









Sheet Metal Worker - Hand Tools and manually operated machines

Optional NOS

QP Code: CSC/Q0301

Version: 3.0

NSQF Level: 2

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CSC/Q0301: Sheet Metal Worker - Hand Tools and manually operated machines

Brief Job Description

The incumbent in the job is responsible for performing basic sheet metal cutting, forming and assembly operations.

Personal Attributes

The job holder must have an eye for detail as well as the patience and discipline required to carry out detailed and repetitive tasks. The candidate should be able to read and understand technical manuals, instructions and warnings.

Applicable National Occupational Standards (NOS)

Compulsory NOS:

- 1. CSC/N0301: Perform basic sheet metal cutting, forming and assembly operations
- 2. CSC/N1335: Follow the health and safety practices at the work
- 3. CSC/N1336: Coordinate with co-workers to achieve work efficiency
- 4. DGT/VSQ/N0101: Employability Skills (30 Hours)

Options(*Not mandatory*):

Option: Optional NOS

1. CSC/N0302: Grind surface using hand and hand-held power tools

Qualification Pack (QP) Parameters

Sector	Capital Goods
Sub-Sector	Machine Tools, Plastics Manufacturing Machinery, Textile Manufacturing Machinery, Process Plant Machinery, Electrical and Power Machinery
Occupation	Fabrication, Fitting and Assembly









Country	India
NSQF Level	2
Credits	7
Aligned to NCO/ISCO/ISIC Code	NCO-2015/7213.0101
Minimum Educational Qualification & Experience	Ability to read and write
Minimum Level of Education for Training in School	
Pre-Requisite License or Training	NA
Minimum Job Entry Age	18 Years
Last Reviewed On	NA
Next Review Date	31/03/2025
NSQC Approval Date	31/03/2022
Version	3.0
Reference code on NQR	QG-02-CG-00193-2023-V1.1-CGSC
NQR Version	1









CSC/N0301: Perform basic sheet metal cutting, forming and assembly operations

Description

This unit is about cutting, forming and assembly operations for basic sheet metal (up to and including 3 mm) by using hand and manually operated machine tools.

Scope

The scope covers the following:

- Prepare for work
- Perform marking on the sheet metal
- Perform sheet metal cutting and forming operations
- Perform sheet metal assembly operations
- Perform post-assembly activities

Elements and Performance Criteria

Prepare for work

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

- **PC1.** identify work requirements by interpreting instructions received from supervisor or person in charge
- **PC2.** identify and arrange tools, equipment, measuring instruments and material required for performing sheet metal cutting, forming and assembly operations as per specifications
- **PC3.** check the tools, measuring instruments and equipment for any defects before use
- **PC4.** check that all measuring equipment are within calibration date
- **PC5.** use appropriate Personal Protective Equipment (PPE) for safe working in workshop

Perform marking on the sheet metal

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

- **PC6.** prepare the sheet metal for marking out by cleaning, removing burrs and sharp edges and applying marking out medium on it
- **PC7.** use a range of marking out equipment and mark the dimensions on the sheet metal materials by applying an appropriate method of marking out as per the instructions received
- **PC8.** mark out a range of features (datum lines; cutting guidelines; square and rectangular profiles; circular and radial profiles; angles; holes linearly positioned, boxed and on pitch circles) on the sheet metal
- **PC9.** obtain approval from supervisor or person in charge on marked out features and correct errors as per feedback received

Perform sheet metal cutting and forming operations

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

PC10. cut and shape the sheet metal materials to the required specification by performing appropriate cutting operations and techniques









- **PC11.** use appropriate cutting hand and manually operated machine tools to cut the marked-out shape on the material with required finishing
- **PC12.** perform various forming operations to produce sheet metal components of required shapes by using forming hand and manually operated machine tools
- **PC13.** measure the cut and formed components and compare with the dimensions as prescribed in the work order and engineering drawing

Perform sheet metal assembly operations

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

- **PC14.** assemble and secure the components in their correct positions by using appropriate assembly methods and techniques
- **PC15.** use appropriate assembly and joining techniques to produce fabrications of required shape/geometry within \pm 3.0 mm
- **PC16.** produce products with various features, have secure and firm joints and are free from excessive tooling marks, deformation, cracking, sharp edges, slivers or burrs
- PC17. follow the specified sheet metal cutting, forming and assembly sequence and procedure
- **PC18.** monitor the sheet metal cutting, forming and assembly operation and identify any problems that occur
- **PC19.** report to the supervisor about any problems faced or anticipated during the complete process

Perform post-assembly activities

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

- **PC20.** prepare work completion reports and necessary documentation for the higher authorities
- **PC21.** clean and store all the tools and equipment after completion of work
- **PC22.** dispose scrap or waste material into the disposal area in accordance with the company's policies and environmental regulations

Knowledge and Understanding (KU)

The individual on the job needs to know and understand:

- **KU1.** relevant legislation, standards, policies, and procedures followed in the organization
- **KU2.** various sheet metal materials and their properties
 - Sheet metal materials: hot rolled mild steel; cold rolled mild steel; coated mild steel (e.g. primed, tinned, galvanized); stainless steel; aluminum
 - Physical properties: melting points of metals, density, color, magnetism, corrosion resistance, conductivity, insulation
 - Mechanical properties: tensile strength, toughness, hardness, elasticity, ductility, malleability
- **KU3.** how to identify materials by their color, appearance, density
- **KU4.** various sheet metal cutting operations i.e. hand sawing, band sawing, filing, drilling, chiseling, threading, scraping, manually operated lapping
- **KU5.** various sheet forming operations i.e. planishing, raising, hollowing, flanging, 'split and weld' method
- **KU6.** how to select and establish a suitable datum while marking out
- **KU7.** marking methods i.e. direct marking using instruments, use of templates, tracing/transfer methods









