

NVQ/SVQ
Technical Services
Level 2 and 3



NVQs AND SVQs

AND HOW THEY WILL BENEFIT YOU...

National and Scottish Vocational Qualifications (NVQ/SVQs) recognise what a person is able to do at work. They involve the skills and knowledge needed to do the job, ability to organise work and spotting and stopping problems.

Each qualification has a level which shows what skills are needed to achieve the qualification. In the workplace, the levels can be described as:

- Level 1:** Foundation or basic skilled employees
- Level 2:** Operators or semi-skilled employees
- Level 3:** Technicians, craft, skilled and supervisory employees
- Level 4:** Technical and junior management positions
- Level 5:** Professional engineers and senior management positions

NVQ/SVQs are based on industry standards which must be met to be competent in a particular task. There's no need to go back to college or to sit exams, assessment is usually in the workplace. They're very flexible – a candidate doesn't have to start at Level 1 but at the level that fits his/her job and abilities.

Each qualification is made up of a number of units. The units comprise a number of EAL evidence routes which allows the qualification to be tailored to the individual's and employer's exact needs. The NVQ/SVQ is gained when all the evidence routes for a unit and all the units have been achieved. The individual receives a certificate for each unit completed so even if they don't manage to complete the full qualification they still have proof of their ability.



The Benefits of NVQs and SVQs

For Employers, NVQ/SVQs can:

- reduce staff turnover, help to recruit people and to motivate them
- increase productivity and help win contracts
- show customers that you have a workforce competent to industry standards
- help reduce accidents as NVQ/SVQs cover health and safety.

For Individuals, NVQ/SVQs can:

- provide evidence that you can do a particular job or skill
- help with promotion or a career move
- help you gain a qualification without going back to college or sitting exams
- be completed at a pace to suit you - there is no pass or fail.

EAL – the leading NVQ/SVQ partner

The leading awarding body of engineering NVQ/SVQs EAL offers qualifications both nationally and internationally. It offers over 60 NVQ/SVQs from Levels 1 to 5 covering a comprehensive range of engineering disciplines as well as management, business administration, distribution and warehousing and aviation to ensure that all employees are competent and adding to the value of the company.

EAL is committed to assisting its customers achieve their training and business goals. Support is readily available to help both centres and candidates whatever the query or problem. A team of easily accessible external verifiers - all professionally qualified and experienced - ensure that your needs and the needs of your business are met.

A commitment to providing industry with the very best qualifications in both quality and service is the prime objective of EAL. Let us help you to both meet and beat your objectives.

What are technical services?

Technical services are performed by those individuals whose work involves a technical support role. Technical services are provided by a host of different people within a company including planners, estimators, quality controllers, inspectors, testers, technical buyers, contract engineers, technical authors, materials schedulers, applications engineers, stock controllers - not just technicians.

Who would benefit from this qualification?

Technical services has been developed for individuals whose job involves technical support in some form or another. Candidates for the Level 2 qualification will typically be operators or semi-skilled employees who wish to further their skills or those who wish to move on from a Level 1 engineering qualification. Candidates for the Level 3 qualification will typically include those on Modern Apprenticeship schemes (MAs), those increasing their skills further from a Level 2 engineering NVQ/SVQ or individuals working in technical support roles who wish to develop and increase their level of qualifications.

How is the qualification structured?

At Level 2 the candidate must complete two mandatory units and one optional unit from a choice of fifteen. Level 3 candidates must complete three mandatory units plus two optional units from eighteen.

Each unit, whether mandatory or optional, has an evidence route allowing the qualification to match each candidates' job and give a context in which the unit is to be assessed.

Candidates, if they wish, may do more than the minimum number of units to complete the full award or take additional units from other EAL awards. All units completed and evidence routes chosen will be shown on the certificate.

A single charge covers registration, supply of evidence routes and certification.

How can I start benefiting from this qualification?

If you're an organisation ...

