

## **NSQF QUALIFICATION FILE**

**Approved in 19th NSQC Meeting – NCVET – Dated 26/05/2022**

### **CONTACT DETAILS OF THE BODY SUBMITTING THE QUALIFICATION FILE**

**Name and address of submitting body:**

Electronics Sector Skills Council of India

155, 2nd Floor, ESC House

Okhla Industrial Area - Phase 3,

New Delhi - 110020

Tel: 011 - 8447738501

**Name and contact details of individual dealing with the submission**

**Name:** Dr. Abhilasha Gaur

**Position in the Organization:** COO

**Address if different from above:** Same as above

**Tel number(s):**

**E-mail address:** ceo@essc-india.org

**List of documents submitted in support of the Qualifications File**

1. Model Curriculum

**Model Curriculum to be added which will include the following:**

- Indicative list of tools/equipment to conduct the training
- Trainers' qualification
- Lesson Plan
- Distribution of training duration into theory/practical/OJT component

## SUMMARY

1	<b>Qualification Title:</b> Drone Manufacturing and Assembly Technician
2	<b>Qualification Code, if any:</b> ELE/Q7307
3	<b>NCO code and occupation:</b> NCO-2015/8212.0400 and Assembly I & A
4	<b>Nature and purpose of the qualification (Please specify whether qualification is short term or long term):</b> Responsible for manufacturing and assembling a drone
5	<b>Body/bodies which will award the qualification:</b> Electronics Sector Skills Council of India
6	<b>Body which will accredit providers to offer courses leading to the qualification:</b> Electronics Sector Skills Council of India
7	<b>Whether accreditation/affiliation norms are already in place or not, if applicable (if yes, attach a copy):</b> Yes
8	<b>Occupation(s) to which the qualification gives access:</b> Assembly- I & A
9	<b>Job description of the occupation:</b> A Drone Manufacturing and Assembly Technician simulates, assembles, tests and debugs drones as part of a Drone manufacturing line, whilst ensuring adherence to standard working practices. The individuals in this job assemble and manufacture drones of varying sizes that are used in various applications such as taking aerial photos or videos, transporting goods, firefighting and emergency operations, power line inspections, clandestine inspections, etc.
10	<b>Licensing requirements:</b> N/A
11	<b>Statutory and Regulatory requirement of the relevant sector (documentary evidence to be provided):</b> N/A
12	<b>Level of the qualification in the NSQF:</b> Level 4
13	<b>Anticipated volume of training/learning required to complete the qualification:</b> 450 Hours (Theory:120, Practical:180, Theory:150)
14	<b>Indicative list of training tools required to deliver this qualification:</b> Soldering Iron, Screwdriver, Torque Screwdriver, Nut Driver, Safety Knife, Pliers, Wire Strippers, Wire Cutters, Glue Gun, Tweezers, Multi meter, Heat Gun, Desk Light and Magnifier, Digital Weighing Scale, Wattmeter and Clamp meter, Motor Thrust Stand, Connectors, Drone simulator, Drone chassis, drone controller, BLDC motors, propellers,

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	propeller guards, camera, trans receiver module				
15	<b>Entry requirements and/or recommendations and minimum age:</b> 8th Grade Pass + NTC (2 years after 8th) +2 Year NAC/relevant Experience) OR 10th Grade pass + 2 Year NTC/NAC/ relevant experience OR Certificate-NSQF (Level-3 in Domain of Electrical/Electronics) with 2 Years of relevant Experience OR 12th Grade and 18 Years				
16	<b>Progression from the qualification (Please show Professional and academic progression):</b> Assembly Supervisor				
17	<b>Arrangements for the Recognition of Prior learning (RPL):</b> RPL will be based on the same approved Qualification Pack and Assessment Criteria mentioned in the Qualification Pack by Electronics Sector Skills Council of India (ESSCI)				
18	<b>International comparability where known (research evidence to be provided):</b> Yet to establish				
19	<b>Date of planned review of the qualification:</b> 26 Sep 2025				
20	<b>Formal structure of the qualification</b> <b>Mandatory components</b>				
	Title of component and identification code/NOSs/Learning outcomes	Estimated size (learning hours)			Level
		Theory	Practical	OJT	
(i)	Bridge Module (Introduction)	21	09	00	4
(ii)	Manufacturing and Assembly of a drone (ELE/N7308)	45	105	150	4

