



Level 2 NVQ Diploma in Performing Engineering Operations (7682)

QCF Unit No: 202

QCF Credit Value: 4

**Unit Title: Carrying Out Engineering Activities
Efficiently and Effectively**

Candidate	
Candidate No	

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Unit Assessment Plan & Feedback

Candidate		Group	
Unit & Assessment Plan			
<p>This unit will be undertaken by cross reference from practical units, completion of knowledge questions and completion of page 11.</p>			
Summative Decision & Candidate Feedback			
Assessor Name			
Assessor Signature		Date	
Candidate Name			
Candidate Signature		Date	

Internal verifier declaration:
 I have internally verified the assessment work on this unit by carrying out the following (please tick):

☐ sampling candidate and assessment evidence

☐ observation of assessment practice

☐ discussion with candidate

☐ other – please state:

I confirm that the candidate's sampled work meets the standards specified for this unit and may be presented for external verification and/or certification.

☐ Signed off by Internal Verifier for certification although not sampled

Internal Verifier Name			
Internal Verifier Signature		Date	

Place awarding organisation standards in front of this page.

Assessment Criteria Index

		Performance Evidence 1	Performance Evidence 2	Performance Evidence 3	Additional Performance Evidence (if required)
Evidence Type		Cross Referenced Written	Cross Referenced Written	Cross Referenced Written	
Date					
Assessment Criteria					
1	Worked safely at all times, complying with health and safety legislation, regulations and other relevant guidelines	Pages 11,14,16 Unit 19	Pages 11,29 Unit 19	Pages 11,41 Unit 19	
2	Ensured that the following checks and practices were applied during the engineering activities:				
	<ul style="list-style-type: none"> Adhered to procedures or systems in place for risk assessment, COSHH, personal protective equipment and other relevant safety regulations 	All - Page 11 Unit 19	All - Page 11 Unit 19	All - Page 11 Unit 19	
	<ul style="list-style-type: none"> Wore the appropriate personal protective equipment for the work area and specific activity being carried out 				
	<ul style="list-style-type: none"> Used all tools and equipment safely and correctly, and only for their intended purpose 				
	<ul style="list-style-type: none"> Ensured the work area was maintained and left in a safe and tidy condition 				
3	Planned the engineering activities before starting them	Page 13 Unit 019	Page 22 Unit 19	Page 32 Unit 19	
4	Prepared for the specific engineering activity, by producing a work plan which includes all of the following:	All - Page 13 Unit 19	All - Page 22 Unit 19	All - Page 22 Unit 19	
	<ul style="list-style-type: none"> Documentation required (such as drawings, technical/reference documents - such as tapping drill sizes, imperial to metric conversion books, component specifications, quality documentation) 				
	<ul style="list-style-type: none"> Materials required (such as stock material, components, part-machined components, cables/wire, welding consumables) 				
	<ul style="list-style-type: none"> Equipment required (such as machine tools to be used, lifting and handling equipment, bending and forming equipment, anti-static equipment, test equipment) 				
	<ul style="list-style-type: none"> Work holding methods and equipment (such as machine or bench vice, clamps, special work holding arrangements), where appropriate 				
	<ul style="list-style-type: none"> Tools required (such as hand tools, portable power tools, cutting tools, soldering irons) 				
	<ul style="list-style-type: none"> measuring equipment required (such as mechanical, electrical, pressure, flow, level, speed and sound) 				
	<ul style="list-style-type: none"> The operating sequence to be followed 				
	<ul style="list-style-type: none"> The timescale required to complete the engineering operations 				
5	Prepared the work area for carrying out the engineering activity	Page 11 – Unit 19	Page 11 – Unit 19	Page 11 – Unit 19	
6	Made preparation to carry out the engineering activity, ensuring all of the following, as applicable to the				

