

The National Examination Board in Occupational Safety and Health (NEBOSH)

Dominus Way,
Meridian Business Park,
Leicester LE19 1QW

Tel: +44 (0) 116 263 4700
Fax: +44 (0) 116 282 4000
Email: info@nebosh.org.uk
www.nebosh.org.uk

Version: 2.1
Specification date: April 2018
Publication date: January 2023

Registered Charity Number: 1010444

© NEBOSH. All rights reserved. No part of this publication may be reproduced, stored in a retrieval system or transmitted in any form, or by any means, electronic, electrostatic, mechanical, photocopied or otherwise, without the express permission in writing from NEBOSH.

A large, circular opening in a dark, metallic pipe or tunnel. Inside, a welder wearing a blue protective suit, orange gloves, and a green welding mask is working. Bright sparks are flying from the welding point. The scene is illuminated by a bright light source, possibly a lamp, creating a strong contrast and highlighting the welder's work.

NEBOSH HSE Introduction to Incident Investigation

Qualification guide for Learning Partners

Contents

Qualification overview

Qualification key features	4
----------------------------	---

Qualification summary

Introduction to the qualification	6
-----------------------------------	---

Syllabus development and review	7
---------------------------------	---

Notional learning hours	7
-------------------------	---

Assessment	8
------------	---

Minimum standards of English required for learners	8
--	---

Teaching of the unit	8
----------------------	---

Qualification type	9
--------------------	---

Reason for resits	9
-------------------	---

Conflict of interest	9
----------------------	---

Minimum standards of English required for tutors	9
--	---

Available resources	9
---------------------	---

Syllabus

Syllabus summary	11
------------------	----

Learning outcomes, content and assessment criteria	12
--	----

Qualification overview

Qualification overview

Qualification key features

Unit prefix and title	Unit INV1: Introduction to Incident Investigation	
Assessment Unit INV1	Type Practical assessment	Time Approximately 60 minutes
Modes of study	Taught (face to face) Open or distance learning	
Notional learning hours	Teaching and assessment: 7 Pre-course reading: 3 Total hours: 10	
Qualification level and number of credits	SCQF Level 6/ RQF Level 3 1 SCQF credit point Information on qualification levels and SCQF can be found on the following link: www.sqa.org.uk/sqa/files_ccc/QualificationsCanCrossBoundaries.pdf	
Entry requirements	None	
Recommended minimum standards of English	Learners: International English Language Testing System 5.0 or higher Tutors: International English Language Testing System 7.0 or higher	
Languages available	English	
Assessment dates	On-demand only	
Qualification grades	Pass Refer	
Pass standard	Learners are required to complete all parts of the assessment to achieve a Pass. If the learner does not achieve a Pass you are expected to work with the learner to enable them to meet the required standard.	
Parchment issue	Issued within 40 working days of the result declaration date for the last successfully completed unit.	

Qualification summary

Qualification summary

Introduction to the qualification

NEBOSH has collaborated on the development of this specialist qualification with the British Health and Safety Executive (HSE). HSE inspectors have noted that incident investigations were generally very poor. The collaboration, therefore, combines the advanced technical expertise of the HSE with NEBOSH's ability to deliver strong vocational qualifications.

The qualification is aimed at managers, supervisors, SHE Champions, union representatives and aspiring health and safety practitioners. On completion of the qualification, candidates will be able to:

- carry out a solo accident investigation for non-complex accidents and incidents including:
 - > gathering of evidence
 - > analysis of that evidence
- produce an action plan; and
- contribute to team incident investigations for large-scale incidents.

“If minor incidents and near-misses are investigated well, organisations could potentially prevent more serious or catastrophic incidents happening. Investigating incidents helps you to identify trends and ensure your control measures are effective. If you invest time in analysing incidents, you get a snapshot of what's really happening and you can improve your risk management system. Employees become more engaged, and morale improves.”

Jill De Nardo
Head of Commercial Training at
the HSE Training and Events

Qualification summary

Syllabus development and review

The syllabus has been developed by NEBOSH and the HSE following extensive consultation with key stakeholders, notably Learning Partners, employers, NEBOSH Alumni and subject experts. NEBOSH would like to take this opportunity to thank all those who participated in the development and implementation of this qualification, but in particular the following employers:

- Balfour Beatty;
- BP;
- Sonoco; and
- University of Portsmouth.