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<b>(iii)</b>	Work effectively at the workplace (ELE/N9905)	15	15	00	4
<b>(iv)</b>	Apply health and safety practices at the workplace (ELE/N1002)	15	15	00	4
<b>(v)</b>	Employability Skills (60 Hours) (DGT/VSQ/N0102)	24	36	00	4
<b>Sub - Total</b>		<b>120</b>	<b>180</b>	<b>150</b>	
<b>Total</b>		<b>450</b>			

**SECTION 1****ASSESSMENT**

<b>21</b>	<b>Body/Bodies which will carry out assessment:</b> Electronics Sector Skills Council of India
<b>22</b>	<b>How will RPL assessment be managed and who will carry it out?</b> Give details of how RPL assessment for the qualification will be carried out and quality assured.  The RPL assessment will be carried out through pre assessment, identifying the skills gaps, provide bridge training to cover the competency gap and then conduct final assessment of the candidates.
<b>23</b>	<b>Describe the overall assessment strategy and specific arrangements which have been put in place to ensure that assessment is always valid, reliable and fair and show that these are in line with the requirements of the NSQF.</b> Assessment is done through third parties who are affiliated to ESSCI as Assessment Body. Assessors are trained & certified by ESSCI through Training of Assessors program. The assessment involves two processes. The first process is gathering the evidence of the competency of individuals. The second part of the assessment process is the judgement as to whether a person is competent or not. The assessment plan contains the following information: <ul style="list-style-type: none"><li>• What will be assessed, i.e. the competency based on each NOS</li><li>• How assessment will occur i.e. methods of assessment</li><li>• When the assessment will occur</li><li>• Where the assessment will take place i.e. context of the assessment (workplace/simulation)</li><li>• The criteria for decision making i.e. those aspects that will guide judgements and where appropriate, any supplementary criteria used to make a judgement on the level of performance.</li></ul> The assessment is conducted through theory, viva voce and practical.

Please attach most relevant and recent documents giving further information about assessment and/or RPL.

Give the titles and other relevant details of the document(s) here. Include page references showing where to find the relevant information.

## **ASSESSMENT EVIDENCE**

**Complete a grid for each component as listed in “Formal structure of the qualification” in the Summary.**

*NOTE: this grid can be replaced by any part of the qualification documentation which shows the same information – i.e. Learning Outcomes to be assessed, assessment criteria and the means of assessment.*

### **Assessment evidences**

**Title of Component:** Drone Manufacturing & Assembly Technician

### **CRITERIA FOR ASSESSMENT OF TRAINEES**

**Job Role** Drone Manufacturing & Assembly Technician

**Qualification Pack** ELE/Q7307

**Sector Skill Council** Electronics Sector Skills Council of India

#### **Guidelines for Assessment**

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

## **24. Assessment evidences**

<b>Outcomes to be assessed/NOSs to be assessed</b>	<b>Assessment criteria for the outcome</b>
Provided in the above section	
<b>Means of assessment 1</b> <ol style="list-style-type: none"> <li>1. Criteria for assessment for each Qualification Pack will be created by the Sector Skill Council. Each Performance Criteria (PC) will be assigned marks proportional to its importance in NOS. SSC will also lay down proportion of marks for Theory and Skills Practical for each PC.</li> <li>2. The assessment for the theory part will be based on knowledge bank of questions created by the SSC.</li> <li>3. Individual assessment agencies will create unique question papers for theory part for each candidate at each examination/training centre (as per assessment criteria below.)</li> <li>4. Individual assessment agencies will create unique evaluations for skill practical for every student at each examination/training centre based on these criteria.</li> </ol>	
<b>Means of assessment 2</b> Add boxes as required.	
<b>Pass/Fail</b> <ol style="list-style-type: none"> <li>1. To pass the Qualification Pack, every trainee should score a minimum of 70% in every NOS.</li> <li>2. In case of successfully passing only certain number of NOS's, the trainee is eligible to take subsequent assessment on the balance NOS's to pass the Qualification Pack.</li> </ol>	

