

Qualification Pack



Quality Manager - Electronics

QP Code: ELE/Q7902

Version: 3.0

NSQF Level: 6

Electronics Sector Skills Council of India || 155, 2nd Floor, ESC House Okhla Industrial Area-Phase 3
New Delhi- 110020 || email:anu@essc-india.org



Qualification Pack

Contents

ELE/Q7902: Quality Manager - Electronics	3
<i>Brief Job Description</i>	3
Applicable National Occupational Standards (NOS)	3
<i>Compulsory NOS</i>	3
<i>Qualification Pack (QP) Parameters</i>	3
ELE/N7906: Manage quality in the product design process	5
ELE/N7907: Manage the supplier relationship and receipt inspection process	10
ELE/N7908: Manage quality in the production process and final output	16
ELE/N7909: Manage recruitment, training and drive quality initiatives for projects	23
DGT/VSQ/N0102: Employability Skills (60 Hours)	28
Assessment Guidelines and Weightage	35
<i>Assessment Guidelines</i>	35
<i>Assessment Weightage</i>	36
Acronyms	37
Glossary	38

Qualification Pack

ELE/Q7902: Quality Manager - Electronics

Brief Job Description

A Quality Manager - Electronics is responsible for managing quality in all organisational operations. It starts from ensuring the quality of components received from the supplier to the quality of final output, including the quality of the production process. The individual also recruits, trains and manages a team of quality inspectors and supervisors, apart from driving quality initiatives in the organisation to ensure it remains competitive in the market.

Personal Attributes

The individual in this job role must possess strong leadership, management, analytical and problem-solving abilities. The person must be adept at using various computer applications for efficient data and record management. The individual must have good communication skills, attention to detail and a strong sense of quality in all the activities.

Applicable National Occupational Standards (NOS)

Compulsory NOS:

1. [ELE/N7906: Manage quality in the product design process](#)
2. [ELE/N7907: Manage the supplier relationship and receipt inspection process](#)
3. [ELE/N7908: Manage quality in the production process and final output](#)
4. [ELE/N7909: Manage recruitment, training and drive quality initiatives for projects](#)
5. [DGT/VSQ/N0102: Employability Skills \(60 Hours\)](#)

Qualification Pack (QP) Parameters

Sector	Electronics
Sub-Sector	Communication & Broadcasting
Occupation	Quality Maintenance
Country	India
NSQF Level	6
Credits	22

Qualification Pack

Aligned to NCO/ISCO/ISIC Code	NCO-2015/1213.0102
Minimum Educational Qualification & Experience	<p>Completed 4 year UG program (Physics/ Electronics/Electrical/Mechanical) with 3 Years of experience Relevant Experience in Electronics OR Completed 3 year UG degree (Physics/ Electronics/Electrical/Mechanical) with 3 Years of experience Relevant Experience in Electronics OR Completed 3 year diploma after 10th (Electronics /Electrical /Mechanical) with 4.5 years of experience Relevant Experience in Electronics OR Previous relevant Qualification of NSQF Level (5.5) with 1.5 years of experience Relevant Experience in Electronics</p>
Minimum Level of Education for Training in School	10th Class
Pre-Requisite License or Training	NA
Minimum Job Entry Age	18 Years
Last Reviewed On	NA
Next Review Date	30/04/2028
NSQC Approval Date	08/05/2025
Version	3.0
Reference code on NQR	QG-06-EH-03975-2025-V3-ESSCI
NQR Version	3.0

Remarks:

NA

Qualification Pack

ELE/N7906: Manage quality in the product design process

Description

This NOS unit is about identifying and taking various initiatives in the organisation to improve the quality of processes and output.

Scope

The scope covers the following :

- Identify the customer needs and concerns
- Carry out Advanced Product Quality Planning (APQP)

Elements and Performance Criteria

Identify the customer needs and concerns

To be competent, the user/individual on the job must be able to:

- PC1.** identify different methods of connecting with the target customers such as surveys, focus groups, social listening, etc.
- PC2.** connect with the target customers to understand their expectations/ concerns with the product offered by the organisation
- PC3.** collect sufficient data and analyse it to draw reliable conclusions regarding customer expectations/ concerns

Carry out Advanced Product Quality Planning (APQP)

To be competent, the user/individual on the job must be able to:

- PC4.** prepare a plan and define the program as per the customer needs and expectations from the existing or proposed product(s)
- PC5.** prepare, review and verify the product design
- PC6.** determine the material specifications and equipment requirements
- PC7.** carry out Design Failure Mode and Effect Analysis (DFMEA) to assess the failure probabilities
- PC8.** establish control plans for product prototype creation
- PC9.** design and develop the production process with a focus on product specifications, quality and production costs
- PC10.** determine the capability and reliability of the manufacturing process and product quality acceptance criteria
- PC11.** develop the verification and validation plans, and effective quality control processes
- PC12.** carry out benchmarking with the top competitors' products to ensure the relevance and quality of the product
- PC13.** arrange for carrying out production trial runs
- PC14.** collect and assess the data related to quality planning effectiveness
- PC15.** evaluate and test the product output to confirm the effectiveness of the deployed manufacturing approach
- PC16.** carry out necessary adjustments to the product and process, if required

Qualification Pack

- PC17.** arrange external technical help such as a process engineer or technical assistant, if required
- PC18.** identify issues and implement corrective actions to support continual improvement and reduce process variations
- PC19.** ensure the relevant legal and safety standards are followed in the designing process

Knowledge and Understanding (KU)

The individual on the job needs to know and understand:

