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Qualification Specification

Highfield Level 2 Certificate in Business Improvement Techniques (RQF)

Qualification Number: 601/3198/6

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Highfield Level 2 Certificate in Business Improvement Techniques (RQF)

Introduction

This qualification specification is designed to outline all you need to know to offer this qualification at your centre. If you have any further questions, please contact your account manager.

Qualification regulation and support

The Highfield Level 2 Certificate in Business Improvement Techniques (RQF) has been developed and is awarded by Highfield Qualifications and sits on the Regulated Qualifications Framework (RQF). The RQF is a qualification framework regulated by Ofqual and CCEA Regulation. The qualification is also regulated by Qualifications Wales.

Key facts

Qualification number:	601/3198/6
Learning aim reference:	60131986
Credit value:	18
Assessment method:	Portfolio of evidence
Guided learning hours (GLH):	102
Total qualification time (TQT):	180

Qualification overview and objective

The objective of this qualification is to support a role in the workplace and the qualification is designed for those learners wishing to understand and use business improvement techniques. These techniques can be applied to a variety of sectors from manufacturing through to office based roles and ensures that business processes are planned and executed as efficiently as possible, identifying and, minimising waste whilst ensuring the highest quality.

It can be delivered as a standalone programme or as the knowledge component of the Business Improvement Techniques pathway of the Level 2 Intermediate SASE Apprenticeship in Improving Operational Performance.

Entry requirements

This qualification is approved for delivery to learners aged 16+. It is recommended that learners have a minimum of level 1 English and maths prior to enrolling on this qualification.

Guidance on delivery

The total qualification time for this qualification is 180 and of this 102 are recommended as guided learning hours.

TQT is an estimate of the total number of hours it would take an average learner to achieve and demonstrate the necessary level of attainment to be awarded with a qualification, both under direct supervision (forming guided learning hours) and without supervision (all other time). TQT and GLH values are advisory and assigned to a qualification as guidance.

Guidance on assessment

This qualification is assessed by a portfolio of evidence which must cover all assessment criteria of selected units. This will be internally assessed and quality assured by the centre. Suggested paperwork is available to download on the Highfield Qualifications website. If a Centre would like to use alternative paperwork, this must be sent to Highfield for approval before commencement of the course.

Centres must take all reasonable steps to avoid any part of the assessment of a learner (including any internal quality assurance and invigilation) being undertaken by any person who has a personal interest in the result of the assessment.

Guidance on quality assurance

Highfield Qualifications requires centres to have in place a robust mechanism for internal quality assurance of training delivery and internal assessment processes.

Recognition of prior learning (RPL)

Centres may apply to use recognition of prior learning or prior achievement to reduce the amount of time spent in preparing the learner for assessment.

For further information on how centres can apply to use RPL as described above, please refer to the Recognition of Prior Learning (RPL) policy in the members' area of the Highfield Qualifications website. This policy should be read in conjunction with this specification and all other relevant Highfield Qualifications documentation.

Assessor requirements

Highfield Qualifications requires that nominated assessors for this qualification meet the following:

- hold a relevant subject area qualification [or experience], which could include any of the following:
  - Highfield Level 2 Certificate in Business Improvement Techniques (QCF) or above;
  - Highfield Level 2 Certificate Lean Organisational Management Techniques (QCF);
  - At least 5 years' experience in a similar role maintain appropriate continued professional development for the subject area

It is not a requirement that assessors of this qualification hold a formal assessing qualification, however it is recognised as good practice.

Assessors should also be able to demonstrate relevant experience and knowledge in a work context and provide evidence of engagement with the subject field and continuing professional development.

Internal quality assurance (IQA) requirements

Highfield Qualifications require that IQA officers of this qualification hold a qualification in the relevant subject area as specified in the nominated tutors section above.

It is not a requirement that IQA officers of this qualification hold a formal IQA qualification, however it is recognised as good practice.

Mapping to National Occupational Standards (NOS)

This qualification maps to the National Occupational Standards for Business Improvement Techniques.

Reasonable adjustments and special considerations

Highfield Qualifications has measures in place for learners who require additional support. Please refer to Highfield Qualifications' Reasonable Adjustments Policy for further information/guidance.

ID requirements

It is the responsibility of the centre to have systems in place to ensure that the person taking an assessment is indeed the person they are claiming to be. All centres are therefore required to ensure that each learner's identification is checked before they undertake the assessment. Highfield Qualifications recommends the following as proof of a learner's identity:

- a valid passport (any nationality)
- a signed UK photocard driving licence
- a valid warrant card issued by HM forces or the police
- another photographic ID card, e.g. employee ID card, student ID card, travel card etc.

If a learner is unable to produce any of the forms of photographic identification listed above, a centre may accept another form of identification containing a signature, for example, a credit card. Identification by a third-party representative, such as a line manager, human resources manager or invigilator, will also be accepted.

For more information on learner ID requirements, please refer to Highfield Qualifications' Core Manual.

