



Part of the
Enginuity Group

Qualification Specification

**EAL Level 3 NVQ Diploma in
Providing Electronic Fire and
Security Systems**

Qualification code: 603/6194/3



Contents

1.0 About EAL.....	3
2.0 About the qualification	4
3.0 Centre and qualification approval.....	6
4.0 Qualification specific information.....	7
5.0 Assessment strategy	9
6.0 About the qualification units.....	155
Appendix 1: Unit overview	16

1.0 About EAL

Since 1964 EAL (Excellence, Achievement and Learning) has been awarding vocational qualifications and apprenticeship components for engineering, building services and related sectors. Developed to the highest technical standard, our qualifications are regularly updated to reflect regulatory, employer and technical changes. We support the providers of our qualifications with an unparalleled level of service to ensure that learners are well prepared for the roles they plan to take on.

EAL recognise the value of skills in the work environment as one of the five key drivers of productivity, essential for economic growth and bringing a number of wider social benefits. Through its programme of continuous improvement EAL strives to meet the demand from employers for high performing, high quality products.

In 2012, EAL changed its name from EMTA Awards Limited to Excellence, Achievement and Learning, to better reflect its wide reaching position across industry – providing qualifications, not only in Engineering and Manufacturing, but also specialising in Building Services Engineering, Gas Utilisation, Environmental Technologies, Business Services and closely related sectors.

1.1 Equal opportunities and diversity

EAL expects its centres to enable learners to have equal access to training and assessment for qualifications in line with equalities legislation. Further details can be located in the EAL Equal Opportunities and Diversity Policy:

<http://www.eal.org.uk/centre-support/centre-support/policies-and-important-documents>

Note: Where learners taking the qualification in a region where legislation, organisations, regulations detailed does not apply, relevant legislation should be substituted. For example: The Health and Safety at Work etc. Act 1974 shall be substituted in Northern Ireland by The Health and Safety at Work (Northern Ireland) Order 1978.

1.2 Customer Experience and feedback

Customer Experience is a fundamental part of EAL's commitment to you. EAL aims to ensure that all customers receive a high-quality efficient service. We are always interested in feedback and if you have any comments or feedback on our qualifications, products or services, please contact the Customer Experience team:

EAL Customer Experience

Tel: +44 (0)1923 652 400

Email: Customer.Experience@eal.org.uk

2.0 About the qualification

What is the purpose of this qualification?

This qualification is for learners who wish to prove their competence in providing and installing fire or security systems or for those already working in the industry who require a formal qualification to facilitate progression to becoming industry recognised in their role. The content of this qualification was created from working with employers, their representatives and Skills for Security, the sector body.

Who is this qualification for?

This qualification is for those who are new to the industry and those already in the industry who wish to prove their competence and gain a formal qualification and industry recognition in their occupation.

What does this qualification cover?

This qualification comprises of units with knowledge, understanding and performance outcomes covering the design, installation, testing, commissioning, maintenance and auditing for the electronic systems used by both the Fire and Security sectors.

This qualification has been designed with two pathways to enable the learner to select their discipline. Pathway 1 allows a learner to specialise in electronic systems used in fire detection and alarm systems. Pathway 2 allows a learner to specialise in security systems including intruder alarms, CCTV installation and access control systems.

Learners will also cover topics including health and safety, communicating effectively with others and preparing for installation and installing cabling.

This qualification is graded pass or refer only. This qualification has 105 Guided Learning Hours (GLH). It has a Total Qualification Time (TQT) 510 hours (notational time required by the learner to complete the qualification).

2.1 Learner registration and certification

Learners must be registered with EAL on a code which relates to the qualification - this must be completed prior to assessment. Both learner registration and certification can be completed online at the EAL www.eal.org.uk

Qualification pathway:	Code:
Fire detection and alarm systems	603/6194/3/A
Security systems (Intruder, CCTV and Access Control)	603/6194/3/B

2.2 Qualification support materials

The following assessment support materials are available:

- **Unit documentation**

These contain the details of the nationally recognised units. These documents allow both the learner and the assessor to record the progress through the qualification selected. The unit documentation contains the performance, knowledge and understanding to be assessed and evidenced by the learner to demonstrate their competence.

2.3 Achievement of qualification

The EAL Level 3 NVQ Diploma in Providing Electronic Fire and Security Systems has been designed to allow a learner to specialise in either electronic systems used in Fire detection and alarm systems used in the Security sector using a common set of units. The security pathway covers Intruder, CCTV and Access Control systems. Each qualification covers the design, installation, testing, commissioning, maintenance and auditing for the electronic systems.

Each learner will be required to attain eight units which comprises of the seven Mandatory Units and at least one of the Optional Units in order to achieve this qualification. The overall grading type for this qualification is Pass/Fail. Units will be assessed and endorsed against the learners chosen discipline.

Learners will be required to create a Portfolio of Evidence to prove their competence in the workplace. Learners should therefore select the Optional Unit that reflects the job they carry out in the workplace to be able to get the required workplace evidence.

Learners will be assessed in relation to their chosen discipline and endorsed accordingly. The endorsement will be printed on the certificate to show future employers which discipline was covered during their assessment.

The qualification is gained when all the necessary units for the learner's chosen pathway have been achieved. The centre will then be able to apply for the learner's certificate of achievement. The learner will also receive a certificate of unit credit, listing all the units they have achieved.

If learners do not complete the full qualification, they can still claim a certificate of unit credit for the units achieved. This will mean that they will still have proof of their ability and could complete one of the qualifications at a later date.

Units can also be taken individually (stand-alone units). This manual must be used in conjunction with the delivery and assessment of any individual units to ensure that assessment requirements and methodologies are consistently applied.

There are various other qualifications, details on these can be obtained from the [EAL website](#) or alternatively contact:

EAL Customer Experience:

Tel: +44 (0)1923 652 400

Email: customer.experience@eal.org.uk

3.0 Centre and qualification approval

Centres wishing to deliver the EAL Level 3 NVQ Diploma in Providing Electronic Fire and Security Systems will need to comply with the Qualification Manual and EAL's centre recognition criteria. Centres must also put in place the appropriate physical and human resources and administration systems to effectively run the qualification.

For existing EAL centres to put the qualification on your centre remit:

To add the EAL Level 3 NVQ Diploma in Providing Electronic Fire and Security Systems qualification to your centre qualification remit, create and complete a qualification approval application form in Smarter Touch and submit to EAL.

For non EAL centres to gain centre approval to run the qualification:

Please contact the EAL Customer Experience Team who will be delighted to hear from you:

EAL Customer Experience

Tel: +44 (0)1923 652 400

Email: Customer.Experience@eal.org.uk

4.0 Qualification specific information

4.1 Rule of combination (qualification structure)

To achieve this qualification learners are required to obtain the 7 mandatory units plus at least 1 optional unit. Learners will be assessed against their chosen discipline:

Pathway 1: Fire Detection and Alarm Systems

Pathway 2: Security systems (Intruder, CCTV and Access Control)

All assessments must be conducted in the context of the learner's chosen pathway.