- KU1.** different methods of connecting with the target customers such as surveys, focus groups, social listening to understand their expectations/ concerns with the product offered by the organisation
- KU2.** the methods of collecting data and analyse it to draw reliable conclusions regarding customer expectations/ concerns
- KU3.** the importance and process of carrying out Advanced Product Quality Planning (APQP)
- KU4.** how to prepare a plan and define the program as per the customer needs and expectations from the existing or proposed product(s)
- KU5.** the importance of conducting production trial runs and testing the product output to confirm the effectiveness of the deployed manufacturing approach before launching full-scale production
- KU6.** the importance and process of identifying issues and taking corrective actions to support continual improvement and reduce process variations
- KU7.** applicable legal and safety standards to be followed in the designing process

Generic Skills (GS)

User/individual on the job needs to know how to:

- GS1.** write formal emails and letters to communicate with the senior management and suppliers
- GS2.** read the relevant literature to keep abreast with the latest developments in the field of work
- GS3.** communicate politely and professionally
- GS4.** listen attentively to understand the information being shared
- GS5.** plan and schedule tasks to ensure timely completion
- GS6.** identify possible disruptions to work and take appropriate preventive measures
- GS7.** take quick decisions to deal with workplaces emergencies/ accidents
- GS8.** analyse work processes to identify improvements
- GS9.** coordinate with the co-workers to achieve the work objectives

Qualification Pack

Assessment Criteria

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
<i>Identify the customer needs and concerns</i>	6	9	-	3
PC1. identify different methods of connecting with the target customers such as surveys, focus groups, social listening, etc.	-	-	-	-
PC2. connect with the target customers to understand their expectations/ concerns with the product offered by the organisation	-	-	-	-
PC3. collect sufficient data and analyse it to draw reliable conclusions regarding customer expectations/ concerns	-	-	-	-
<i>Carry out Advanced Product Quality Planning (APQP)</i>	24	46	-	12
PC4. prepare a plan and define the program as per the customer needs and expectations from the existing or proposed product(s)	-	-	-	-
PC5. prepare, review and verify the product design	-	-	-	-
PC6. determine the material specifications and equipment requirements	-	-	-	-
PC7. carry out Design Failure Mode and Effect Analysis (DFMEA) to assess the failure probabilities	-	-	-	-
PC8. establish control plans for product prototype creation	-	-	-	-
PC9. design and develop the production process with a focus on product specifications, quality and production costs	-	-	-	-
PC10. determine the capability and reliability of the manufacturing process and product quality acceptance criteria	-	-	-	-
PC11. develop the verification and validation plans, and effective quality control processes	-	-	-	-

Qualification Pack

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
PC12. carry out benchmarking with the top competitors' products to ensure the relevance and quality of the product	-	-	-	-
PC13. arrange for carrying out production trial runs	-	-	-	-
PC14. collect and assess the data related to quality planning effectiveness	-	-	-	-
PC15. evaluate and test the product output to confirm the effectiveness of the deployed manufacturing approach	-	-	-	-
PC16. carry out necessary adjustments to the product and process, if required	-	-	-	-
PC17. arrange external technical help such as a process engineer or technical assistant, if required	-	-	-	-
PC18. identify issues and implement corrective actions to support continual improvement and reduce process variations	-	-	-	-
PC19. ensure the relevant legal and safety standards are followed in the designing process	-	-	-	-
NOS Total	30	55	-	15

Qualification Pack

National Occupational Standards (NOS) Parameters

NOS Code	ELE/N7906
NOS Name	Manage quality in the product design process
Sector	Electronics
Sub-Sector	Generic
Occupation	Quality Maintenance
NSQF Level	6
Credits	7
Version	2.0
Last Reviewed Date	08/05/2025
Next Review Date	30/04/2028
NSQC Clearance Date	08/05/2025

Qualification Pack

ELE/N7907: Manage the supplier relationship and receipt inspection process

Description

This NOS unit is about the managing supplier relationship and inspecting the components received from the supplier to ensure the expected standards of quality are met.

Scope

The scope covers the following :

- Manage the supplier relationship
- Manage receipt inspection

Elements and Performance Criteria

Manage the supplier relationship

To be competent, the user/individual on the job must be able to:

- PC1.** formulate quality standards for components and the process of monitoring their compliance by working with the supplier
- PC2.** prepare the required training modules to train the supplier such as Corrective and Preventive Actions (CAPA) reporting
- PC3.** train the supplier to ensure the components they manufacture comply with the applicable quality and regulatory standards
- PC4.** ensure the supplier follows the terms of contract and quality standards to minimise the time and cost of the inspection, and achieve the quality of final output
- PC5.** ensure the supplier delivers the components in a timely manner to avoid any negative impact on the company's production process
- PC6.** detect any deviations on part of the supplier in following the quality standards and ensure the appropriate corrective action is taken promptly
- PC7.** arrange for critical performance tests to be carried out by the authorised personnel at the supplier's premises and verify the batches, if required
- PC8.** review the supplier performance regularly as per the organisational policy and make recommendations to the senior management regarding the renewal of the supplier's contract or finding new supplier(s)

Manage receipt inspection

To be competent, the user/individual on the job must be able to:

- PC9.** prepare an incoming inspection checklist, and set the process and parameters for checking the received components against the approved samples for comparison, such as common defects, Acceptance Quality Limit (AQL), etc.
- PC10.** instruct the quality inspector to carry out random sampling to ensure the components received are fit for the intended purpose
- PC11.** ensure the established industry sampling standards are followed while carrying out sampling