	work to be undertaken:				
	<ul style="list-style-type: none"> The work area was free from hazards and was suitably prepared for the activities to be undertaken 	Page 11.a Unit 19	Page 11.a Unit 19	Page 11.a Unit 19	
	<ul style="list-style-type: none"> Any required safety procedures were implemented 	Page 11.a Unit 19	Page 11.a Unit 19	Page 11.a Unit 19	
	<ul style="list-style-type: none"> Any necessary personal protection equipment was obtained, and was in a usable condition 	All - Page 11 Unit 19	All - Page 11 Unit 19	All - Page 11 Unit 19	
	<ul style="list-style-type: none"> Tools and equipment required were obtained and checked that they were in a safe and usable condition 				
	<ul style="list-style-type: none"> All necessary drawings, specifications and associated documents were obtained 				
	<ul style="list-style-type: none"> Job instructions were obtained and understood 				
	<ul style="list-style-type: none"> The correct materials or components were obtained 				
	<ul style="list-style-type: none"> Appropriate authorisation to carry out the work was obtained 				
7	Obtained all necessary tools and equipment and check that they were in a safe and usable condition	Page 19 Page 19 Unit 19	Page 29 Unit 19	Page 41 Unit 19	
8	Dealt promptly and effectively with problems within his/her control, and sought help and guidance from the relevant people if he/she had problems that he/she could not resolve	Page 9 Unit 2	Page 13 Unit 05	Page 11 Unit 19	
9	Dealt with problems which affected the engineering activity, including two of the following:	Unit 002			
	<ul style="list-style-type: none"> materials 	Page 9			
	<ul style="list-style-type: none"> tools and equipment 	Page 9			
	<ul style="list-style-type: none"> drawings 				
	<ul style="list-style-type: none"> job specification 				
	<ul style="list-style-type: none"> quality 				
	<ul style="list-style-type: none"> people 				
	<ul style="list-style-type: none"> timescales 				
	<ul style="list-style-type: none"> safety 				
	<ul style="list-style-type: none"> work activities or procedures 				
10	Maintained effective working relationships with colleagues and supervisors	Unit 02 Page 9 FOR ALL			
11	Created and maintained effective working relationships, to include all of the following:				
	<ul style="list-style-type: none"> Turned up at the place of work on time and suitably dressed for the work activities to be carried out 				
	<ul style="list-style-type: none"> Followed instructions given to him/her and checked out any uncertainties before starting work 				
	<ul style="list-style-type: none"> Sought information and assistance in a courteous and polite manner 				
	<ul style="list-style-type: none"> Took advice from others in a positive way 				
	<ul style="list-style-type: none"> Dealt with disagreements in an amicable and constructive way 	Unit 02 Page 9 FOR ALL			
	<ul style="list-style-type: none"> Communicated with others nearby to make sure that they knew about actions they were taking which may have affected their work 				
	<ul style="list-style-type: none"> Showed respect for the views, rights and property of others 				
12	Reviewed personal training and development, as	Unit 02 Page 10			

	appropriate to the job role				
13	Contributed to developing his/her own engineering competence, (to include all of the following):				
	<ul style="list-style-type: none"> Described the levels of skill, knowledge and understanding needed for competence in the areas of work expected of him/her 	Unit 02 Page 11			
	<ul style="list-style-type: none"> Described his/her development objectives/program, and how these met 	Unit 02 Page 11			
	<ul style="list-style-type: none"> Provided information on his/her expectations and progress towards their identified objectives 	Unit 02 Page 11			
	<ul style="list-style-type: none"> Used feedback and advice to improve their personal performance 	Page 20 Unit 19	Page 30 Unit 19		
14	Tidied up the work area on completion of the engineering activity	Page 11 Unit 19			
15	Completed the work activities, to include all of the following:				
	<ul style="list-style-type: none"> Returned tools and equipment to the designated location 				
	<ul style="list-style-type: none"> Returned drawings and work instructions 				
	<ul style="list-style-type: none"> Disposed of waste materials, in line with organisational and environmental requirements 	Page 11 Unit 19	Page 29 Unit 19	Page 41 Unit 19	
	<ul style="list-style-type: none"> Completed all necessary documentation accurately and legibly 				
	<ul style="list-style-type: none"> Identified, where appropriate, any damaged or unusable tools or equipment 				
16	Contributed to, and communicated opportunities for, improvement to working practices and procedures	Unit 02 Page 9 FOR ALL			
17	Contributed to organisational procedures for identifying opportunities for improvement to one of the following:				
	<ul style="list-style-type: none"> working practices 				
	<ul style="list-style-type: none"> working methods 				
	<ul style="list-style-type: none"> quality 				
	<ul style="list-style-type: none"> tools and equipment 				
	<ul style="list-style-type: none"> internal communication 				
	<ul style="list-style-type: none"> teamwork 	Unit 02 Page 9 FOR ALL			
	<ul style="list-style-type: none"> training and development 				
	<ul style="list-style-type: none"> safety 				
	<ul style="list-style-type: none"> other 				

WITNESS STATEMENT

I confirm the candidate:

Candidate Name	
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Satisfied the criteria for Unit 202 Carrying Out Engineering Activities Efficiently and Effectively
When he/she:

- Dealt with a problem with a defective socket when undertaking the dismantling procedure on Assessment 2 of Unit 019
- Dealt with a problem when a defective gasket was issued during the undertaking of assessment 1 of Unit 019

On **three separate occasions** during assessments the candidate also:

- Maintained working relationships with staff and colleagues.
- Turned up on time and suitably dressed
- Followed instructions and checked uncertainties
- Sought information and assistance in a polite, courteous manner.
- Took advice in a positive way.
- Dealt with disagreements in an amicable and constructive way.
- Communicated with others so they knew of his actions and any effect this would have upon them.
- Showed respect for others views, rights and responsibilities throughout the training period at TTE
- Contributed to and communicated an opportunity for improvement during a question and answer session on the subject, covering all point in item 17, criteria page 8.
- Contributed to procedures and opportunities during the induction ice breaker session.

