





# **Automotive CAD Technician**

QP Code: ASC/Q8201

Version: 3.0

NSQF Level: 3.5

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### **ASC/Q8201: Automotive CAD Technician**

### **Brief Job Description**

The individual is involved in interpreting the customer /design team requirements of the product and creating the same into 3D and 2D graphical model through various computer aided design techniques.

### **Personal Attributes**

The person should be patient, organised, team-oriented and have the ability to work for long hours in adverse conditions. They should be keen observers and have an eye for detail and quality.

### **Applicable National Occupational Standards (NOS)**

### **Compulsory NOS:**

- 1. ASC/N9803: Organize work and resources (Manufacturing)
- 2. ASC/N8201: Create design of component/ aggregate
- 3. DGT/VSQ/N0102: Employability Skills (60 Hours)

### **Qualification Pack (QP) Parameters**

Sector	Automotive
Sub-Sector	Research & Development
Occupation	Automotive Product Designing
Country	India
NSQF Level	3.5
Credits	14
Aligned to NCO/ISCO/ISIC Code	NCO-2015/3118.0301





Minimum Educational Qualification & Experience	8th grade pass with 2 years of NTC with 1 Year of experience OR 8th Class with 3 Years of experience OR 10th grade pass and pursuing continuous schooling OR 11th Class
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	NA
NSQC Approval Date	
Version	3.0





### ASC/N9803: Organize work and resources (Manufacturing)

### **Description**

This NOS unit is about implementing safety, planning work, adopting sustainable practices for optimising use of resources

### Scope

The scope covers the following:

- Maintain safe and secure working environment
- Health and hygiene
- Perform work as per quality standards
- Effective waste management practices
- Material/energy conservation practices

### **Elements and Performance Criteria**

### Maintain safe and secure working environment

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

- **PC1.** identify hazardous activities and the possible causes of risks or accidents in the workplace
- PC2. follow safe working practices while dealing with hazards to ensure safety of self and others
- **PC3.** carry out routine check of the machine for identifying potential hazards
- **PC4.** use appropriate protective clothing/equipment for specific tasks and work
- **PC5.** follow safety hazards and preventive techniques during fire drill
- **PC6.** report any identified breaches in health, safety and security policies and procedures to the designated person

### Health and hygiene

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

- **PC7.** ensure workstation and equipment are regularly clean and sanitized
- PC8. clean hands with soap, alcohol-based sanitizer regularly
- **PC9.** avoid contact with ill people and self-isolate in a similar situation
- **PC10.** wear and dispose PPEs regularly and appropriately
- **PC11.** report advanced hygiene and sanitation issues to appropriate authority
- **PC12.** follow stress and anxiety management techniques

### Perform work as per quality standards

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

- **PC13.** ensure that work is accomplished as per the requirements within the specified timeline
- **PC14.** ensure team goals are given preference over individual goals

### Effective waste management practices

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

- PC15. follow the fundamentals of 5S for waste management
- PC16. segregate waste into different categories

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### **Oualification Pack**



- PC17. follow processes specified for disposal of hazardous waste
- PC18. identify recyclable, non-recyclable and hazardous waste
- PC19. dispose non-recyclable, recyclable and reusable waste appropriately at identified location

### Material/energy conservation practices

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

- **PC20.** identify ways to optimize usage of material in various tasks/activities/processes
- **PC21.** check for spills/leakages in various tasks/activities/processes
- PC22. plug spills/leakages and escalate to appropriate authority if unable to rectify
- **PC23.** check if the equipment/machine is functioning normally before commencing work and rectify wherever required
- **PC24.** report malfunctioning (fumes/ sparks/emission/vibration/noise) and lapse in maintenance of equipment
- **PC25.** ensure electrical equipment and appliances are properly connected and turned off when not in use

### **Knowledge and Understanding (KU)**

The individual on the job needs to know and understand:

- **KU1.** organisation procedures for health, safety and security, individual role and responsibilities in this context
- **KU2.** the organisation's emergency procedures for different emergency situations and the importance of following the same
- **KU3.** evacuation procedures for workers and visitors
- **KU4.** how and when to report hazards as well as the limits of responsibility for dealing with hazards
- **KU5.** potential hazards, risks and threats based on the nature of work
- **KU6.** preventative and remedial actions to be taken in case of exposure to toxic material
- **KU7.** various types of fire extinguisher
- **KU8.** various types of safety signs and their meaning
- **KU9.** appropriate first aid treatment relevant to different condition e.g. bleeding, minor burns, eye injuries etc.
- **KU10.** relevant standards, procedures and policies related to 5S followed in the company
- **KU11.** the various materials used and their storage norms
- KU12. efficient utilisation of material and water
- **KU13.** basics of electricity and prevalent energy efficient devices
- **KU14.** common practices of conserving electricity
- **KU15.** common sources and ways to minimize pollution
- **KU16.** categorisation of waste into dry, wet, recyclable, non-recyclable and items of single-use plastics
- **KU17.** usage of different colors of dustbins
- **KU18.** waste management techniques
- **KU19.** significance of greening





### **Generic Skills (GS)**

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

- **GS1.** read safety instructions/guidelines
- **GS2.** modify work practices to improve them
- **GS3.** ask for clarifications from superior about the job requirement
- **GS4.** work with supervisors/team members to carry out work related tasks
- **GS5.** complete tasks efficiently and accurately within stipulated time
- **GS6.** inform/report to concerned person in case of any problem
- **GS7.** make timely decisions for efficient utilization of resources
- **GS8.** write reports such as accident report, in at least English/regional language
- **GS9.** be punctual and utilize time efficiently





### **Assessment Criteria**

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
Maintain safe and secure working environment	11	5	-	7
<b>PC1.</b> identify hazardous activities and the possible causes of risks or accidents in the workplace	2	1	-	2
<b>PC2.</b> follow safe working practices while dealing with hazards to ensure safety of self and others	2	-	-	1
<b>PC3.</b> carry out routine check of the machine for identifying potential hazards	2	1	-	1
<b>PC4.</b> use appropriate protective clothing/equipment for specific tasks and work	2	1	-	1
<b>PC5.</b> follow safety hazards and preventive techniques during fire drill	2	1	-	1
<b>PC6.</b> report any identified breaches in health, safety and security policies and procedures to the designated person	1	1	-	1
Health and hygiene	7	5	-	2
<b>PC7.</b> ensure workstation and equipment are regularly clean and sanitized	2	2	-	1
<b>PC8.</b> clean hands with soap, alcohol-based sanitizer regularly	1	1	-	1
<b>PC9.</b> avoid contact with ill people and self-isolate in a similar situation	1	-	-	-
<b>PC10.</b> wear and dispose PPEs regularly and appropriately	1	-	_	-
<b>PC11.</b> report advanced hygiene and sanitation issues to appropriate authority	1	1	-	-
PC12. follow stress and anxiety management techniques	1	1	-	-
Perform work as per quality standards	5	3	-	2
<b>PC13.</b> ensure that work is accomplished as per the requirements within the specified timeline	2	2	-	1





Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
<b>PC14.</b> ensure team goals are given preference over individual goals	3	1	-	1
Effective waste management practices	15	10	-	4
<b>PC15.</b> follow the fundamentals of 5S for waste management	3	2	-	1
PC16. segregate waste into different categories	2	1	-	-
<b>PC17.</b> follow processes specified for disposal of hazardous waste	2	2	-	1
PC18. identify recyclable, non-recyclable and hazardous waste	4	2	-	1
<b>PC19.</b> dispose non-recyclable, recyclable and reusable waste appropriately at identified location	4	3	-	1
Material/energy conservation practices	12	7	-	5
<b>PC20.</b> identify ways to optimize usage of material in various tasks/activities/processes	2	1	-	1
PC21. check for spills/leakages in various tasks/activities/processes	2	1	-	1
<b>PC22.</b> plug spills/leakages and escalate to appropriate authority if unable to rectify	2	1	-	-
<b>PC23.</b> check if the equipment/machine is functioning normally before commencing work and rectify wherever required	2	2	-	1
PC24. report malfunctioning (fumes/ sparks/emission/vibration/noise) and lapse in maintenance of equipment	2	1	-	1
<b>PC25.</b> ensure electrical equipment and appliances are properly connected and turned off when not in use	2	1	-	1
NOS Total	50	30	-	20





# **National Occupational Standards (NOS) Parameters**

NOS Code	ASC/N9803
NOS Name	Organize work and resources (Manufacturing)
Sector	Automotive
Sub-Sector	Generic
Occupation	Generic
NSQF Level	3
Credits	TBD
Version	1.0
Last Reviewed Date	31/03/2022
Next Review Date	24/06/2026
NSQC Clearance Date	24/06/2021