Qualification Pack

- PC12.** ensure that the relevant critical tests are carried out to check the critical and technical parameters as per the product design provided by the design team
- PC13.** supervise the process of identification and classification of batches with defective units above the acceptable number that don't meet the AQL
- PC14.** authorise the acceptance/ rejection of batches based on the critical tests carried out
- PC15.** report the defective batches to the supplier promptly, and arrange for the defective batches to be returned to them for replacement or corrective action to be taken by the supplier in the company premises
- PC16.** ensure accurate records with respect to the approved and rejected batches are maintained

Knowledge and Understanding (KU)

The individual on the job needs to know and understand:

- KU1.** the importance of formulating quality standards for components and the process of monitoring their compliance by the supplier
- KU2.** the importance and process of training the supplier such as CAPA and train them to ensure the components they manufacture comply with the applicable quality and regulatory standards
- KU3.** different ways to minimise the time and cost of inspection
- KU4.** the importance of receiving components from the supplier in a timely manner to avoid any negative impact on the company production process
- KU5.** how to detect deviations on part of the supplier in following the quality standards and taking corrective action promptly
- KU6.** the process of preparing an incoming inspection checklist, and setting the process and parameters for checking the received components
- KU7.** the importance of carrying out random sampling and the applicable industry sampling standards
- KU8.** the importance and process of carrying out critical tests to check the critical and technical parameters as per the product design provided by the design team
- KU9.** the importance of maintaining accurate records with respect to the approved and rejected batches

Generic Skills (GS)

User/individual on the job needs to know how to:

- GS1.** write formal emails and letters to communicate with the senior management and suppliers
- GS2.** read the relevant literature to keep abreast with the latest developments in the field of work
- GS3.** communicate politely and professionally
- GS4.** listen attentively to understand the information being shared
- GS5.** plan and schedule tasks to ensure timely completion
- GS6.** identify possible disruptions to work and take appropriate preventive measures
- GS7.** take quick decisions to deal with workplaces emergencies/ accidents



Qualification Pack

GS8. analyse work processes to identify improvements

GS9. coordinate with the co-workers to achieve the work objectives

Qualification Pack

Assessment Criteria

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
<i>Manage the supplier relationship</i>	16	24	-	7
PC1. formulate quality standards for components and the process of monitoring their compliance by working with the supplier	-	-	-	-
PC2. prepare the required training modules to train the supplier such as Corrective and Preventive Actions (CAPA) reporting	-	-	-	-
PC3. train the supplier to ensure the components they manufacture comply with the applicable quality and regulatory standards	-	-	-	-
PC4. ensure the supplier follows the terms of contract and quality standards to minimise the time and cost of the inspection, and achieve the quality of final output	-	-	-	-
PC5. ensure the supplier delivers the components in a timely manner to avoid any negative impact on the company's production process	-	-	-	-
PC6. detect any deviations on part of the supplier in following the quality standards and ensure the appropriate corrective action is taken promptly	-	-	-	-
PC7. arrange for critical performance tests to be carried out by the authorised personnel at the supplier's premises and verify the batches, if required	-	-	-	-
PC8. review the supplier performance regularly as per the organisational policy and make recommendations to the senior management regarding the renewal of the supplier's contract or finding new supplier(s)	-	-	-	-
<i>Manage receipt inspection</i>	14	31	-	8
PC9. prepare an incoming inspection checklist, and set the process and parameters for checking the received components against the approved samples for comparison, such as common defects, Acceptance Quality Limit (AQL), etc.	-	-	-	-

Qualification Pack

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
PC10. instruct the quality inspector to carry out random sampling to ensure the components received are fit for the intended purpose	-	-	-	-
PC11. ensure the established industry sampling standards are followed while carrying out sampling	-	-	-	-
PC12. ensure that the relevant critical tests are carried out to check the critical and technical parameters as per the product design provided by the design team	-	-	-	-
PC13. supervise the process of identification and classification of batches with defective units above the acceptable number that don't meet the AQL	-	-	-	-
PC14. authorise the acceptance/ rejection of batches based on the critical tests carried out	-	-	-	-
PC15. report the defective batches to the supplier promptly, and arrange for the defective batches to be returned to them for replacement or corrective action to be taken by the supplier in the company premises	-	-	-	-
PC16. ensure accurate records with respect to the approved and rejected batches are maintained	-	-	-	-
NOS Total	30	55	-	15

Qualification Pack

National Occupational Standards (NOS) Parameters

NOS Code	ELE/N7907
NOS Name	Manage the supplier relationship and receipt inspection process
Sector	Electronics
Sub-Sector	Generic
Occupation	Quality Maintenance
NSQF Level	6
Credits	3
Version	2.0
Last Reviewed Date	08/05/2025
Next Review Date	30/04/2028
NSQC Clearance Date	08/05/2025

Qualification Pack

ELE/N7908: Manage quality in the production process and final output

Description

This NOS unit is about managing the quality aspect during the production process, evaluating the quality of output and resolving any concerns identified.

