



## Model Curriculum

**QP Name: Junior Operator – 2G Ethanol Plant**

**QP Code: HYC/Q 4301**

**QP Version: 1.0**

**NSQF Level: 3**

**Model Curriculum Version: 1.0**

Hydrocarbon Sector Skill Council  
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## Training Parameters

<b>Sector</b>	Hydrocarbon
<b>Sub-Sector</b>	Downstream
<b>Occupation</b>	Bio Ethanol Plant Operations & Maintenance
<b>Country</b>	India
<b>NSQF Level</b>	3
<b>Aligned to NCO/ISCO/ISIC Code</b>	NCO/ 2015 3134
<b>Minimum Educational Qualification and Experience</b>	8th Grade pass plus 2-years of NTC OR 10th Grade Pass OR 9th Grade Pass with 1-year of relevant experience OR 8th Grade Pass with 2-year of relevant experience OR 5th Grade Pass with 5-year of relevant experience OR Previous relevant qualification of NSQF Level 2.5 with 1.5 years of experience OR Previous relevant qualification of NSQF level 2 with 3 years of experience
<b>Pre-Requisite License or Training</b>	NA
<b>Minimum Job Entry Age</b>	18 years
<b>Last Reviewed On</b>	23-06-2023
<b>Next Review Date</b>	22-06-2026
<b>NSQC Approval Date</b>	23-06-2023
<b>QP Version</b>	1.0
<b>Model Curriculum Creation Date</b>	23-06-2023
<b>Model Curriculum Valid Up to Date</b>	22-06-2026
<b>Model Curriculum Version</b>	1.0
<b>Minimum Duration of the Course</b>	390 Hours
<b>Maximum Duration of the Course</b>	390 Hours

## Program Overview

This section summarizes the end objectives of the program along with its duration.

### Training Outcomes

Individual at this job is responsible to operate equipment, monitor pressure and flow, read gauges and adjust valves at refinery. The person at this job is responsible for identifying and correcting problems in the refinery process.

### Compulsory Modules

The table lists the modules and their duration corresponding to the Compulsory NOS of the QP.

NOS and Module Details	Theory Duration	Practical Duration	On-the-Job Training Duration (Mandatory)	Total Duration
<b>HYC/N4301– Assist in performing 2G Ethanol plant operations</b> <b>NOS Version No. –1.0</b> <b>NSQF Level – 3</b>	<b>60:00</b>	<b>150:00</b>	<b>30:00</b>	<b>240:00</b>
Module 1: Introduction to Hydrocarbon sector and the job role of Jr. Operator - 2G Ethanol plant	03:00	Nil	Nil	03:00
Module 2: Assist in carrying out 2G Ethanol plant operations	57:00	150:00	30:00	237:00
<b>HYC/N9301 – Working effectively in a team</b> <b>NOS Version No. – 3.0</b> <b>NSQF Level – 3</b>	<b>15:00</b>	<b>45:00</b>	<b>00:00</b>	<b>60:00</b>
Module 3: Working effectively in a team	15:00	45:00	00:00	60:00
<b>HYC/N9302 – Maintain health, safety and security procedures</b> <b>NOS Version No. – 3.0</b> <b>NSQF Level – 3</b>	<b>15:00</b>	<b>45:00</b>	<b>00:00</b>	<b>60:00</b>
Module 4: Maintain health, safety and security procedures	15:00	45:00	00:00	60:00
<b>DGT/VSQ/N0101 - Employability Module (Mandatory)</b>	<b>06:00</b>	<b>24:00</b>	<b>00:00</b>	<b>30:00</b>
<b>Total Duration</b>	<b>96:00</b>	<b>264:00</b>	<b>30:00</b>	<b>390:00</b>

## Module Details

### Module 1: Introduction to Hydrocarbon Sector and the job role of Junior Operator - 2G Ethanol plant

#### Bridge Module

#### Terminal Outcomes:

- Discuss the Hydrocarbon Sector
- Discuss the job of a of Junior Operator - 2G Ethanol plant