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Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
<b>ELE/N7308- Manufacturing/ Assembly of a drone</b>				
<i>Understanding the components, operational basics of a Drone</i>	<b>5</b>	<b>12</b>	-	-
PC1. Identify different parts used in a Drone	1	2	-	-
PC2. Knowing basic operations of the drone and rationale of parts used in Fixed wing and Multi-rotor.	1	3	-	-
PC3. Understand the purpose of each component used in a Drone	1	3	-	-
PC4. Understand the Drone assembly	1	2	-	-
PC5. Understand the fitting mechanisms and right tools needed for the fitting/assembly	1	2		
<i>Understanding Flying principles with a Drone flight Simulation</i>	<b>10</b>	<b>18</b>	-	-
PC6. Understand the purpose of the different parts of the drones.	1	1	-	-
PC7. Understand thrust to weight ratio of a drone and how the propellers help in controlling the same	1	2	-	-
PC8. Understand and apply concepts of Lift and drag for drone flight using a drone simulator	1	2	-	-
PC9. Understand concept of reverse torque acting on drones.	1	2	-	-
PC10. Understand the drone motions roll, pitch and yaw and how the various propellers impact these	1	3	-	-
PC11. Understand roll and pitch angle and how it affects the flight of the drone	1	2	-	-
PC12. Understand sensor interfacing with the drone	1	1	-	-
PC13. Simulate the following concepts using a drone simulator where individual motors can be controlled: Pitch, roll, yaw, thrust to weight ratio	1	2	-	-

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PC14. Simulate the following concepts using a drone simulator where individual motors can be controlled: Hovering a drone, soft landing and controlled pitch and roll angles	1	2	-	-
PC15. Understand and use drones for solving problems in day-to-day life	1	1	-	-
<i>Performing Manufacture, Assembly, Testing and Quality check of the Drone</i>	<b>7</b>	<b>20</b>	-	-
PC16. Review standard work practice to assemble the drone components as per the drawings	1	2	-	-
PC17. Inspect the functional components of a drone thoroughly by connecting to an external power source, using multimeters and other tools	1	4	-	-
PC18. Assemble the Drone components as per desirable industry practices and as per drawings	2	6	-	-
PC19. Configure and apply settings of the Drone as per the drawings and standard industry	2	3	-	-
PC20. Pre-test that the Drone is working desirably as per the rated norms/specifications and performing Quality checks on the Drone.	1	3	-	-
<i>Commissioning of the Drone</i>	<b>4</b>	<b>12</b>	-	-
PC21. Perform standard safety checks of the Drone post Assembly / Manufacturing	1	4	-	-
PC22. Deploy the Drone and Perform an integrated test and demo run of the Drone to ensure customer satisfaction	2	5	-	-
PC23. Communicate with the customer to provide product specifications and related information	1	3	-	-
<i>Reporting to superior</i>	<b>4</b>	<b>8</b>	-	-
PC24. Inform on the workload and completion	1	2	-	-
PC25. Report work status through proper documentation as per organizational standards	1	2	-	-
PC26. Intimate the problems unresolved during assembly, with reason	1	2	-	-