Scope

The scope covers the following :

- Manage the quality in the production process
- Evaluate the quality of output
- Deal with output quality-related problems
- Collect and analyse data

Elements and Performance Criteria

Manage the quality in the production process

To be competent, the user/individual on the job must be able to:

- PC1.** ensure that the personnel involved in the production process are trained in the use of relevant tools, equipment and Personal Protective Equipment (PPE)
- PC2.** supervise inspectors, technicians and other staff and provide guidance and feedback
- PC3.** monitor and evaluate the production process to ensure compliance with the defined quality standards
- PC4.** identify deviations in the production process and take appropriate corrective action
- PC5.** ensure the components provided to the production line are defect-free
- PC6.** analyse the components that experience problems at the production line
- PC7.** develop and provide an interim corrective action (ICA) plan to the production line to suggest rework or segregation in the existing stock
- PC8.** co-ordinate with the supplier to arrange the supply of a fresh batch to the production line or rework by the supplier
- PC9.** analyse the causes of the breakdown of tools, equipment and machineries and suggest appropriate solutions
- PC10.** use the 7 Quality Control (QC) tools and Corrective Action Preventive Action (CAPA) to collect and analyse information
- PC11.** investigate product and quality-related key problems, control fluctuations in product quality and find the appropriate solutions to avoid output defects
- PC12.** ensure compliance with the relevant internal and regulatory requirements pertaining to the production process and international quality standards

Evaluate the quality of output

To be competent, the user/individual on the job must be able to:

- PC13.** evaluate the final output and compare the product properties with the pre-defined requirements to ensure the required standards of quality are achieved
- PC14.** instruct the team to carry out critical tests to ensure the product functions as expected

Qualification Pack

PC15. ensure the established process is followed for auditing and testing of the product with the participation of relevant departments

PC16. prepare a check sheet based on the observations during testing

PC17. approve the products that meet the quality standards and reject the others

Deal with output's quality-related problems

To be competent, the user/individual on the job must be able to:

PC18. highlight the Non-conformities (NCs) in the rejected products and initiate rework

PC19. ensure rework is done as per the check sheet prepared during testing

PC20. carry out analysis to identify and implement the appropriate corrective measures such as further training requirements of the production line personnel

Collect and analyse data

To be competent, the user/individual on the job must be able to:

PC21. collect statistical data with respect to the performance of the production line on the applicable quality parameters

PC22. analyse the production line's statistical data to identify quality problems

PC23. prepare a variety of quality documentation

PC24. identify and recommend changes in the production processes or quality controls to eliminate the identified problems

PC25. instruct the quality team to engage with customers and collect product feedback

PC26. analyse the product return and feedback data to identify trends and specific problems reported by the end- users

PC27. develop and monitor continuous improvement programs to reduce the number of defects, manufacturing costs and improve the overall quality of the output

Knowledge and Understanding (KU)

The individual on the job needs to know and understand:

KU1. the importance of ensuring that the personnel involved in the production process are trained in the use of relevant tools, equipment and Personal Protective Equipment (PPE)

KU2. the importance of monitoring and evaluating the production process to ensure compliance with the defined quality standards

KU3. how to identify deviations in the production process and take appropriate corrective action

KU4. the process of developing and providing an interim corrective action (ICA) plan to the production line to suggest rework or segregation in the existing stock when the production line experiences problems with components

KU5. the process of analysing the causes of the breakdown of tools, equipment and machineries and suggesting appropriate solutions

KU6. use of 7 Quality Control (QC) tools i.e. Stratification, Histogram, Check sheet, Cause and effect diagram, Pareto chart, Scatter diagram, Control chart and Corrective Action Preventive Action (CAPA) to collect and analyse information

KU7. the process of investigation product and quality-related key problems, control fluctuations in product quality and finding appropriate solutions to avoid output defects

Qualification Pack

- KU8.** the process of evaluating the quality of output by conducting critical tests to ensure the product functions as expected
- KU9.** the importance of following the established process for auditing and testing of the product with the participation of the relevant departments
- KU10.** the process of preparing a check sheet based on the observations during testing and approving/ rejecting the output
- KU11.** the importance of engaging with customers to collect product feedback and analysing the product return data to identify trends and specific problems

Generic Skills (GS)

User/individual on the job needs to know how to:

- GS1.** maintain work-related records
- GS2.** read the relevant literature to get the latest updates about the field of work
- GS3.** communicate politely and professionally
- GS4.** listen attentively to understand the information being shared
- GS5.** plan and schedule tasks for efficient time management
- GS6.** take quick decisions to deal with workplace emergencies/ accidents
- GS7.** evaluate all possible solutions to a problem to select the best one

Qualification Pack

Assessment Criteria

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
<i>Manage the quality in the production process</i>	12	24	-	3
PC1. ensure that the personnel involved in the production process are trained in the use of relevant tools, equipment and Personal Protective Equipment (PPE)	-	-	-	-
PC2. supervise inspectors, technicians and other staff and provide guidance and feedback	-	-	-	-
PC3. monitor and evaluate the production process to ensure compliance with the defined quality standards	-	-	-	-
PC4. identify deviations in the production process and take appropriate corrective action	-	-	-	-
PC5. ensure the components provided to the production line are defect-free	-	-	-	-
PC6. analyse the components that experience problems at the production line	-	-	-	-
PC7. develop and provide an interim corrective action (ICA) plan to the production line to suggest rework or segregation in the existing stock	-	-	-	-
PC8. co-ordinate with the supplier to arrange the supply of a fresh batch to the production line or rework by the supplier	-	-	-	-
PC9. analyse the causes of the breakdown of tools, equipment and machineries and suggest appropriate solutions	-	-	-	-
PC10. use the 7 Quality Control (QC) tools and Corrective Action Preventive Action (CAPA) to collect and analyse information	-	-	-	-
PC11. investigate product and quality-related key problems, control fluctuations in product quality and find the appropriate solutions to avoid output defects	-	-	-	-