Guided Learning Hours (GLH) and Total Qualification Time (TQT):

Fire pathway:

Minimum GLH: 105

TQT: 510

Security pathway

Minimum GLH: 110

TQT: 595

EAL Level 3 NVQ Diploma in Providing Electronic Fire and Security Systems

Mandatory Units: All **seven** units must be completed:

EAL code	Unit title	Level	GLH	Ofqual code
QFES3/001	Reducing the risks to health and safety at work	3	5	D/618/3193
QFES3/002	Communicate effectively with others	3	10	H/618/3194
QFES3/003	Preparing and installing cabling for electronic systems	3	15	K/618/3195
QFES3/004	Installing electronic equipment and systems	3	15	M/618/3196
QFES3/005	Testing, commissioning and handover of systems	3	15	T/618/3197
QFES3/006	Rectifying faults on electronic equipment and systems	3	15	A/618/3198
QFES3/007	Maintenance of electronic equipment and systems	3	15	F/618/3199

Optional Units: At least **one** of following must be completed:

EAL code	Unit title	Level	GLH	Ofqual code
QFES3/008	Auditing of electronic equipment and systems	3	15	K/618/3200
QFES3/009	Protecting from the risk of violence at work	3	15	M/618/3201
QFES3/010	Work effectively with other agencies	3	15	J/618/3284
QFES3/011	Control contract work for electronic security or fire detection and alarm systems	3	15	T/618/3202
QFES3/012	Implement works to meet installation requirements	3	15	A/618/3203
QFES3/013	Provide leadership for your team	3	15	F/618/3204

QFES3/014	Survey sites to prepare specifications for electronic security or fire detection and alarm systems	3	15	J/618/3205
QFES3/015	Preparing quotations for providing electronic security or fire detection and alarm systems	3	15	L/618/3206
QFES3/016	Negotiate sales of electronic security or fire detection and alarm systems	3	15	R/618/3207
QFES3/017	Manage your own resources and personal development	3	15	Y/618/3208
QFES3/018	Develop productive working relationships with colleagues and stakeholders	3	15	D/618/3209
QFES3/019	Plan the installation of electronic security or fire detection and alarm systems	3	15	L/618/3285

4.2 Unit endorsement

Learners will be assessed in relation to their chosen discipline and endorsed accordingly. The endorsement will be printed on the certificate to show future employers which discipline was covered during their assessment.

All units must be assessed against **one** of the following endorsements:

- Fire detection and alarm systems
- Security systems (Intruder, CCTV and Access Control).

4.3 Barred units

There are no barred units.

5.0 Assessment strategy

5.1 Learners

The Level 3 units have been designed to cover those learners who are either:

- Individuals who need to acquire electronic system competencies for the fire and/or security sectors
- Individuals employed in the electronic fire and/or security system sectors but require additional competencies as part of an existing job role or to enable career progression.

There are no formal entry requirements for this qualification. Learners must have been initially assessed to ensure they have both the potential and opportunity to achieve the assessment criteria set out in the qualification units and gain evidence from the workplace.

Learners are required to obtain evidence against each assessment criteria when competence has been proven.

Performance, Skills and Knowledge evidence must be sufficiently covered and recorded in the Evidence Reference boxes contained within the units, to ensure all criteria has been met.

5.2 Assessor requirements to demonstrate effective assessment practice

Assessment must be carried out by competent assessors that as a minimum must hold a Level 3 Award in Assessing Competence in the Work Environment. Current and operational assessors that hold units D32 and/or D33 or A1 and/or A2 as appropriate to the assessment being carried out, will not be required to achieve the Level 3 Award as they are still appropriate for the assessment requirements set out in this unit assessment strategy. However, they will be expected to regularly review their skills, knowledge and understanding and where applicable undertake continuing professional development to ensure that they are carrying out workplace assessment to the most up to date National Occupational Standards (NOS) developed by Skills for Security.

Assessor technical requirements

Assessors must be able to demonstrate that they have verifiable, relevant and sufficient technical competence to evaluate and judge performance and knowledge evidence requirements as set out in the relevant unit learning outcomes and associated performance criteria.

This will be demonstrated either by holding a relevant technical qualification or by proven industrial experience of the technical areas to be assessed. The assessor's competence must, at the very least, be at the same level as that required of the learner(s) in the units being assessed.

Assessors must also be:

- a) Fully conversant with the Awarding Organisation's assessment recording documentation used for the units against which the assessments and quality assurance are to be carried out, other relevant documentation and system and procedures to support the QA process.
- b) Demonstrate their ability and commitment to maintain their occupational competence
- c) Be able to relate the national occupational standards against which they will be assessing learners, to activities in the workplace
- d) Provide evidence that they:
 - understand the structure of national occupational standards and qualifications
 - can interpret the standards in accordance with awarding body requirements
 - recognise acceptable sources of evidence for the qualification; and can implement the recording procedures required by the awarding body.

- can implement the awarding body quality assurance and administration procedures.
- e) Be in regular contact with the learners and the Internal Quality Assurer (IQA); and
- f) hold the appropriate assessor award (as defined by the regulatory authorities) or have a clear plan for achieving the award(s) within 18 months of commencing assessments.

Note: Evidence of individuals meeting all of the above criteria should be confirmed by the Awarding Body, which may be through External Quality Assurer (EQA). Evidence of meeting criteria c and d above may be provided as a result of successfully completing a relevant training course, on which attendance is not mandatory but is strongly recommended

5.3 Quality assurance requirements (internal and external)

Internal quality assurance (IQA) must be carried out by competent IQA's that as a minimum must hold a Level 4 Award in the Internal Quality Assurance of Assessment Processes and Practices. Current and operational IQA's that hold internal quality assurance units V1 or D34 will not be required to achieve the Level 4 Award as they are still appropriate for the IQA requirements set out in this unit assessment strategy.

IQA's must be familiar with, and preferably hold, either the nationally recognised assessor units D32 and/or D33 or A1 and/or A2 or a Level 3 Award in Assessing Competence in the Work Environment.

In addition, IQAs must:

- a) demonstrate their ability and commitment to maintain their occupational competence
- b) be able to relate the national occupational standards against which they will be assessing learners, to activities in the workplace
- c) provide evidence that they:
 - understand the structure of national occupational standards and qualifications
 - can interpret the standards in accordance with awarding body requirements
 - recognise acceptable sources of evidence for the qualification; and
 - can implement the recording procedures required by the awarding body
 - can implement the awarding body quality assurance and administration procedures.
- d) be in regular contact with the assessor and
- e) hold the appropriate IQA award (as defined by the regulatory authorities) or have a clear plan for achieving the award(s) within 18 months of commencing assessments.

It is recommended that IQAs hold the appropriate assessor qualification.

Evidence of individuals meeting all of the above criteria should be confirmed by the awarding body, which may be through the EQAs. Evidence of meeting criteria c and d above may be provided as a result of successfully completing a relevant training course, on which attendance is not mandatory but is strongly recommended.

Specific technical requirements for Internal and External Quality Assurers

Internal and External Quality Assurers must be able to demonstrate they have verifiable, sufficient and relevant industrial experience, and must have a working knowledge of the processes, techniques and procedures that are used in the relevant sector/occupation.

The tables on the following page show the recommended levels of technical competence for assessors, IQA's and EQA's.