You can gain access to this qualification by either becoming an EAL approved assessment centre or through an EAL approved centre in your region. Our Customer Services department can help you decide which is the right choice for you.

If you're an EAL centre ...

You can access this qualification by adding it to your centre remit and registering candidates in the normal way using a candidate registration form, CRF1.

If you're an individual ...

You will need to speak to your employer about it becoming an approved assessment centre for this qualification or accessing it through your local EAL approved centre.

What material is available to help me with this qualification?

Every candidate registered on this qualification will receive an EAL Candidate Book, a personalised ring binder with all the appropriate evidence routes.

An Assessor Book is available to purchase, order code ABG/101, containing general information and guidance on the NVQ/SVQ assessment process. An Assessor Guide specific to this qualification, order code ENA/103, contains advice on assessment and types of evidence. Current prices and details on how to order are available from Customer Services.

TECHNICAL SERVICES LEVEL 2

NVQ Level 2 Q1027258

SVQ Level 2 G36622

Qualification Structure

Mandatory Units

Determine Requirements to Achieve Engineering Objectives	U1026988
Contribute to the Effectiveness of Work Activities	U1027003

Optional Units – any one from

Establish Customer Technical Requirements	U1026948
Provide Detailed Drawings for Engineering Activities	U1026952
Provide Technical Information for Engineering Activities	U1026953
Develop Technical Engineering Specifications	U1026954
Modify the Properties of Materials for Engineering Use	U1026973
Install Engineering Products/Assets	U1026976
Configure Engineering Products/Assets	U1026978
Plan Engineering Activities	U1026989
Conduct Specified Testing of Engineering Products/Assets	U1026996
Monitor and Assess the Performance and Condition of Engineering Assets	U1026998
Check Engineering Product/Asset Compliance with Specifications	U1027000
Contribute to Improving the Organisation's Working Practices and Procedures	U1027001
Control and Monitor the Use of Allocated Resources	U1027005
Exchange Responsibility for Control of Engineering Products/Assets	U1027006
Support Technical Sales Transactions	U1027008

All of: Mandatory Evidence Routes and Elements

ENR/101	<input type="checkbox"/> Determine requirements to achieve engineering objectives (establishing work requirements) <i>contains the following elements...</i> <ul style="list-style-type: none"> · determine technical requirements · determine resource requirements 	U1026988
ENR/103	<input type="checkbox"/> Contribute to the effectiveness of work activities (communicating and self development) <i>contains the following elements...</i> <ul style="list-style-type: none"> · develop yourself in the work role · contribute to working relationships 	U1027003

Optional Evidence Routes and Elements

ENR/117	<input type="checkbox"/> Establish customer technical requirements (establishing customer requirements) <i>contains the following elements...</i> <ul style="list-style-type: none"> · determine a customer's technical requirements for engineering products · recommend solutions to meet technical requirements 	U1026948
ENR/111	<input type="checkbox"/> Provide detailed drawings for engineering activities <i>contains the following elements...</i> <ul style="list-style-type: none"> · review technical information to produce detailed drawings · produce detailed drawings <i>and is available in the following contexts:</i> <ul style="list-style-type: none"> ENR/111 <input type="checkbox"/> providing detailed drawings ENR/371 <input type="checkbox"/> providing detailed drawings for pcb design 	U1026952
ENR/110	<input type="checkbox"/> Provide technical information for engineering activities <i>contains the following elements...</i> <ul style="list-style-type: none"> · extract detailed information from technical requirements · produce technical details in required formats <i>and is available in the following contexts:</i> <ul style="list-style-type: none"> ENR/110 <input type="checkbox"/> providing technical information ENR/407 <input type="checkbox"/> produce CNC programs for engineering applications 	U1026953