<b>Duration: 03:00</b>	<b>Duration: 00:00</b>
<b>Theory – Key Learning Outcomes</b>	<b>Practical – Key Learning Outcomes</b>
<ul style="list-style-type: none"> <li>• Describe the oil and natural gas sector and its subsectors.</li> <li>• Describe about the importance of Bio-Ethanol in Hydrocarbon Sector</li> <li>• Explain the importance of a Jr. Operator - 2G Ethanol plant</li> <li>• Explain the roles and responsibilities of Jr. Operator - 2G Ethanol plant</li> </ul>	
<b>Classroom Aids:</b>	
<ul style="list-style-type: none"> <li>• White / Black board and Projector</li> <li>• Digital Presentation</li> <li>• Computer/Laptop</li> <li>• Public Addressing System</li> </ul>	
<b>Tools, Equipment and Other Requirements</b>	
NA	

## Module 2: Assist in carrying out 2G Ethanol plant operations

*Mapped to HYC/ 4301 v 1.0*

### Terminal Outcomes:

- Provide assistance in handling Biomass storage, Feed Stock Handling System- Milling, Conveying and Wet washing
- Providing assistance in operating 2G ethanol production processes and related equipments
- Providing assistance in operating safe and efficient operations
- Follow environmental compliance and sustainability practices

<b>Duration: 57:00</b>	<b>Duration: 150:00</b>
<b>Theory – Key Learning Outcomes</b>	<b>Practical – Key Learning Outcomes</b>
<ul style="list-style-type: none"> <li>• Explain how to check and finalize appropriate biomass/feedstock materials based on availability and suitability</li> <li>• Describe the importance of biomass storage, handling, and pre-treatment in the 2G ethanol production process.</li> <li>• Describe the process of enzymatic hydrolysis and co-fermentation techniques</li> <li>• Explain how to operate distillation and dehydration equipment to separate and purify ethanol.</li> <li>• Explain the procedures for solid-liquid separation, evaporation, and condensate treatment in residue handling.</li> <li>• Explain the safe handling of utility systems, including boilers, water treatment plants, and cooling towers.</li> <li>• Describe the significance of product storage, inventory management, and quality control in ethanol production.</li> <li>• Follow safety protocols and emergency response procedures, including fire-fighting systems.</li> <li>• Explain the role of control systems (DCS) and electrical systems in maintaining plant operations.</li> <li>• Describe the functions and utilization of fire-fighting systems and weigh bridges.</li> <li>• Explain reporting logs, finding and fault to the Sr. Operator</li> </ul>	<ul style="list-style-type: none"> <li>• Demonstrate the methods to Check and finalize appropriate biomass/feedstock materials based on availability and suitability</li> <li>• Demonstrate the technique of biomass storage, handling, and pre-treatment in the 2G ethanol production process</li> <li>• Demonstrate the implementation of pre-treatment procedures such as grinding, milling, or other methods to prepare the feedstock for fermentation</li> <li>• Demonstrate the working of Feed Stock Handling System such as conveying the feed stock, de-stoning and screening, magnetic particle separation, intermediate storage, necessary safety controls and instrumentation for automatic operation, weighing system, vibratory screen system with rated capacity as per layout and parameters mentioned in the specifications</li> <li>• Perform wet washing procedures effectively</li> <li>• Demonstrate knowledge of enzymatic hydrolysis and co-fermentation techniques for efficient ethanol production</li> <li>• Demonstrate proficiency in operating distillation and dehydration equipment to separate and purify ethanol.</li> <li>• Perform the procedures for solid-liquid separation, evaporation, and condensate treatment in residue handling.</li> <li>• Demonstrate the operational process of utility systems, including boilers, water treatment plants, and cooling towers</li> <li>• Demonstrate accurate utilization of weighing systems for efficient material handling.</li> </ul>