“I get asked to be involved in various projects, but this is one I made time for because it’s an area that is so important. As an organisation, if you have an injury or a serious near-miss, the least you can do is learn from it.”

Steff Williams
Health and Safety Manager
– Industrial Europe, Sonoco
Alcore Europe



Notional learning hours

It is expected that this qualification will be delivered over the equivalent of one day (depending on the mode of study). Learners will be required to undertake three hours of pre-course reading before your course commences. Some suggestions for this pre-course reading include:

- reading and understanding the requirements of their organisation’s incident investigation policy;
- reviewing a sample of their organisation’s previous incident investigation reports to find what lessons have been learnt; and
- reviewing some of the incident investigation case studies from the HSE’s website that may be relevant to their organisation (www.hse.gov.uk/slips/casestudies.htm).

You should provide further guidance on this to learners if required.

Qualification summary

Assessment

The assessment should normally take place after the taught content for Element 1.4. Element 1.5 is an introduction to advanced incident investigation techniques and does not form part of the assessment for this qualification.

Please refer to 'INV: Guidance and information for learners and Learning Partners' which is downloadable from the NEBOSH website, www.nebosh.org.uk.

Prior to marking any assessments, internal assessors **must** complete the online assessor's course for this qualification. Further details will be supplied by the NEBOSH Learning Partner Quality department.

Minimum standard of English required for learners

The standard of English required by learners studying for the NEBOSH HSE Introduction to Incident Investigation must be such that they can both understand and articulate the concepts contained in the syllabus. It is important to stress that the onus is on Learning Partners to determine their learners' standards of proficiency in English.

Teaching of the unit

Although the syllabus sets out the Elements in a specific order, tutors can teach the Elements in any order they feel is appropriate. You will need to reflect this in the timetables which are submitted for approval as part of the accreditation/re-accreditation process (if you are not using the course materials produced by NEBOSH).

"Prior to my current role at BP, I was an inspector with the HSE for more than 10 years. I saw the same sorts of incidents occurring again and again and again because organisations weren't learning: they weren't carrying out decent investigations, and they weren't implementing action plans.

Then I moved to BP where, post Deepwater Horizon, there has been a real desire to become a learning organisation – and the foundation for that is robust investigations, which look at the causal factors."

Roger Schulp
Lead Investigator S&OR,
Investigations and Learning, BP

Individual learner feedback

For more information on the assessment feedback provided for this qualification, please visit the NEBOSH website: <https://www.nebosh.org.uk/faqs/how-can-i-gain-feedback-on-my-performance-to-assist-with-future/>

Qualification summary

Qualification type

NEBOSH qualifications are categorised as 'Other' qualifications by SQA Accreditation in Scotland. These are categorised as Vocationally-Related Qualifications (VRQs) in England, Wales and Northern Ireland.

VRQs provide the knowledge and practical skills required for particular job roles through a structured study-based training programme, that combines the testing of knowledge and understanding in written examinations with practical application of learning in the workplace.

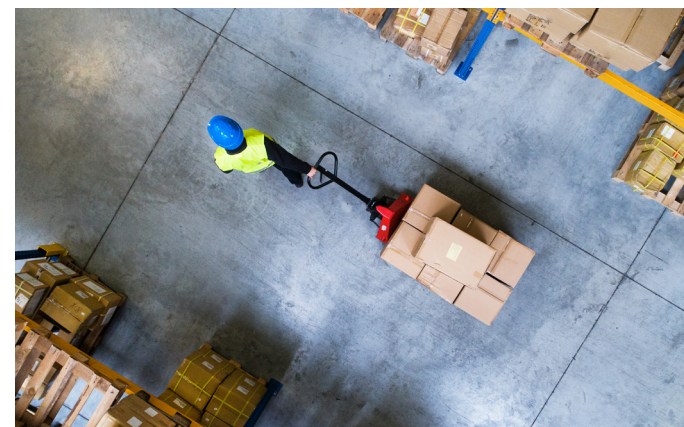
VRQs are a popular type of qualification because they are nationally recognised, flexible and offer routes for progression to employment or further study.

Reason for resits

A learner can resit if a 'Refer' result is received. There is no limit on the number of times a student can resit a unit. Learners must register and pay the current fee(s) by the registration closing date for the relevant examination sitting.

Conflict of interest

Your staff, including Head of Learning Partner, tutors, administrators, examinations officers and invigilators, must declare in writing to NEBOSH any employee and/or familial, spousal or other close personal relationship with any examination or assessment student. Further information can be found in the 'Instructions for Conducting Examinations' document.