Technical Requirements for Assessors and Quality Assurers

Position	Prime activity requirements	Support activity requirements	Technical requirements (see notes)
Assessor	Assessment Skills	IQA Systems	Technical competence in the areas covered by the units being assessed
IQA	Quality Assurance Skills	Assessment Knowledge	Technical understanding of the areas covered by the qualifications
EQA	Quality Assurance Skills	Assessment Understanding	Technical awareness of the areas covered by the qualifications

Notes:

1. Technical **competence** is defined here as a combination of practical skills, knowledge, and the ability to apply both of these, in familiar and new situations, within a real working environment.
2. Technical **understanding** is defined here as having a good understanding of the technical activities being assessed, together with knowledge of relevant Health & Safety implications and requirements of the assessments.
3. Technical **awareness** is defined here as a general overview of the subject area, sufficient to ensure that assessment and portfolio evidence are reliable, and that relevant Health and Safety requirements have been complied with.
4. The competence required by the assessor, IQA and EQA, in the occupational area being assessed, is likely to exist at three levels as indicated by the shaded zones in the following table.

Technical Competence required by:	An ability to discuss the general principles of the competences being assessed	An ability to describe the practical aspects of the competence being assessed	An ability to demonstrate the practical competences being assessed
Assessor			
IQA			
EQA			

5.4 Assessment environment

Assessment of all NVQ candidates in security related occupations, against the national occupational standards developed by Skills for Security, will be undertaken in accordance with the following criteria: -

- Evidence of occupational competence should be generated and collected through real work activities in a realistic work environment.
- Real work activities are those undertaken to provide a security product or service under typical business conditions.
- A realistic working environment is one that reflects typical employment conditions relevant to the work activities being assessed.
- The evidence collected under these conditions should also be as naturally occurring as possible.

Taking account of the above, it is not acceptable to undertake assessments in a classroom, or similar environment that has been set up specifically for training. Where opportunities for evidence collection are

not available at the workplace, simulation is permitted, in accordance with the criteria listed in section 5.6 below.

5.5 Access to assessment

There are no entry qualifications or age limits required by learners to undertake the units unless this is a legal requirement of the process or the environment. Assessment is open to any learner who has the potential to achieve the criteria set out in the units.

Aids or appliances which are designed to alleviate disability, may be used during assessment, providing they do not compromise the standard required.

5.6 Carrying out assessment

The EAL Level 3 NVQ Diploma in Providing Electronic Fire and Security Systems units has been specifically developed to cover a wide range of activities. The evidence produced for the units will, therefore, depend on the learner's choice of "bulleted items" listed in the unit performance criteria.

Where the performance criteria gives a choice of bulleted items (for example 'any three from five'), assessors should note that learners do not need to provide evidence of the other items to complete the unit (in this example above, two items) particularly where these additional items may relate to other activities or methods that are not part of the learners normal workplace activity or area of expertise.

Performance evidence requirements

Performance evidence must be the main form of evidence gathered. In order to demonstrate consistent competent performance for a unit, a minimum of one example of performance of the unit activity will be required, unless otherwise stated. Items of performance evidence often contain features that apply to more than one unit and can be used as evidence in any unit where they are suitable.

Performance evidence must be:

- products of the learners' work, such as items that have been produced or worked on, plans, charts, reports, standard operating procedures, documents produced as part of a work activity, records or photographs of the completed activity

Together with:

- evidence of the way the learners carried out the activities, such as witness testimonies, assessor observations or authenticated learner reports of the activity undertaken.

Competent performance is more than just carrying out a series of individual set tasks. Many of the units contain statements that require the learner to provide evidence that proves they are capable of combining various features and techniques. Where this is the case, separate fragments of evidence would not provide this combination of features and techniques and, therefore, will not be acceptable as demonstrating competent performance.

Simulation

Direct evidence produced through normal performance in the workplace is the primary source for meeting the evidence requirements of this qualification.

If the learner cannot meet all assessment criteria under naturally occurring activities in their workplace and need to simulate a specific task please refer to the guidance notes "Centre Guidance for Developing Assessments for Simulation/Replication" in smarter touch.

Assessing knowledge and understanding

Knowledge and understanding are key components of competent performance, but it is unlikely that performance evidence alone will provide enough evidence in this area. Where the learner's knowledge and understanding (and the handling of contingency situations) is not apparent from performance evidence, it must be assessed by other means and be supported by suitable evidence.

EAL expects oral questioning and practical demonstrations to be used, as these are considered the most appropriate for these units. Assessors should ask enough questions to make sure that the learner has an appropriate level of knowledge and understanding, as required by the unit. Awarding Organisations may choose other methods, which must be supported by a suitable rationale.

The achievement of the specific knowledge and understanding requirements of the units cannot simply be inferred by the results of tests or assignments from other units, qualifications or training programmes. Where evidence is submitted from these sources, the assessor must, as with any assessment, make sure the evidence is valid, reliable, authentic, directly attributable to the learner, and meets the full knowledge and understanding requirements of the unit.

Where oral questioning is used the assessor must retain a record of the questions asked, together with the learner's answers.

Please note: Knowledge and understanding can be demonstrated in a number of different ways.

Witness testimony

Where observation is used to obtain performance evidence, this must be carried out against the unit performance criteria. Best practice would require that such observation is carried out by a qualified Assessor. If this is not practicable, then alternative sources of evidence may be used. For example, the observation may be carried out against the performance criteria by someone else that is in close contact with the learner. This could be a team leader, supervisor, mentor or line manager who may be regarded as a suitable witness to the learner's competency. However, the witness must be technically competent in the process or skills that they are providing testimony for, to at least the same level of expertise as that required of the learner. It will be the responsibility of the assessor to make sure that any witness testimonies accepted as evidence of the learner's competency are reliable, auditable and technically valid.

5.7 Quality control of assessment: General

There are two major points where EAL interacts with the Centre in relation to the external quality control of assessment for a qualification and these are:

- Approval - when a centre takes on new qualifications, the awarding organisation, normally through an External Quality Assurer (EQA) ensures that the centre is suitably equipped and prepared to deliver the new qualification
- Monitoring - throughout the on-going delivery of the qualification the awarding organisation, through EQA monitoring and other mechanisms must maintain and the quality and consistency of assessment of the qualification.

Approval

In granting approval, the awarding organisation, normally through its External Quality Assurer (EQA) must ensure that the prospective centre:

- meets any procedural requirements specified by the Awarding Organisation
- has sufficient and appropriate physical and staff resources
- meets relevant health and safety and/or equality and access requirements

- has a robust plan for the delivery, assessment and QA for the qualifications.

EAL will visit the centre to view the evidence provided. The Centre must have a clear rationale for the method(s) deployed.

Monitoring

The Awarding organisation, through EQA monitoring and other mechanisms must ensure:

- that a strategy is developed and deployed for the on-going awarding organisation monitoring of the centre. This strategy must be based on an active risk assessment of the centre. In particular the strategy must identify the learner, assessor and IQA sampling strategy to be deployed and the rationale behind this
- that the centre's internal quality assurance processes are effective in learner assessments
- that sanctions are applied to a centre where necessary and that corrective actions are taken
- by the centre and monitored by the awarding organisation/EQA
- that reviews of awarding organisation's external auditing arrangements are undertaken.

5.8 Specific assessment requirements:

In reference to section 5.6, it is permitted to consider simulated activities for the following units if all other methods of attainment have been exhausted:

Unit	Unit specific additional assessment requirements:
QLES3/003	Where a learner is unable to obtain workplace evidence of preparing and installing cabling for systems due to the conditions in section 5.6 a simulated assessment may be utilised.
QFES3/005	Where a learner is unable to obtain workplace evidence of testing and commissioning and handover of systems due to the conditions in section 5.6 a simulated assessment may be utilised.
QFES3/006	Where a learner is unable to obtain workplace evidence of rectifying faults due to the conditions in section 5.6 a simulated assessment may be utilised.
QFES3/007	Where a learner is unable to obtain workplace evidence of maintaining systems due to the conditions in section 5.6 a simulated assessment may be utilised.