	<ul style="list-style-type: none"> <li>• Demonstrate the technique to operate control systems (DCS) and electrical systems in maintaining plant operations</li> <li>• Demonstrate how to operate M.C.C (motor control centre) panel safely and efficiently</li> <li>• Perform reporting logs, finding and fault to the Senior Operator</li> </ul>
<b>Classroom Aids:</b>	
<ul style="list-style-type: none"> <li>• White / Black board and Projector</li> <li>• Digital Presentation</li> <li>• Computer/Laptop</li> <li>• Public Addressing System</li> </ul>	
<b>Tools, Equipment and Other Requirements</b>	
<ul style="list-style-type: none"> <li>• <b>Hand Tools:</b> Wrenches, screwdrivers, pliers, hammer, measuring tape, utility knife, wire cutters/strippers, Allen keys, pipe wrench.</li> <li>• <b>Process Equipments:</b> Biomass storage systems, milling equipment, conveyors, pre-treatment reactors, enzymatic hydrolysis equipment, fermentation vessels, distillation columns, dehydration equipment, solid-liquid separation equipment, evaporation units, process condensate treatment systems, boilers, water treatment plants, cooling towers, air compressors. (All equipments should either acquired in demonstration form or small capacity)</li> <li>• <b>Control Systems:</b> Distributed Control System (DCS), Programmable Logic Controllers (PLCs), Human-Machine Interface (HMI) panels (All equipments should either acquired in demonstration form or small capacity)</li> <li>• <b>Personal Protective Equipment (PPE):</b> Safety helmet, safety glasses, ear protection, respiratory protection (if required), protective gloves, safety boots.</li> </ul>	

### Module 3: Working effectively in a team

Mapped to HYC/N9301 v 3.0

#### Terminal Outcomes:

- Effective team work

<b>Duration: 15:00</b>	<b>Duration: 45:00</b>
<b>Theory – Key Learning Outcomes</b>	<b>Practical – Key Learning Outcomes</b>
<ul style="list-style-type: none"> <li>• Describe maintaining clear communication with colleagues</li> <li>• Explain passing on information to colleagues in line with organizational requirements</li> <li>• Describe working in a team and support the team members</li> <li>• Explain working in ways that show respect to colleagues</li> <li>• Describe fulfilling commitments made to colleagues</li> <li>• Explain informing team members timely, if timelines can't be met</li> <li>• Describe taking the necessary initiatives to resolve the issues while working in team</li> </ul>	<ul style="list-style-type: none"> <li>• Demonstrate maintaining clear communication with colleagues</li> <li>• Perform passing on information to colleagues in line with organizational requirements</li> <li>• Perform working in a team and support the team members</li> <li>• Demonstrate working in ways that show respect to colleagues</li> <li>• Perform fulfilling commitments made to colleagues</li> <li>• Demonstrate informing team members timely, if timelines can't be met</li> <li>• Perform taking the necessary initiatives to resolve the issues while working in team</li> </ul>
<b>Classroom Aids:</b>	
<ul style="list-style-type: none"> <li>• White / Black board and Projector</li> <li>• Digital Presentation</li> <li>• Computer/Laptop</li> <li>• Public Addressing System</li> </ul>	
<b>Tools, Equipment and Other Requirements</b>	
<ul style="list-style-type: none"> <li>• Dummy Team</li> </ul>	



## Module 4: Maintain health, safety and security procedures

Mapped to HYC/N9302 v 3.0

### Terminal Outcomes:

- Practice health and safety measures
- Follow fire safety procedures
- Follow emergencies, rescue and first-aid procedures