Minimum standard of English required for tutors

Tutors who are based overseas must have a good standard of English. They must be able to articulate the concepts contained in the syllabus. You must provide evidence of the tutor's standard of English when submitting the tutor's CV for approval.

NEBOSH's requirement is for tutors delivering this qualification to have reached a minimum standard of English equivalent to an International English Language Testing System score of **7.0** or higher in IELTS tests.

Available resources

In addition to this Guide, the following resources are downloadable from the NEBOSH website:

- INV1 Guidance for Learning Partners and learners;
- Assessment pack;
- Leaflet;
- Case studies.

Syllabus

Syllabus

Syllabus summary

	Learning outcome	Element summary	Recommended tuition hours	Assessment
1	Understand why incident investigations are carried out and how human and organisational factors contribute to incidents	1.1 Incident terminology, the moral, legal and financial arguments for investigations and management system requirements	7	Application of knowledge by analysis of a theoretical incident investigation
		1.2 Human and organisational factors		
2	Understand how to investigate incidents and confidently carry out an investigation	1.3 Investigating incidents		
		1.4 Positive strategies for and the barriers to successful interviews		
		1.5 Advanced incident investigation techniques		

Teaching and assessment hours	7
Pre-course reading	3
Notional learning hours	10

Syllabus

Learning outcome	Content	Assessment criteria
<p>Understand why incident investigations are carried out and how human and organisational factors contribute to incidents</p>	<p>1.1 Incident terminology, the moral, legal and financial arguments for investigations and management system requirements</p> <ul style="list-style-type: none"> • Definitions: accident, incident, near miss, dangerous occurrence, immediate cause, underlying cause, root cause with reference to HSG245 and ISO 45001 • How near misses and incident data can relate to major injuries (reference to Bird’s Triangle) • Examples of minor and major injury, dangerous occurrences and near misses • Moral, legal and financial arguments for investigating incidents (including the challenges of near-miss reporting) • Management system requirements (ISO 45001): <ul style="list-style-type: none"> > an incident is also a non-conformity > procedures for incident reporting > concept of leading and lagging indicators • Co-operation with regulators and other enforcement agencies • The role of insurers. 	<p>Understand incident terminology, the moral, legal and financial arguments for investigations and management system requirements.</p>
	<p>1.2 Human and organisational factors</p> <ul style="list-style-type: none"> • Factors that can contribute towards accidents and incidents: <ul style="list-style-type: none"> > organisational factors (workplace design, time pressures, goal conflicts) > human factors (competence, capability, morale) • Causes of human failure (conscious and unconscious actions). 	<p>Recognise how human and organisational factors can contribute to an incident.</p>

Syllabus

Learning outcome	Content	Assessment criteria
<p>Understand how to investigate incidents and confidently carry out an investigation</p>	<p>1.3 Investigating incidents</p> <ul style="list-style-type: none"> • What a good investigation looks like (proportionality, finding the immediate, underlying and root cause(s), identifying additional control measures) • Levels of investigations: minimal, low, medium and high • How lessons learned from investigations can be used in the future • Accident investigation teams (who should be involved and competencies required) • Pre-investigation actions following an accident: <ul style="list-style-type: none"> > emergency response (first aid, making the scene safe) > initial response to consider: preservation of the scene, the names of those involved for witness statements, equipment in use, recording environmental conditions, concept of leading and lagging indicators • The accident/incident investigation process: <ul style="list-style-type: none"> > gathering information: <ul style="list-style-type: none"> - physical – from the scene of the accident, eg, plant and equipment, including photographs, CCTV footage, plan of the area - verbal – witness statements - written – risk assessments, policies, procedures, training records, etc 	<p>Outline the process for investigating accidents and incidents.</p>

Syllabus

Learning outcome	Content	Assessment criteria
<p>Understand how to investigate incidents and confidently carry out an investigation</p>	<p>1.3</p> <ul style="list-style-type: none"> > analysis: <ul style="list-style-type: none"> - exploring all reasonable lines of enquiry in a timely and structured way, setting out what is known/unknown - objective/unbiased/evidence based - identifying sequence of events and adverse conditions leading to the event - identifying immediate, underlying and root causes (use of 5 Whys technique) - common themes from interviews - recording all findings/organisation of findings/use of organisational tools and/or procedures to drive the analysis (all findings may not have an action/recommendation) - concept of barrier controls > risk control: <ul style="list-style-type: none"> - identifying missing/inadequate/unused controls - complying with legislation/other standards - additional control measures (application of hierarchy of control) - realistic recommendations based on the outcomes of the investigation 	<p>Outline the process for investigating accidents and incidents.</p>