# **ASDC**

### **Qualification Pack**



### ASC/N8201: Create design of component/ aggregate

### **Description**

This NOS is about interreting the customer and internal product design requirements and creating the design of components by using appropriate computer graphic techniques

### Scope

The scope covers the following:

- Prepare for product designing
- Perform designing of the component
- Inspection and storage of design

### **Elements and Performance Criteria**

### Prepare for product designing

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

- **PC1.** identify the customer requirements and work to be done by interpreting the work order, process manuals and instructions from internal design team and supervisor
- **PC2.** identify and select software like CATIA, Auto- CAD, Unigraphics etc. for creating the designs and models as per the requirement
- **PC3.** collate the design requirements in terms of material used for making the component, packaging and other requirements to decide the dimensions, measurements and tolerances of the aggregate/component
- **PC4.** refer any issues related to design concept clarity, dimensions and practicality to competent internal specialist or supervisor if they cannot be resolved by own

### Perform designing of the component

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

- **PC5.** prepare a rough sketch of the end product by visualizing the requirements of the customer
- **PC6.** develop and design specifications of the component by using the Geometric and Trigonometric rules/ formula provided by the supervisor
- **PC7.** set the required unit and dimension parameters and insert sketches, scanned images, diagrams, signs or symbols, etc. of required product design in a CAD file
- **PC8.** create a 3D model of product by using CAD techniques as per the information received from the customer
- **PC9.** prepare layouts and various views of drawing to generate a relationship between components and assemblies
- **PC10.** apply different drawing/ drafting aids like colours, symbols etc. to highlight areas in the drawings
- **PC11.** test the 3D model through simulation/ packaging study on the feasibility of actual product as per the customer requirement
- PC12. create 2D drawing of the component as per the SOP/WI
- **PC13.** make accurate and complete notes related to design in terms of overall dimensions or other manufacturing specifications like assembly sequence etc. in the drawing





**PC14.** maintain CAD files, backup of CAD files and records of other related information shared by internal team or customer

### Inspection and storage of design

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

- **PC15.** co-ordinate with product design team and other departments for design review and their feedback on the correctness and validity of the drawing for production purpose
- **PC16.** conduct quality inspection of the drawings and sketches for various tolerances levels
- **PC17.** rework or modify the design as per the feedback shared by the product design team on the 2D drawings
- **PC18.** tag and store the drawings with the right numbers and codes properly as per the organisational guidelines

### **Knowledge and Understanding (KU)**

The individual on the job needs to know and understand:

- **KU1.** relevant standards and procedures followed in the company
- **KU2.** various requirements in terms of design and utility of the component
- **KU3.** internal systems of design records (Manual /PLM ), Change notes (ECN)
- **KU4.** different types of designing processes and associated software like CATIA, AutoCAD, Unigraphics etc.
- **KU5.** Draughting Standards & Techniques- e.g. ANSI series IS/ ISO
- **KU6.** technical drawing practices as per the company standards
- **KU7.** drawings and modelling techniques like 2D and 3D
- **KU8.** different type of views generated in engineering drawings
- **KU9.** computer programming and drafting
- **KU10.** Limits & Fits, GD & T etc.
- **KU11.** algebra and trigonometric rules and applications
- **KU12.** how to interpret Tolerance Analysis sheet supplied by the design team
- **KU13.** how to check various dimensional mismatches which may happen on the actual product assembly

### **Generic Skills (GS)**

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

- **GS1.** read and interpret notes, designs and instructions shared by different internal team
- **GS2.** communicate the process requirements to the supervisor and co-workers
- **GS3.** attentively listen and comprehend the information given by the supervisor/team members
- **GS4.** write work related information in English/regional language
- **GS5.** recognise a workplace problem and take suitable action
- **GS6.** analyse and apply the information gathered from observation, experience, reasoning or communication to act efficiently
- **GS7.** plan and organise work according to the work requirements