<b>Duration: 15:00</b>	<b>Duration: 45:00</b>
<b>Theory – Key Learning Outcomes</b>	<b>Practical – Key Learning Outcomes</b>
<ul style="list-style-type: none"> <li>• Describe using protective clothing/equipment for specific tasks and work conditions</li> <li>• Explain identifying documents, location and people responsible for health and safety in the workplace</li> <li>• Describe identifying possible causes of risk or accident in the workplace</li> <li>• Describe carrying out safe working practices while dealing with hazards to ensure the safety of self and others</li> <li>• Explain lifting heavy objects safely using correct procedures</li> <li>• Describe identifying common safety signs, displayed in various areas</li> <li>• Explain using the various appropriate fire extinguishers on different types of fires correctly</li> <li>• Describe following rescue techniques applied during fire hazard</li> <li>• Explain following good housekeeping practice in order to prevent fire hazards</li> <li>• Describe list issues concerning the safety in work place</li> <li>• Describe informing fire safety department about any near-miss incidents in the work place</li> <li>• Explain following the applicable laws, regulations and codes as per safety standard</li> <li>• Describe preparing written accident/incident report and share with the concerned officer/department</li> <li>• Explain providing appropriate first aid to victims in emergency situation</li> <li>• Explain basic techniques of bandaging</li> <li>• Explain responding promptly and appropriately to an accident</li> <li>• Explain rescue activity during an accident in real or simulated environments</li> </ul>	<ul style="list-style-type: none"> <li>• Demonstrate using protective clothing/equipment for specific tasks and work conditions</li> <li>• Perform identifying documents, location and people responsible for health and safety in the workplace</li> <li>• Demonstrate identifying possible causes of risk or accident in the workplace</li> <li>• Perform carrying out safe working practices while dealing with hazards to ensure the safety of self and others</li> <li>• Demonstrate lifting heavy objects safely using correct procedures</li> <li>• Perform identifying common safety signs, displayed in various areas</li> <li>• Demonstrate using the various appropriate fire extinguishers on different types of fires correctly</li> <li>• Perform following rescue techniques applied during fire hazard</li> <li>• Demonstrate following good housekeeping practice in order to prevent fire hazards</li> <li>• Perform list issues concerning the safety in work place</li> <li>• Demonstrate informing fire safety department about any near-miss incidents in the work place</li> <li>• Perform following the applicable laws, regulations and codes as per safety standard</li> <li>• Demonstrate preparing written accident/incident report and share with the concerned officer/department</li> <li>• Perform providing appropriate first aid to victims in emergency situation</li> <li>• Perform basic techniques of bandaging</li> <li>• Perform responding promptly and appropriately to an accident</li> <li>• Perform rescue activity during an accident in real or simulated environments</li> <li>• Demonstrate correct method to rescue</li> </ul>

<ul style="list-style-type: none"> <li>• Describe correct method to rescue injured people and others during an emergency</li> </ul>	<p>injured people and others during an emergency</p>
<p>• Classroom Aids:</p>	
<ul style="list-style-type: none"> <li>• White / Black board and Projector</li> <li>• Digital Presentation</li> <li>• Computer/Laptop</li> <li>• Public Addressing System</li> </ul>	
<p><b>Tools, Equipment and Other Requirements</b></p>	
<ul style="list-style-type: none"> <li>• Trainer Guide</li> <li>• Participant hand book</li> <li>• Escalation matrix chart</li> <li>• Class Room</li> <li>• White Board &amp; Markers</li> <li>• LCD Projector</li> </ul>	

## Module 5: Employability Skills

Mapped to DGT/VSQ/N0101

NOS Version No. – 1.0

### Terminal Outcomes:

- Understanding of employability skills.
- Enhancing candidate's employability skills.

Duration: 06:00	Duration: 24:00
Theory – Key Learning Outcomes	Practical – Key Learning Outcomes
<ul style="list-style-type: none"> <li>• Introduction to Employability Skills</li> <li>• Constitutional Values – Citizenship</li> <li>• Becoming a Professional in the 21st Century</li> <li>• Basic English Skills</li> <li>• Communication Skills</li> <li>• Financial and Legal Literacy</li> <li>• Essential Digital Skills</li> <li>• Diversity &amp; Inclusion</li> <li>• Career Development &amp; Goal Setting</li> <li>• Customer Service</li> <li>• Getting Ready for Apprenticeship &amp; Jobs</li> </ul>	<ul style="list-style-type: none"> <li>• Introduction to Employability Skills - Online learning &amp; future of Skills</li> <li>• Constitutional Values – Citizenship as guiding principles and protecting the environment</li> <li>• Becoming a Professional in the 21st Century by knowing oneself and developing critical thinking &amp; decision-making abilities</li> <li>• Basic English Skills -both written, reading and spoken</li> <li>• Communication Skills by Practicing Effective Communication</li> <li>• Financial and Legal Literacy by learning basics of banking &amp; money management</li> <li>• Essential Digital Skills</li> <li>• Diversity &amp; Inclusion at workplace</li> <li>• Career Development &amp; Goal Setting</li> <li>• Customer Service and relationship building</li> <li>• Getting Ready for Apprenticeship &amp; Jobs</li> </ul>
<ul style="list-style-type: none"> <li>• Classroom Aids:</li> </ul>	
<ul style="list-style-type: none"> <li>• White / Black board and Projector</li> <li>• Digital Presentation</li> <li>• Computer/Laptop</li> <li>• Public Addressing System</li> </ul>	
<b>Tools, Equipment and Other Requirements</b>	
<ul style="list-style-type: none"> <li>• Dummy team</li> </ul>	

