



**nebosh**

**Syllabus summary -  
NEBOSH National Diploma  
in Occupational  
Health and Safety**

**February 2010**

## **Syllabus summary - NEBOSH National Diploma in Occupational Health and Safety (February 2010 specification)**

### **Structure**

The qualification is divided into four units: Unit A (Managing health and Safety), unit B (Hazardous agents in the workplace), Unit C (Workplace and work equipment safety hazards) and Unit D (Application of health and safety theory and practice).

### **Unit A: Managing health and safety**

<b>Element Number</b>	<b>Element Title</b>	<b>Recommended hours</b>	<b>Page</b>
1	Principles of health and safety management	5	5
2	Loss causation and incident investigation	5	6
3	Measuring and reviewing health and safety performance	6	6
4	Identifying hazards, assessing and evaluating risk	12	7
5	Risk control	8	7
6	Organisational factors	10	8
7	Human factors	12	9
8	Principles of health and safety law	12	10
9	Criminal law	9	10
10	Civil law	12	11
	<b>Minimum unit tuition time</b>	<b>91</b>	

**Recommended private study time            75**

## **Unit B: Hazardous agents in the workplace**

<b>Element Number</b>	<b>Element Title</b>	<b>Recommended hours</b>	
1	Principles of toxicology and epidemiology	8	12
2	Hazardous substances and other chemicals – assessment of risk	5	13
3	Hazardous substances and other chemicals – engineering controls and personal protective equipment	4	13
4	Monitoring and measuring	6	14
5	Biological agents	7	14
6	Physical agents 1 – noise and vibration	10	15
7	Physical agents 2 - radiation	9	15
8	Psychosocial agents	5	16
9	Musculoskeletal risks and controls	4	16
10	Work environment risks and controls	5	17
11	Managing occupational health	8	17
<b>Minimum unit tuition time</b>		<b>71</b>	
<b>Recommended private study time</b>		<b>50</b>	

## **Unit C: Workplace and work equipment safety**

<b>Element Number</b>	<b>Element Title</b>	<b>Recom- mended hours</b>	<b>Page</b>
1	General workplace issues	7	18
2	Principles of fire and explosion	6	19
3	Workplace fire risk assessment	6	19
4	Storage, handling and processing of dangerous substances	7	20
5	Work equipment (general)	9	20
6	Work equipment (workplace machinery)	11	21
7	Work equipment (mobile, lifting and access)	6	22
8	Electrical safety and Electricity at Work Regulations 1989	7	22
9	Construction hazards and controls	7	23
10	Workplace transport and driving for work	4	23
11	Pressure system hazards and controls	5	24
	<b>Minimum unit tuition time</b>	<b>75</b>	
	<b>Recommended private study time</b>	<b>50</b>	

## Unit D: Application of health and safety theory and practice

Element Number	Element Title	Recommended hours	Page
1	Application of health and safety theory and practice	6	25
	<b>Minimum unit tuition time</b>	<b>6</b>	
	<b>Recommended private study time</b>	<b>50</b>	
	<i>Minimum total tuition time</i>	<i>243</i>	
	<i>Recommended total private study time</i>	<i>225</i>	
	<i>Total overall hours</i>	<i>468</i>	

## **Unit A: Managing health and safety**

### **Overall learning outcome**

On completion of this unit, candidates will be able to demonstrate their understanding of the domain knowledge covered through:

1. The application of knowledge to familiar and unfamiliar situations; and
2. The critical analysis and evaluation of information presented in both quantitative and qualitative forms.

In addition each element has specific learning outcomes.

### **Element A1: Principles of health and safety management**

#### **Learning outcomes**

On completion of this element, candidates should be able to demonstrate understanding of the content through the application of knowledge to familiar and unfamiliar situations and the critical analysis and evaluation of information presented in both quantitative and qualitative forms. In particular they should be able to:

- A1.1 Explain the moral, legal and economic reasons for the effective management of health and safety
- A1.2 Outline the societal factors which influence health and safety standards and priorities
- A1.3 Explain the principles and content of effective health and safety, quality, environmental, and integrated management systems with reference to recognised models and standards
- A1.4 Outline the role and responsibilities of the health and safety practitioner.