Progression opportunities

On successful completion of this qualification, learners may wish to continue their development by undertaking one of the following qualifications:

- Highfield Level 2 Certificate in Lean Organisation Management Techniques (RQF)
- Highfield Level 2 NVQ Diploma in Business Improvement Techniques (RQF)
- Level 3 NVQ Diploma in Business Improvement Techniques
- Level 4 NVQ Diploma in Business Improvement Techniques

Useful websites

SEMTA http://www.semta.org.uk

Additional support/training

The National Counter Terrorism Security Office (NaCTSO) is a police unit that works alongside the Home Office to support the 'protect and prepare' areas of the government's counterterrorism strategy. You can find information, advice and guidance on recognising, acting on and reporting suspicious behaviour on the following website: www.gov.uk/government/organisations/national-counterterrorism-security-office

As an apprentice you should access the free NaCTSO Action Counters Terrorism (ACT) Awareness e-learning course. This award-winning and invaluable training tool is essential in supporting your understanding of your role in recognising and preventing terrorism and what to do in the event of a terrorist attack.

To access the course:

- follow the link: http://ct.highfieldelearning.com/org/TheHighfieldGroup
- answer the questions
- click start

Appendix 1: Qualification structure

To complete the **Highfield Level 2 Certificate in Business Improvement Techniques (RQF),** learners must complete the following:

- **all units** contained within the mandatory group
- a **minimum of 3 credits** from optional group A

Mandatory group
Learners must achieve **all units** in this group

Unit number	Unit reference	Unit title	Level	GLH	Credit
1	R/602/4137	Statutory Regulations and Organisational Safety Requirements	2	14	3
2	F/602/4148	Contributing to effective team working	2	18	3
3	L/602/4203	Contributing to the Application of Workplace Organisation Techniques	2	22	3
4	A/602/4214	Contributing to the Application of Continuous Improvement Techniques _Kaizen	2	20	3
5	L/602/4220	Contributing to the development of visual management systems	2	14	3

Optional group A
Learners must achieve a minimum of **3 credits** from this group

Unit number	Unit reference	Unit title	Level	GLH	Credit
6	T/602/2526	Contributing to carrying out lead time analysis	2	18	3
7	D/602/2536	Carrying out set-up reduction techniques	2	22	3
8	H/602/2540	Contributing to the application of problem solving techniques	2	14	3
9	H/602/2604	Contributing to the application of kanban control systems	2	20	3
10	T/602/4146	Contributing to the analysis and selection of parts for improvement	2	14	3
11	J/602/4166	Carrying out autonomous maintenance	2	22	3
12	Y/602/4186	Contributing to the creation of standard operating procedures _SOP	2	14	3
13	D/602/4173	Carrying out flow process analysis	2	16	3

Appendix 2: Qualification content

Unit 1: **Statutory Regulations and Organisational Safety Requirements**
Unit number: R/602/4137
Credit: 3
GLH: 14
Level: 2

Learning Outcomes	Assessment Criteria
The learner will	***The learner can***
1 Know the principal provisions of the Health and Safety at Work Act and other current legislation	1.1 Identify the principal provisions of the Health and Safety at Work Act current legislation and other current legislation 1.2 Describe the principal provisions of the Health and Safety at Work Act and other current legislation
2 Know how current legislation affects health and safety issues in respect of employers, employees and the public	2.1 Describe how current legislation affects health and safety issues in respect of employers, employees, and the public
3 Know how to obtain information and relevant advice on the organisations health and safety policy	3.1 Obtain information and relevant advice on health and safety legislation and guidelines 3.2 Source expert assistance when help is needed on the organisations health and safety policy
4 Know the general safe working practices associated with operations in the workplace	4.1 Describe the general safe working practices associated with operations in the workplace 4.2 Describe the implications and consequences of the appropriate legislation and guidelines not being followed
5 Know the types, causes, and consequences of workplace accidents and emergencies	5.1 Identify the types of accidents and emergencies that can occur in the workplace 5.2 Describe what are the root cause of accidents and what are the methods for preventing them 5.3 Describe the far-reaching consequences of workplace accidents 5.4 Describe the first aid arrangements required in the workplace
6 Know the procedures to be followed in the event of accidents, injuries, the evacuation of the premises, and dangerous occurrences or hazardous malfunctions	6.1 Identify the procedures to be followed in the event of accidents or injuries 6.2 Describe what an evacuation of the premises would require 6.3 Describe what would be considered a dangerous occurrence or hazardous malfunction
7 Know the hazards and risks associated with work activities and the importance of being involved in the risk assessment procedure	7.1 Describe what is meant by a 'hazard' 7.2 Describe what is meant by a 'risk' 7.3 Identify the hazards and risks that are found in the workplace, and who could be affected 7.4 Describe why risk assessments are necessary, and who needs to be involved in their production