Qualification Pack

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
PC12. ensure compliance with the relevant internal and regulatory requirements pertaining to the production process and international quality standards	-	-	-	-
<i>Evaluate the quality of output</i>	5	10	-	4
PC13. evaluate the final output and compare the product properties with the pre-defined requirements to ensure the required standards of quality are achieved	-	-	-	-
PC14. instruct the team to carry out critical tests to ensure the product functions as expected	-	-	-	-
PC15. ensure the established process is followed for auditing and testing of the product with the participation of relevant departments	-	-	-	-
PC16. prepare a check sheet based on the observations during testing	-	-	-	-
PC17. approve the products that meet the quality standards and reject the others	-	-	-	-
<i>Deal with output's quality-related problems</i>	6	7	-	3
PC18. highlight the Non-conformities (NCs) in the rejected products and initiate rework	-	-	-	-
PC19. ensure rework is done as per the check sheet prepared during testing	-	-	-	-
PC20. carry out analysis to identify and implement the appropriate corrective measures such as further training requirements of the production line personnel	-	-	-	-
<i>Collect and analyse data</i>	7	14	-	5
PC21. collect statistical data with respect to the performance of the production line on the applicable quality parameters	-	-	-	-
PC22. analyse the production line's statistical data to identify quality problems	-	-	-	-
PC23. prepare a variety of quality documentation	-	-	-	-

Qualification Pack

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
PC24. identify and recommend changes in the production processes or quality controls to eliminate the identified problems	-	-	-	-
PC25. instruct the quality team to engage with customers and collect product feedback	-	-	-	-
PC26. analyse the product return and feedback data to identify trends and specific problems reported by the end- users	-	-	-	-
PC27. develop and monitor continuous improvement programs to reduce the number of defects, manufacturing costs and improve the overall quality of the output	-	-	-	-
NOS Total	30	55	-	15

Qualification Pack

National Occupational Standards (NOS) Parameters

NOS Code	ELE/N7908
NOS Name	Manage quality in the production process and final output
Sector	Electronics
Sub-Sector	Generic
Occupation	Quality Maintenance
NSQF Level	6
Credits	4
Version	2.0
Last Reviewed Date	08/05/2025
Next Review Date	30/04/2028
NSQC Clearance Date	08/05/2025

Qualification Pack

ELE/N7909: Manage recruitment, training and drive quality initiatives for projects

Description

This NOS unit is about managing the quality aspect during the production process, evaluating the quality of output and resolving any concerns identified.

Scope

The scope covers the following :

- Recruit the quality team personnel
- Conduct workshops and training
- Drive quality initiatives

Elements and Performance Criteria

Recruit the quality team personnel

To be competent, the user/individual on the job must be able to:

- PC1.** recruit quality supervisors and inspectors for effective assessment of products and their components at different stages of production
- PC2.** provide documented quality standards as guidelines for their day-to-day work
- PC3.** select quality inspection tools and software to support the inspection team
- PC4.** manage the team effectively to ensure their optimum productivity and highest quality of output

Conduct workshops and training

To be competent, the user/individual on the job must be able to:

- PC5.** conduct research to identify ways to bridge the knowledge and skill gaps of the production and quality team personnel
- PC6.** prepare the required training modules and arrange the necessary resources such as audio-visual aids, tools and equipment for the training
- PC7.** conduct workshop, classroom and shop floor training to ensure the quality and production team personnel are fully equipped to perform their duties

Drive quality initiatives

To be competent, the user/individual on the job must be able to:

- PC8.** follow the lean manufacturing method to identify ways to optimise the usage of manpower and materials in the organisation
- PC9.** use the six sigma methods to improve the business processes/ Standard Operating Procedures (SOPs) in the organisation
- PC10.** reengineer the critical business processes as per the requirement to improve the quality of output and reduce production costs
- PC11.** coordinate with the relevant stakeholders to formulate and implement appropriate policies
- PC12.** identify and suggest the use of new and advanced tools and technology to improve efficiency in various business processes

Qualification Pack

Knowledge and Understanding (KU)

The individual on the job needs to know and understand:

- KU1.** the importance of conducting research to identify ways to bridge the knowledge and skill gaps of the production and quality team personnel
- KU2.** the process of preparing the required training modules
- KU3.** the process of conducting workshop, classroom and shop floor training to ensure the quality and production team personnel are fully equipped to perform their duties
- KU4.** the process of collecting and analysing statistical data with respect to the performance of the production line on the applicable quality parameters
- KU5.** the process of identifying problems and recommending appropriate changes in the production processes or quality controls
- KU6.** the process of developing and monitoring continuous improvement programs to reduce the number of defects, manufacturing costs and improve the overall quality of the output
- KU7.** the use of lean manufacturing method to identify ways to optimise the usage of manpower and materials
- KU8.** the use the six sigma methods to improve the business processes/ Standard Operating Procedures (SOPs)
- KU9.** the process of reengineering the critical business processes to improve the quality of output and reduce production costs

Generic Skills (GS)

User/individual on the job needs to know how to:

- GS1.** make work-related records
- GS2.** read the relevant literature to get the latest updates about the field of work
- GS3.** communicate politely and professionally
- GS4.** listen attentively to comprehend the information being shared
- GS5.** take quick decisions to resolve work-related issues to minimise the impact on productivity
- GS6.** plan and prioritise tasks to ensure timely completion
- GS7.** identify possible disruptions to work and take appropriate preventive measures