- **KU8.** methods of marking out cutting guidelines for square and rectangular profiles, circular and radial profiles, angles and hole positions
- **KU9.** marking out features i.e. datum/centre lines; square/rectangular profiles; circles; radial profiles; cutting and bending detail (including allowances); hole centering and outlining (such as circular or linear
- * ways of laying out the marking-out shapes or patterns to optimize use of materials
 * Marking out tools: rules/tapes; straight edge; dividers/trammels; scribers; punches; squares; protractor; chalk, bluing or paint
- **KU11.** SOP recommended by manufacturer for using various measuring instruments, marking, cutting, forming and assembly tools required during work
- **KU12.** how to cut and form sheet metal using hand and manually operated machines
 - Cutting hand tools: tin snips, hacksaw, hand power tools (such as drill, nibbling, saw), trepanning, bench shears, files, pneumatic tools, thermal device, other specific tool
 - Forming hand tools: hammers, mallets, stakes, formers, wooden blocks, sand bags, etc.
 - Manually operated cutting machine tools: guillotine, pillar drill, punch/cropping machine, nibbling machine, mechanical saw, rotary shears, fly press
 - Manually operated forming machine tools: bending/folding machine (hand or powered), rolling machine (hand or powered), hammers/panel beating equipment, presses
- **KU13.** various assembly methods i.e. self-secured joints, thermal methods (soldering, brazing and tack welding), mechanical fastening devices(rivets, nut, bolts, studs, circlips, etc
- **KU14.** problems that can occur in the sheet metal cutting, forming and assembly operation
- * how to check the quality of the shaped components against the required quality standards
 * Components standards: all dimensions are within +/- 3.0mm; finished products are correctly formed and meet the required shape/geometry (square, straight, angles free from twists); completed products are free from excessive tool or bending marks, stretching or distortion, cracking, sharp edges, slivers or burrs
- **KU16.** safety practices need to follow during cutting, forming and assembling activities

Generic Skills (GS)

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

- **GS1.** note the information related to work and processes
- **GS2.** write reports and observations related to work in English/regional language
- **GS3.** read and interpret and process flowchart for all operations
- **GS4.** read manuals and operation documents to understand the Equipment used into operation
- **GS5.** discuss task lists, schedules and activities with the seniors and team members
- **GS6.** follow organization rule-based decision making process
- **GS7.** take decisions with systematic course of actions and/or res[onse
- **GS8.** plan and organize tasks to meet deadlines
- **GS9.** find ways of modifying difficult operating stages to make it operation friendly
- **GS10.** apply domain information to set and define operation parameters that ensures economy and quality of the product
- **GS11.** analyse the complexity of work to determine if it can be successfully carried out or needs to be referred to a superior/specialist
- **GS12.** recognise a workplace problem and take suitable action to resolve it









Assessment Criteria

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
Prepare for work	8	10	-	6
PC1. identify work requirements by interpreting instructions received from supervisor or person in charge	1	2	-	1
PC2. identify and arrange tools, equipment, measuring instruments and material required for performing sheet metal cutting, forming and assembly operations as per specifications	3	2	-	3
PC3. check the tools, measuring instruments and equipment for any defects before use	2	3	-	1
PC4. check that all measuring equipment are within calibration date	1	2	-	1
PC5. use appropriate Personal Protective Equipment (PPE) for safe working in workshop	1	1	-	-
Perform marking on the sheet metal	6	10	-	4
PC6. prepare the sheet metal for marking out by cleaning, removing burrs and sharp edges and applying marking out medium on it	1	2	-	1
PC7. use a range of marking out equipment and mark the dimensions on the sheet metal materials by applying an appropriate method of marking out as per the instructions received	2	3	-	1
PC8. mark out a range of features (datum lines; cutting guidelines; square and rectangular profiles; circular and radial profiles; angles; holes linearly positioned, boxed and on pitch circles) on the sheet metal	2	3	-	2
PC9. obtain approval from supervisor or person in charge on marked out features and correct errors as per feedback received	1	2	-	-
Perform sheet metal cutting and forming operations	6	12	-	4









Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
PC10. cut and shape the sheet metal materials to the required specification by performing appropriate cutting operations and techniques	2	4	-	1
PC11. use appropriate cutting hand and manually operated machine tools to cut the marked-out shape on the material with required finishing	1	2	-	1
PC12. perform various forming operations to produce sheet metal components of required shapes by using forming hand and manually operated machine tools	2	4	-	1
PC13. measure the cut and formed components and compare with the dimensions as prescribed in the work order and engineering drawing	1	2	-	1
Perform sheet metal assembly operations	7	13	-	5
PC14. assemble and secure the components in their correct positions by using appropriate assembly methods and techniques	2	4	-	2
PC15. use appropriate assembly and joining techniques to produce fabrications of required shape/geometry within \pm 3.0 mm	2	4	-	1
PC16. produce products with various features, have secure and firm joints and are free from excessive tooling marks, deformation, cracking, sharp edges, slivers or burrs	1	2	-	1
PC17. follow the specified sheet metal cutting, forming and assembly sequence and procedure	-	1	-	-
PC18. monitor the sheet metal cutting, forming and assembly operation and identify any problems that occur	1	1	-	1
PC19. report to the supervisor about any problems faced or anticipated during the complete process	1	1	-	-
Perform post-assembly activities	3	5	-	1
PC20. prepare work completion reports and necessary documentation for the higher authorities	1	2	-	1









Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
PC21. clean and store all the tools and equipment after completion of work	1	2	-	-
PC22. dispose scrap or waste material into the disposal area in accordance with the company's policies and environmental regulations	1	1	-	-
NOS Total	30	50	-	20









National Occupational Standards (NOS) Parameters

NOS Code	CSC/N0301
NOS Name	Perform basic sheet metal cutting, forming and assembly operations
Sector	Capital Goods
Sub-Sector	Machine Tools, Plastics Manufacturing Machinery, Textile Manufacturing Machinery, Process Plant Machinery, Electrical and Power Machinery, Dies, Moulds and Press Tools
Occupation	Fabrication, Fitting and Assembly
NSQF Level	2
Credits	2
Version	3.0
Last Reviewed Date	NA
Next Review Date	31/03/2025
NSQC Clearance Date	31/03/2022









CSC/N1335: Follow the health and safety practices at the work

Description

This OS unit is about following the appropriate health and safety practices at work. It covers responsibilities towards self and others to ensure a safe work environment.

Scope

The scope covers the following:

- Maintain personal health and safety
- Assist in hazard management
- Check the first aid box, firefighting and safety equipment
- Assist in waste management
- Follow the fire safety guidelines
- Follow the emergency and first-aid procedures
- Carry out relevant documentation and review

Elements and Performance Criteria

Maintain personal health and safety

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

- **PC1.** follow the recommended practices to ensure protection from infections and transmission to others, such as the use of hand sanitiser and face mask
- **PC2.** check the work conditions, assess the potential health and safety risks, and take appropriate measures to mitigate them
- **PC3.** select and use the appropriate Personal Protective Equipment (PPE) relevant to the task and work conditions
- **PC4.** follow the recommended techniques while lifting and moving heavy objects to avoid injury
- **PC5.** follow the manufacturer's instructions and workplace safety guidelines while working on heavy machinery, tools and equipment

Assist in hazard management

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

- **PC6.** identify existing and potential hazards at work
- **PC7.** assess the potential risks and injuries associated with the identified hazards
- **PC8.** coordinate with the supervisor or other relevant personnel to prevent or minimise the identified hazards
- **PC9.** handle hazardous materials safely and store them in the designated storage

Check the first aid box, firefighting and safety equipment

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

- **PC10.** check the first aid box to ensure it is updated with the relevant first aid supplies
- **PC11.** check and test the firefighting and various safety equipment to ensure they are in usable condition









PC12. coordinate with the supervisor for the repair and replacement of firefighting and safety equipment

Assist in waste management

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

- **PC13.** segregate waste into appropriate categories
- **PC14.** recycle the recyclable waste appropriately
- **PC15.** dispose of the non-recyclable waste in an environment-friendly manner, complying with the applicable regulations

Follow the fire safety guidelines

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

- **PC16.** use the appropriate type of fire extinguisher to extinguish different types of fires safely
- **PC17.** follow the recommended practices for a safe rescue during a fire emergency
- PC18. coordinate with the fire department to request assistance to extinguish a serious fire

Follow the emergency and first-aid procedures

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

- **PC19.** follow the organisational health and safety guidelines during workplace emergencies to ensure own and co-workers' safety
- **PC20.** follow the recommended practices to minimise loss to organisational property during an emergency
- **PC21.** follow the recommended procedure to free a person from electrocution
- **PC22.** administer appropriate first aid to the injured personnel
- PC23. perform Cardiopulmonary Resuscitation (CPR) on a potential victim of cardiac arrest
- **PC24.** coordinate with the emergency services to request medical assistance for seriously injured/ ill personnel requiring professional medical attention or hospitalisation

Carry out relevant documentation and review

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

- **PC25.** carry out appropriate documentation following a health and safety incident at work, including all the required information
- **PC26.** coordinate with the relevant personnel to review health and safety conditions at work regularly or following an incident
- **PC27.** assist in implementing appropriate changes to improve the health and safety conditions at work

Knowledge and Understanding (KU)

The individual on the job needs to know and understand:

- **KU1.** the recommended practices to be followed to ensure protection from infections and transmission to others, such as the use of hand sanitiser and face mask
- **KU2.** the importance and process of checking the work conditions, assessing the potential health and safety risks, and take appropriate measures to mitigate them
- **KU3.** the importance and process of selecting and using the appropriate PPE relevant to the task and work conditions









- **KU4.** the recommended techniques to be followed while lifting and moving heavy objects to avoid injury
- **KU5.** the importance of following the manufacturer's instructions and workplace safety guidelines while working on heavy machinery, tools and equipment
- **KU6.** the importance and process of identifying existing and potential hazards at work
- **KU7.** the process of assessing the potential risks and injuries associated with the various hazards
- **KU8.** how to prevent or minimise different types of hazards
- **KU9.** how to handle and store hazardous materials safely
- **KU10.** the importance of ensuring the first aid box is updated with the relevant first aid supplies
- **KU11.** the process of checking and testing the firefighting and various safety equipment to ensure they are in a usable condition
- **KU12.** the criteria for segregating waste into appropriate categories
- **KU13.** the appropriate methods for recycling the recyclable waste
- **KU14.** the process of disposing of the non-recyclable waste safely and the applicable regulations
- **KU15.** Use of different types of fire extinguishers to extinguish different types of fires
- **KU16.** the recommended practices to be followed for a safe rescue during a fire emergency
- **KU17.** how to request assistance from the fire department to extinguish a serious fire
- **KU18.** the appropriate practices to be followed during workplace emergencies to ensure safety and minimise loss to organisational property
- **KU19.** common health and safety hazards present in a work environment, associated risks, and how to mitigate them
- **KU20.** safe working practices to be followed while working at various hazardous sites and using electrical equipment
- **KU21.** the importance of ensuring easy access to firefighting and safety equipment
- **KU22.** the appropriate preventative and remedial actions to be taken in the case of exposure to toxic materials, such as poisonous chemicals and gases
- **KU23.** various causes of fire in different work environments and the recommended precautions to be taken to prevent fire accidents
- **KU24.** different methods of extinguishing fire
- **KU25.** different materials used for extinguishing fire, such as sand, water, foam, CO2, dry powder, etc.
- **KU26.** the applicable rescue techniques to be followed during a fire emergency
- **KU27.** the importance of placing safety signs and instructions at strategic locations in a workplace and following them
- **KU28.** different types of first aid treatment to be provided for different types of injuries
- **KU29.** potential injuries associated with incorrect manual handling
- **KU30.** how to move an injured person safely
- **KU31.** various hazards associated with the use of various machinery, tools, implements, equipment and materials
- **KU32.** the importance of ensuring no obstruction and free access to fire exits
- **KU33.** how to free a person from electrocution safely
- **KU34.** how to administer appropriate first aid to an injured person