Optional Evidence Routes and Elements *Continued...*

ENR/139	<p>Develop technical engineering specifications (developing technical specifications) <i>contains the following elements...</i></p> <ul style="list-style-type: none"> · review engineering activities to determine technical requirements · specify technical requirements for the activity 	U1026954
ENR/138	<p>Modify the properties of materials for engineering use (modifying the properties of materials) <i>contains the following elements...</i></p> <ul style="list-style-type: none"> · process materials to alter their properties · establish compliance with materials specifications 	U1026973
	<p>Install engineering products/assets <i>contains the following elements...</i></p> <ul style="list-style-type: none"> · position and install equipment · confirm equipment meets specification <p><i>and is available in the following contexts:</i></p>	U1026976
ENR/133	mechanical equipment	
ENR/134	electrical equipment	
ENR/144	engineering plant/equipment	
ENR/162	telemetry equipment	
ENR/242	instrumentation equipment	
ENR/243	utilities/services equipment	
ENR/268	fluid power equipment	
ENR/294	lift/escalator equipment	
ENR/297	electronic equipment	
ENR/360	armament equipment	
ENR/364	avionics equipment	
ENR/379	aircraft electrical equipment	
ENR/382	aircraft mechanical equipment	
	<p>Configure engineering products/assets <i>contains the following elements...</i></p> <ul style="list-style-type: none"> · set up plant/equipment · handover set up plant/equipment <p><i>and is available in the following contexts:</i></p>	U1026978
ENR/143	commissioning plant/equipment	
ENR/152	telemetry equipment	
ENR/193	mechanical equipment	
ENR/194	electrical equipment	
ENR/247	instrumentation equipment	
ENR/266	utilities/services equipment	
ENR/270	fluid power equipment	
ENR/296	lift/escalator equipment	

ENR/137	<p>Plan engineering activities (engineering planning) <i>contains the following elements...</i></p> <ul style="list-style-type: none"> · prepare plans for engineering activities · determine procedures for engineering activities 	U1026989
	<p>Conduct specified testing of engineering products/assets <i>contains the following elements...</i></p> <ul style="list-style-type: none"> · test equipment · analyse test results <p><i>and is available in the following contexts:</i></p> <ul style="list-style-type: none"> ENR/123 <input type="checkbox"/> mechanical equipment ENR/124 <input type="checkbox"/> electrical equipment ENR/153 <input type="checkbox"/> products and systems ENR/156 <input type="checkbox"/> telemetry equipment ENR/264 <input type="checkbox"/> instrumentation equipment ENR/279 <input type="checkbox"/> fluid power equipment ENR/302 <input type="checkbox"/> lift/escalator equipment function ENR/320 <input type="checkbox"/> electronic equipment ENR/334 <input type="checkbox"/> measuring equipment ENR/342 <input type="checkbox"/> utilities/services equipment ENR/352 <input type="checkbox"/> marine equipment ENR/358 <input type="checkbox"/> armament equipment ENR/362 <input type="checkbox"/> avionics equipment ENR/376 <input type="checkbox"/> aircraft electrical equipment ENR/377 <input type="checkbox"/> aircraft mechanical equipment ENR/393 <input type="checkbox"/> cycle equipment 	U1026996
ENR/116	<p>Monitor and assess the performance and condition of engineering assets (monitoring and assessment of equipment) <i>contains the following elements...</i></p> <ul style="list-style-type: none"> · monitor performance and condition of engineering equipment · assess performance and condition of engineering equipment 	U1026998
	<p>Check engineering product/asset compliance with specification <i>contains the following elements...</i></p> <ul style="list-style-type: none"> · inspect products/assets · deal with defects in products/assets <p><i>and is available in the following contexts:</i></p> <ul style="list-style-type: none"> ENR/195 <input type="checkbox"/> mechanical products ENR/240 <input type="checkbox"/> electrical products ENR/241 <input type="checkbox"/> electronic products ENR/337 <input type="checkbox"/> metrology equipment 	U1027000