Qualification Pack

Assessment Criteria

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
<i>Recruit the quality team personnel</i>	8	15	-	5
PC1. recruit quality supervisors and inspectors for effective assessment of products and their components at different stages of production	-	-	-	-
PC2. provide documented quality standards as guidelines for their day-to-day work	-	-	-	-
PC3. select quality inspection tools and software to support the inspection team	-	-	-	-
PC4. manage the team effectively to ensure their optimum productivity and highest quality of output	-	-	-	-
<i>Conduct workshops and training</i>	10	20	-	5
PC5. conduct research to identify ways to bridge the knowledge and skill gaps of the production and quality team personnel	-	-	-	-
PC6. prepare the required training modules and arrange the necessary resources such as audio-visual aids, tools and equipment for the training	-	-	-	-
PC7. conduct workshop, classroom and shop floor training to ensure the quality and production team personnel are fully equipped to perform their duties	-	-	-	-
<i>Drive quality initiatives</i>	12	20	-	5
PC8. follow the lean manufacturing method to identify ways to optimise the usage of manpower and materials in the organisation	-	-	-	-
PC9. use the six sigma methods to improve the business processes/ Standard Operating Procedures (SOPs) in the organisation	-	-	-	-
PC10. reengineer the critical business processes as per the requirement to improve the quality of output and reduce production costs	-	-	-	-

Qualification Pack

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
PC11. coordinate with the relevant stakeholders to formulate and implement appropriate policies	-	-	-	-
PC12. identify and suggest the use of new and advanced tools and technology to improve efficiency in various business processes	-	-	-	-
NOS Total	30	55	-	15

Qualification Pack

National Occupational Standards (NOS) Parameters

NOS Code	ELE/N7909
NOS Name	Manage recruitment, training and drive quality initiatives for projects
Sector	Electronics
Sub-Sector	Generic
Occupation	Quality Maintenance
NSQF Level	6
Credits	6
Version	2.0
Last Reviewed Date	08/05/2025
Next Review Date	30/04/2028
NSQC Clearance Date	08/05/2025

Qualification Pack

DGT/VSQ/N0102: Employability Skills (60 Hours)

Description

This unit is about employability skills, Constitutional values, becoming a professional in the 21st Century, digital, financial, and legal literacy, diversity and Inclusion, English and communication skills, customer service, entrepreneurship, and apprenticeship, getting ready for jobs and career development.

Scope

The scope covers the following :

- Introduction to Employability Skills
- Constitutional values - Citizenship
- Becoming a Professional in the 21st Century
- Basic English Skills
- Career Development & Goal Setting
- Communication Skills
- Diversity & Inclusion
- Financial and Legal Literacy
- Essential Digital Skills
- Entrepreneurship
- Customer Service
- Getting ready for Apprenticeship & Jobs

Elements and Performance Criteria

Introduction to Employability Skills

To be competent, the user/individual on the job must be able to:

- PC1.** identify employability skills required for jobs in various industries
- PC2.** identify and explore learning and employability portals

Constitutional values – Citizenship

To be competent, the user/individual on the job must be able to:

- PC3.** recognize the significance of constitutional values, including civic rights and duties, citizenship, responsibility towards society etc. and personal values and ethics such as honesty, integrity, caring and respecting others, etc.
- PC4.** follow environmentally sustainable practices

Becoming a Professional in the 21st Century

To be competent, the user/individual on the job must be able to:

- PC5.** recognize the significance of 21st Century Skills for employment
- PC6.** practice the 21st Century Skills such as Self-Awareness, Behaviour Skills, time management, critical and adaptive thinking, problem-solving, creative thinking, social and cultural awareness, emotional awareness, learning to learn for continuous learning etc. in personal and professional life

Basic English Skills

To be competent, the user/individual on the job must be able to:

Qualification Pack

- PC7.** use basic English for everyday conversation in different contexts, in person and over the telephone
- PC8.** read and understand routine information, notes, instructions, mails, letters etc. written in English
- PC9.** write short messages, notes, letters, e-mails etc. in English

Career Development & Goal Setting

To be competent, the user/individual on the job must be able to:

- PC10.** understand the difference between job and career
- PC11.** prepare a career development plan with short- and long-term goals, based on aptitude

Communication Skills

To be competent, the user/individual on the job must be able to:

- PC12.** follow verbal and non-verbal communication etiquette and active listening techniques in various settings
- PC13.** work collaboratively with others in a team

Diversity & Inclusion

To be competent, the user/individual on the job must be able to:

- PC14.** communicate and behave appropriately with all genders and PwD
- PC15.** escalate any issues related to sexual harassment at workplace according to POSH Act

Financial and Legal Literacy

To be competent, the user/individual on the job must be able to:

- PC16.** select financial institutions, products and services as per requirement
- PC17.** carry out offline and online financial transactions, safely and securely
- PC18.** identify common components of salary and compute income, expenses, taxes, investments etc
- PC19.** identify relevant rights and laws and use legal aids to fight against legal exploitation

Essential Digital Skills

To be competent, the user/individual on the job must be able to:

- PC20.** operate digital devices and carry out basic internet operations securely and safely
- PC21.** use e- mail and social media platforms and virtual collaboration tools to work effectively
- PC22.** use basic features of word processor, spreadsheets, and presentations

Entrepreneurship

To be competent, the user/individual on the job must be able to:

- PC23.** identify different types of Entrepreneurship and Enterprises and assess opportunities for potential business through research
- PC24.** develop a business plan and a work model, considering the 4Ps of Marketing Product, Price, Place and Promotion
- PC25.** identify sources of funding, anticipate, and mitigate any financial/ legal hurdles for the potential business opportunity

Customer Service

To be competent, the user/individual on the job must be able to:

- PC26.** identify different types of customers
- PC27.** identify and respond to customer requests and needs in a professional manner.