6.0 About the qualification units

The EAL Level 3 NVQ Diploma in Providing Electronic Fire and Security Systems is made up of a number of nationally recognised units which EAL has converted into performance criteria and knowledge and understanding assessment material. These documents allow both the learner and the assessor to record the progress through the qualification.

The units contain the performance to be assessed, the knowledge to be assessed and the evidence required from the learner to demonstrate their competence.

All units in these qualifications contain the following information:

- qualification and unit title
- unit level
- unit summary
- performance to be assessed and evidenced
- knowledge to be assessed and evidenced
- application of endorsement

These units are aligned to the Skills for Security National Occupational Standards (NOS).

6.1 Learner's portfolio building and referencing

For guidance to assessment and exemplars on completing documentation including completed assessment units and assessment planning documentation refer to EAL centre guidance.

For further information please contact EAL Customer Experience:

EAL Customer Experience
Tel: +44 (0)1923 652 400
Email: Customer.Experience@eal.org.uk

Appendix 1

Unit overview

Level 3

Reducing the risks to health and safety at work

Unit Code: QFES3/001

Overview

This NVQ qualification unit has been derived from National Occupational Standards (NOS) by education representatives and employers in the Fire, Emergency and Security Systems sector.

This has been designed as part of an overall development programme designed to meet the requirements of the Sector, either through a structured Apprenticeship programme or an upskilling programme.

This unit identifies the performance and knowledge criteria required in order that the learner can demonstrate that they are competent in reducing the risks to health and safety at work.

The learner must produce a portfolio of evidence to demonstrate their competence in the following areas:

- Understanding the roles and responsibilities in the reduction of risks to health and safety in the workplace
- Identify the hazards and evaluate the risks to health and safety in the workplace
- Taking appropriate action to reduce risks to health and safety in the workplace.

The learner must ensure:

- your own actions do not create any health and safety hazards
- you do not ignore significant risks in your workplace
- you take sensible action to put things right, including reporting situations which pose a danger to people in the workplace and seeking advice.

Their underpinning knowledge will provide a good understanding of their work and will provide an informed approach to applying statutory regulations and organisational safety requirements and procedures. They will understand the safety requirements and their application and will know about the safety requirements in adequate depth to provide a sound basis for carrying out the activities safely and correctly.

They will be able to apply the appropriate behaviours required in the workplace to meet the job profile and overall company objectives, such as strong work ethic, positive attitude, team player, dependability, responsibility, honesty, integrity, motivation and commitment.

The NOS used to create this unit:

- Skills for Security
 - SFS 2 – Make sure your own actions reduce

Level 3

Communicate effectively with others

Unit Code: QFES3/002

Overview

This NVQ qualification unit has been derived from National Occupational Standards (NOS) by education representatives and employers in the Fire, Emergency and Security Systems sector.

This has been designed as part of an overall development programme designed to meet the requirements of the Sector, either through a structured Apprenticeship programme or an upskilling programme.

This unit identifies the performance and knowledge criteria required in order that the learner can demonstrate that they are competent in communicating effectively with others in the workplace.

The learner must produce a portfolio of evidence to demonstrate their competence in the following areas:

- Develop and maintain effective communication with customers and colleagues
- Maintain the security of information whilst accessing information and keeping records
- Portray a positive image whilst establishing an effective rapport with customers
- Respond and communicate information appropriately to customers,

They will be able to apply the appropriate behaviours required in the workplace to meet the job profile and overall company objectives, such as strong work ethic, positive attitude, team player, dependability, responsibility, honesty, integrity, motivation and commitment.

Note:

- Communication: non-verbal, oral, written, electronic and telecommunication
- Barriers to effective communication: environmental, personal, social
- Appropriate precautions in relation to who might overhear or oversee the information, who might access the information.

The NOS used to create this unit:

- Skills for Security
 - SFS 4 – Communicate effectively with others (A)
 - SFS 5 – Give a positive image of yourself (B)

Level 3

Preparing and installing cabling for electronic systems

Unit Code: QFES3/003

Overview

This NVQ qualification unit has been derived from National Occupational Standards (NOS) by education representatives and employers in the Fire, Emergency and Security Systems sector.

This has been designed as part of an overall development programme designed to meet the requirements of the Sector, either through a structured Apprenticeship programme or an upskilling programme.

This unit identifies the performance and knowledge criteria required in order that the learner can demonstrate that they are competent in preparing and installing cabling for electronic systems.

The learner must produce a portfolio of evidence to demonstrate their competence in the following areas:

- Making preparations and arrangements to install cabling for electronic systems
- Confirming availability of equipment and materials
- Confirming the installation plan meets requirements
- Installing cable containment systems
- Installing, inspecting and testing cabling
- Restoring sites after installing cabling.

Preparing to install cables means that you should make sure you have all the necessary information, cables, tools and equipment that you need. You should plan how you are going to install the cabling, and deal with any potential problems that could arise.

You must route and secure all cable containments, cables according to system specifications, relevant regulations and codes of practice, without avoidable damage to building structures or surfaces. The fixing methods that you use must be suitable and appropriate for sites and building materials. Cables and wires must be free from damage or other factors that could impair their performance; you should confirm they meet their operational company standards by applying appropriate tests. You must label installed cables and wires according to requirements and make sure that all containments are properly secured. You must be able to close and seal or reseal any fine rebuilding materials.

You must know and understand the current relevant legislation for dealing with waste (e.g. the controlled waste regulations, packaging regulations, the waste electrical and electronic equipment regulations (WEEE), the special regulations and the hazardous waste regulations).

After installing cables, you must make good any damage to building structures and surfaces in line with agreed specifications, regulations and codes of practice.

Their underpinning knowledge will provide a good understanding of their work and will provide an informed approach to applying statutory regulations and organisational safety requirements and procedures. They will understand the safety requirements and their application and will know about the safety requirements in adequate depth to provide a sound basis for carrying out the activities safely and correctly.

They will be able to apply the appropriate behaviours required in the workplace to meet the job profile and overall company objectives, such as strong work ethic, positive attitude, team player, dependability, responsibility, honesty, integrity, motivation and commitment.

The NOS used to create this unit:

- Skills for Security
 - SFS SYS 8 – Make preparations and arrangements to install electronic security systems (A)
 - SFS SYS 9 – Install cabling for electronic security systems (B)

Additional information relating to the Performance Criteria:

electrical supply systems: supply to the system components, such as primary and secondary supplies

site characteristics: physical layout, dimensions, structure and use

specification: the specific detail containing design, installation, commissioning or maintenance requirements

systems: a set of components working together as an interconnecting network. For example (but not exhaustive) new installations; extensions; modifications

transmission: the interconnection of system components. For example (but not exhaustive) wired, wireless, networking

Prepare to install cabling for electronic security systems

- **systems:** new installations; extensions; modifications
- **cable types:** copper; coaxial; mineral insulated; optical fibre
- **cabling components:** cable; basket; conduit; trays; fixings and fittings, glands; terminators
- **tools and equipment:** hand tools; power tools; templates; personal protective equipment; consumable items; access equipment
- **plans of action:** sequence of preparing and installing cabling components; sketches; schedules of work
- **potential problems** related to lack of resources; access; site services; difficulties in preparing or installing cabling components
- **electrical supply systems:** zero volts to 230 volts AC mains supply, 440v AC three phase supply, zero volts to 24 volts DC supply, low voltage AC mains power units transforming to safety extra low voltage DC, standby batteries