Learning Outcomes	Assessment Criteria
The learner will	***The learner can***
8 Be able to carry out a risk assessment activity	8.1 Carry out a risk assessment using a given scenario and complete a risk assessment sheet 8.2 Describe the criteria for carrying out a risk assessment 8.3 Describe what documentation will be used in a risk assessment 8.4 Describe what techniques are necessary to ensure a risk assessment is carried out effectively 8.5 Describe how the results of a risk assessment would be publicised
9 Know the steps necessary to minimise the risk of injury or damage when moving a load	9.1 Describe what is meant by manual and mechanical handling 9.2 Identify what regulations apply to manual handling and lifting, and why they are needed 9.3 Describe their responsibilities with regard to safe manual handling 9.4 Describe the correct technique for safe manual handling
10 Be able to correctly and safely move a load using the appropriate methods and techniques	10.1 Manually lift a load using the correct manual handling procedure 10.2 Describe the correct procedure and technique needed to carry out the safe manual lifting of a load
11 Know how to apply good housekeeping and safe working practices as a basis for the safe implementation of lean business activities	11.1 Describe how good housekeeping and safe working practices are a basis for the safe implementation of business activities 11.2 Describe how good housekeeping and safe working practices are integral activities and key parts of **lean business activities**

Amplification
11.2 Lean business activities, such as: • 5S • 5C • TPM • Set up reduction techniques etc

Unit 2: **Contributing to effective team working**
Unit number: F/602/4148
Credit: 3
GLH: 18
Level: 2

Learning Outcomes	Assessment Criteria
The learner will	***The learner can***
1. Know the different types of team roles, and how they contribute to effective team working	1.1. Identify different types of team roles 1.2. Describe how different team roles contribute to effective working 1.3. Identify the skills needed for an effective team
2. Know how working relationships need to extend across appropriate work groups and departments	2.1. Classify the different types of work groups 2.2. Identify the need for appropriate working relationships 2.3. Describe working relationships across work groups and departments
3. Be able to identify individual strengths and weaknesses, and how they contribute to the effectiveness	3.1. Identify strengths and weaknesses using a workplace situation or a given scenario 3.2. Describe how individual strengths and weaknesses contribute to the effectiveness of a team 3.3. Categorise and relate observations to team performance 3.4. Identify what team skills are important for different environments 3.5. Identify strengths and weaknesses in an existing team
4. Know how individuals behaviour and appearance may be perceived by others	4.1. Describe how appearances can be deceptive 4.2. Describe the potential dangers associated with stereotypes
5. Know the importance of creating and maintaining effective working relationships	5.1. Describe the importance of good working relationships
6. Know the types of problems and difficulties that can occur within team working relationships, and how they can be resolved	6.1. Identify the types of problems and difficulties that can occur within team working relationships 6.2. Describe how problems and difficulties within team working relationships can be resolved
7. Know the importance of sharing knowledge, information, and performance measures within the team	7.1. Describe the importance of sharing appropriate information 7.2. Describe the importance of performance measures related to business performance
8. Know how to present information in an amicable and constructive manner, in relation to the team or individual circumstance	8.1. Understand how to treat sensitive information 8.2. Present information in a non-threatening and positive manner
9. Be able to use different types of communication methods, in order to keep others informed	9.1. Use written, visual, and verbal means to create a forum for sharing ideas, problem solving, and for keeping others informed 9.2. Identify the different types of communication methods 9.3. Describe how different types of communication methods are applied

Learning Outcomes	Assessment Criteria
The learner will	***The learner can***
10. Know how to identify the mixture of skills and experience available within a team	10.1. Identify the mix of available skills and experience that will be of benefit to the team
11. Know how the mixture of skills and experience within a team, contributes to effective team working	11.1. Describe how the available skills and experience in a team is used to contribute to effective team working

Unit 3: **Contributing to the Application of Workplace Organisation Techniques**
Unit number: L/602/4203
Credit: 3
GLH: 22
Level: 2

Learning Outcomes	Assessment Criteria
The learner will	***The learner can***
1. Know what a work environment is, and what is meant by an organised working environment	1.1. Describe a working environment 1.2. Describe what is meant by an organised working environment
2. Be able to identify the benefits that can be achieved by having an organised working environment	2.1. Identify from a given scenario, examples of poor workplace organisation, and what improvements could be made 2.2. Describe what an organised working environment looks like 2.3. Describe the benefits that can be had by having an organised working environment
3. Know the methods and techniques for workplace organisation, and how they are used	3.1. Identify the 5 steps involved in workplace organisation 3.2. Identify when the steps of workplace organisation are used 3.3. Describe where the steps of workplace organisation are used 3.4. Describe why the steps of workplace organisation are used
4. Know how the steps of workplace organisation are implemented	4.1. Describe the different stages of workplace organisation 4.2. Describe the order that the different stages of workplace organisation are implemented
5. Be able to apply the first three steps of workplace organisation	5.1. Select a suitable area to carry out the activity 5.2. Apply the first three steps of workplace organisation, by contributing to A workplace organisation activity 5.3. Describe what 'sorting out/ clearing up' is, why it is done, its benefits, and the stages involved. 5.4. Describe what 'straighten/ configuring (organising)' is, why it is done, it's benefits, and the stages involved. 5.5. Describe what 'scrub/ clean' is, why it is done, it's benefits, and the stages involved
6. Know the fourth and fifth steps of workplace organisation in order to sustain and improve the workplace	6.1. Describe what 'standardising / conforming' is, why it is done, it's benefits, and the stages involved 6.2. Describe what 'self-discipline / custom and practice' is, why it is done, it's benefits, and the stages involved
7. Be able to carry out a tagging exercise	7.1. Carry out a tagging exercise 7.2. Describe the preparations required to carry out an effective tagging exercise 7.3. Describe how a workplace tagging activity is carried out to assist in the removal of unwanted items from the workplace