- **KU35.** how to perform Cardiopulmonary Resuscitation (CPR)
- **KU36.** the importance of coordinating with the emergency services to request urgent medical assistance for persons requiring professional medical attention or hospitalisation
- **KU37.** the appropriate documentation to be carried out following a health and safety incident at work, and the relevant information to be included
- **KU38.** the importance and process of reviewing the health and safety conditions at work regularly or following an incident
- **KU39.** the importance and process of implementing appropriate changes to improve the health and safety conditions at work

Generic Skills (GS)

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

- GS1. maintain work-related notes and records
- GS2. communicate clearly and politely with co-workers and clients
- GS3. read the relevant literature to get the latest updates about the field of work
- **GS4.** listen attentively to understand the information being shared
- **GS5.** plan and prioritise tasks to ensure timely completion
- **GS6.** take quick decisions to deal with workplace emergencies and accidents
- **GS7.** identify possible disruptions to work and take appropriate preventive measures
- **GS8.** coordinate with the co-workers to achieve the work objectives
- **GS9.** evaluate all possible solutions to a problem to select the best one









Assessment Criteria

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
Maintain personal health and safety	7	12	-	-
PC1. follow the recommended practices to ensure protection from infections and transmission to others, such as the use of hand sanitiser and face mask	2	3	-	-
PC2. check the work conditions, assess the potential health and safety risks, and take appropriate measures to mitigate them	1	2	-	-
PC3. select and use the appropriate Personal Protective Equipment (PPE) relevant to the task and work conditions	1	2	-	-
PC4. follow the recommended techniques while lifting and moving heavy objects to avoid injury	1	3	-	-
PC5. follow the manufacturer's instructions and workplace safety guidelines while working on heavy machinery, tools and equipment	2	2	-	-
Assist in hazard management	4	10	-	-
PC6. identify existing and potential hazards at work	1	1	-	-
PC7. assess the potential risks and injuries associated with the identified hazards	1	3	-	-
PC8. coordinate with the supervisor or other relevant personnel to prevent or minimise the identified hazards	1	3	-	<u>-</u>
PC9. handle hazardous materials safely and store them in the designated storage	1	3	-	-
Check the first aid box, firefighting and safety equipment	3	7	-	-
PC10. check the first aid box to ensure it is updated with the relevant first aid supplies	1	2	-	-
PC11. check and test the firefighting and various safety equipment to ensure they are in usable condition	1	3	-	-









Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
PC12. coordinate with the supervisor for the repair and replacement of firefighting and safety equipment	1	2	-	-
Assist in waste management	3	8	-	-
PC13. segregate waste into appropriate categories	1	3	-	-
PC14. recycle the recyclable waste appropriately	1	3	-	-
PC15. dispose of the non-recyclable waste in an environment-friendly manner, complying with the applicable regulations	1	2	-	-
Follow the fire safety guidelines	3	12	-	-
PC16. use the appropriate type of fire extinguisher to extinguish different types of fires safely	1	4	-	-
PC17. follow the recommended practices for a safe rescue during a fire emergency	1	4	-	-
PC18. coordinate with the fire department to request assistance to extinguish a serious fire	1	4	-	-
Follow the emergency and first-aid procedures	7	12	-	-
PC19. follow the organisational health and safety guidelines during workplace emergencies to ensure own and co-workers' safety	1	2	-	-
PC20. follow the recommended practices to minimise loss to organisational property during an emergency	1	3	-	-
PC21. follow the recommended procedure to free a person from electrocution	1	2	-	-
PC22. administer appropriate first aid to the injured personnel	1	2	-	-
PC23. perform Cardiopulmonary Resuscitation (CPR) on a potential victim of cardiac arrest	1	2	-	-
PC24. coordinate with the emergency services to request medical assistance for seriously injured/ ill personnel requiring professional medical attention or hospitalisation	2	1	-	-









Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
Carry out relevant documentation and review	3	9	-	-
PC25. carry out appropriate documentation following a health and safety incident at work, including all the required information	1	3	-	-
PC26. coordinate with the relevant personnel to review health and safety conditions at work regularly or following an incident	1	3	-	-
PC27. assist in implementing appropriate changes to improve the health and safety conditions at work	1	3	-	-
NOS Total	30	70	-	-









National Occupational Standards (NOS) Parameters

NOS Code	CSC/N1335
NOS Name	Follow the health and safety practices at the work
Sector	Capital Goods
Sub-Sector	Machine Tools, Process Plant Machinery, Dies, Moulds and Press Tools, Electrical and Power Machinery, Plastics Manufacturing Machinery, Light Engineering Goods, Textile Manufacturing Machinery
Occupation	Machining
NSQF Level	3
Credits	TBD
Version	2.0
Last Reviewed Date	26/05/2022
Next Review Date	31/03/2024
NSQC Clearance Date	31/03/2021









CSC/N1336: Coordinate with co-workers to achieve work efficiency

Description

This OS unit is about working in coordination with co-workers to achieve the work objectives efficiently. It also covers practising inclusion at work.