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PC27. Prepare the feedback form on customer installation with respect to the product deployment	1	2	-	-
<b>NOS Total</b>	<b>30</b>	<b>70</b>	<b>-</b>	<b>-</b>
<b>ELE/N9905: Work effectively at the workplace</b>				
<i>Communicate effectively at the workplace</i>	<b>5</b>	<b>13</b>	<b>-</b>	<b>-</b>
PC1. exchange information and instruction with colleagues, and seek clarifications and feedback as necessary	1	3	-	-
PC2. assist colleagues where required	1	3	-	-
PC3. follow business communication etiquette in all interactions and communicative formats (online, digital, and in-person)	1	4	-	-
PC4. document and share all relevant information with stakeholders in agreed formats and as per agreed timelines	2	3	-	-
<i>Work effectively</i>	<b>6</b>	<b>13</b>	<b>-</b>	<b>-</b>
PC5. identify and obtain clarity regarding organisational, team and own goals and targets	1	2	-	-
PC6. prioritise and plan work in order to achieve goals and targets	1	2	-	-
PC7. monitor own and team performance as per agreed plan	1	2	-	-
PC8. complete duties accurately, systematically and within required timeframes	1	2	-	-
PC9. express emotions appropriately at the workplace and manage own response to heightened emotions	1	2	-	-
PC10. maintain orderliness and cleanliness in the work area	1	3	-	-
<i>Maintain and enhance professional competence</i>	<b>8</b>	<b>7</b>	<b>-</b>	<b>-</b>

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PC11. identify own strengths and weaknesses in relation to goals and targets	1	1	-	-
PC12. adapt self, service, or product to Meet success criteria	1	1	-	-
PC13. seek and select opportunities for Continuous professional development	1	1	-	-
PC14. formulate a professional development plan to enhance capabilities	2	1	-	-
PC15. build or contribute to the organizational knowledge base of cases, clients, issues, solutions, and innovations	1	1	-	-
PC16. examine developments and trends in field of work and their potential impact on work	1	1	-	-
PC17. take feedback from peers, supervisors and clients to improve own performance and practices	1	1	-	-
<i>Work in a disciplined and ethical manner</i>	<b>11</b>	<b>16</b>	-	-
PC18. perform tasks as per workplace standards, organisational policies and legislative requirements	2	2	-	-
PC19. display appropriate professional appearance at the workplace and adhere to the organisational dress code	1	2	-	-
PC20. demonstrate responsible and disciplined behaviour at the workplace such as punctuality; completing tasks as per given time and standards; demonstrating professional behaviour at all times, adopting environment- friendly practices, etc.	1	2	-	-
PC21. identify the cause of conflict and options for resolution with peers or escalate grievances and problems to appropriate authority as per procedure for conflict resolution	2	2	-	-
PC22. protect the rights of the client and organisation when delivering services	1	2	-	-

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PC23. ensure services are delivered equally to all clients regardless of personal and cultural beliefs	1	2	-	-
PC24. operate within an agreed ethical code of practice and report unethical conduct to the appropriate authorities	2	2	-	-
PC25. follow organisational guidelines and Legal requirements on disclosure and confidentiality	1	2	-	-
<i>Uphold social diversity at the workplace</i>	<b>10</b>	<b>11</b>	-	-
PC26. recognize and evaluate biased practices against underrepresented groups like women and persons with disabilities, in workplace systems and processes	2	2	-	-
PC27. identify and report discrimination and harassment based on gender, disability, or cultural difference at the workplace	2	2	-	-
PC28. use inclusive or neutral language And gestures in all interactions	2	2	-	-
PC29. respect the personal and professional space of others	2	2	-	-
PC30. access grievance redressal mechanisms as per legislations	2	3	-	-
<b>NOS Total</b>	<b>40</b>	<b>60</b>	-	-
<b>ELE/N1002: Apply health and safety practices at the workplace</b>				
<i>Deal with workplace hazards</i>	<b>20</b>	<b>31</b>	-	-
PC1. identify job-site hazards and possible causes of accident in the workplace	2	3	-	-
PC2. perform work complying to organizational safe working practices and observing hazard signs displayed on containers, equipment and in various work areas such as inside buildings, in open areas and public spaces, etc.	3	4	-	-