Qualification Pack

PC28. follow appropriate hygiene and grooming standards

Getting ready for apprenticeship & Jobs

To be competent, the user/individual on the job must be able to:

PC29. create a professional Curriculum vitae (Résumé)

PC30. search for suitable jobs using reliable offline and online sources such as Employment exchange, recruitment agencies, newspapers etc. and job portals, respectively

PC31. apply to identified job openings using offline /online methods as per requirement

PC32. answer questions politely, with clarity and confidence, during recruitment and selection

PC33. identify apprenticeship opportunities and register for it as per guidelines and requirements

Knowledge and Understanding (KU)

The individual on the job needs to know and understand:

KU1. need for employability skills and different learning and employability related portals

KU2. various constitutional and personal values

KU3. different environmentally sustainable practices and their importance

KU4. Twenty first (21st) century skills and their importance

KU5. how to use English language for effective verbal (face to face and telephonic) and written communication in formal and informal set up

KU6. importance of career development and setting long- and short-term goals

KU7. about effective communication

KU8. POSH Act

KU9. Gender sensitivity and inclusivity

KU10. different types of financial institutes, products, and services

KU11. how to compute income and expenditure

KU12. importance of maintaining safety and security in offline and online financial transactions

KU13. different legal rights and laws

KU14. different types of digital devices and the procedure to operate them safely and securely

KU15. how to create and operate an e- mail account and use applications such as word processors, spreadsheets etc.

KU16. how to identify business opportunities

KU17. types and needs of customers

KU18. how to apply for a job and prepare for an interview

KU19. apprenticeship scheme and the process of registering on apprenticeship portal

Generic Skills (GS)

User/individual on the job needs to know how to:

GS1. read and write different types of documents/instructions/correspondence

GS2. communicate effectively using appropriate language in formal and informal settings



Qualification Pack

- GS3.** behave politely and appropriately with all
- GS4.** how to work in a virtual mode
- GS5.** perform calculations efficiently
- GS6.** solve problems effectively
- GS7.** pay attention to details
- GS8.** manage time efficiently
- GS9.** maintain hygiene and sanitization to avoid infection

Qualification Pack

Assessment Criteria

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
<i>Introduction to Employability Skills</i>	1	1	-	-
PC1. identify employability skills required for jobs in various industries	-	-	-	-
PC2. identify and explore learning and employability portals	-	-	-	-
<i>Constitutional values – Citizenship</i>	1	1	-	-
PC3. recognize the significance of constitutional values, including civic rights and duties, citizenship, responsibility towards society etc. and personal values and ethics such as honesty, integrity, caring and respecting others, etc.	-	-	-	-
PC4. follow environmentally sustainable practices	-	-	-	-
<i>Becoming a Professional in the 21st Century</i>	2	4	-	-
PC5. recognize the significance of 21st Century Skills for employment	-	-	-	-
PC6. practice the 21st Century Skills such as Self-Awareness, Behaviour Skills, time management, critical and adaptive thinking, problem-solving, creative thinking, social and cultural awareness, emotional awareness, learning to learn for continuous learning etc. in personal and professional life	-	-	-	-
<i>Basic English Skills</i>	2	3	-	-
PC7. use basic English for everyday conversation in different contexts, in person and over the telephone	-	-	-	-
PC8. read and understand routine information, notes, instructions, mails, letters etc. written in English	-	-	-	-
PC9. write short messages, notes, letters, e-mails etc. in English	-	-	-	-
<i>Career Development & Goal Setting</i>	1	2	-	-

Qualification Pack

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
PC10. understand the difference between job and career	-	-	-	-
PC11. prepare a career development plan with short- and long-term goals, based on aptitude	-	-	-	-
<i>Communication Skills</i>	2	2	-	-
PC12. follow verbal and non-verbal communication etiquette and active listening techniques in various settings	-	-	-	-
PC13. work collaboratively with others in a team	-	-	-	-
<i>Diversity & Inclusion</i>	1	2	-	-
PC14. communicate and behave appropriately with all genders and PwD	-	-	-	-
PC15. escalate any issues related to sexual harassment at workplace according to POSH Act	-	-	-	-
<i>Financial and Legal Literacy</i>	2	3	-	-
PC16. select financial institutions, products and services as per requirement	-	-	-	-
PC17. carry out offline and online financial transactions, safely and securely	-	-	-	-
PC18. identify common components of salary and compute income, expenses, taxes, investments etc	-	-	-	-
PC19. identify relevant rights and laws and use legal aids to fight against legal exploitation	-	-	-	-
<i>Essential Digital Skills</i>	3	4	-	-
PC20. operate digital devices and carry out basic internet operations securely and safely	-	-	-	-
PC21. use e- mail and social media platforms and virtual collaboration tools to work effectively	-	-	-	-
PC22. use basic features of word processor, spreadsheets, and presentations	-	-	-	-

Qualification Pack

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
<i>Entrepreneurship</i>	2	3	-	-
PC23. identify different types of Entrepreneurship and Enterprises and assess opportunities for potential business through research	-	-	-	-
PC24. develop a business plan and a work model, considering the 4Ps of Marketing Product, Price, Place and Promotion	-	-	-	-
PC25. identify sources of funding, anticipate, and mitigate any financial/ legal hurdles for the potential business opportunity	-	-	-	-
<i>Customer Service</i>	1	2	-	-
PC26. identify different types of customers	-	-	-	-
PC27. identify and respond to customer requests and needs in a professional manner.	-	-	-	-
PC28. follow appropriate hygiene and grooming standards	-	-	-	-
<i>Getting ready for apprenticeship & Jobs</i>	2	3	-	-
PC29. create a professional Curriculum vitae (Résumé)	-	-	-	-
PC30. search for suitable jobs using reliable offline and online sources such as Employment exchange, recruitment agencies, newspapers etc. and job portals, respectively	-	-	-	-
PC31. apply to identified job openings using offline /online methods as per requirement	-	-	-	-
PC32. answer questions politely, with clarity and confidence, during recruitment and selection	-	-	-	-
PC33. identify apprenticeship opportunities and register for it as per guidelines and requirements	-	-	-	-
NOS Total	20	30	-	-