Scope

The scope covers the following:

- Work effectively with co-workers
- Communicate effectively with co-workers
- Practice inclusion at work

Elements and Performance Criteria

Work effectively with co-workers

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

- **PC1.** plan daily tasks at work to ensure their timely completion and efficient use of time
- **PC2.** carry out work responsibilities adhering to the limits of authority
- **PC3.** follow the supervisor's instructions to ensure adherence to the applicable quality standards and timescales
- **PC4.** coordinate with the co-workers to achieve the work objectives efficiently
- **PC5.** prepare the relevant documents and reports as per the supervisor's instructions, providing appropriate information clearly and systematically
- **PC6.** coordinate with the supervisor or relevant personnel to deal with out of authority tasks and concerns
- **PC7.** mentor and assist subordinates in the execution of their work responsibilities
- **PC8.** identify possible disruptions to work through coordination with the relevant stakeholders and take appropriate preventive measures
- **PC9.** use various resources efficiently to ensure maximum utilisation and minimum wastage
- **PC10.** follow the recommended practices to avoid and resolve conflicts at work
- **PC11.** follow the relevant organisational policies to ensure disciplined behaviour with maximum productivity at work

Communicate effectively with co-workers

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

- **PC12.** follow the organisational policy for the efficient and timely dissemination of information to the authorised personnel
- PC13. communicate clearly and politely to ensure effective communication with co-workers
- **PC14.** follow the appropriate techniques for active listening during interactions

Practice inclusion at work

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

PC15. empathise with Persons with Disabilities (PwD)









PC16. adopt gender-neutral behaviour at work

Knowledge and Understanding (KU)

The individual on the job needs to know and understand:

- **KU1.** the importance and process of effective communication in the workplace
- **KU2.** the barriers to effective communication and how to overcome them
- KU3. the importance of teamwork in an organisation's and individual's success
- **KU4.** the importance of active listening in the work environment
- **KU5.** the appropriate techniques to be followed for active listening
- **KU6.** importance of avoiding casual expletives and unpleasant terms while communicating professional circles
- **KU7.** the importance of maintaining discipline and ethical behaviour at work
- **KU8.** the common reasons for interpersonal conflict and how to resolve them
- **KU9.** the importance of developing effective work relationships for professional success
- **KU10.** how expressing and addressing grievances appropriately and effectively
- **KU11.** the importance and process of planning daily tasks to ensure their timely completion and efficient use of time
- **KU12.** the importance of adhering to the limits of authority at work
- **KU13.** the importance of following the applicable quality standards and timescales at work
- **KU14.** the importance of coordinating with the co-workers to achieve the work objectives efficiently
- **KU15.** the relevant documentation requirements
- **KU16.** the importance of providing appropriate information clearly and systematically in work documents
- **KU17.** the escalation matrix to be followed to deal with out of authority tasks and concerns
- **KU18.** the importance and process of mentoring and assisting subordinates in the execution of their work responsibilities
- **KU19.** how to identify possible disruptions to work prevent them
- **KU20.** how to use various resources efficiently to ensure maximum utilisation and minimum wastage
- **KU21.** the recommended practices to be followed at work to avoid and resolve conflicts at work
- **KU22.** the importance and process of efficient and timely dissemination of information to the authorised personnel
- **KU23.** how to communicate clearly and politely to ensure effective communication
- **KU24.** the importance of following the recommended practices to ensure an inclusive environment for PwD and all genders at work

Generic Skills (GS)

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

GS1. maintain work-related notes and records









- GS2. read work-related and other relevant literature
- **GS3.** communicate politely and -professionally
- GS4. listen attentively to understand the information or instructions being shared
- **GS5.** plan and prioritise tasks to ensure timely completion
- GS6. take prompt decisions to deal with workplace emergencies and accidents
- **GS7.** evaluate all possible solutions to a problem to select the best one









Assessment Criteria

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
Work effectively with co-workers	20	43	-	-
PC1. plan daily tasks at work to ensure their timely completion and efficient use of time	2	4	-	-
PC2. carry out work responsibilities adhering to the limits of authority	2	4	-	-
PC3. follow the supervisor's instructions to ensure adherence to the applicable quality standards and timescales	2	4	-	-
PC4. coordinate with the co-workers to achieve the work objectives efficiently	2	4	-	-
PC5. prepare the relevant documents and reports as per the supervisor's instructions, providing appropriate information clearly and systematically	2	4	-	-
PC6. coordinate with the supervisor or relevant personnel to deal with out of authority tasks and concerns	2	4	-	-
PC7. mentor and assist subordinates in the execution of their work responsibilities	2	4	-	-
PC8. identify possible disruptions to work through coordination with the relevant stakeholders and take appropriate preventive measures	2	4	-	-
PC9. use various resources efficiently to ensure maximum utilisation and minimum wastage	2	4	-	-
PC10. follow the recommended practices to avoid and resolve conflicts at work	1	4	-	-
PC11. follow the relevant organisational policies to ensure disciplined behaviour with maximum productivity at work	1	3	-	-
Communicate effectively with co-workers	6	15	-	-









Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
PC12. follow the organisational policy for the efficient and timely dissemination of information to the authorised personnel	2	5	-	-
PC13. communicate clearly and politely to ensure effective communication with co-workers	2	5	-	-
PC14. follow the appropriate techniques for active listening during interactions	2	5	-	-
Practice inclusion at work	4	12	-	-
PC15. empathise with Persons with Disabilities (PwD)	2	6	-	-
PC16. adopt gender-neutral behaviour at work	2	6	-	-
NOS Total	30	70	-	-