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PC3. use appropriate personal protective equipment(PPE) for specific tasks and work conditions, contaminant (concentration w.r.t air) requirements and severity of hazard while conforming to the Indian/International standards	3	4	-	-
PC4. follow standard safety procedures while handling tool/ equipment, hazardous substances and while working in hazardous environments	3	4	-	-
PC5. dispose electronic waste (such as toxins; metals such as lead, cadmium, barium; flame retardant plastics, welding slag etc.) as per Industry approved techniques	2	4	-	-
PC6. avoid damage of components due to negligence in electrostatic discharge (ESD) procedures	2	3	-	-
PC7. locate general health and safety equipment in the workplace such as fire extinguishers; first aid equipment; safety instruments, clothing and installations (fire exits, exhaust fans)	2	3	-	-
PC8. maintain appropriate posture while handling heavy objects	1	3	-	-
PC9. apply good housekeeping practices at all times	2	3	-	-
<i>Apply fire safety practices</i>	<b>4</b>	<b>9</b>	-	-
PC10. take preventive measures to prevent fire hazards	2	3	-	-

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PC11. use appropriate fire extinguishers for different types of fires  Types of fires: Class A: e.g. ordinary solid combustibles, such as wood, paper, cloth, plastic, charcoal, etc.; Class B: flammable liquids and gases, such as gasoline, propane, diesel fuel, tar, cooking oil, and similar substances; Class C: e.g. electrical equipment such as appliances, wiring, breaker panels, etc. (These categories of fires become Class A, B, and D fires when the electrical equipment that initiated the fire is no longer present)	1	3	-	-
PC12. exhibit rescue and first-aid techniques in case of fire or electrocution	1	3	-	-
<i>Follow emergencies, rescue and first-aid procedures</i>	6	13	-	-
PC13. administer appropriate first aid to victims In case of bleeding, burns, choking, electric shock, poisoning etc.	1	3	-	-
PC14. administer first aid to victims in case of a heart attack or cardiac arrest due to electric shock,	1	2	-	-
PC15. participate regularly in emergency procedures such as raising alarm, safe/efficient, evacuation, correct means of taking shelter and escaping, correct assembly point, roll call, correct return to work	2	4	-	-
PC16. use correct method to move injured people and others during an emergency	2	4	-	-
<i>Effective waste management/recycling practices</i>	5	12	-	-
PC17. identify recyclable and non-recyclable, and hazardous waste generated	1	3	-	-
PC18. segregate waste into different categories	1	2	-	-
PC19. ensure disposal of non-recyclable waste appropriately	1	2	-	-

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PC20. deposit non-recyclable and reusable material at identified location	1	3	-	-
PC21. follow processes specified for disposal of hazardous waste	1	2	-	-
<b>NOS Total</b>	<b>35</b>	<b>65</b>	<b>-</b>	<b>-</b>
<b>DGT/VSQ/N0102: Employability Skills (60 Hours)</b>				
<i>Introduction to Employability Skills</i>	1	1	-	-
PC1. identify employability skills required for jobs in various industries	-	-	-	-
PC2. identify and explore learning and employability portals	-	-	-	-
<i>Constitutional values – Citizenship</i>	1	1	-	-
PC3. recognize the significance of constitutional values, including civic rights and duties, citizenship, responsibility towards society etc. and personal values and ethics such as honesty, integrity, caring and respecting others, etc.	-	-	-	-
PC4. follow environmentally sustainable practices	-	-	-	-
<i>Becoming a Professional in the 21st Century</i>	2	4	-	-
PC5. recognize the significance of 21st Century Skills for employment	-	-	-	-
PC6. practice the 21st Century Skills such as Self-Awareness, Behaviour Skills, time management, critical and adaptive thinking, problem-solving, creative thinking, social and cultural awareness, emotional awareness, learning to learn for continuous learning etc. in personal and professional life	-	-	-	-
<i>Basic English Skills</i>	2	3	-	-
PC7. use basic English for everyday conversation in different contexts, in person and over the telephone	-	-	-	-
PC8. read and understand routine information, notes, instructions, mails, letters etc. written in English	-	-	-	-
PC9. write short messages, notes, letters, e-mails etc. in English	-	-	-	-