***Recommended tuition time not less than 5 hours***

## **Element A2: Loss causation and incident investigation**

### **Learning outcomes**

On completion of this element, candidates should be able to demonstrate understanding of the content through the application of knowledge to familiar and unfamiliar situations and the critical analysis and evaluation of information presented in both quantitative and qualitative forms. In particular they should be able to:

- A2.1 Explain theories of loss causation
- A2.2 Explain the quantitative analysis of accident/incident and ill-health data, limitations of their application, and their presentation in numerical and graphical form
- A2.3 Explain the statutory and the internal reporting and recording systems for injuries, ill-health, dangerous occurrences and near misses
- A2.4 Explain loss investigations; the requirements, benefits, the procedures, the documentation, and the involvement of and communication with relevant staff and representatives.

***Recommended tuition time not less than 5 hours***

## **Element A3: Measuring and reviewing health and safety performance**

### **Learning outcomes**

On completion of this element, candidates should be able to demonstrate understanding of the content through the application of knowledge to familiar and unfamiliar situations and the critical analysis and evaluation of information presented in both quantitative and qualitative forms. In particular they should be able to:

- A3.1 Explain the purpose of performance measurement in relation to health and safety objectives and arrangements
- A3.2 Explain the need for, and the objectives and limitations of, health and safety monitoring systems
- A3.3 Describe the variety of monitoring and measurement techniques
- A3.4 Explain the requirements for reviewing health and safety performance.

***Recommended tuition time not less than 6 hours***

## **Element A4: Identifying hazards, assessing and evaluating risks**

### **Learning outcomes**

On completion of this element, candidates should be able to demonstrate understanding of the content through the application of knowledge to familiar and unfamiliar situations and the critical analysis and evaluation of information presented in both quantitative and qualitative forms. In particular they should be able to:

- A4.1 Describe how to use internal and external sources of information in the identification of hazards and the assessment of risk
- A4.2 Outline a range of hazard identification techniques
- A4.3 Explain how to assess and evaluate risk and to implement a risk assessment programme
- A4.4 Explain the principles and techniques of failure tracing methodologies with the use of calculations.

***Recommended tuition time not less than 12 hours***

## **Element A5: Risk Control**

### **Learning outcomes**

On completion of this element, candidates should be able to demonstrate understanding of the content through the application of knowledge to familiar and unfamiliar situations and the critical analysis and evaluation of information presented in both quantitative and qualitative forms. In particular they should be able to:

- A5.1 Outline common risk management strategies
- A5.2 Outline factors to be taken into account when selecting risk controls
- A5.3 Explain the development, main features and operation of safe systems of work and permit-to-work systems.

***Recommended tuition time not less than 8 hours***

## **Element A6: Organisational factors**

### **Learning outcomes**

On completion of this element, candidates should be able to demonstrate understanding of the content through the application of knowledge to familiar and unfamiliar situations and the critical analysis and evaluation of information presented in both quantitative and qualitative forms. In particular they should be able to:

- A6.1 Explain the internal and external influences on health and safety in an organisation
- A6.2 Outline the organisation as a system, the different types of organisation, their characteristics and relationship to individuals within them
- A6.3 Identify the various categories of third parties in a workplace – the relevant legislative requirements, responsibilities and controls
- A6.4 Explain the role, influences on and procedures for formal and informal consultation with employees in the workplace
- A6.5 Outline the development of a health and safety management information system, the relevant legal requirements, and the data it should contain
- A6.6 Explain health and safety culture and climate
- A6.7 Outline the factors which can both positively and negatively affect health and safety culture.