## Annexure

### Trainer Requirements

Trainer Prerequisites						
Minimum Educational Qualification	Specialization	Relevant Industry Experience		Training Experience		Remarks
		Years	Specialization	Years	Specialization	
Diploma (after class X)	-	2	-	1	-	Relevant Experience
ITI Pass (Two year after class X)	-	3	-	1	-	Relevant Experience

Trainer Certification	
Domain Certification	Platform Certification
Certified for the Job Role: “Junior Operator – 2G Ethanol Plant”, mapped to QP: “HYC/Q 4301, v1.0”. Minimum accepted score is 80%	Recommended that the trainer is certified for the Job Role: “Trainer (VET & Skills)”, mapped to the Qualification Pack: “MEP/Q2601, v2.0” with minimum score of 80%

## Assessor Requirements

Assessor Prerequisites						
Minimum Educational Qualification	Specialization	Relevant Industry Experience		Training/Assessment Experience		Remarks
		Years	Specialization	Years	Specialization	
Diploma (after class X)	-	2	-	1	-	Relevant Experience
ITI Pass (Two year after class X)	-	3	-	1	-	Relevant Experience

Assessor Certification	
Domain Certification	Platform Certification
Certified for the Job Role: “Junior Operator – 2G Ethanol Plant”, mapped to QP: “HYC/Q 4301, v1.0”. Minimum accepted score is 80%	Recommended that the Assessor is certified for the Job Role: “Assessor (VET and Skills)”, mapped to the Qualification Pack: “MEP/Q2701, v2.0” with minimum score of 80%

## Assessment Strategy

The assessment of candidates/trainees will be on the basis on assessment outcome/assessment criteria of the Qualification. In the assessment criteria for each NOS marks have been defined for theoretical and practical skills, on which the candidate will be assessed. The emphasis is on 'learning-by-doing' and performance criteria is based on the practical demonstration of skills and knowledge.

**Theory/Knowledge test**– This section will test the trainee on his/her knowledge on the subject/trade. The test will be carried out online/offline with a set of random Question paper. that include multiple choice questions in multilingual, True/False Statement, audio-video question etc.

The Question Bank will be developed by Subject Matter Experts (SME) of the hydrocarbon sector and these questions again be vetted by the Industry Experts, each performance criteria have its marks for theory based on the level of question i.e., easy, medium and difficult.

**Practical/Demonstration Test**– This stage involves the face-to-face interaction between Assessor and each trainee. The practical knowledge will be tested through trade test which demonstrates the skill required for the job, by which assessor would be able to evaluate the trainee for his/her practical knowledge on respective Qualification.

To ensure the maximum possible consistency in the assessment by different assessors at different locations, orientation of the assessors is also required about the stages involved in the assessment and the assessor role in the assessment process. The assessor must have knowledge of the following concepts before assessment:

- Qualification Pack Structure
- Guidance for the assessor to conduct theory and practical assessments
- Guidance for trainees to be given by assessor before the start of the assessments.
- Guidance on assessments process, practical brief with steps of operations practical observation checklist
- Practical/Demonstration Test guidance for uniformity and consistency.
- Guidance on assessment evidence collection (signed attendance copy, verification of the authenticity of the candidate by checking the photo ID card, Photographs-while assessment undergoing etc.)

The empanelled assessment agencies will be instructed to hire assessors with integrity, reliability and fairness. Each assessor shall sign a document with its assessment agency by which they commit themselves to comply with the rules of confidentiality and conflict of interest, independence from commercial and other interests that would compromise impartiality of the assessments. The assessment agencies are instructed to ideally have assessor with sufficient amount of relevant industry experience related to Qualification. The assessors will also have scrutinized and have to undergo orientation of assessment framework, competency-based assessments etc.