Install cable containment systems

- **cable containments:** basket; conduit; ducting; ceiling voids; trays; surface mounted; catenaries
- **systems:** new installations; extensions; modifications
- **sites:** commercial; industrial; retail; domestic; governmental
- **building materials:** hard (masonry, brick, concrete; metal); soft (plasterboard, timber, plastic)
- **cable types:** copper; coaxial; mineral insulated, optical fibre
- **tools and equipment:** hand tools; power tools; templates, personal protective equipment; consumable items
- **electrical supply systems:** zero volts to 230 volts AC mains supply, 440v AC three phase supply, zero volts to 24 volts DC supply, low voltage AC mains power units transforming to safety extra low voltage DC, standby batteries

Install, inspect and test cabling for electronic security systems

- **cable types:** copper; coaxial; mineral insulated; optical fibre
- **wires:** single strand; multi-strand
- **systems:** new installations; extensions; modifications
- **test equipment:** multi meter, dB meter, data logging, specialised test equipment; earth loop impedance

Restore sites after installing cabling

- **surfaces:** hard (masonry, brick, concrete; metal); soft (plasterboard, timber, plastic)
- **tools and equipment:** hand tools; power tools; temporary access equipment; personal protective equipment; consumable items
- **waste, debris and surplus that is:** non-hazardous; hazardous

Level 3

Installing electronic equipment and systems

Unit Code: QFES3/004

Overview

This NVQ qualification unit has been derived from National Occupational Standards (NOS) by education representatives and employers in the Fire, Emergency and Security Systems sector.

This has been designed as part of an overall development programme designed to meet the requirements of the Sector, either through a structured Apprenticeship programme or an upskilling programme.

This unit identifies the performance and knowledge criteria required in order that the learner can demonstrate that they are competent in installing electronic equipment and systems.

The learner must produce a portfolio of evidence to demonstrate their competence in the following areas:

- Inspecting cabling prior to installation
- Positioning and mounting specified equipment safely
- Terminating cables to equipment
- Restoring the site safely after installing equipment.

Their underpinning knowledge will provide a good understanding of their work and will provide an informed approach to applying statutory regulations and organisational safety requirements and procedures. They will understand the safety requirements and their application and will know about the safety requirements in adequate depth to provide a sound basis for carrying out the activities safely and correctly.

They will be able to apply the appropriate behaviours required in the workplace to meet the job profile and overall company objectives, such as strong work ethic, positive attitude, team player, dependability, responsibility, honesty, integrity, motivation and commitment.

Additional information for performance criteria:

containment: For example (but not exhaustive) basket; conduit ducting; ceiling voids; trays; surface mounted; catenaries

Electronic security systems: a generic term that includes intruder, fire, CCTV, access, remote monitoring systems and other types of protective installations. It also encompasses the integration of existing and new systems.

electrical supply systems: supply to the system components, such as primary and secondary supplies

sites: premises of installations. For example (but not exhaustive) commercial; industrial; retail; domestic; governmental

specification: the specific detail containing design, installation, commissioning or maintenance requirements

systems: a set of components working together as an interconnecting network. For example (but not exhaustive) new installations extensions; modifications

transmission: the means by which system components communicate. This includes, for example: wired, wireless, Bluetooth, networking.

The NOS used to create this unit:

- Skills for Security
 - SFS SYS 10 – Install electronic security systems

Level 3

Testing, commissioning and handover of electronic systems

Unit Code: QFES3/005

Overview

This NVQ qualification unit has been derived from National Occupational Standards (NOS) by education representatives and employers in the Fire, Emergency and Security Systems sector. This has been designed as part of an overall development programme designed to meet the requirements of the Sector, either through a structured Apprenticeship programme or an upskilling programme.

This unit identifies the performance and knowledge criteria required in order that the learner can demonstrate that they are competent in testing, commissioning and handing over electronic systems to customers.

The learner must produce a portfolio of evidence to demonstrate their competence in the following areas:

- Carry out a range of tests to confirm required system operation
- Carry out transmission tests and system integration
- Bring systems into operation
- Prepare to demonstrate the use and operation of a system
- Instruct users in the operation of a system
- Handover systems to customer.

Their underpinning knowledge will provide a good understanding of their work and will provide an informed approach to applying statutory regulations and organisational safety requirements and procedures. They will understand the safety requirements and their application and will know about the safety requirements in adequate depth to provide a sound basis for carrying out the activities safely and correctly.

They will be able to apply the appropriate behaviours required in the workplace to meet the job profile and overall company objectives, such as strong work ethic, positive attitude, team player, dependability, responsibility, honesty, integrity, motivation and commitment.

Additional information for Performance Criteria:

- **Electronic security systems:** a generic term that includes intruder, fire, CCTV, access, remote monitoring systems and other types of protective installations. It also encompasses the integration of existing and new systems.
- **Electrical supply systems:** supply to the system components, such as primary and secondary supplies
- **Specification:** the specific detail containing design, installation, commissioning or maintenance requirements
- **Systems:** a set of components working together as an interconnecting network. For example (but not exhaustive) new installations; extensions; modifications
- **Tests:** For example (but not exhaustive) visual; electrical, operational, induced faults.

The NOS used to create this unit:

- Skills for Security
 - SFS SYS 11 – Test and confirm operation of integrated systems and communications (A)
 - SFS SYS 12 – Commission electronic security systems (B)
 - SFS SYS 17 – Handover electronic security systems. (C)

Level 3

Rectifying faults on electronic equipment and systems

Unit Code: QFES3/006

Overview

This NVQ qualification unit has been derived from National Occupational Standards (NOS) by education representatives and employers in the Fire, Emergency and Security Systems sector.

This has been designed as part of an overall development programme designed to meet the requirements of the Sector, either through a structured Apprenticeship programme or an upskilling programme.

This unit identifies the performance and knowledge criteria required in order that the learner can demonstrate that they are competent in rectifying faults on equipment and electronic systems.

The learner must produce a portfolio of evidence to demonstrate their competence in the following areas:

- Liaise with customers during repair visits
- Identify causes of unacceptable system performance
- Rectify faults in systems.

Their underpinning knowledge will provide a good understanding of their work and will provide an informed approach to applying statutory regulations and organisational safety requirements and procedures. They will understand the safety requirements and their application and will know about the safety requirements in adequate depth to provide a sound basis for carrying out the activities safely and correctly.

They will be able to apply the appropriate behaviours required in the workplace to meet the job profile and overall company objectives, such as strong work ethic, positive attitude, team player, dependability, responsibility, honesty, integrity, motivation and commitment.

Additional information for Performance Criteria:

- **Electronic security systems:** a generic term that includes intruder, fire, CCTV, access, remote monitoring systems and other types of protective installations. It also encompasses the integration of existing and new systems.
- **Electrical supply systems:** supply to the system components, such as primary and secondary supplies
- **Faults:** transmission and system components not working as required
- **Specification:** the specific detail containing design, installation, commissioning or maintenance requirements
- **Systems:** a set of components working together as an interconnecting network. For example (but not exhaustive) new installations; extensions; modifications
- **Tests:** For example (but not exhaustive) visual; electrical, operational, induced faults.