***Recommended tuition time not less than 10 hours***

## **Element A7: Human factors**

### **Learning outcomes**

On completion of this element, candidates should be able to demonstrate understanding of the content through the application of knowledge to familiar and unfamiliar situations and the critical analysis and evaluation of information presented in both quantitative and qualitative forms. In particular they should be able to:

- A7.1 Outline psychological and sociological factors which may give rise to specific patterns of safe and unsafe behaviour in the working environment
- A7.2 Explain the nature of the perception of risk and its relationship to performance in the workplace
- A7.3 Explain the classification of human failure
- A7.4 Explain appropriate methods of improving individual human reliability in the workplace
- A7.5 Explain how organisational factors could contribute to improving human reliability
- A7.6 Explain how job factors could contribute to improving human reliability
- A7.7 Outline the principles, conditions and typical content of behavioural change programmes designed to improve safe behaviour in the workplace.

***Recommended tuition time not less than 12 hours***

## **Element A8: Principles of health and safety law**

### **Learning outcomes**

On completion of this element, candidates should be able to demonstrate understanding of the content through the application of knowledge to familiar and unfamiliar situations and the critical analysis and evaluation of information presented in both quantitative and qualitative forms. In particular they should be able to:

- A8.1 Explain the sources and types of law in force in the UK relevant to health and safety
- A8.2 Explain the concept of absolute and qualified duties in relation to health and safety legislation
- A8.3 Outline the influence and role of the European Union on UK health and safety legislation
- A8.4 Describe the status and procedure for the creation of UK Acts, Regulations and Orders
- A8.5 Describe the structure and functions of courts and related institutions in the UK
- A8.6 Outline the principles of the law of contract and its application to health and safety issues
- A8.7 Explain the principles of employment and discrimination law as it affects health and safety issues.

***Recommended tuition time not less than 12 hours***

## **Element A9: Criminal law**

### **Learning outcomes**

On completion of this element, candidates should be able to demonstrate understanding of the content through the application of knowledge to familiar and unfamiliar situations and the critical analysis and evaluation of information presented in both quantitative and qualitative forms. In particular they should be able to:

- A9.1 Explain the key requirements of the Health and Safety at Work etc Act 1974 and the Management of Health and Safety at Work Regulations 1999
- A9.2 Explain the status of Approved Codes of Practice and guidance and the statutory procedures for making Approved Codes of Practice
- A9.3 Explain the responsibilities and powers of enforcing agencies and officers and the range of options related to enforcement action, their implications and appeal procedures.

***Recommended tuition time not less than 9 hours***

## **Element A10: Civil law**

### **Learning outcomes**

On completion of this element, candidates should be able to demonstrate understanding of the content through the application of knowledge to familiar and unfamiliar situations and the critical analysis and evaluation of information presented in both quantitative and qualitative forms. In particular they should be able to:

A10.1 Explain the duties owed at common law

A10.2 Explain the criteria required to establish a successful civil action for breach of statutory duty, the main defences available and the procedure for assessment of damages under civil law

A10.3 Outline the main civil law statutory duties owed by the occupiers of premises to lawful and unlawful visitors.

***Recommended tuition time not less than 12 hours***

## **Unit B: Hazardous agents in the workplace**

### **Overall learning outcome**

On completion of this unit, candidates should be able to demonstrate understanding of the domain knowledge covered through:

1. The application of knowledge to familiar and unfamiliar situations; and
2. The critical analysis and evaluation of information presented in both quantitative and qualitative forms.

In addition each element has specific learning outcomes.

### **Element B1: Principles of toxicology and epidemiology**

#### **Learning outcomes**

On completion of this element, candidates should be able to demonstrate understanding of the content through the application of knowledge to familiar and unfamiliar situations and the critical analysis and evaluation of information presented in both quant:

- B1.1 Outline the legal framework as it applies to chemicals
- B1.2 Outline human anatomical systems and sensory organs
- B1.3 Describe the main effects and routes of attack of chemicals on the human body
- B1.4 Explain the health effects of chemicals used in the workplace
- B1.5 Explain the principles of epidemiology and the principles of toxicological data to the identification of work related ill-health.