Learning Outcomes	Assessment Criteria
The learner will	***The learner can***
8. Know how to redeploy or dispose of non-essential items from the workplace	8.1. Describe how to carry out the redeployment of non-essential items from the workplace 8.2. Describe how to dispose of non-essential items from the workplace
9. Know why it is necessary to audit workplace organisation activities, and the tools and techniques that are used	9.1. Describe the reason for auditing the activity, and the audit process 9.2. Identify the tools and techniques that are used to measure the performance of a 5 step workplace
10. Be able to carry out a workplace organisation audit	10.1. Carry out a workplace organisation audit 10.2. Describe the criteria for carrying out a workplace organisation audit 10.3. Describe what documentation will be used 10.4. Understand what techniques are necessary to ensure the audit is carried out effectively 10.5. Describe how the results of the workplace organisation audit will be publicised
11. Know how aspects of health, safety, and team work may improve as a result of good workplace organisation	11.1. Describe how improved workplace organisation can improve health and safety 11.2. Describe how improved workplace organisation can improve team work and communication
12. Know how workplace organisation fits in with other lean business techniques	12.1. Describe how effective workplace organisation is fundamental to **other lean methodologies** 12.2. Describe how effective workplace organisation techniques fit in with **other lean methodologies**

Amplification
12.1 Other lean methodologies • for example, TPM, SMED 12.2 Other lean methodologies • for example, TPM, SMED

Unit 4: **Contributing to the Application of Continuous Improvement Techniques _Kaizen_**
Unit number: A/602/4214
Credit: 3
GLH: 20
Level: 2

Learning Outcomes	Assessment Criteria
The learner will	***The learner can***
1. Know the importance and need to continuously improve productivity in the working environment	1.1. Describe the underlying principles that support continuous improvement 1.2. Describe the meaning of continuous improvement, competitiveness, productivity, and breakthrough improvement 1.3. Describe why continuous improvement in the marketplace allows a company to keep its competitive edge
2. Know the types of improvement that can be made as part of continuous improvement	2.1. Describe the improvements that can result from kaizen deployment 2.2. Describe the types of improvement appropriate to their workplace
3. Know what is meant by the term 'waste' in business, and how it affects productivity	3.1. Describe what is meant by the term 'waste' 3.2. Identify waste in the manufacturing process
4. Be able to contribute to the elimination of 'waste' in a workplace	4.1. Identify 'waste', and suggest how to eliminate it 4.2. Describe the methods used to eliminate 'waste'
5. Know what benchmarking is	5.1. Describe the term benchmarking, and how it is applied 5.2. Describe typical benchmarking measures
6. Know the potential benefits of benchmarking	6.1. Describe the potential benefits of benchmarking 6.2. Describe how to apply benchmarking in the workplace
7. Know how to identify the type of improvements that can be made in the workplace	7.1. Identify the areas where improvements can be made
8. Know the '12' steps to carrying out a continuous improvement activity	8.1. Identify the '12' steps to carrying out a continuous improvement activity 8.2. Analyse the facts and identify possible solutions 8.3. Choose the best solution
9. Be able to carry out a continuous improvement activity	9.1. Carry out a continuous improvement activity 9.2. Describe the key factors to achieving a successful continuous improvement activity 9.3. Recognise and consider the key factors to achieving a successful continuous improvement activity
10. Know the key performance indicators that are used to measure improvements	10.1. Describe the key performance indicators that are used
11. Know how performance indicators are applied, and the results visually communicated	11.1. Describe appropriate performance measures 11.2. Describe simple ways to visually display results

Learning Outcomes	Assessment Criteria
The learner will	***The learner can***
12. Know the role of standard operating procedures in sustaining improvements	12.1. Describe the role of standard operating procedures in sustaining improvements
13. Know the importance of an appropriate environment for improvement	13.1. Describe the barriers to implementing change 13.2. Describe the factors that encourage a culture of continuous improvement

Unit 5: **Contributing to the development of visual management systems**
Unit number: L/602/4220
Credit: 3
GLH: 14
Level: 2

