.

Candidates must be fit to enter Confined Spaces and wear breathing apparatus. Self-declaration form to be completed. Discounts available for group bookings | Contact us for a quote. For Mobile Unit Training practical training elements will be restricted to a maximum of 8 participants.

# CABWI Accredited Confined Space Training





# We provide four main CABWI Accredited Certified Confined Space courses. These are:

- · Level 2 Award in Working in Low Risk Confined Spaces
- Level 2 Award in Working in Medium Risk Confined Spaces
- Level 2 Award in Working in High Risk Confined Spaces
- Level 3 Award in Emergency Rescue and Recovery of Casualties from Confined Spaces

# Who Should Attend?

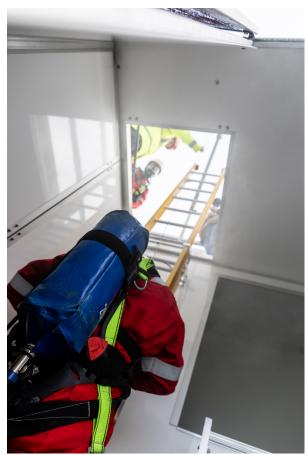
These courses are predominantly intended for practical users who need to enter spaces which are substantially enclosed and where there is a potentially hazardous working environment.

# Aim

These qualifications are designed to provide learners with the underpinning knowledge and practical skills associated with working in confined spaces.

# **Training Location**

At ITS Portadown HQ, Dublin HQ or at the client's own site via our Mobile Confined Space Training Unit.



Candidates must be fit to enter Confined Spaces and wear breathing apparatus. Self-declaration form to be completed. Discounts available for group bookings | Contact us for a quote. For Mobile Unit Training practical training elements will be restricted to a maximum of 8 participants.

# Recognising Confined Spaces

### 9.1 Characteristics of Confined Spaces:



### Limited Entry and Exit

Confined spaces have restricted entry and exit points. These openings may be small or narrow, making it challenging to enter and exit easily.

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### Not Designed for Continuous Occupancy

Confined spaces are not intended for prolonged human occupancy. They are usually designed for other purposes such as storage, maintenance, or access to equipment.



### **Enclosed or Partially Enclosed**

Confined spaces can be fully enclosed (like tanks or vaults) or partially enclosed (like trenches or pits). The degree of enclosure can vary.



### Difficult Access and Egress

Workers may have to use ladders, crawl through small openings, or navigate other challenging means to enter and exit confined spaces.

### Limited Natural Ventilation

Confined spaces often have poor natural ventilation, which can contribute to the accumulation of hazardous gases or lack of oxygen.



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### **Physical Hazards**

Confined spaces can pose physical hazards like engulfment (submersion or entrapment in a liquid or granular material), entrapment by machinery or equipment, or the presence of moving parts.

### **Hazardous Atmospheres**

They may contain or potentially develop hazardous atmospheres, such as low oxygen levels, toxic gases, or flammable vapours. These atmospheric hazards can make confined spaces particularly dangerous.





### Hazardous Gases that may be present in Confined Spaces

#### Hydrogen Sulfide (H2S):

A colourless, highly toxic gas with a distinct "rotten egg" odour. It's commonly found in sewers, manholes, and areas with decaying organic matter.

#### Benzene

A volatile organic compound (VOC) that is colourless and flammable. It's used in various industrial processes and can be present in storage tanks or containers.

### Methane (CH4)

A flammable and potentially explosive gas that is odourless and colourless. It can be produced in confined spaces like sewage treatment plants or natural gas facilities.

### Toluene

Another VOC that is often used as a solvent in paints, coatings, and chemicals. It can be found in storage tanks or confined spaces in manufacturing facilities.

#### Carbon Monoxide (CO)

A colourless, odourless gas produced during incomplete combustion. It can accumulate in spaces with fuel-burning equipment, such as engine rooms or boiler rooms.

#### Nitrogen Dioxide (NO2)

A reddish-brown gas produced by combustion processes. It can be present in spaces with fuel-burning equipment, like engine rooms or furnaces.

### Ammonia (NH3)

A colourless gas with a pungent odour. It's often found in refrigeration systems, chemical manufacturing, or agricultural s ettings.

#### Sulfur Dioxide (SO2)

A colourless gas with a pungent odour. It's commonly found in industrial settings, particularly where sulfurcontaining fuels are burned.

### Chlorine (Cl2)

A greenish-yellow gas with a strong, pungent odour. It's used in water treatment facilities and can be present in storage tanks or pipelines.

### Volatile Organic Compounds (VOCs)

This category includes a wide range of organic chemicals, such as toluene, xylene, and acetone, which can evaporate into the air and pose health risks in confined spaces.

#### Carbon Dioxide (CO2)

A colourless, odourless gas that can accumulate in spaces with poor ventilation, such as silos, tanks, or fermentation vessels.

These are some of the specific gases that can be encountered in confined spaces. The presence of these gases can vary based on the type of confined space and its specific conditions, so it's crucial to conduct thorough atmospheric testing to identify potential hazards before entry and during work within confined spaces.

# Conclusion

Insights into the critical aspects of confined spaces, their inherent hazards, and essential measures required to ensure safety while working within these environments have been explored.

As well as underlining the legal regulations and best practices governing confined space operations in the UK and Ireland, highlighting the importance of compliance and vigilance.

Whether you're working in the pharmaceutical sector, harbours, local authorities, or other industries, the principles of confined space safety remain universal. Our aim has been to provide you with valuable insights and knowledge that empower you to protect lives, uphold regulatory compliance, and foster a culture of safety within your organisation.

Remember, safety is not just a legal obligation but a moral one. It's a commitment to the well-being of your workforce, an investment in the sustainability of your business, and a testament to your dedication to preventing accidents.



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