***Recommended tuition time not less than 8 hours***

## **Element B2: Hazardous substances and other chemicals – assessment of risk**

### **Learning outcomes**

On completion of this element, candidates should be able to demonstrate understanding of the content through the application of knowledge to familiar and unfamiliar situations and the critical analysis and evaluation of information presented in both quantitative and qualitative forms. In particular they should be able to:

- B2.1 Outline the factors to consider when assessing risks from hazardous substances
- B2.2 Explain the control measures for hazardous substances
- B2.3 Explain the additional requirements for asbestos and lead.

***Recommended tuition time not less than 5 hours***

## **Element B3: Hazardous substances and other chemicals – engineering controls and personal protective equipment**

### **Learning outcomes**

On completion of this element, candidates should be able to demonstrate understanding of the content through the application of knowledge to familiar and unfamiliar situations and the critical analysis and evaluation of information presented in both quantitative and qualitative forms. In particular they should be able to:

- B3.1 Explain local exhaust ventilation and procedures to ensure effective ventilation
- B3.2 Explain the various types of personal protective equipment (PPE) available for use with hazardous substances and other chemicals, their effectiveness, and the relevant specifications and standards to be met.

***Recommended tuition time not less than 5 hours***

## **Element B4: Monitoring and measuring**

### **Learning outcomes**

On completion of this element, candidates should be able to demonstrate understanding of the content through the application of knowledge to familiar and unfamiliar situations and the critical analysis and evaluation of information presented in both quantitative and qualitative forms. In particular they should be able to:

- B4.1 Explain workplace exposure limits (WELs), the means by which they are established, and their application to the workplace
- B4.2 Outline the strategies, methods, and equipment for the sampling and measurement of airborne contaminants
- B4.3 Outline the principles of biological monitoring.

***Recommended tuition time not less than 6 hours***

## **Element B5: Biological agents**

### **Learning outcomes**

On completion of this element, candidates should be able to demonstrate understanding of the content through the application of knowledge to familiar and unfamiliar situations and the critical analysis and evaluation of information presented in both quantitative and qualitative forms. In particular they should be able to:

- B5.1 Explain the types and properties of biological agents found at work
- B5.2 Explain the assessment and control of risk from exposure to biological agents at work.

***Recommended tuition time not less than 7 hours***

## **Element B6: Physical agents 1 – noise and vibration**

### **Learning outcomes**

On completion of this element, candidates should be able to demonstrate understanding of the content through the application of knowledge to familiar and unfamiliar situations and the critical analysis and evaluation of information presented in both quantitative and qualitative forms. In particular they should be able to:

- B6.1 Explain the basic physical concepts relevant to noise
- B6.2 Explain the effects of noise on the individual and the use of audiometry
- B6.3 Explain the measurement and assessment of noise exposure
- B6.4 Explain the principles of controlling noise and noise exposure
- B6.5 Explain the basic physical concepts relevant to vibration
- B6.6 Explain the effects of vibration on the individual
- B6.7 Explain the measurement and assessment of vibration exposure
- B6.8 Explain the principles of controlling vibration and vibration exposure.

***Recommended tuition time not less than 10 hours***

## **Element B7: Physical agents 2 – radiation**

### **Learning outcomes**

On completion of this element, candidates should be able to demonstrate understanding of the content through the application of knowledge to familiar and unfamiliar situations and the critical analysis and evaluation of information presented in both quantitative and qualitative forms. In particular they should be able to:

- B7.1 Outline the nature of the different types of ionising and non-ionising radiation
- B7.2 Explain the effects of exposure to non-ionising radiation, its measurement and control
- B7.3 Explain the effects of exposure to ionising radiation, its measurement and control
- B7.4 Explain the different sources of lasers found in the workplace, the classification of lasers and the control measures.

***Recommended tuition time not less than 9 hours***

## **Element B8: Psychosocial agents**

### **Learning outcomes**

On completion of this element, candidates should be able to demonstrate understanding of the content through the application of knowledge to familiar and unfamiliar situations and the critical analysis and evaluation of information presented in both quantitative and qualitative forms. In particular they should be able to:

- B8.1 Explain the scope, effects and causes of work-related stress
- B8.2 Explain the identification and control of workplace stress with reference to legal duties and other standards
- B8.3 Explain the scope, effects and causes of work-related violence/aggression
- B8.4 Explain the identification and control of work-related violence/aggression with reference to legal duties.