Qualification Pack

National Occupational Standards (NOS) Parameters

NOS Code	DGT/VSQ/N0102
NOS Name	Employability Skills (60 Hours)
Sector	Cross Sectoral
Sub-Sector	Professional Skills
Occupation	Employability
NSQF Level	4
Credits	2
Version	1.0
Last Reviewed Date	08/05/2025
Next Review Date	31/10/2025
NSQC Clearance Date	08/05/2025

Assessment Guidelines and Assessment Weightage

Assessment Guidelines

1. Criteria for assessment for each Qualification Pack will be created by the Sector Skill Council. Each Performance Criteria (PC) will be assigned marks proportional to its importance in NOS. SSC will also lay down proportion of marks for Theory and Skills Practical for each PC.
2. The assessment for the theory part will be based on knowledge bank of questions created by the SSC.
3. Assessment will be conducted for all compulsory NOS, and where applicable, on the selected elective/option NOS/set of NOS.
4. Individual assessment agencies will create unique question papers for theory part for each candidate at each examination/training centre (as per assessment criteria below).
5. Individual assessment agencies will create unique evaluations for skill practical for every student at each examination/training centre based on this criterion.
6. To pass the Qualification Pack, every trainee should score a minimum of 70% of aggregate marks to successfully clear the assessment.
7. In case of unsuccessful completion, the trainee may seek reassessment on the Qualification Pack

Qualification Pack

Minimum Aggregate Passing % at QP Level : 70

(Please note: Every Trainee should score a minimum aggregate passing percentage as specified above, to successfully clear the Qualification Pack assessment.)

Assessment Weightage

Compulsory NOS

National Occupational Standards	Theory Marks	Practical Marks	Project Marks	Viva Marks	Total Marks	Weightage
ELE/N7906.Manage quality in the product design process	30	55	-	15	100	25
ELE/N7907.Manage the supplier relationship and receipt inspection process	30	55	-	15	100	25
ELE/N7908.Manage quality in the production process and final output	30	55	-	15	100	20
ELE/N7909.Manage recruitment, training and drive quality initiatives for projects	30	55	-	15	100	20
DGT/VSQ/N0102.Employability Skills (60 Hours)	20	30	-	-	50	10
Total	140	250	-	60	450	100

Qualification Pack

Acronyms

NOS	National Occupational Standard(s)
NSQF	National Skills Qualifications Framework
QP	Qualifications Pack
TVET	Technical and Vocational Education and Training

Qualification Pack

Glossary

Sector	Sector is a conglomeration of different business operations having similar business and interests. It may also be defined as a distinct subset of the economy whose components share similar characteristics and interests.
Sub-sector	Sub-sector is derived from a further breakdown based on the characteristics and interests of its components.
Occupation	Occupation is a set of job roles, which perform similar/ related set of functions in an industry.
Job role	Job role defines a unique set of functions that together form a unique employment opportunity in an organisation.
Occupational Standards (OS)	OS specify the standards of performance an individual must achieve when carrying out a function in the workplace, together with the Knowledge and Understanding (KU) they need to meet that standard consistently. Occupational Standards are applicable both in the Indian and global contexts.
Performance Criteria (PC)	Performance Criteria (PC) are statements that together specify the standard of performance required when carrying out a task.
National Occupational Standards (NOS)	NOS are occupational standards which apply uniquely in the Indian context.
Qualifications Pack (QP)	QP comprises the set of OS, together with the educational, training and other criteria required to perform a job role. A QP is assigned a unique qualifications pack code.
Unit Code	Unit code is a unique identifier for an Occupational Standard, which is denoted by an 'N'
Unit Title	Unit title gives a clear overall statement about what the incumbent should be able to do.
Description	Description gives a short summary of the unit content. This would be helpful to anyone searching on a database to verify that this is the appropriate OS they are looking for.
Scope	Scope is a set of statements specifying the range of variables that an individual may have to deal with in carrying out the function which have a critical impact on quality of performance required.

Qualification Pack

Knowledge and Understanding (KU)	Knowledge and Understanding (KU) are statements which together specify the technical, generic, professional and organisational specific knowledge that an individual needs in order to perform to the required standard.
Organisational Context	Organisational context includes the way the organisation is structured and how it operates, including the extent of operative knowledge managers have of their relevant areas of responsibility.
Technical Knowledge	Technical knowledge is the specific knowledge needed to accomplish specific designated responsibilities.
Core Skills/ Generic Skills (GS)	Core skills or Generic Skills (GS) are a group of skills that are the key to learning and working in today's world. These skills are typically needed in any work environment in today's world. These skills are typically needed in any work environment. In the context of the OS, these include communication related skills that are applicable to most job roles.
Electives	Electives are NOS/set of NOS that are identified by the sector as contributive to specialization in a job role. There may be multiple electives within a QP for each specialized job role. Trainees must select at least one elective for the successful completion of a QP with Electives.
Options	Options are NOS/set of NOS that are identified by the sector as additional skills. There may be multiple options within a QP. It is not mandatory to select any of the options to complete a QP with Options.