The NOS used to create this unit:

- Skills for Security
 - SFS SYS 14 – Diagnose and rectify faults on electronic security systems

Level 3

Maintenance of electronic equipment and systems

Unit Code: QFES3/007

Overview

This NVQ qualification unit has been derived from National Occupational Standards (NOS) by education representatives and employers in the Fire, Emergency and Security Systems sector.

This has been designed as part of an overall development programme designed to meet the requirements of the Sector, either through a structured Apprenticeship programme or an upskilling programme.

This unit identifies the performance and knowledge criteria required in order that the learner can demonstrate that they are competent in the maintenance of electronic equipment and systems.

The learner must produce a portfolio of evidence to demonstrate their competence in the following areas:

- Carry out preventative maintenance on electronic security and emergency systems.
- Undertake component replacement or adjustment and restore the system to normal operation.
- Liaise with customers during service visits.

Their underpinning knowledge will provide a good understanding of their work and will provide an informed approach to applying statutory regulations and organisational safety requirements and procedures. They will understand the safety requirements and their application and will know about the safety requirements in adequate depth to provide a sound basis for carrying out the activities safely and correctly.

They will be able to apply the appropriate behaviours required in the workplace to meet the job profile and overall company objectives, such as strong work ethic, positive attitude, team player, dependability, responsibility, honesty, integrity, motivation and commitment.

Additional Information for Performance Criteria:

Electronic security systems: a generic term that includes intruder, fire, CCTV, access, remote monitoring systems and other types of protective installations. It also encompasses the integration of existing and new systems.

electrical supply systems: supply to the system components, such as primary and secondary supplies.

maintenance: the process of maintaining a system for example (but not exhaustive) measurements, adjustments, calibrations, physical inspections, replacements, tests.

specification: the specific detail containing design, installation, commissioning or maintenance requirements.

systems: a set of components working together as an interconnecting network. For example (but not exhaustive) new installations; extensions; modifications .

tests: For example (but not exhaustive) visual; electrical, operational, induced faults.

The NOS used to create this unit:

- Skills for Security
 - SFS SYS 13 – Maintain the performance of electronic security systems

Level 3

Auditing of electronic equipment and systems

Unit Code: QFES3/008

Overview

This NVQ qualification unit has been derived from National Occupational Standards (NOS) by education representatives and employers in the Fire, Emergency and Security Systems sector.

This has been designed as part of an overall development programme designed to meet the requirements of the Sector, either through a structured Apprenticeship programme or an upskilling programme.

This unit identifies the performance and knowledge criteria required in order that the learner can demonstrate that they are competent in auditing electronic equipment and systems.

The learner must produce a portfolio of evidence to demonstrate their competence in the following areas:

- Carry out technical audits of electronic security and emergency systems
- Produce audit reports.

Their underpinning knowledge will provide a good understanding of their work and will provide an informed approach to applying statutory regulations and organisational safety requirements and procedures. They will understand the safety requirements and their application and will know about the safety requirements in adequate depth to provide a sound basis for carrying out the activities safely and correctly.

They will be able to apply the appropriate behaviours required in the workplace to meet the job profile and overall company objectives, such as strong work ethic, positive attitude, team player, dependability, responsibility, honesty, integrity, motivation and commitment.

Additional information for Performance Criteria:

electronic security systems: a generic term that includes intruder, fire, CCTV, access, remote monitoring systems and other types of protective installations. It also encompasses the integration of existing and new systems.

electrical supply systems: supply to the system components, such as primary and secondary supplies

sites: premises of installations. For example (but not exhaustive) commercial; industrial; retail; domestic; governmental

specification: the specific detail containing design, installation, commissioning or maintenance requirements

electronic security systems: a generic term that includes intruder, fire, CCTV and other types of protective installations

systems: a set of components working together as an interconnecting network. For example (but not exhaustive) new installations; extensions; modifications.

The NOS used to create this unit:

- Skills for Security
 - SFS SYS 7 – Audit electronic security systems

Level 3

Protecting from the risk of violence at work

Unit Code: QFES3/009

Overview

This NVQ qualification unit has been derived from National Occupational Standards (NOS) by education representatives and employers in the Fire, Emergency and Security Systems sector.

This has been designed as part of an overall development programme designed to meet the requirements of the Sector, either through a structured Apprenticeship programme or an upskilling programme.

This unit identifies the performance and knowledge criteria required in order that the learner can demonstrate that they are competent in protecting themselves from the risk of violence at work, due to the nature of their work.

This unit is about calming a potentially dangerous situation by minimizing actions or words that may trigger violent behaviour and by showing respect for people, their property and rights. It is about responding to a situation, trying to calm it down and, when appropriate, leaving a threatening situation safely. It is about reviewing the incident for recording and monitoring purposes.

The learner must produce a portfolio of evidence to demonstrate their competence in the following areas:

- Explain the job role, role responsibilities and limitations
- Describe the legal duties for an individual to ensure well-being and health and safety in the workplace
- Dynamically risk assess a potentially violent situation
- Take action that will help calm a potentially violent situation whilst maintaining personal safety
- Review an incident and evaluate the effectiveness of support processes
- Accurately report an incident.

Their underpinning knowledge will provide a good understanding of their work and will provide an informed approach to applying statutory regulations and organisational safety requirements and procedures. They will understand the safety requirements and their application and will know about the safety requirements in adequate depth to provide a sound basis for carrying out the activities safely and correctly.

They will be able to apply the appropriate behaviours required in the workplace to meet the job profile and overall company objectives, such as strong work ethic, positive attitude, team player, dependability, responsibility, honesty, integrity, motivation and commitment.

The NOS used to create this unit:

- Skills for Security
 - SFS 1 – Protect yourself from the risk of violence at work

Level 3

Work effectively with other agencies

Unit Code: QFES3/010

Overview

This NVQ qualification unit has been derived from National Occupational Standards (NOS) by education representatives and employers in the Fire, Emergency and Security Systems sector.

This has been designed as part of an overall development programme designed to meet the requirements of the Sector, either through a structured Apprenticeship programme or an upskilling programme.

This unit identifies the performance and knowledge criteria required in order that the learner can demonstrate that they are competent in working effectively with other agencies.

The learner must produce a portfolio of evidence to demonstrate their competence in the following areas:

- Develop effective working arrangements with staff in other agencies
- Sustain effective working with staff in other agencies.

Their underpinning knowledge will provide a good understanding of their work and will provide an informed approach to applying statutory regulations and organisational safety requirements and procedures. They will understand the safety requirements and their application and will know about the safety requirements in adequate depth to provide a sound basis for carrying out the activities safely and correctly.

They will be able to apply the appropriate behaviours required in the workplace to meet the job profile and overall company objectives, such as strong work ethic, positive attitude, team player, dependability, responsibility, honesty, integrity, motivation and commitment.

Additional information for Performance Criteria:

roles and responsibilities: the worker in the joint working, individuals with whom the arrangements are being made, other people within the agencies involved in the joint working.

The NOS used to create this unit:

- Skills for Security
 - SFS 6 – Work effectively with other agencies

Level 3

Control contract work for electronic security or fire detection and alarm systems

Unit Code: QFES3/011

Overview

This NVQ qualification unit has been derived from National Occupational Standards (NOS) by education representatives and employers in the Fire, Emergency and Security Systems sector.

This has been designed as part of an overall development programme designed to meet the requirements of the Sector, either through a structured Apprenticeship programme or an upskilling programme.