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

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

**SECTION 2****25.EVIDENCE OF LEVEL**

Title/Name of qualification/component: Drone Manufacturing & Assembly Technician Level: 4			
NSQF Domain	Key requirements of the job role	How the job role relates to the NSQF level descriptors	NSQF Level
Process	<p><b>Demands a wide range of specialized technical skill, clarity of knowledge and practice in broad range of activity involving standard and non- standard practices.</b></p> <ul style="list-style-type: none"> <li>• Checking and testing the drone before deployment</li> <li>• identify components and tools needed for assembly</li> <li>• assembling the Drone</li> <li>• Work effectively at the workplace.</li> <li>• Apply health and safety practices at the workplace.</li> <li>• Perform functional testing of various equipment</li> </ul>	<p>A Drone Manufacturing &amp; Assembly is responsible for assembling, manufacturing and testing the Drone</p>	4
Professional knowledge	<p><b>Factual and theoretical knowledge in broad contexts within a field of work or study.</b></p> <ul style="list-style-type: none"> <li>• Knowledge of the process of how to operate the drone</li> <li>• Process of activation of the Drone</li> <li>• Knowledge of company's policy on assembling time, production volume and working hours</li> </ul>	<p>A Drone Manufacturing &amp; Assembly should know the knowledge of different processes involved in planning, assembling, manufacturing and testing the Drone unit</p> <p>Hence Level 4</p>	4
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Professional skill	<p><b>A range of cognitive and practical skills required to generate solutions to specific problems in a field of work or study.</b></p> <ul style="list-style-type: none"> <li>• Communicate with customer, team and supervisor to understand the work requirement</li> <li>• Identify the errors in orders</li> <li>• Maintain test results and processes</li> <li>• Complete the documentation of assembly and testing records</li> </ul>	<p>A Drone Manufacturing &amp; Assembly should be able to use drone hardware in correct way to operate the assembly of Drone and test the required equipment. He/she works after getting work requirements from supervisor or other team members.</p>	
Core skill	<p>Reasonably good in:</p> <ul style="list-style-type: none"> <li>• Processing work requirements for assembly /disassembly drone</li> <li>• Analyzing the product design</li> <li>• Finding out the test requirements</li> <li>• Testing and verifying test results</li> <li>• Analyzing tests</li> </ul>	<p>A Drone Manufacturing &amp; Assembly needs to find out the requirements, of customer and perform the task as per customer requirement and meet the expectations. The technician should keep the workplace clean and managed.</p> <p>Hence Level 4</p>	4
Responsibility	<p>Responsibility of completing the work assigned and reporting the same as per standards.</p> <ul style="list-style-type: none"> <li>• Understand the job role and follow the organizational policy</li> <li>• Record and report about the work status</li> <li>• Follow safety regulations at workplace</li> </ul>	<p>A Drone Manufacturing &amp; Assembly should record the issues and report about the same to supervisor and also update the status of the work as per organizations policy.</p> <p>Hence Level 4</p>	4

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	<ul style="list-style-type: none"><li>• Work along with colleagues and supervisors</li></ul>		
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**SECTION 3**