Learning Outcomes	Assessment Criteria
The learner will	***The learner can***
1. Know what is meant by 'visual management', and the benefits that can be gained from having visual management systems in place	1.1. Describe what is meant by 'visual management' 1.2. Describe what benefits can be gained by applying a visual management system
2. Know how the principles and processes of visual management can be applied in the workplace	2.1. Describe the principles and processes of visual management 2.2. Describe how visual management can be applied in the workplace
3. Know the different forms of visual management, and to what part of the business they can be applied	3.1. Describe the different forms of visual management 3.2. Identify the parts of the business to which they can be applied
4. Be able to display information, and key business and local performance measures	4.1. List the visual management systems in the current working environment 4.2. Identify what information is displayed, and its effectiveness 4.3. List the information, and key business and local performance indicators that can be displayed visually 4.4. Describe the effect of the displays
5. Know the improvement actions and measurement techniques that will facilitate the deployment of a visual management system	5.1. Describe what actions and improvements will facilitate the deployment of a visual management system 5.2. Describe the measurement techniques that can be displayed within a visual Management system
6. Know how to employ an improvement action that requires a visual management system activity within a work area	6.1. Describe how to employ an improvement action that requires a visual management system 6.2. Select an area to display information
7. Know how to prepare and carry out the visual management activity within a chosen work area	7.1. Describe how to prepare the visual management activity within a chosen work area 7.2. Describe how to carry out a visual management activity within a chosen work area
8. Be able to display and maintain information, using the most appropriate and effective methods	8.1. Design a simple visual management system to display data 8.2. Justify the design, production, and maintenance of the visual management system 8.3. Display the information gained using the most appropriate and cost effective measures 8.4. Maintain the information displayed cost effectively

Learning Outcomes	Assessment Criteria
The learner will	***The learner can***
9. Know how further improvement actions continue to drive the information and development of the system	9.1. Describe how further improvement actions will drive the implementation of the system 9.2. Describe how further improvement actions will help the development of the system
10. Know how visual management systems fit in with other lean business activities	10.1. Describe how visual management systems fit in with other **lean business activities** 10.2. Identify the type of activities suitable for using visual displays

Amplification
10.1 Lean business activities • for example, TPM, JIT, SMED

Unit 6: **Contributing to carrying out lead time analysis**
Unit number: T/602/2526
Credit: 3
GLH: 18
Level: 2

Learning Outcomes	Assessment Criteria
The learner will	***The learner can***
1. Know what lead time is, and how it is used as an improvement tool in a lean business environment	1.1. Describe what lead time is 1.2. Explain how lead time analysis can be used as an improvement tool
2. Know how to identify the representative parts or processes that are suitable for the production of a lead time profile	2.1. Identify the key factors for selecting items or processes for analysis and profiling
3. Know the type of information required to compile a draft outline of lead time profiles	3.1. Identify the types of information needed to compile lead time profiles 3.2. Source the information required to compile lead time profiles
4. Be able to create a lead time profile and frequency diagram for the part or processes that have been analysed	4.1. Create lead time profiles and frequency diagrams 4.2. Analyse and present lead time data 4.3. Analyse and present delivery performance data
5. Know how to fully analyse the current practice in order to identify potential improvements	5.1. Analyse current processes to find areas for improvement 5.2. Describe which tools and techniques may be used
6. Know the type of improvements that can be made to reduce lead time, with defined, quantifiable, objectives, and targets	6.1. Describe the types of improvements that can achieve lead time reduction 6.2. Describe the importance of quantifiable objectives and targets
7. Know the implementation issues that can arise as a result of proposed improvements to achieve a targeted lead time	7.1. Describe the issues that could arise with proposed improvements 7.2. Describe the potential barriers to implementation
8. Know how to plan the improvements needed, and the consequences for the business of not being able to achieve the benefits	8.1. Identify the key points in planning improvements 8.2. Describe the consequences of not achieving the planned benefits
9. Know how Lead Time Analysis fits in with other lean business activities	9.1. Describe how Lead Time Analysis compliments Value Stream Mapping (VSM), and Flow Process Analysis (FPA) 9.2. Describe how Lead Time Analysis may be used together with other improvement tools and techniques

Unit 7: **Carrying out set-up reduction techniques**
Unit number: D/602/2536
Credit: 3
GLH: 22
Level: 2

Learning Outcomes	Assessment Criteria
The learner will	***The learner can***
1. Know the principles of 'Set up reduction techniques', and how it can improve business efficiency and profitability	1.1. Describe the principles of 'Set up reduction techniques' and how it can improve business efficiency and profitability
2. Know how to critically evaluate the changes that have been made, or are being proposed, to the set-up activity	2.1. Critically evaluate the changes that have been made, or are being proposed to the set-up activity
3. Know the role and application of standard operating procedures in sustaining improvements	3.1. Describe the role of standard operating procedures in sustaining improvements
4. Know how effective process set up and changeover techniques can build effective team working in the workplace	4.1. Explain how effective process set up and changeover techniques can build up effective team work in the workplace
5. Know how effective process set up and changeover techniques fits in with other lean business principles	5.1. Describe how effective process set up and changeover techniques fits in with other **lean business principles**
6. Know why a machine, process or operation can be selected for the improvement activity, and what range of improvements can be possible	6.1. Explain why a machine, process or operation would be selected for the improvement activity 6.2. Describe the range of improvements that are possible
7. Know the difference between motion and work, and what is meant by value adding and non-value adding activities	7.1. Describe the difference between motion and work 7.2. Describe the difference between value adding and non-value adding activities
8. Be able to carry out the basic steps in a set up procedure	8.1. Describe the basic elements of a set up procedure 8.2. Analyse the elements of a set up procedure 8.3. Carry out the basic steps or functions in a set up procedure and apply it to a machine / process, bottleneck or constraint
9. Know the basic steps to be followed in a set up procedure aimed at streamlining the set up operation	9.1. Describe the basic steps to be followed in a set up procedure aimed at streamlining the set of operations
10. Know the preparation needed to be done prior to a set up reduction activity taking place	10.1. Describe the preparation needed prior to a set up reduction activity taking place