This unit identifies the skills, knowledge and understanding for you to monitor and control work against contractual, quality, legal and progress requirements. It would apply to anyone having the responsibility for site preparation and controlling work for electronic security or fire detection and alarm systems.

The learner must produce a portfolio of evidence to demonstrate their competence in the following areas:

- Control contracts against agreed quality standards
- Maintain contract compliance with legal and statutory requirements
- Control contract progress against agreed programmes
- Control contract quantities and costs to a defined budget
- Control contracts against agreed terms and conditions.

Their underpinning knowledge will provide a good understanding of their work and will provide an informed approach to applying statutory regulations and organisational safety requirements and procedures. They will understand the safety requirements and their application and will know about the safety requirements in adequate depth to provide a sound basis for carrying out the activities safely and correctly.

They will be able to apply the appropriate behaviours required in the workplace to meet the job profile and overall company objectives, such as strong work ethic, positive attitude, team player, dependability, responsibility, honesty, integrity, motivation and commitment.

The NOS used to create this unit:

- Skills for Security
 - SFS SYS 19 – Control contract work

Level 3

Implement works to meet installation requirements

Unit Code: QFES3/012

Overview

This NVQ qualification unit has been derived from National Occupational Standards (NOS) by education representatives and employers in the Fire, Emergency and Security Systems sector.

This has been designed as part of an overall development programme designed to meet the requirements of the Sector, either through a structured Apprenticeship programme or an upskilling programme.

This unit identifies the performance and knowledge criteria required in order that the learner can demonstrate that they are competent in implementing works to meet installation requirements.

The learner must produce a portfolio of evidence to demonstrate their competence in the following areas:

- Co-ordinate site preparation
- Co-ordinate work control

Their underpinning knowledge will provide a good understanding of their work and will provide an informed approach to applying statutory regulations and organisational safety requirements and procedures. They will understand the safety requirements and their application and will know about the safety requirements in adequate depth to provide a sound basis for carrying out the activities safely and correctly.

They will be able to apply the appropriate behaviours required in the workplace to meet the job profile and overall company objectives, such as strong work ethic, positive attitude, team player, dependability, responsibility, honesty, integrity, motivation and commitment.

Additional information for Performance Criteria:

Electronic security systems: a generic term that includes intruder, fire, CCTV, access, remote monitoring systems and other types of protective installations. It also encompasses the integration of existing and new systems.

sites: premises of installations. For example (but not exhaustive) commercial; industrial; retail; domestic; governmental.

specification: the specific detail containing design, installation, commissioning or maintenance requirements.

The NOS used to create this unit:

- Skills for Security
 - SFS SYS 20 – Implement works to meet installation requirements

Level 3

Provide leadership for your team

Unit Code: QFES3/013

Overview

This NVQ qualification unit has been derived from National Occupational Standards (NOS) by education representatives and employers in the Fire, Emergency and Security Systems sector.

This has been designed as part of an overall development programme designed to meet the requirements of the Sector, either through a structured Apprenticeship programme or an upskilling programme.

This unit identifies the performance and knowledge criteria required in order that the learner can demonstrate that they are competent in providing leadership for their team.

The learner must produce a portfolio of evidence to demonstrate their competence in the following areas:

- Develop skills to provide leadership for their team.
- Use appropriate behaviours to provide leadership for their team
- Know and understand how to provide leadership for their team using general knowledge.
- Know and understand how to provide leadership for their team using industry and sector specific knowledge
- Know and understand how to provide leadership for their team using context specific knowledge.

Their underpinning knowledge will provide a good understanding of their work and will provide an informed approach to applying statutory regulations and organisational safety requirements and procedures. They will understand the safety requirements and their application and will know about the safety requirements in adequate depth to provide a sound basis for carrying out the activities safely and correctly.

They will be able to apply the appropriate behaviours required in the workplace to meet the job profile and overall company objectives, such as strong work ethic, positive attitude, team player, dependability, responsibility, honesty, integrity, motivation and commitment.

The NOS used to create this unit:

- Skills for Security
 - SFS 10 – Provide leadership for your team

Level 3

Survey sites to prepare specifications for electronic security or fire detection and alarm systems

Unit Code: QFES3/014

Overview

This NVQ qualification unit has been derived from National Occupational Standards (NOS) by education representatives and employers in the Fire, Emergency and Security Systems sector.

This has been designed as part of an overall development programme designed to meet the requirements of the Sector, either through a structured Apprenticeship programme or an upskilling programme.

This unit identifies the performance and knowledge criteria required in order that the learner can demonstrate that they are competent in surveying sites to prepare specifications for electronic security or fire detection and alarm and design a system to meet their customer's needs. You must know and comply with the legislation, regulations, standards and codes of practice that are relevant to the systems for which you carry out surveys and produce designs and specifications.

The learner must produce a portfolio of evidence to demonstrate their competence in the following areas:

- Survey sites to collect information for the design, installation and maintenance of electronic security or fire detection and alarm systems design.
- Design a system to meet the customer requirements and comply with current legislation and codes of practice.
- Produce a specification for an electronic security or fire detection and alarm system to meet the customer requirements that complies with current legislation and codes of practice.

Their underpinning knowledge will provide a good understanding of their work and will provide an informed approach to applying statutory regulations and organisational safety requirements and procedures. They will understand the safety requirements and their application and will know about the safety requirements in adequate depth to provide a sound basis for carrying out the activities safely and correctly.

They will be able to apply the appropriate behaviours required in the workplace to meet the job profile and overall company objectives, such as strong work ethic, positive attitude, team player, dependability, responsibility, honesty, integrity, motivation and commitment.

Additional information for Performance Criteria:

Electronic security systems: a generic term that includes intruder, fire, CCTV, access, remote monitoring systems and other types of protective installations. It also encompasses the integration of existing and new systems.

Factors: local conditions of the site that could affect or influence the design or installation. For example (but not exhaustive) environmental; use; occupancy; access; structure

Integration: the linking of new or existing systems with new or existing IT and other systems and networks

Site characteristics: physical layout, dimensions, structure and use

Sites: premises of installations. For example (but not exhaustive) commercial; industrial; retail; domestic; governmental

Specification: the specific detail containing design, installation, commissioning or maintenance requirements

The NOS used to create this unit:

- Skills for Security
 - SFS SYS 4 – Survey sites to prepare specifications for electronic security systems

Level 3

Preparing quotations for providing electronic security or fire detection and alarm systems

Unit Code: QFES3/015

Overview

This NVQ qualification unit has been derived from National Occupational Standards (NOS) by education representatives and employers in the Fire, Emergency and Security Systems sector.

This has been designed as part of an overall development programme designed to meet the requirements of the Sector, either through a structured Apprenticeship programme or an upskilling programme.

This unit identifies the performance and knowledge criteria required in order that the learner can demonstrate that they are preparing quotations for providing electronic security systems. This unit is for learners who work with electronic security or fire detection and alarm systems, this includes roles such as: surveyor, technical sales, system designer, installer, maintenance engineer, service engineer and commissioning engineer.

The learner must produce a portfolio of evidence to demonstrate their competence in the following areas:

- Calculate the cost of supplying and installing electronic security or fire detection and alarm systems
- Calculate the cost of maintaining the performance of electronic security or fire detection and alarm systems.
- Produce quotations for the supply, installation and maintenance of electronic security or fire detection and alarm systems.

Their underpinning knowledge will provide a good understanding of their work and will provide an informed approach to applying statutory regulations and organisational safety requirements and procedures. They will understand the safety requirements and their application and will know about the safety requirements in adequate depth to provide a sound basis for carrying out the activities safely and correctly.