### Recognition of Prior Learning (RPL)

Under the Recognition of Prior Learning (RPL), the candidates enrolled and the assessment will be carried out as per the assessment criteria and assessment outcome of the full Qualification and the process of assessment will be carry out by the body/bodies empanelled by Hydrocarbon Sector Skill Council

In RPL, the candidate already has the skills and knowledge while working on the job from long, the learners only require to undergo a brief orientation training and the subsequent assessment process and certification is awarded to those candidates who successfully clears the assessment. The tentative process of RPL would include the flowing stages:

- 1 Cluster Mapping and Mobilization of the candidates
- 2 Counselling & Pre-Screening
- 4 Candidate registration, batch creation and enrolment

- 5 Conductions of an orientation program for candidates before assessment
- 7 Assessment by HSSC
- 8 Evaluation of Assessment Result
- 9 Issuance of the Certificate to successful candidates

#### Assessment Strategy:

- For each Qualification Pack assessment criteria has been developed, which describe the weightage for each NOS/Performance criteria (PC) and assigned marks based on each NOS separately for theoretical and practical skills
- The question bank will be developed by the subject matter experts to assess the theoretical and practical knowledge.
- The accredited assessment agency will carry out the assessment process on the date proposed after completion of the training. The assessment will be carried out on the basis of the two parameters i.e. Theoretical test and Practical test.
- The result of the assessment will be shared by assessment body to the HSSC for review and compliance, after that result will be processed and certificates will be generated
- Assessments shall be conducted in the regional languages in case of any specific requirement from the concerned Training Provider.
- For ensuring the impartial assessment it will be ensured that the Assessment Bodies (AB) are not involved in any type of training delivery with respect to this project.

#### 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 the proportion of marks for Theory and Skills Practical for each PC.
2. The assessment for the theory part will be based on the 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 the theory part for each candidate at each examination/training center (as per assessment criteria below).
5. Individual assessment agencies will create unique evaluations for skill practical for every student at each examination/ training center based on these criteria.
6. To pass the Qualification Pack assessment, every trainee should score a minimum of 50% of % aggregate marks to successfully clear the assessment.
7. In case of unsuccessful completion, the trainee may seek reassessment on the Qualification Pack.

**Recommended Pass % aggregate for QP: 50%**

## References

## Glossary

<b>Term</b>	<b>Description</b>
<b>Sector</b>	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.
<b>Sub-sector</b>	Sub-sector is derived from a further breakdown based on the characteristics and interests of its components.
<b>Occupation</b>	Occupation is a set of job roles, which perform similar/ related set of functions in an industry.
<b>Job role</b>	Job role defines a unique set of functions that together form a unique employment opportunity in an organization.
<b>Occupational Standards (OS)</b>	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.
<b>Performance Criteria (PC)</b>	Performance Criteria (PC) are statements that together specify the standard of performance required when carrying out a task.
<b>National Occupational Standards (NOS)</b>	NOS are occupational standards which apply uniquely in the Indian context.
<b>Qualifications Pack (QP)</b>	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.
<b>Unit Code</b>	Unit code is a unique identifier for an Occupational Standard, which is denoted by an 'N'
<b>Unit Title</b>	Unit title gives a clear overall statement about what the incumbent should be able to do.
<b>Description</b>	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.
<b>Scope</b>	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.
<b>Knowledge and Understanding (KU)</b>	Knowledge and Understanding (KU) are statements that together specify the technical, generic, professional and organisational specific knowledge that an individual need in order to perform to the required standard.
<b>Organisational Context</b>	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.
<b>Technical Knowledge</b>	Technical knowledge is the specific knowledge needed to accomplish specific designated responsibilities.
<b>Core Skills/Generic Skills (GS)</b>	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 the context of the OS, these include communication-related skills that are applicable to most job roles.
<b>Electives</b>	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.
<b>Options</b>	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.



## Acronyms and Abbreviations

Term	Description
<b>NOS</b>	National Occupational Standard(s)
<b>NSQF</b>	National Skills Qualifications Framework
<b>QP</b>	Qualifications Pack
<b>TVET</b>	Technical and Vocational Education and Training
<b>OS</b>	Occupational Standard(s)
<b>QP</b>	Qualifications Pack
<b>KU</b>	Knowledge and understanding
<b>GS</b>	Generic Skills
<b>FAQ</b>	Frequently Asked Questions
<b>BP</b>	Business Partner
<b>KYC</b>	Know Your Consumer
<b>FAB</b>	Feature Advantage Benefit