Learning Outcomes	Assessment Criteria
The learner will	***The learner can***
11. Be able to apply the practical steps of 'set up reduction techniques' using the 'Single Minute Exchange of Dies' (SMED) technique	11.1. Use the SMED technique to improve a set up that has been observed 11.2. Prepare a basic standard operating procedure for the set up observed 11.3. Identify the steps that form part of a set up 11.4. Describe how to apply the practical steps of 'set up reduction' techniques using the principles of 'Single Minute Exchange of Dies' (SMED)
12. Know how to apply effective problem solving methods and techniques to further improve the set up activity	12.1. Describe how to apply effective problem solving methods and techniques to further improve the set up activity
13. Know how to set quantifiable targets and objectives for the improvement activity, and how they can be achieved	13.1. Set quantifiable targets and objectives for the improvement activity and how they can be achieved

Amplification
5.1 Describe how effective process set up and changeover techniques fits in with other lean business principles, • for example, 5S, TPM

Unit 8: **Contributing to the application of problem solving techniques**
Unit number: H/602/2540
Credit: 3
GLH: 14
Level: 2

Learning Outcomes	Assessment Criteria
The learner will	***The learner can***
1. Know the types of problems that can affect a business, and the effects of unresolved problems on business performance	1.1. Describe the types of problems that can affect a business 1.2. Describe the effects unresolved problems can have on business performance
2. Know the benefits of adopting a structured approach to problem solving	2.1. Describe the benefits of adopting a structured approach to problem solving involving teamwork
3. Know the techniques available to help identify, contain, and resolve problems in the workplace	3.1. Describe the range of techniques available to identify, contain if necessary, and resolve problems
4. Be able to apply the appropriate problem-solving technique to identify the root cause of a problem	4.1. Prepare a cause and effect diagram based on a given problem 4.2. Identify the possible root cause of a problem 4.3. Select the appropriate problem-solving technique 4.4. Apply the appropriate technique to identify the possible root cause of the problem
5. Know how the appropriate corrective actions are determined, selected, and implemented to resolve problems	5.1. Describe how appropriate corrective actions are determined and selected 5.2. Describe how problem-solving techniques are implemented in order to resolve problems
6. Know the tools and techniques available to prevent the recurrence of a problem	6.1. Describe the tools and techniques used to prevent the recurrence of a problem 6.2. Describe how the successful implementation of problem solving activities will be monitored
7. Know how to capture improvement opportunities, and the actions needed to carry out the improvement effectively	7.1. Describe how to capture improvement opportunities 7.2. Identify what actions are needed to carry out the improvement effectively
8. Know how effective problem recognition and problem solving can be used to identify and implement other improvement opportunities	8.1. Describe how effective problem recognition can be used to identify improvement opportunities 8.2. Describe how problem solving can be used to deal with other improvement opportunities

Unit 9: Contributing to the application of kanban control systems

Unit number: H/602/2604
Credit: 3
GLH: 20
Level: 2

Learning Outcomes	Assessment Criteria
The learner will	***The learner can***
1. Know when to use kanbans as part of a stock control, or a production control system	1.1. Describe how visual triggers and signals (kanbans) are used
2. Know the development of work flow, from traditional push, through visual pull to continuous flow systems	2.1. Describe the use of pull systems as a means of making the transition from push to flow
3. Know the various types of visual triggers that are used as a means of visual communication	3.1. Describe the various types of kanban signals that are used within control loops
4. Be able to create stock control triggers	4.1. Calculate trigger points for kanban replenishment 4.2. Describe how to apply stock control terminology to visual triggers 4.3. Explain the method for calculating 'trigger levels'
5. Know how kanbans communicate the need for action	5.1. Explain how a kanban signal becomes a signal to others 5.2. Describe the key information needed for both a kanban trigger and signal
6. Be able to design and use a two-bin system where the container acts as a trigger	6.1. Design a two-bin system based on usage and the supply environment 6.2. Describe the key factors in selecting items to be controlled by a two-bin system 6.3. Calculate container sizes
7. Know how to use multiple containers to cope with high volumes or complex supply chains	7.1. Calculate the number of containers 7.2. Describe the use of multiple containers in respect to kanban principles, when dealing with high volume or long lead time items
8. Know how kanbans are important parts of pull systems	8.1. Describe the key characteristics of a pull system
9. Know how to use input and output kanbans to create flow through a production area or series of processes	9.1. Describe how input and output kanbans can be used to control a process
10. Know the strengths and weaknesses of kanban systems	10.1. Explain the strengths and weaknesses of kanban systems

Unit 10: **Contributing to the analysis and selection of parts for improvement**
Unit number: T/602/4146
Credit: 3
GLH: 14
Level: 2