National Occupational Standards (NOS) Parameters

NOS Code	CSC/N1336
NOS Name	Coordinate with co-workers to achieve work efficiency
Sector	Capital Goods
Sub-Sector	Machine Tools, Dies, Moulds and Press Tools, Plastics Manufacturing Machinery, Textile Manufacturing Machinery, Process Plant Machinery, Electrical and Power Machinery, Light Engineering Goods
Occupation	Machining
NSQF Level	3
Credits	TBD
Version	2.0
Last Reviewed Date	26/05/2022
Next Review Date	31/03/2024
NSQC Clearance Date	31/03/2021









DGT/VSQ/N0101: Employability Skills (30 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
- 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. understand the significance of employability skills in meeting the job requirements

Constitutional values - Citizenship

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

PC2. identify constitutional values, civic rights, duties, personal values and ethics and environmentally sustainable practices

Becoming a Professional in the 21st Century

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

PC3. explain 21st Century Skills such as Self-Awareness, Behavior Skills, Positive attitude, self-motivation, problem-solving, creative thinking, time management, social and cultural awareness, emotional awareness, continuous learning mindset etc.

Basic English Skills

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

PC4. speak with others using some basic English phrases or sentences

Communication Skills

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

PC5. follow good manners while communicating with others

PC6. work with others in a team









Diversity & Inclusion

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

PC7. communicate and behave appropriately with all genders and PwD

PC8. report any issues related to sexual harassment

Financial and Legal Literacy

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

PC9. use various financial products and services safely and securely

PC10. calculate income, expenses, savings etc.

PC11. approach the concerned authorities for any exploitation as per legal rights and laws

Essential Digital Skills

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

PC12. operate digital devices and use its features and applications securely and safely

PC13. use internet and social media platforms securely and safely

Entrepreneurship

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

PC14. identify and assess opportunities for potential business

PC15. identify sources for arranging money and associated financial and legal challenges

Customer Service

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

PC16. identify different types of customers

PC17. identify customer needs and address them appropriately

PC18. follow appropriate hygiene and grooming standards

Getting ready for apprenticeship & Jobs

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

PC19. create a basic biodata

PC20. search for suitable jobs and apply

PC21. identify and register apprenticeship opportunities as per requirement

Knowledge and Understanding (KU)

The individual on the job needs to know and understand:

KU1. need for employability skills

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 basic spoken English language

KU6. Do and dont of effective communication

KU7. inclusivity and its importance

KU8. different types of disabilities and appropriate communication and behaviour towards PwD

KU9. different types of financial products and services









- **KU10.** how to compute income and expenses
- **KU11.** importance of maintaining safety and security in financial transactions
- **KU12.** different legal rights and laws
- **KU13.** how to operate digital devices and applications safely and securely
- KU14. ways to identify business opportunities
- KU15. types of customers and their needs
- **KU16.** how to apply for a job and prepare for an interview
- **KU17.** apprenticeship scheme and the process of registering on apprenticeship portal

Generic Skills (GS)

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

- **GS1.** communicate effectively using appropriate language
- GS2. behave politely and appropriately with all
- **GS3.** perform basic calculations
- **GS4.** solve problems effectively
- **GS5.** be careful and attentive at work
- **GS6.** use time effectively
- **GS7.** maintain hygiene and sanitisation to avoid infection









Assessment Criteria

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
Introduction to Employability Skills	1	1	-	-
PC1. understand the significance of employability skills in meeting the job requirements	-	-	-	-
Constitutional values – Citizenship	1	1	-	-
PC2. identify constitutional values, civic rights, duties, personal values and ethics and environmentally sustainable practices	-	-	-	-
Becoming a Professional in the 21st Century	1	3	-	-
PC3. explain 21st Century Skills such as Self-Awareness, Behavior Skills, Positive attitude, self-motivation, problem-solving, creative thinking, time management, social and cultural awareness, emotional awareness, continuous learning mindset etc.	-	-	-	-
Basic English Skills	2	3	-	-
PC4. speak with others using some basic English phrases or sentences	-	-	-	-
Communication Skills	1	1	-	-
PC5. follow good manners while communicating with others	-	-	-	-
PC6. work with others in a team	-	-	-	-
Diversity & Inclusion	1	1	-	-
PC7. communicate and behave appropriately with all genders and PwD	-	-	-	-
PC8. report any issues related to sexual harassment	-	-	-	-
Financial and Legal Literacy	3	4	-	-
PC9. use various financial products and services safely and securely	-	-	-	-









Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
PC10. calculate income, expenses, savings etc.	-	-	-	-
PC11. approach the concerned authorities for any exploitation as per legal rights and laws	-	-	-	-
Essential Digital Skills	4	6	-	-
PC12. operate digital devices and use its features and applications securely and safely	-	-	-	-
PC13. use internet and social media platforms securely and safely	-	-	-	-
Entrepreneurship	3	5	-	-
PC14. identify and assess opportunities for potential business	-	-	-	-
PC15. identify sources for arranging money and associated financial and legal challenges	-	-	-	-
Customer Service	2	2	-	-
PC16. identify different types of customers	-	-	-	-
PC17. identify customer needs and address them appropriately	-	-	-	-
PC18. follow appropriate hygiene and grooming standards	-	-	-	-
Getting ready for apprenticeship & Jobs	1	3	-	-
PC19. create a basic biodata	-	-	-	-
PC20. search for suitable jobs and apply	-	-	-	-
PC21. identify and register apprenticeship opportunities as per requirement	-	-	-	-
NOS Total	20	30	-	-









National Occupational Standards (NOS) Parameters

NOS Code	DGT/VSQ/N0101
NOS Name	Employability Skills (30 Hours)
Sector	Cross Sectoral
Sub-Sector	Professional Skills
Occupation	Employability
NSQF Level	2
Credits	1
Version	1.0
Last Reviewed Date	29/09/2023
Next Review Date	29/09/2028
NSQC Clearance Date	29/09/2023









CSC/N0302: Grind surface using hand and hand-held power tools

Description

This unit is about grinding surface using hand and/or hand-held power tools on various ferrous and non-ferrous materials and components.