**EVIDENCE OF NEED**

26	<b>What evidence is there that the qualification is needed? What is the estimated uptake of this qualification and what is the basis of this estimate?</b>		
	<b>Basis</b>	<b>In case of SSC</b>	<b>In case of other Awarding Bodies (Institutes under Central Ministries and states departments)</b>
	<p><b>Need of the qualification</b></p> <p>The Indian electronics industry is one of the largest and fastest-growing industries in the world.</p> <p>The market growth of Drone is expected to be at a CAGR of 18% over the forecast period (2019-24) .</p>	<p>The SSC would undertake market study and would enclose demand forecast for the proposed job role both on short-term and long-term basis to substantiate the requirement of the Qualification proposed. The SSC can produce the data from primary or authorized secondary sources as well.</p>	<p>The Submitting Body would produce any reputable and reliable research reports, such as labour market information reports; occupational mapping or similar research carried out by Ministry/State/Any other authentic source forecasting the demand for the proposed qualification</p>
	<p><b>Industry Relevance</b></p> <p>We are in the process of taking industry validation.</p>	<p>The SSC would undertake validation of the job roles with actual end-user industry where such employment is going to be generated and absorbed instead of generic validation of industry. The SSC would submit the endorsements from users/intended users of the qualification clearly supporting or otherwise the need for trained people against</p>	<p>The Submitting Body would submit the list of industry participation while preparation of the curriculum/ course content of the qualifications. These could include minutes of the meeting/ reports of these consultations</p>

		specific job role. ( <i>The industry validation format to be used</i> )	
	<p>Usage of the qualification: This Qualification Pack will be used across Drone industry which is organized as well as unorganized</p>	<p>The SSC would submit details of the employment generated (wherever applicable) and realized by virtue of training in the Qualifications of the sector earlier submitted for NSQF alignment.</p> <p>In case of unorganized sector, case studies or evidences may be given</p>	<p>The submitting body would submit the details of trained and placed data in the proposed qualification (if an existing qualification is being proposed for NSQF alignment) Information about the success of the qualification should be given (e.g. uptake figures, examples of use in recruitment and placement rates (if known) should be given. However, many of the bodies that do not have placement tracking mechanism established in place would provide necessary endorsements by the state/ ministry stating that a tracking mechanism would be institutionalized and placement records shall be provided annually or later, depending on length of qualification.</p>

**NSQF QUALIFICATION FILE****Approved in 19th NSQC Meeting – NCVET – Dated 26/05/2022**

	Estimated uptake  The Indian Drone market is driven by Increased focus of Indian	The SSC would submit the estimated uptake of the qualification and What steps were carried out to test the likely uptake of the qualification? The basis	The Submitting Body should submit the estimated uptake by reflecting the number of the takers for this qualification for at
	Armed forces on UAV Technology	of this estimate should include data about the number of jobs or places in courses of learning which will be available to people who are awarded the qualification.	least two years from submission of the qualification
27	<b>Recommendation from the concerned Line Ministry of the Government/Regulatory Body. To be supported by documentary evidences</b>  Ministry of Electronics and Information Technology, Government of India (MeitY)		
28	<b>What steps were taken to ensure that the qualification(s) does (do) not duplicate already existing or planned qualifications in the NSQF? Give justification for presenting a duplicate qualification</b>  This is the first time that this Qualification is being made. The national qualification registers as well as the Qualification Packs with NSDC have been checked.		
29	<b>What arrangements are in place to monitor and review the qualification(s)? What data will be used and at what point will the qualification(s) be revised or updated? Specify the review process here</b> <ul style="list-style-type: none"> <li>• Agencies have been appointed by the SSC to interact with training providers to gather feedback in implementation.</li> <li>• Monitoring of results of assessments</li> <li>• Employer feedback will be sought post-placement</li> <li>• A formal review is scheduled in a year</li> </ul>		

**SECTION 4**

**EVIDENCE OF PROGRESSION**

30

**What steps have been taken in the design of this or other qualifications to ensure that there is a clear path to other qualifications in this sector?**

***Show the career map here to reflect the clear progression***

1. Discussing the growth trajectory within each occupation after studying organizational charts of various industry players across small, medium and large-scale organizations.
2. Exploring various lateral career opportunities for the discussed qualification
3. Ensuring that there is a clear role up in terms of performance criteria qualification experience and skill requirement from lower NSQF Level to higher levels in the hierarchy.

Career pathway has been identified as illustrated below (Annexure 1)

**Annexure 1: Career Map of Drone Manufacturing & Assembly Technician**

