

**-SQA-SCOTTISH QUALIFICATIONS AUTHORITY**

**Hanover House  
24 Douglas Street  
GLASGOW G2 7NQ**

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**NATIONAL CERTIFICATE MODULE DESCRIPTOR**

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**-Module Number- 0094000 -Session-1989-90**  
**-Superclass- XA**

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**-Title- SAFE WORKING PRACTICE IN HAZARDOUS ENVIRONMENTS**

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**-DESCRIPTION-**

**Purpose** The module is designed to develop a practical awareness of risks likely to be found and necessary precautions to be taken in hazardous working environments. It should be noted that successful completion does not constitute a permit to work in a specific hazardous environment. This module could be taken in parallel with 92352 Health and Safety in the Work Environment.

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**Preferred Entry Level** No formal entry qualifications.

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**Learning Outcomes** The student should:

1. identify the risks involved, and precautions to be taken when working in a specific hazardous environment;
2. respond correctly to signs, alarms and indications of increased hazard;
3. use a variety of protective clothing and equipment;
4. carry out established procedures for safe working in hazardous environments;
5. carry out established procedures to maintain the physical security of a work area.

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**Content/ Context** This module could be meaningfully applied in a wide range of contexts which may include hazardous environments in the following industries: armed services, oil, chemical, nuclear, farming, storage/distribution/retail of hazardous products.

Reference should be made to the particular procedures and codes of practice for working in hazardous environment of the industry in which the student is working.

Corresponding to the Learning Outcomes 1-5:

1. Classification of hazards and type of substance with reference to approved Code of Practice, e.g., the Classification, Packaging and Labelling of Dangerous Substances Regulations 1984.
2. Visual and audible alarms - standard symbols and classifications for national/international recognition. Drills and alarm raising procedures according to particular industry codes of practice.
3. Testing of protective equipment prior to use. Hand, eye, head, facial, foot protective clothing/equipment. Clothing appropriate for protection of product, e.g. in microchip production or clean room assembly. Observation of specific precautions/operating procedures of equipment for working in hazardous environment, e.g. avoiding static electricity charges, detectors, etc. Routine maintenance procedures e.g. recognition of labelling codes, packaging, equipment inspection (service or maintenance where appropriate).
4. Control of Substances Hazardous to Health (COSHH) Regulations.
5. Security pass systems, passwords, introduction, recognition of appropriate clothing/uniform. Security regulations of company or hazardous environment. Identification of trespassers, reporting of defective security equipment, suspicious objects.

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Suggested Learning and Teaching Approaches

The Learning Outcomes of this module could be achieved through the use of simulation and role playing exercises, audio and visual aids.

The simulation exercises should represent real situations as closely as possible, in terms of time constraints and other factors. Individual and group responsibilities should be stressed throughout.

Assessment Procedures Acceptable performance in the module will be satisfactory achievement of all the performance criteria specified for each Learning Outcome.

The following abbreviations are used below:

LO Learning Outcome  
IA Instrument of Assessment  
PC Performance Criteria

LO1 IDENTIFY THE RISKS INVOLVED, AND PRECAUTIONS TO BE TAKEN WHEN WORKING IN A SPECIFIC HAZARDOUS ENVIRONMENT

- PC (a) The risks most likely to be met in a specific hazardous environment are described.  
(b) The regime of precautions is described in terms of training, work practice, protective garments and equipment.  
(c) The use of specialist clothing and equipment needed to minimise risks is correctly described.  
(d) The key work practices needed to minimise the risks are correctly described.

IA Restricted Response Questions

The student will be set questions to test ability to identify the risks and associated precautions to be taken when working in a hazardous environment.

The test will comprise 8 questions to be allocated to the following areas, to reflect the nature of the specific environment, with a minimum of one question per area:

- (a) risks  
(b) regime of precautions  
(c) specialist clothing  
(d) key work practices

Satisfactory achievement of the Learning Outcome will be based on the student producing six correct responses including one from each section.

LO2 RESPOND CORRECTLY TO SIGNS, ALARMS AND INDICATIONS OF INCREASED HAZARD

- PC (a) Appropriate action is taken in response to signs.  
(b) The drills instigated by standard alarms indicating an increased hazard are correctly carried out with due attention to the immediate safety of others.  
(c) Alarms are raised correctly in response to events indicating an increase in hazard.

## IA Simulation Exercise

The student will be set a simulation exercise during which a number of alarms and common indications of increased hazard are triggered. The student will be required to demonstrate the appropriate action, instigate drill(s) and raise alarm in response to events.

A checklist will be kept to record the performance of each student.

Satisfactory achievement of the Learning Outcome will be based on the student meeting all of the performance criteria.

## LO3

## USE A VARIETY OF PROTECTIVE CLOTHING AND EQUIPMENT

- PC (a) Inspection and fault finding of protective clothing and equipment is carried out to ensure serviceability.
- (b) Whole or part body protective clothing for a specific hazardous environment is correctly selected, worn and adjusted.
- (c) Working equipment in a specific hazardous environment is correctly operated.

## IA Practical Exercise

The student will be set a practical exercise to show ability to use a variety of protective clothing and equipment for use in a hazardous environment.

A checklist will be kept to record the student's performance in carrying out the tasks related to each of the performance criteria.

Satisfactory achievement of the Learning Outcome will be based on the student meeting all of the performance criteria.

## LO4

## CARRY OUT ESTABLISHED PROCEDURES FOR SAFE WORKING IN HAZARDOUS ENVIRONMENTS

- PC (a) Established procedures in preparation for work in a hazardous environment are properly carried out.
- (b) Set tasks are successfully completed according to established safe working procedures in a hazardous environment.
- (c) Correct closing down procedures are strictly observed.

## IA Simulation Exercise

The student will be set a simulation exercise in which he/she will be required to carry out established safe working practices for the selected environment. The exercise should be as realistic as possible and the minimum time constraints and requirements appropriate to the tasks should be observed.

A performance checklist will be kept which details the procedures appropriate for the particular hazardous environment in which the student is working.

Satisfactory achievement of the Learning Outcome will be based on the student meeting all of the performance criteria.

LO5

**CARRY OUT ESTABLISHED PROCEDURES TO MAINTAIN THE PHYSICAL SECURITY OF A WORK AREA**

- PC (a) Established procedures for authorising access to a specific hazardous environment are correctly carried out.
- (b) Attempts to infringe established security regulations in a specific hazardous environment are correctly dealt with.

## IA Simulation Exercise

The student will be set a simulation exercise to test ability to put into practice the procedures for authorising access and dealing with security infringements.

A performance checklist will be kept which details the particular tasks appropriate to the access and security infringement procedures for the selected environment.

Satisfactory achievement of the Learning Outcome will be based on the student meeting both performance criteria.