***Recommended tuition time not less than 5 hours***

## **Element B9: Musculoskeletal risks and controls**

### **Learning outcomes**

On completion of this element, candidates should be able to demonstrate understanding of the content through the application of knowledge to familiar and unfamiliar situations and the critical analysis and evaluation of information presented in both quantitative and qualitative forms. In particular they should be able to:

- B9.1 Outline types, causes and relevant workplace examples of injuries and ill-health conditions associated with repetitive physical activities, manual handling and poor posture
- B9.2 Explain the assessment and control of risks from repetitive activities, manual handling and poor posture.

***Recommended tuition time not less than 4 hours***

## **Element B10: Work environment risks and controls**

### **Learning outcomes**

On completion of this element, candidates should be able to demonstrate understanding of the content through the application of knowledge to familiar and unfamiliar situations and the critical analysis and evaluation of information presented in both quantitative and qualitative forms. In particular they should be able to:

- B10.1 Explain the need for, and factors involved in, the provision and maintenance of thermal comfort in the work environment
- B10.2 Explain the need for suitable and sufficient lighting in the workplace, units of measurement of light and the assessment of lighting levels in the workplace
- B10.3 Explain the need for welfare facilities and arrangements in fixed and temporary workplaces
- B10.4 Explain the requirements and provision for first aid in the workplace.

***Recommended tuition time not less than 5 hours***

## **Element B11: Managing occupational health**

### **Learning outcomes**

On completion of this element, candidates should be able to demonstrate understanding of the content through the application of knowledge to familiar and unfamiliar situations and the critical analysis and evaluation of information presented in both quantitative and qualitative forms. In particular they should be able to:

- B11.1 Outline the nature of occupational health
- B11.2 Outline the principles and benefits of vocational rehabilitation including the role of outside support agencies
- B11.3 Outline the management of occupational health (including the practical and legal aspects).

***Recommended tuition time not less than 8 hours***

## **Unit C: Workplace and work equipment safety**

### **Overall Learning Outcome**

On completion of this unit, candidates should be able to demonstrate understanding of the domain knowledge covered through:

1. The application of knowledge to familiar and unfamiliar situations; and
2. The critical analysis and evaluation of information presented in both quantitative and qualitative forms.

In addition each element has specific learning outcomes.

### **Element C1: General workplace issues**

#### **Learning outcomes**

On completion of this element, candidates should be able to demonstrate understanding of the content through the application of knowledge to familiar and unfamiliar situations and the critical analysis and evaluation of information presented in both quantitative and qualitative forms. In particular they should be able to:

- C1.1 Explain the need for, and factors involved in, the provision and maintenance of a safe working environment, with specific reference to access and egress, pedestrians, and slips, trips and falls
- C1.2 Explain how safety signs are used in the workplace
- C1.3 Explain the assessment of risk and safe working practices associated with work in confined spaces
- C1.4 Outline the main issues associated with maintaining structural safety of workplaces
- C1.5 Explain the hazards, risks, and controls when working at heights
- C1.6 Explain the hazards, risks and controls for lone working.

***Recommended tuition time not less than 7 hours***

## **Element C2: Principles of fire and explosion**

### **Learning outcomes**

On completion of this element, candidates should be able to demonstrate understanding of the content through the application of knowledge to familiar and unfamiliar situations and the critical analysis and evaluation of information presented in both quantitative and qualitative forms. In particular they should be able to:

- C2.1 Outline the properties of flammable and explosive materials and the mechanisms by which they ignite
- C2.2 Outline the behaviour of structural materials, buildings and building contents in a fire
- C2.3 Outline the main principles and practices of fire and explosion prevention and protection
- C2.4 Outline the contribution of typical mechanical and systems failures to major accidents.