The candidate proved competent see declaration page 4

PLACE COPY OF REVIEW HERE AND NUMBER PAGE 10

Candidate Name	
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Describe the level of skill, knowledge and understanding needed for competence in your areas of work.

Describe your development objectives and how these have been met

What are your expectations and progress toward your objectives?

The candidate proved competent see declaration Page 4

Underpinning Knowledge

Candidate	
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1	Describe the safe working practices and procedures to be followed whilst preparing and tidying up their work area
2	Explain how to present themselves in the workplace suitably dressed for the activities to be undertaken (such as being neat, clean and dressed in clothes appropriate to the area of activity; ensuring that, if they have long hair, it is tied back or netted; and removing any jewellery or other items that can become entangled in the machinery)

3	Describe the personal protective equipment to be worn for the engineering activities undertaken (such as correctly fitting overalls, safety shoes, eye protection, ear protection)
4	Describe the correct use of any equipment used to protect the health and safety of themselves and their colleagues
5	Explain how to plan and prepare to carry out the engineering activity (such as obtaining the appropriate drawings/documentation to be used, determining the materials required, determining the tools and equipment required, determining a suitable sequence of operations, determining the quality checks to be made and equipment to be used)

6	Describe the procedure for ensuring that all documentation relating to the work being carried out is available, prior to starting the activity
7	Describe the procedure for ensuring that all tools and equipment are available prior to undertaking the activity
8	Describe the checks to be carried out to ensure that tools and equipment are in full working order, prior to undertaking the activity
9	Describe the checks to be carried out to ensure that all materials required are correct and complete, prior to undertaking the activity

10	Describe the action that should be taken if documentation, tools and equipment or materials are incomplete or do not meet the requirements of the activity
11	Describe their role in helping to develop their own skills and knowledge (such as checking with their supervisor about the work they are expected to carry out and the standard they need to achieve; the safety points to be aware of and the skills and knowledge they will need to develop)
12	Describe the benefits of continuous personal development, and the training opportunities that are available in the workplace

13	Describe the importance of reviewing their training and development with trainers and supervisors, of comparing the skills, knowledge and understanding that they have at any given point with the competences they need to develop, and of setting objectives to overcome any shortfall or address any development needs
14	Describe their responsibilities for providing evidence of their performance and progress (such as submitting work for assessment or the completion of assignments or tests)
15	Describe the importance of maintaining effective working relationships within the workplace (such as listening attentively to instructions told to them by their supervisor, making sure they ask for help and advice in a polite and courteous manner, responding positively to requests for help from others)

16	Describe the reason for informing others of their activities which may have impact on their work (such as the need to temporarily disconnect a shared resource like electricity or compressed air supply; making undue noise or creating sparks, fumes or arc flashes from welding)
17	Explain how to deal with disagreements with others in ways which will help to resolve difficulties and maintain long term relationships
18	Describe the organisational procedures to deal with and report any problems that can affect working relationships

19	Describe the difficulties that can occur in working relationships and how to resolve them
20	Describe the sorts of attitudes and requests that are likely to create conflict or negative responses
21	Describe the regulations that affect how they should be treated at work (such as equal opportunities and equal pay, race relations and sex discrimination, working time directive, disabled persons acts)
22	Describe the importance of making a contribution to improving working practices and

procedures, and the procedure and format for making suggestions for improvements

23

Describe the benefits to them and to the organisation if improvements can be identified and implemented

24

Describe the need to dispose of waste materials and consumables (such as oils and chemicals) in a safe and environmentally friendly way

25	Explain where tools and equipment should be stored and located, and the importance of returning all tools and documentation to their designated area on completion of their work activities
26	Explain when to act on their own initiative and when to seek help and advice from others
27	Describe the importance of leaving the work area in a safe condition on completion of their activities (such as equipment correctly isolated, cleaning the work area and removing and disposing of waste)

Assessor Declaration:

I confirm that this candidate has met the assessment criteria for underpinning knowledge. See declaration page 4