They will be able to apply the appropriate behaviours required in the workplace to meet the job profile and overall company objectives, such as strong work ethic, positive attitude, team player, dependability, responsibility, honesty, integrity, motivation and commitment.

The NOS used to create this unit:

- Skills for Security
 - SFS SYS 5 – Prepare quotations for providing electronic security systems

Level 3

Negotiate sales of electronic security or fire detection and alarm systems

Unit Code: QFES3/016

Overview

This NVQ qualification unit has been derived from National Occupational Standards (NOS) by education representatives and employers in the Fire, Emergency and Security Systems sector.

This has been designed as part of an overall development programme designed to meet the requirements of the Sector, either through a structured Apprenticeship programme or an upskilling programme.

This unit identifies the performance and knowledge criteria required in order that the learner can demonstrate that they are competent in negotiating sales of electronic security or fire detection and alarm systems to customers.

The learner must produce a portfolio of evidence to demonstrate their competence in the following areas:

- Prepare to negotiate sales of electronic security or fire detection and alarm systems
- Prepare sales proposals for electronic security or fire detection and alarm systems.
- Negotiate and agree terms of sales for electronic security or fire detection and alarm systems.

Their underpinning knowledge will provide a good understanding of their work and will provide an informed approach to applying statutory regulations and organisational safety requirements and procedures. They will understand the safety requirements and their application and will know about the safety requirements in adequate depth to provide a sound basis for carrying out the activities safely and correctly.

They will be able to apply the appropriate behaviours required in the workplace to meet the job profile and overall company objectives, such as strong work ethic, positive attitude, team player, dependability, responsibility, honesty, integrity, motivation and commitment.

Additional information for Performance Criteria:

Electronic security systems: a generic term that includes intruder, fire, CCTV, access, remote monitoring systems and other types of protective installations. It also encompasses the integration of existing and new systems.

negotiating areas: system specification; price; delivery; terms of payment; after sales service

resources: audio-visual aids; handouts; product samples; colleagues

sales information related to system specification; price; delivery terms of payment; after sales service

systems: a set of components working together as an interconnecting network. For example (but not exhaustive) new installations extensions; modifications.

The NOS used to create this unit:

- Skills for Security
 - SFS SYS 16 - Negotiate sales of electronic security systems

Level 3

Manage own resources and professional development

Unit Code: QFES3/017

Overview

This NVQ qualification unit has been derived from National Occupational Standards (NOS) by education representatives and employers in the Fire, Emergency and Security Systems sector.

This has been designed as part of an overall development programme designed to meet the requirements of the Sector, either through a structured Apprenticeship programme or an upskilling programme.

This unit identifies the performance and knowledge criteria required in order that the learner can demonstrate that they are competent in managing their own resources and professional development. This unit is about managing your personal resources (particularly knowledge, understanding, skills, experience and time) and your professional development in order to achieve your work objectives and your career and personal goals.

You need to understand your work role and how it fits into the overall vision and objectives of the organisation whilst also understanding what is driving you in terms of your values and your career and wider personal aspirations. Identifying and addressing gaps in your skills and knowledge and understanding is an essential aspect of this unit.

The learner must produce a portfolio of evidence to demonstrate their competence in the following areas:

- Manage own resources and professional development
- Know and understand how to manage their own resources using general knowledge
- Know and understand how to manage their own resources using industry and sector specific knowledge
- Know and understand how to manage their own resources using context specific knowledge.

They will be able to apply the appropriate behaviours required in the workplace to meet the job profile and overall company objectives, such as strong work ethic, positive attitude, team player, dependability, responsibility, honesty, integrity, motivation and commitment.

The NOS used to create this unit:

- Skills for Security
 - SFS 13 - Manage own resources and professional development

Level 3

Develop productive working relationships with colleagues and stakeholders

Unit Code: QFES3/018

Overview

This NVQ qualification unit has been derived from National Occupational Standards (NOS) by education representatives and employers in the Fire, Emergency and Security Systems sector.

This has been designed as part of an overall development programme designed to meet the requirements of the Sector, either through a structured Apprenticeship programme or an upskilling programme.

This unit identifies the performance and knowledge criteria required in order that the learner can demonstrate that they are competent in developing productive working relationships with colleagues and stakeholders in the workplace.

This unit is about developing productive working relationships with colleagues, within your own organisation and within other organisations with which your organisation works, and with identified stakeholders. It involves being aware of the roles, responsibilities, interests and concerns of colleagues and stakeholders and working with and supporting them in various ways. The need to monitor and review the effectiveness of working relationships with colleagues and stakeholders is also a key requirement of this unit. 'Colleagues' are any people you are expected to work with, whether they are at a similar position or in other positions in terms of level of responsibility, including your manager. For the purpose of this unit, 'Stakeholders' refers to individuals or organisations that have a material, legal or political interest in or who may be affected by the activities and performance of your organisation.

The learner must produce a portfolio of evidence to demonstrate their competence in the following areas:

- Developing productive working relationships with colleagues, within your own organisation and within other organisations with which your organisation works, and with identified stakeholders.
- Monitor and review effectiveness of working relationships with colleagues and stakeholders
- Access information and keep records
- Portray a positive image whilst establishing an effective rapport with customers.

They will be able to apply the appropriate behaviours required in the workplace to meet the job profile and overall company objectives, such as strong work ethic, positive attitude, team player, dependability, responsibility, honesty, integrity, motivation and commitment.

The NOS used to create this unit:

- Skills for Security
 - SFS 9 – Develop productive working relationships with colleagues and stakeholders

Level 3

Plan the installation of electronic security or fire detection and alarm systems

Unit Code: QFES3/019

Overview

This NVQ qualification unit has been derived from National Occupational Standards (NOS) by education representatives and employers in the Fire, Emergency and Security Systems sector.

This has been designed as part of an overall development programme designed to meet the requirements of the Sector, either through a structured Apprenticeship programme or an upskilling programme.

This unit identifies the performance and knowledge criteria required in order that the learner can demonstrate that they are competent planning and co-ordinating installations for electronic security or fire detection and alarm systems.

The learner must produce a portfolio of evidence to demonstrate their competence in the following areas:

- Confirm the details of electronic security or fire detection and alarm system requirements
- Plan and co-ordinate the use of resources to install electronic security or fire detection and alarm systems
- Organise first fixes of installation.

Their underpinning knowledge will provide a good understanding of their work and will provide an informed approach to applying statutory regulations and organisational safety requirements and procedures. They will understand the safety requirements and their application and will know about the safety requirements in adequate depth to provide a sound basis for carrying out the activities safely and correctly.

They will be able to apply the appropriate behaviours required in the workplace to meet the job profile and overall company objectives, such as strong work ethic, positive attitude, team player, dependability, responsibility, honesty, integrity, motivation and commitment.

Additional information for Performance Criteria:

electrical supply systems: supply to the system components, such as primary and secondary supplies.

site characteristics: physical layout, dimensions, structure and use.

specification: the specific detail containing design, installation, commissioning or maintenance requirements.

systems: a set of components working together as an interconnecting network. For example (but not exhaustive) new installations; extensions; modifications.

transmission: the interconnection of system components. For example (but not exhaustive) wired, wireless, networking.

The NOS used to create this unit:

- Skills for Security
 - SFS SYS 6 - Plan the installation of electronic security systems

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