Optional Evidence Routes and Elements *Continued...*

ENR/115	<p>Contribute to improving the organisation's working practices and procedures (implementing continuous improvement) <i>contains the following elements...</i></p> <ul style="list-style-type: none"> · identify opportunities for improvements · suggest improvements 	U1027001
ENR/151	<p>Control and monitor the use of allocated resources (controlling and monitoring resources) <i>contains the following elements...</i></p> <ul style="list-style-type: none"> · control resources to achieve requirements · monitor the use of resources 	U1027005
ENR/150	<p>Exchange responsibility for control of engineering products/assets (handing over products/assets) <i>contains the following elements...</i></p> <ul style="list-style-type: none"> · hand over engineering products/assets to the control of others · accept and confirm responsibility for the control of engineering products/assets 	U1027006
ENR/149	<p>Support technical sales transactions (providing technical sales support) <i>contains the following elements...</i></p> <ul style="list-style-type: none"> · provide technical sales information to customers · assess the ability of products to meet customer technical requirements 	U1027008



TECHNICAL SERVICES LEVEL 3

NVQ Level 3 Q1027259

SVQ Level 3 G3WN23

Qualification Structure

Mandatory Units

Determine Requirements to Achieve Engineering Objectives	U1026988
Contribute to the Effectiveness of Work Activities	U1027003
Co-ordinate Activities with Others	U1027004

Optional Units *(Any two, at least one of which must be from Group B)*

GROUP A

Establish Customer Technical Requirements	U1026948
Provide Technical Information for Engineering Activities*	U1026953
Develop Technical Engineering Specifications	U1026954
Plan Engineering Activities	U1026989
Check Engineering Product/Asset Compliance with Specifications	U1027000
Control and Monitor the use of Allocated Resources	U1027005
Exchange Responsibility for Control of Engineering Products/Assets	U1027006
Support Technical Sales Transactions	U1027008

GROUP B

Establish Objectives and Methods for Engineering Design and Development Projects	U1026949
Identify and Assess Factors Impacting on Engineering Design Requirements	U1026950
Install Engineering Products/Assets Under Complex Conditions	U1026977
Establish Configuration of Engineering Products/Assets that are Complex to Achieve	U1026979
Dismantle Engineering Assets Under Complex Conditions	U1026981
Conduct Testing of Engineering Products/Assets Under Complex Conditions	U1026997
Conduct Complex Monitoring and Assessment of the Performance and Condition of Engineering Assets	U1026999
Identify and Evaluate Development Options for Engineering Products/Assets	U1027002
Provide Technical Information and Advisory Services*	U1027009
Acquire Specified Goods and Services	U1025732

* *(These may not be chosen together)*

Mandatory Evidence Routes and Elements

ENR/101	<p>□ Determine requirements to achieve engineering objectives (establishing work requirements)</p> <p><i>contains the following elements...</i></p> <ul style="list-style-type: none"> · determine technical requirements · determine resource requirements 	U1026988
ENR/103	<p>□ Contribute to the effectiveness of work activities (communicating and self development)</p> <p><i>contains the following elements...</i></p> <ul style="list-style-type: none"> · develop yourself in the work role · contribute to working relationships 	U1027003
ENR/104	<p>□ Co-ordinate activities with others (organising and leading)</p> <p><i>contains the following elements...</i></p> <ul style="list-style-type: none"> · organise the work · provide technical leadership 	U1027004

Optional Evidence Routes and Elements

GROUP A

ENR/117	<p>□ Establish customer technical requirements (establishing customer requirements)</p> <p><i>contains the following elements...</i></p> <ul style="list-style-type: none"> · determine a customer's technical requirements for engineering products · recommend solutions to meet technical requirements 	U1026948
ENR/110	<p>□ Provide technical information for engineering activities (extracting technical information)</p> <p><i>contains the following elements...</i></p> <ul style="list-style-type: none"> · extract detailed information from technical requirements · produce technical details in required forms <p><i>and is available in the following context</i></p> <p>□ providing technical information</p>	U1026953
ENR/407	<p>□ providing CNC programs for engineering applications</p>	
ENR/139	<p>□ Develop technical engineering specifications (developing technical specifications)</p> <p><i>contains the following elements...</i></p> <ul style="list-style-type: none"> · review engineering activities to determine technical requirements · specify technical requirements for the activity 	U1026954