***Recommended tuition time not less than 6 hours***

## **Element C3: Workplace fire risk assessment**

### **Learning outcomes**

On completion of this element, candidates should be able to demonstrate understanding of the content through the application of knowledge to familiar and unfamiliar situations and the critical analysis and evaluation of information presented in both quantitative and qualitative forms. In particular they should be able to:

- C3.1 Outline the main legal requirements for fire safety in the workplace
- C3.2 Explain the processes involved in the identification of hazards and the assessment of risk from fire
- C3.3 Describe common fire detection and alarm systems and procedures
- C3.4 Outline the factors to be considered when selecting fixed and portable fire-fighting equipment for the various types of fire
- C3.5 Outline the factors to be considered in the provision and maintenance of means of escape
- C3.6 Explain the purpose of, and essential requirements for, emergency evacuation procedures.

***Recommended tuition time not less than 6 hours***

## **Element C4: Storage, handling and processing of dangerous substances**

### **Learning outcomes**

On completion of this element, candidates should be able to demonstrate understanding of the content through the application of knowledge to familiar and unfamiliar situations and the critical analysis and evaluation of information presented in both quantitative and qualitative forms. In particular they should be able to:

- C4.1 Outline the main physical and chemical characteristics of industrial chemical processes
- C4.2 Outline the main principles of the safe storage, handling and transport of dangerous substances
- C4.3 Outline the main principles of the design and use of electrical systems and equipment in adverse or hazardous environments
- C4.4 Explain the need for emergency planning, the typical organisational arrangements needed for emergencies and relevant regulatory requirements.

***Recommended tuition time not less than 7 hours***

## **Element C5: Work equipment (general)**

### **Learning outcomes**

On completion of this element, candidates should be able to demonstrate understanding of the content through the application of knowledge to familiar and unfamiliar situations and the critical analysis and evaluation of information presented in both quantitative and qualitative forms. In particular they should be able to:

- C5.1 Outline the criterion for the selection of suitable work equipment for particular tasks and processes to eliminate or reduce risks
- C5.2 Explain how risks to health and safety arising from the use of work equipment are controlled
- C5.3 Explain safe working procedures for the maintenance, inspection and testing of work equipment according to the risks posed
- C5.4 Explain the role of competence, training, information and supervision in the control of risks arising from the installation, operation, maintenance and use of work equipment.

***Recommended tuition time not less than 9 hours***

## **Element C6: Work equipment (workplace machinery)**

### **Learning outcomes**

On completion of this element, candidates should be able to demonstrate understanding of the content through the application of knowledge to familiar and unfamiliar situations and the critical analysis and evaluation of information presented in both quantitative and qualitative forms. In particular they should be able to:

- C6.1 Describe the principles of safety integration and the considerations required in a general workplace machinery risk assessment
- C6.2 Describe, with examples, the principal generic mechanical and non-mechanical hazards of general workplace machinery
- C6.3 Describe protective devices found on general workplace machinery
- C6.4 Explain the principles of control associated with the maintenance of general workplace machinery
- C6.5 Describe the requirements for information and warnings on general workplace machinery
- C6.6 Explain the key safety characteristics of general workplace machinery control systems
- C6.7 Explain the analysis, assessment and improvement of system failures and system reliability with the use of calculations.

***Recommended tuition time not less than 11 hours***

## **Element C7: Work equipment (mobile, lifting and access)**

### **Learning outcomes**

On completion of this element, candidates should be able to demonstrate understanding of the content through the application of knowledge to familiar and unfamiliar situations and the critical analysis and evaluation of information presented in both quantitative and qualitative forms. In particular they should be able to:

- C7.1 Describe the main hazards and control measures associated with commonly encountered mobile work equipment
- C7.2 Describe the main hazards and control measures associated with commonly encountered lifting equipment
- C7.3 Describe the main hazards and control measures associated with commonly encountered access equipment and equipment for working at height.