Scope

The scope covers the following:

- Prepare for grinding operations
- Perform grinding operations
- Perform post-grinding activities

Elements and Performance Criteria

Prepare for grinding operations

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

- **PC1.** identify work requirements by interpreting job specification document and instructions received from supervisor
- **PC2.** report and rectify incorrect and inconsistent information in job specification documents as per organization procedures
- **PC3.** select grinding method/technique as per the surface finish specifications and work requirements
- **PC4.** select stones, wheels, files or other abrasives, according to materials, sizes and shapes of work-pieces, amount of stock to be removed, finishes specified, and steps in finishing and grinding process
- **PC5.** identify and arrange tools, equipment, raw material (metals, metal alloys and non-metals) and consumables as per job requirements
- **PC6.** check the tools and equipment for any defects before use
- **PC7.** prepare the work area for the grinding operations as per SOP
- **PC8.** perform grinding wheel dressing by using diamond cutter
- **PC9.** measure and mark the specifications on the workpiece to ensure required grinding standards are achieved
- PC10. use appropriate Personal Protective Equipment (PPE) for safe working in workshop

Perform grinding operations

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

- **PC11.** trim or scrape work pieces by using appropriate hand or power tools like chisels, scrapers etc.
- **PC12.** load and set work pieces onto equipment or work tables by using appropriate positioning and/or holding devices
- **PC13.** carry out the grinding process by using appropriate hand and/or hand-held power grinding tools in accordance with standard operating procedures









- **PC14.** monitor the grinding process and adjust, start, or stop the equipment if not working within standards
- **PC15.** produce workpieces of required surface finish and specification as specified in work order and job card
- **PC16.** monitor the grinding operation and identify any problems that occur during process
- **PC17.** report to the supervisor about any problems faced or anticipated during the complete process

Perform post-grinding activities

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

- **PC18.** check the surface finish of the grinded workpiece to ensure that the work-piece achieves the required characteristics and meets the finishing specification (Finishing parameters: texture, roughness)
- **PC19.** identify common surface imperfections on the workpiece and correct them by following work instructions and SOP
- **PC20.** prepare work completion reports and necessary documentation i.e. job card, progress records, incident reports etc. for the higher authorities as per SOP
- **PC21.** clean and store all the tools and equipment after completion of work
- **PC22.** dispose scrap or waste material into the disposal area in accordance with the company's policies and environmental regulations
- **PC23.** perform routine maintenance of grinding tools and equipment after completion of work

Knowledge and Understanding (KU)

The individual on the job needs to know and understand:

- **KU1.** relevant legislation, standards, policies, and procedures followed in the organization
- **KU2.** properties of common ferrous and non-ferrous metals used
 - Ferrous metals: carbon steels, stainless steels, cast iron, tool steel, hard metals, etc.;
 - Non-ferrous metals: bronze, bronze alloys, copper and copper alloys, etc.)
- **KU3.** hand tool (powered and unpowered) grinding methods & techniques
- **KU4.** terminology used in grinding procedures
- **KU5.** different kinds of manually operated grinders i.e. angle grinders, bench grinders, straight grinder, rotary die grinders, disc grinder, electronic grinder, electric or pneumatic/hydraulic grinders, pedestal grinders, cylindrical grinders
- **KU6.** SOP recommended by the manufacturer for using hand and held-held power tools and equipment (Power tools: electric, pneumatic, liquid fuel, hydraulic) for grinding of different types of material
- **KU7.** selection of correct type of wheel on the basis of type of material, surface finish required etc.
 - Types of wheel: cut-off discs (diamond blade), abrasive grinding discs, grinding stones, wire brush wheels
- **KU8.** procedures and techniques required to set operational performance parameters of grinding
- **KU9.** effect of different types and grades of grinding to achieve required surface finish
- **KU10.** importance of following specified grinding sequence and procedures
- **KU11.** suitability of work pieces/materials and consumables for the specified job, its importance and procedures









- **KU12.** securing the work-piece/raw material correctly using appropriate tools and mechanisms
- **KU13.** various types of substrate that may require for preparing the grinding tools and equipment
- **KU14.** how to identify grinding process faults
- **KU15.** methods and techniques to check for common surface imperfections/defects and conformance to specifications
- **KU16.** ways to remove/repair surface imperfections/defects
- **KU17.** safety requirements during the grinding process
- **KU18.** importance of completing the production documentation throughout the grinding process
 - Documentation during and post operations: job card, progress records, incident reports

Generic Skills (GS)

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

- **GS1.** note the information related to work and processes
- **GS2.** write reports and observations related to work in English/regional language
- **GS3.** read and interpret and process flowchart for all operations
- **GS4.** read manuals and operation documents to understand the Equipment used into operation
- **GS5.** discuss task lists, schedules and activities with the seniors and team members
- **GS6.** follow organization rule-based decision making process
- **GS7.** take decisions with systematic course of actions and/or response
- **GS8.** plan and organize tasks to meet deadlines
- **GS9.** find ways of modifying difficult operating stages to make it operation friendly
- **GS10.** apply domain information to set and define operation parameters that ensures economy and quality of the product
- **GS11.** analyse the complexity of work to determine if it can be successfully carried out or needs to be referred to a superior/specialist
- **GS12.** recognise a workplace problem and take suitable action to resolve it