Optional Evidence Routes and Elements *Continued...*

ENR/137	<p>Plan engineering activities (engineering planning) <i>contains the following elements...</i></p> <ul style="list-style-type: none"> · prepare plans for engineering activities · determine procedures for engineering activities 	U1026989
<p>ENR/195</p> <p>ENR/240</p> <p>ENR/241</p> <p>ENR/337</p>	<p>Check engineering product/asset compliance with specification <i>contains the following elements...</i></p> <ul style="list-style-type: none"> · inspect products/assets · deal with defects <p><i>and is available in the following contexts:</i></p> <ul style="list-style-type: none"> inspecting mechanical products inspecting electrical products inspecting electronic products confirming metrology equipment meets specification 	U1027000
ENR/151	<p>Control and monitor the use of allocated resources (controlling and monitoring resources) <i>contains the following elements...</i></p> <ul style="list-style-type: none"> · control resources to achieve requirements · monitor the use of resources 	U1027005
ENR/150	<p>Exchange responsibility for control of engineering products/assets (handing over products/assets) <i>contains the following elements...</i></p> <ul style="list-style-type: none"> · hand over engineering products/assets to the control of others · accept and confirm responsibility for the control of engineering products/assets 	U1027006
ENR/149	<p>Support technical sales transactions (providing technical sales support) <i>contains the following elements...</i></p> <ul style="list-style-type: none"> · provide technical sales information to customers · assess the ability of products to meet customer technical requirements 	U1027008



Optional Evidence Routes and Elements *Continued...*

GROUP B

ENR/113 <input type="checkbox"/>	<p>Establish objectives and methods for engineering design and development projects (planning design and development projects) <i>contains the following elements...</i></p> <ul style="list-style-type: none"> · establish design and development objectives · recommend methods to achieve the design and development objective 	U1026949
ENR/112 <input type="checkbox"/>	<p>Identify and assess factors impacting on engineering design requirements (preparing for designing) <i>contains the following elements...</i></p> <ul style="list-style-type: none"> · identify factors that affect design briefs · analyse and assess the effects of identified factors 	U1026950
<p>ENR/131 <input type="checkbox"/></p> <p>ENR/132 <input type="checkbox"/></p> <p>ENR/142 <input type="checkbox"/></p> <p>ENR/157 <input type="checkbox"/></p> <p>ENR/244 <input type="checkbox"/></p> <p>ENR/245 <input type="checkbox"/></p> <p>ENR/269 <input type="checkbox"/></p> <p>ENR/326 <input type="checkbox"/></p> <p>ENR/355 <input type="checkbox"/></p> <p>ENR/359 <input type="checkbox"/></p> <p>ENR/363 <input type="checkbox"/></p> <p>ENR/368 <input type="checkbox"/></p> <p>ENR/378 <input type="checkbox"/></p> <p>ENR/383 <input type="checkbox"/></p> <p>ENR/405 <input type="checkbox"/></p>	<p>Install engineering products/assets under complex conditions <i>and is available in the following contexts:</i></p> <ul style="list-style-type: none"> · install equipment under complex conditions · checking equipment installations under complex conditions <ul style="list-style-type: none"> mechanical equipment electrical equipment plant/equipment telemetry equipment utilities/services equipment instrumentation equipment fluid power equipment electronic equipment internal combustion engines/pallets into test cell armament equipment avionics equipment metrology equipment aircraft electrical equipment aircraft mechanical equipment lift and escalator equipment 	U1026977
<p>ENR/141 <input type="checkbox"/></p> <p>ENR/185 <input type="checkbox"/></p> <p>ENR/186 <input type="checkbox"/></p> <p>ENR/187 <input type="checkbox"/></p> <p>ENR/248 <input type="checkbox"/></p> <p>ENR/249 <input type="checkbox"/></p> <p>ENR/271 <input type="checkbox"/></p> <p>ENR/338 <input type="checkbox"/></p>	<p>Establish configuration of engineering products/assets that are complex to achieve <i>contains the following elements...</i></p> <ul style="list-style-type: none"> · set up equipment under complex conditions · hand over set up equipment <p><i>and is available in the following contexts:</i></p> <ul style="list-style-type: none"> commissioning of plant/equipment setting up of electrical equipment setting up of mechanical equipment setting up of telemetry equipment configuring utilities/services equipment configuring instrumentation equipment configuring fluid power equipment commissioning metrology equipment 	U1026979