Syllabus

Learning outcome	Content	Assessment criteria
Understand how to investigate incidents and confidently carry out an investigation	<p>1.3</p> <ul style="list-style-type: none"> > action plan: <ul style="list-style-type: none"> - consideration of human performance - deals with immediate, underlying and root causes - lessons learned and communicated (eg, outcomes discussed with relevant stakeholders) - gives feedback to all parties involved - includes risk assessment review - arrangements to implement SMART objectives - looks at tracking and closing of actions • Post investigation – releasing the scene back to the operational unit (if applicable). 	Outline the process for investigating accidents and incidents.
	<p>1.4 Positive strategies for and the barriers to successful interviews</p> <ul style="list-style-type: none"> • Reasons for carrying out prompt interviews following an accident/incident • Use of the PEACE model for interviewing: <ul style="list-style-type: none"> > Planning and preparation: <ul style="list-style-type: none"> - practical issues (location of interview selected to avoid interruptions; time of interview; how the interview is to be conducted – benefits and limitations of on-site interviews; use of checklists) - use of timelines to plot the events - points to be discussed (set aims and objectives of interview) 	Outline positive strategies that can be adopted for interviews following accidents or incidents and the barriers to successful interview outcomes.

Syllabus

Learning outcome	Content	Assessment criteria
<p>Understand how to investigate incidents and confidently carry out an investigation</p>	<p>1.4</p> <ul style="list-style-type: none"> - interview one person at a time - use one interviewer with one scribe at a time <p>> Engage and explain:</p> <ul style="list-style-type: none"> - assess any needs of the interviewee; explain the purpose of the interview (aims and objectives) - engage the interviewee in conversation (establish and maintain rapport) - use of 'active listening' skills (including the use of drawings, plans, etc) - language used is appropriate and understood - when to use 'closed' questions (eg for confirmation of specific points, such as "Was the machine started at 10.10am?") and prevention of leading questions <p>> Account, clarification and challenge:</p> <ul style="list-style-type: none"> - consider the topic areas to be explored - summarise answers using interviewee's own words - challenge any inconsistencies or contradictions - clarify inconsistencies between other evidence and the interviewee's account 	<p>Outline positive strategies that can be adopted for interviews following accidents or incidents and the barriers to successful interview outcomes.</p>

Syllabus

Learning outcome	Content	Assessment criteria
<p>Understand how to investigate incidents and confidently carry out an investigation</p>	<p>1.4</p> <ul style="list-style-type: none"> > Closure: <ul style="list-style-type: none"> - summarise the interview findings to ensure there has been a mutual understanding - ensure that all areas have been covered - explain the next steps to the interviewee - contact details of interviewee gained so they can be contacted again if required > Evaluation: <ul style="list-style-type: none"> - were the aims and objectives achieved? - evaluate the information received - re-evaluate all evidence obtained - evaluate own performance as interviewer (what went wrong and what could have been done better?) • Barriers to good interviews: <ul style="list-style-type: none"> > language barrier > leading questions > poor communication skills on the part of the interviewer/interviewee > credibility given to hearsay/rumour > mindset/cognitive state of interviewee, eg, are they still in shock/thinking rationally? • Dealing with interviewees who are unwilling to take part in the interview process • Concept of 'blame culture' and why it is a barrier to open accident/incident interviews 	<p>Outline positive strategies that can be adopted for interviews following accidents or incidents and the barriers to successful interview outcomes.</p>

Syllabus

Learning outcome	Content	Assessment criteria
Understand how to investigate incidents and confidently carry out an investigation	1.4 <ul style="list-style-type: none"> • Bias, examples of it, and how it can affect interviews and the wider incident investigation process: <ul style="list-style-type: none"> > self-serving > fundamental attribution error > 'cherry picking'. 	Outline positive strategies that can be adopted for interviews following accidents or incidents and the barriers to successful interview outcomes.
	1.5 Advanced incident investigation techniques <ul style="list-style-type: none"> • Introduction to advanced incident investigation techniques: root cause analysis (fishbone/cause and effect analysis; event tree analysis; fault tree analysis). 	An introduction to advanced incident investigation techniques.