Assessment Criteria

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
Prepare for grinding operations	12	17	-	8
PC1. identify work requirements by interpreting job specification document and instructions received from supervisor	1	1	-	1
PC2. report and rectify incorrect and inconsistent information in job specification documents as per organization procedures	1	1	-	-
PC3. select grinding method/technique as per the surface finish specifications and work requirements	1	1	-	1
PC4. select stones, wheels, files or other abrasives, according to materials, sizes and shapes of workpieces, amount of stock to be removed, finishes specified, and steps in finishing and grinding process	1	2	-	1
PC5. identify and arrange tools, equipment, raw material (metals, metal alloys and non-metals) and consumables as per job requirements	3	2	-	2
PC6. check the tools and equipment for any defects before use	2	3	-	1
PC7. prepare the work area for the grinding operations as per SOP	1	2	-	-
PC8. perform grinding wheel dressing by using diamond cutter	1	2	-	1
PC9. measure and mark the specifications on the workpiece to ensure required grinding standards are achieved	1	2	-	1
PC10. use appropriate Personal Protective Equipment (PPE) for safe working in workshop	-	1	-	-
Perform grinding operations	11	20	-	7
PC11. trim or scrape work pieces by using appropriate hand or power tools like chisels, scrapers etc.	1	2	-	1









Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
PC12. load and set work pieces onto equipment or work tables by using appropriate positioning and/or holding devices	2	3	-	1
PC13. carry out the grinding process by using appropriate hand and/or hand-held power grinding tools in accordance with standard operating procedures	2	3	-	2
PC14. monitor the grinding process and adjust, start, or stop the equipment if not working within standards	1	2	-	-
PC15. produce workpieces of required surface finish and specification as specified in work order and job card	2	4	-	1
PC16. monitor the grinding operation and identify any problems that occur during process	1	2	-	1
PC17. report to the supervisor about any problems faced or anticipated during the complete process	2	4	-	1
Perform post-grinding activities	7	13	-	5
PC18. check the surface finish of the grinded workpiece to ensure that the work-piece achieves the required characteristics and meets the finishing specification (Finishing parameters: texture, roughness)	2	4	-	2
PC19. identify common surface imperfections on the workpiece and correct them by following work instructions and SOP	2	4	-	1
PC20. prepare work completion reports and necessary documentation i.e. job card, progress records, incident reports etc. for the higher authorities as per SOP	1	2	-	1
PC21. clean and store all the tools and equipment after completion of work	-	1	-	-
PC22. dispose scrap or waste material into the disposal area in accordance with the company's policies and environmental regulations	1	1	-	1









Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
PC23. perform routine maintenance of grinding tools and equipment after completion of work	1	1	-	-
NOS Total	30	50	-	20









National Occupational Standards (NOS) Parameters

NOS Code	CSC/N0302
NOS Name	Grind surface using hand and hand-held power tools
Sector	Capital Goods
Sub-Sector	Machine Tools, Dies, Moulds and Press Tools, Plastics Manufacturing Machinery, Textile Manufacturing Machinery, Process Plant Machinery, Electrical and Power Machinery, Light Engineering Goods
Occupation	Fitting and Assembly
NSQF Level	2
Credits	2
Version	3.0
Last Reviewed Date	NA
Next Review Date	31/03/2025
NSQC Clearance Date	31/03/2022

Assessment Guidelines and Assessment Weightage

Assessment Guidelines

- 1. Criteria for assessment for the Qualification Pack will be created by CGSC.
- 2. Performance Criteria (PC) have been assigned marks proportional to its importance in NOS. SSC will also lay down proportion of marks for Theory and Skills Practical for each PC.
- 3. The assessment for the theory part will/may be based on knowledge bank of questions approved CGSC.
- 4. Assessment will be conducted for all compulsory NOS, and where applicable, on the selected elective/option NOS/set of NOS.
- 5. Assessment Agencies will create Assessor Guides comprising of Theory and Practical Assessment Set and Guidelines for each examination/training centre (as per assessment criteria below). The same will be approved by CGSC for adequacy.
- 6. To successfully attain Certification on the Qualification Pack, the trainee must score a minimum of 70% in each Core NOS and minimum of 50% in all non-core NOS. In addition, a candidate needs to attain a minimum overall pass percentage of 70% for certification.









7. In case of unsuccessful completion, the trainee may seek reassessment on the 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
CSC/N0301.Perform basic sheet metal cutting, forming and assembly operations	30	50	-	20	100	50
CSC/N1335.Follow the health and safety practices at the work	30	70	-	-	100	15
CSC/N1336.Coordinate with co- workers to achieve work efficiency	30	70	-	-	100	15
DGT/VSQ/N0101.Employability Skills (30 Hours)	20	30	-	-	50	20
Total	110	220	-	20	350	100

Optional: 1 Optional NOS

National Occupational Standards	Theory Marks	Practical Marks	Project Marks	Viva Marks	Total Marks	Weightage
CSC/N0302.Grind surface using hand and hand-held power tools	30	50	-	20	100	20
Total	30	50	-	20	100	20









Acronyms

NOS	National Occupational Standard(s)
NSQF	National Skills Qualifications Framework
QP	Qualifications Pack
TVET	Technical and Vocational Education and Training
CO2	Carbon Dioxide
CPR	Cardiac Pulmonary Resuscitation
PPE	Personal Protective Equipment









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.









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.