Dismantle engineering assets under complex conditions
contains the following elements...

U1026981

- dismantle equipment under complex conditions
 - check the dismantling specification has been met
- and is available in the following contexts:*

- ENR/129 mechanical equipment
- ENR/130 electrical equipment
- ENR/140 plant/equipment
- ENR/163 telemetry equipment
- ENR/252 utilities/services equipment
- ENR/253 instrumentation equipment
- ENR/273 fluid power equipment
- ENR/298 lift/escalator equipment
- ENR/311 equipment for refurbishment
- ENR/347 marine equipment
- ENR/353 internal combustion engines
- ENR/365 metrology equipment

Conduct testing of engineering products/assets under
complex conditions
contains the following elements...

U1026997

- test equipment under complex conditions
 - analyse test results
- and is available in the following contexts:*

- ENR/102 products/systems
 - ENR/119 mechanical equipment
 - ENR/120 electrical equipment
 - ENR/158 telemetry equipment
 - ENR/246 instrumentation equipment
 - ENR/265 utilities/services equipment
 - ENR/280 fluid power equipment
 - ENR/330 electronic equipment
 - ENR/334 metrology equipment
 - ENR/335 operating calibrated test facilities
 - ENR/354 internal combustion engines
 - ENR/357 armament equipment
 - ENR/361 avionics equipment
 - ENR/374 aircraft electrical equipment
 - ENR/375 aircraft mechanical equipment
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Optional Evidence Routes and Elements *Continued...*

<p>ENR/191 <input type="checkbox"/></p> <p>ENR/366 <input type="checkbox"/></p> <p>ENR/367 <input type="checkbox"/></p>	<p>Conduct complex monitoring and assessment of the performance and condition of engineering assets <i>contains the following elements...</i></p> <ul style="list-style-type: none"> · monitor equipment considering complex factors · assess equipment considering complex factors <p><i>and is available in the following contexts:</i></p> <ul style="list-style-type: none"> monitoring and assessment electrical/electronic metrology equipment products using calibrated test facilities 	<p>U1026999</p>
<p>ENR/114 <input type="checkbox"/></p>	<p>Identify and evaluate development options for engineering products/assets (evaluating development options) <i>contains the following elements...</i></p> <ul style="list-style-type: none"> · identify potential developments to existing products · evaluate and recommend development options 	<p>U1027002</p>
<p>ENR/190 <input type="checkbox"/></p>	<p>Provide technical information and advisory services (providing technical information and advice) <i>contains the following elements...</i></p> <ul style="list-style-type: none"> · provide technical information of the use of engineering products/assets · provide operational support to users of engineering products/assets 	<p>U1027009</p>
<p>ENR/267 <input type="checkbox"/></p>	<p>Acquire specified goods and services (acquiring engineering goods/services) <i>contains the following elements...</i></p> <ul style="list-style-type: none"> · provide information on goods and services to users · select potential suppliers for supply of goods and services · obtain quotations for the supply of goods and services · recommend supplier after evaluation of quotations · place order for the supply of goods and services 	<p>U1025732</p>







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