**GS8.** complete the assigned tasks with minimum supervision

**GS9.** visualize designs

**GS10.** share technical information clearly using appropriate language





### **Assessment Criteria**

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
Prepare for product designing	8	10	-	4
<b>PC1.</b> identify the customer requirements and work to be done by interpreting the work order, process manuals and instructions from internal design team and supervisor	2	2	-	1
<b>PC2.</b> identify and select software like CATIA, Auto-CAD, Unigraphics etc. for creating the designs and models as per the requirement	2	2	-	1
<b>PC3.</b> collate the design requirements in terms of material used for making the component, packaging and other requirements to decide the dimensions, measurements and tolerances of the aggregate/component	2	3	-	1
<b>PC4.</b> refer any issues related to design concept clarity, dimensions and practicality to competent internal specialist or supervisor if they cannot be resolved by own	2	3	-	1
Perform designing of the component	16	36	-	12
<b>PC5.</b> prepare a rough sketch of the end product by visualizing the requirements of the customer	2	2	-	1
<b>PC6.</b> develop and design specifications of the component by using the Geometric and Trigonometric rules/ formula provided by the supervisor	1	4	-	1
<b>PC7.</b> set the required unit and dimension parameters and insert sketches, scanned images, diagrams, signs or symbols, etc. of required product design in a CAD file	1	5	-	1
<b>PC8.</b> create a 3D model of product by using CAD techniques as per the information received from the customer	2	5	-	1
<b>PC9.</b> prepare layouts and various views of drawing to generate a relationship between components and assemblies	1	4	-	1





Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
<b>PC10.</b> apply different drawing/ drafting aids like colours, symbols etc. to highlight areas in the drawings	2	4	-	1
<b>PC11.</b> test the 3D model through simulation/ packaging study on the feasibility of actual product as per the customer requirement	2	5	-	2
PC12. create 2D drawing of the component as per the SOP/WI	1	3	-	2
<b>PC13.</b> make accurate and complete notes related to design in terms of overall dimensions or other manufacturing specifications like assembly sequence etc. in the drawing	2	2	-	1
<b>PC14.</b> maintain CAD files, backup of CAD files and records of other related information shared by internal team or customer	2	2	-	1
Inspection and storage of design	6	4	-	4
<b>PC15.</b> co-ordinate with product design team and other departments for design review and their feedback on the correctness and validity of the drawing for production purpose	2	1	-	1
<b>PC16.</b> conduct quality inspection of the drawings and sketches for various tolerances levels	2	1	-	1
PC17. rework or modify the design as per the feedback shared by the product design team on the 2D drawings	1	1	-	1
<b>PC18.</b> tag and store the drawings with the right numbers and codes properly as per the organisational guidelines	1	1	-	1
NOS Total	30	50	-	20





# **National Occupational Standards (NOS) Parameters**

NOS Code	ASC/N8201
NOS Name	Create design of component/ aggregate
Sector	Automotive
Sub-Sector	Research & Development
Occupation	Automotive Product Designing
NSQF Level	4
Credits	TBD
Version	2.0
Last Reviewed Date	30/09/2021
Next Review Date	30/09/2024
NSQC Clearance Date	30/09/2021

# ASDC

### **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:

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### **Oualification 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.
- **PC28.** follow appropriate hygiene and grooming standards

# ASDC

### **Oualification Pack**



### 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
- **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





### **Assessment Criteria**

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
Introduction to Employability Skills	1	1	-	-
<b>PC1.</b> identify employability skills required for jobs in various industries	-	-	-	-
<b>PC2.</b> identify and explore learning and employability portals	-	-	-	-
Constitutional values - Citizenship	1	1	-	-
<b>PC3.</b> 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	2	4	-	-
<b>PC5.</b> recognize the significance of 21st Century Skills for employment	-	-	-	-
<b>PC6.</b> 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	2	3	-	-
<b>PC7.</b> use basic English for everyday conversation in different contexts, in person and over the telephone	-	-	-	-
<b>PC8.</b> read and understand routine information, notes, instructions, mails, letters etc. written in English	-	-	-	-
<b>PC9.</b> write short messages, notes, letters, e-mails etc. in English	-	-	-	-
Career Development & Goal Setting	1	2	-	-





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





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





### **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	31/08/2023
Next Review Date	31/08/2026
NSQC Clearance Date	31/08/2023

## 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 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. 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
ASC/N9803.Organize work and resources (Manufacturing)	50	30	-	20	100	15
ASC/N8201.Create design of component/ aggregate	30	50	-	20	100	75
DGT/VSQ/N0102.Employability Skills (60 Hours)	20	30	-	-	50	10
Total	100	110	-	40	250	100





# **Acronyms**

NOS	National Occupational Standard(s)
NSQF	National Skills Qualifications Framework
QP	Qualifications Pack
TVET	Technical and Vocational Education and Training
PPE	Personal Protective Equipment
PwD	Person with Disability
SOP	Standard Operating Practices
PwD	Persons with Disability





# 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.