Learning Outcomes	Assessment Criteria
The learner will	***The learner can***
1. Know how to identify the selection of parts for improvement from within a chosen area or product range	1.1. Identify the key factors for selecting parts for analysis
2. Know the type of information required to select representative parts within a chosen area or product range	2.1. Identify the type of information needed to select parts for improvement 2.2. Evaluate the information to select parts
3. Know how to group identified parts into appropriate part families	3.1. Describe the production of part families based on the part stage 3.2. Describe the production of part families based on the part size 3.3. Describe the production of part families based on the manufacturing process 3.4. Describe the production of part families based on the material used to manufacture the part
4. Be able to group parts based on part shape, part size, the material used to manufacture the part, and the manufacturing process	4.1. Group identified parts into appropriate part families 4.2. Produce a finalised list of the representative parts for the chosen area or product range
5. Be able to carry out an analysis	5.1. Describe the health and safety requirements of the work area in which the activity is being undertaken 5.2. Carry out an analysis against three of the following criteria; customer schedules (volume); cost of producing the part; profit for each part as a percentage; manufacturing lead time quality (scrap and non-conformance percentage), and process or manufacturing route
6. Know the principles and process of carrying out an analysis	6.1. Describe how pie charts, bar charts, pareto analysis are used in the analysis process 6.2. Describe how to create and present bar graphs and histograms 6.3. Describe the techniques used to communicate the information and the results achieved
7. Know the difference between 'lead time' and 'cycle time'	7.1. Describe 'lead time' 7.2. Describe how 'lead time' analysis can be used as an improvement tool 7.3. Describe 'cycle time' 7.4. Describe how 'cycle time' analysis can be used as an improvement tool

Learning Outcomes	Assessment Criteria
The learner will	***The learner can***
8. Know what is meant by the term 'bill of materials' for each of the representative parts	8.1. Describe the bill of materials (BOM) structure for each of the representative parts 8.2. Explain how to identify the origin or source of the parts within a chosen area
9. Know the importance of analysing and selecting parts for improvement	9.1. Describe the type of improvements that can be achieved 9.2. Explain the issues that could arise with potential improvements
10. Know how the analysis and selection of parts for improvement fits in with other lean business techniques	10.1. Describe how the selection and analysis of parts for improvement compliments problem solving and root cause analysis techniques

Unit 11: **Carrying out autonomous maintenance**
Unit number: J/602/4166
Credit: 3
GLH: 22
Level: 2

Learning Outcomes	Assessment Criteria
The learner will	***The learner can***
1. Know the principles of Total Productive Maintenance (TPM)	1.1. Describe the principles of TPM
2. Know the ways TPM can help improve the profitability of a business	2.1. Describe how TPM can help improve the profitability of a business
3. Know the '5 pillars' of TPM, and who needs to be involved in its implementation	3.1. Describe the '5 pillars' of TPM 3.2. Identify who needs to be involved in the implementation of TPM
4. Know what preparation is required prior to a TPM activity taking place	4.1. Describe the preparation required prior to a TPM activity taking place
5. Know the health and safety requirements for the area, and the resources required for a TPM activity	5.1. Know the health and safety requirements for the area, and the resources required for a TPM activity
6. Be able to apply the practical steps of TPM	6.1. Apply the practical steps of TPM
7. Know the 6 major losses, their impact on a business, and how they can be eliminated	7.1. Describe the 6 major losses 7.2. Understand the effect of the 6 major losses on a business 7.3. Describe how the 6 major losses can be eliminated
8. Be able to collect the information needed to calculate Overall Equipment Effectiveness (OEE)	8.1. Calculate the OEE of three machines from the information provided 8.2. Obtain the information needed to calculate OEE
9. Know why it is necessary to audit TPM activities, and the techniques used	9.1. Describe why it is necessary to audit a TPM activity 9.2. Describe the techniques used to score a TPM activity audit
10. Be able to carry out a TPM audit	10.1. Carry out a TPM audit and complete the relevant documentation 10.2. Describe the criteria for carrying out the audit 10.3. Describe the documentation that will be used in the audit 10.4. Describe the techniques used to ensure the audit is carried out effectively 10.5. Describe how the results of the audit will be publicised
11. Know what aspects of business performance can improve as a result of TPM	11.1. Describe what aspects of business performance can improve as a result of TPM

Learning Outcomes	Assessment Criteria
The learner will	***The learner can***
12. Know how TPM fits in with other lean business principles	12.1. Describe how TPM fits in with other **lean business principles**

Amplification
12.1 Lean business principles • for example, 5S, 5C, SMED

Unit 12: **Contributing to the creation of standard operating procedures _SOP_**
Unit No: Y/602/4186
Credit: 3
GLH: 14
Level: 2