***Recommended tuition time not less than 6 hours***

## **Element C8: Electrical safety and Electricity at Work Regulations 1989**

### **Learning outcomes**

On completion of this element, candidates should be able to demonstrate understanding of the content through the application of knowledge to familiar and unfamiliar situations and the critical analysis and evaluation of information presented in both quantitative and qualitative forms. In particular they should be able to:

- C8.1 Outline the basic principles of electricity
- C8.2 Outline the dangers of electricity
- C8.3 Outline the issues relevant to the installation, use, inspection and maintenance of electrical systems
- C8.4 Outline the main principles for safe working in the vicinity of high voltage systems
- C8.5 Outline the main hazards, risks and controls associated with the use of portable electrical equipment.

***Recommended tuition time not less than 7 hours***

## **Element C9: Construction hazards and controls**

### **Learning outcomes**

On completion of this element, candidates should be able to demonstrate understanding of the content through the application of knowledge to familiar and unfamiliar situations and the critical analysis and evaluation of information presented in both quantitative and qualitative forms. In particular they should be able to:

- C9.1 Describe the scope and nature of construction activities
- C9.2 Explain the scope and application of the Construction (Design and Management) Regulations 2007
- C9.3 Explain the hazards associated with working at heights from fixed work or temporary platforms and the necessary precautions and safe working practices
- C9.4 Explain the hazards, precautions and safe working practices associated with demolition work
- C9.5 Explain the hazards associated with excavation work and the necessary precautions and safe working practices.

***Recommended tuition time not less than 7 hours***

## **Element C10: Workplace transport and driving for work**

### **Learning outcomes**

On completion of this element, candidates should be able to demonstrate understanding of the content through the application of knowledge to familiar and unfamiliar situations and the critical analysis and evaluation of information presented in both quantitative and qualitative forms. In particular they should be able to:

- C10.1 Explain the hazards, risks and control measures for safe workplace transport operations
- C10.2 Outline the factors associated with driving at work that increase the risk of an incident and the control measures to reduce work-related driving risks.

***Recommended tuition time not less than 4 hours***

## **Element C11: Pressure system hazards and controls**

### **Learning outcomes**

On completion of this element, candidates should be able to demonstrate understanding of the content through the application of knowledge to familiar and unfamiliar situations and the critical analysis and evaluation of information presented in both quantitative and qualitative forms. In particular they should be able to:

- C11.1 Outline the principles of operation of liquefied gas storage; refrigeration systems; and heating systems
- C11.2 Outline the key features and safety requirements for 'simple' unfired pressure systems
- C11.3 Outline the key features and safety requirements for process pressure systems
- C11.4 Outline, the likely causes of the failure of pressure systems, and the testing and prevention strategies that can be used.

***Recommended tuition time not less than 5 hours***

## **Unit D: Application of health and safety theory and practice**

### **Learning outcomes**

On completion of this element, candidates should be able to:

- Demonstrate the ability to apply the knowledge and understanding gained from their studies of elements of Units A, B and C in a practical environment
- Carry out a detailed review of the health and safety performance of a workplace or organisation
- Critically analyse and evaluate information gathered during the review
- Produce a justified action plan to improve performance.

This unit contains no additional syllabus content. However, completion of study for units A, B and C is recommended in order to undertake the Unit D assignment.

Further detailed information regarding Unit D including forms and mark schemes can be found in a separate guidance document for candidates and accredited .course providers available from the NEBOSH website ([www.nebosh.org.uk](http://www.nebosh.org.uk)).

## **Unit assessment summary**

Units A, B and C are each assessed by one three-hour examination. Candidate scripts are marked by external examiners appointed by NEBOSH.

Unit D is assessed via a workplace-based written assignment of around 8,000 words. Assignments are marked by external examiners appointed by NEBOSH.

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**The National Examination Board in Occupational Safety and Health (NEBOSH),  
Dominus Way, Meridian Business Park, Leicester LE19 1QW.**

Registered Charity Number: 1010444

Telephone: +44 (0) 116 263 4700

Fax: +44 (0) 116 282 4000

Email: [info@nebosh.org.uk](mailto:info@nebosh.org.uk)

Website: [www.nebosh.org.uk](http://www.nebosh.org.uk)

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