Learning Outcomes	Assessment Criteria
The learner will	***The learner can***
1. Know what is meant by the term standardisation as applied to a business environment	1.1. Describe what is meant by the term standardisation, and the aspects of a business it can be used to improve
2. Know how standardisation can help to make an organisation more competitive	2.1. Describe how standardisation can help to make an organisation more competitive, and how it can be achieved
3. Know what standard operating procedures are, and their benefits	3.1. Describe what standard operating procedures are 3.2. Describe the benefits of having standard operating procedures
4. Know the areas within a business environment that standard operating procedures seek to address	4.1. Describe the areas within a business environment that standard operating procedures seek to address
5. Know the key points that are included on a standard operation sheet, and the difference between a 'main step' and an 'operation'	5.1. Explain the use of a standard operating sheet 5.2. Describe the key points that are included on a standard operation sheet and the difference between a 'main step' and an 'operation'
6. Know the difference between 'value added' and 'non-value added' activities	6.1. Explain the difference between value added and non-value-added operations and activities 6.2. Describe how the difference between value added and non-value-added operations and activities is established
7. Know the principles of motion economy and how this is incorporated into standard operating procedures	7.1. Describe the principles of motion economy and how this is incorporated into a standard operating procedure
8. Be able to collect information for use in preparing a standard operating sheet	8.1. Prepare a standard operating procedure for a task 8.2. Check and amend a standard operating procedure as required 8.3. Describe the information that would be included in a standard operating procedure 8.4. Describe how to collect information for use in a standard operating procedure
9. Know the factors that could cause a review of a standard operating procedure	9.1. Describe the factors that could cause a review of standard operating procedures
10. Know the reasons for having reviews of standard operating procedures	10.1. Describe the reasons for reviewing standard operating procedures

Learning Outcomes	Assessment Criteria
The learner will	***The learner can***
11. Know what factors could cause a revision to standard operating procedures	11.1. Describe the factors that could cause a revision to standard operating procedures

Unit 13: **Carrying out flow process analysis**
Unit No: D/602/4173
Credit: 3
GLH: 16
Level: 2

Learning Outcomes	Assessment Criteria
The learner will	***The learner can***
1. Know the principles of Flow Process Analysis, its benefits and use in a lean manufacturing environment	1.1. Describe Flow Process Analysis 1.2. Describe the benefits of Flow Process Analysis within a lean manufacturing environment
2. Be able to establish 'value added' and 'non-value added' activities	2.1. Analyse a series of processes and calculate or deduce step times and categories 2.2. Describe what is meant by 'value added' and 'non-value added' activities
3. Know how Flow Process Analysis is applied to a part or process to help identify where waste or problem conditions occur	3.1. Describe how to select a process to be mapped 3.2. Describe how Flow Process Analysis is applied to identify waste or problem conditions
4. Be able to construct a flow analysis sheet to map the process	4.1. Construct a flow analysis sheet (process chart) 4.2. Describe how to construct a flow analysis sheet (process chart) 4.3. Explain the 5 basic symbols used in Process Mapping
5. Know how to carry out a Flow Process Analysis on a chosen part, using appropriate tools and techniques	5.1. Describe how to carry out Flow Process Analysis using appropriate tools and techniques
6. Know how to produce a visual representation of a process using appropriate mapping techniques	6.1. Describe how to produce a visual representation of a process map
7. Know the type of improvements that can be made to the process, with defined, quantifiable objectives and targets	7.1. Describe the type of improvements that can be made 7.2. Describe the types of quantifiable objectives and targets that should be set
8. Know the implementation issues that can arise as a result of proposed improvements	8.1. Describe the type of implementation issues that could arise
9. Know how to produce a payback matrix or efficiency statement that prioritises and evaluates improvement opportunities	9.1. Describe how to evaluate opportunities using cost/benefit, payback or efficiency measures
10. Know how Flow Process Analysis fits in with other lean business processes	10.1. Describe how Flow Process Analysis fits in with other lean business improvement processes

Appendix 3: Sample assessment material



Evidence Tracking Sheet

Mandatory Units

Learner Name	
Centre Name	

Mandatory Unit 1: Statutory Regulations and Organisational Safety Requirements (R/602/4137)				
Assessment Criteria				
Learning Outcome	**Assessment Criteria**	**Evidence Type**	**Evidence Reference**	**Date**
1 Know the principal provisions of the Health and Safety at Work Act and other current legislation	1.1 Identify the principal provisions of the Health and Safety at Work Act current legislation and other current legislation			
	1.2 Describe the principal provisions of the Health and Safety at Work Act and other current legislation			
2 Know how current legislation affects health and safety issues in respect of employers, employees and the public	2.1 Describe how current legislation affects health and safety issues in respect of employers, employees, and the public			
3 Know how to obtain information and relevant advice on the organisations health and safety policy	3.1 Obtain information and relevant advice on health and safety legislation and guidelines			
	3.2 Source expert assistance when help is needed on the organisations health and safety policy			
11 Know how to apply good housekeeping and safe working practices as a basis for the safe implementation of lean business activities	11.1 Describe how good housekeeping and safe working practices are a basis for the safe implementation of business activities			
	11.2 Describe how good housekeeping and safe working practices are integral ness activities key parts of lean business activities, such as, 5S, 5C, TPM, Set up reduction techniques etc.			

Assessment method key:			
Obs	Observation	Wit	Witness testimony
Pe	Product evidence	R	RPL
Q	Questioning	O	Other
Sim	Simulation/assignment	PD	Professional Discussion

Learner Signature		Date:	
Assessor Signature		Date:	
IQA Signature (if sampled)		Date:	
EQS Signature (if sampled)		Date:	