

## **QUALIFICATION FILE – Standalone NOS**

### **Entrepreneurship in Drone Assembling**

- Horizontal/Generic  Vertical/Specialization
- Upskilling  Dual/Flexi Qualification  For ToT  For ToA
- General  Multi-skill (MS)  Cross Sectoral (CS)  Future Skills

**NCrF/NSQF Level: 4**

**NOS Code: IID/N0054**

**Submitted By:**

**Samadhan Samiti**

**2nd Floor, Siddhivinayak Building, 27/1/B Samadhan Tower, Gokhale Marg Lucknow – 226001**

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NSQC Approved

## Section 1: Basic Details

<b>1.</b>	<b>NOS-Qualification Name</b>	<b>Entrepreneurship in Drone Assembling</b>																			
<b>2.</b>	<b>Sector/s</b>	<b>Electronics and HW</b>																			
<b>3.</b>	<b>Type of Qualification</b> <input checked="" type="checkbox"/> New <input type="checkbox"/> Revised	<b>NQR Code &amp; version of the existing /previous qualification:</b> <i>N/A</i>	<b>Qualification Name of the existing/previous version:</b> <i>N/A</i>																		
<b>4.</b>	<b>National Qualification Register (NQR) Code &amp; Version</b> <i>(Will be issued after NSQC approval.)</i>	NG-04-EH-046502025-V1-SS	<b>5. NCrF/NSQF Level: 4</b>																		
<b>6.</b>	<b>Brief Description of the Standalone NOS</b>	<p>The Qualification for Entrepreneurship in Drone Assembling is designed to equip individuals with the skills and knowledge required to establish and manage drone assembling business. This qualification focuses on the technical aspects of drone assembling, including the understanding of drone components, assembly of drones, and conceptual design. It also covers essential business management concepts such as budgeting, marketing, product development, supply chain management, and customer service.</p>																			
<b>7.</b>	<b>Eligibility Criteria for Entry for a Student/Trainee/Learner/Employee</b>	<p><b>a. Entry Qualification &amp; Relevant Experience:</b></p> <table border="1" style="width: 100%; border-collapse: collapse; margin-left: 20px;"> <thead> <tr> <th style="width: 10%;">S. No.</th> <th style="width: 60%;">Academic/Skill Qualification (with Specialization - if applicable)</th> <th style="width: 30%;">Required Experience (with Specialization - if applicable)</th> </tr> </thead> <tbody> <tr> <td style="text-align: center;">1</td> <td>12<sup>th</sup> grade pass or Pursuing</td> <td>No Experience Required.</td> </tr> <tr> <td style="text-align: center;">2</td> <td>11<sup>th</sup> Grade Pass</td> <td>1.5 Years of relevant experience.</td> </tr> <tr> <td style="text-align: center;">3</td> <td>10<sup>th</sup> Grade Pass</td> <td>3 Years of relevant experience.</td> </tr> <tr> <td style="text-align: center;">4</td> <td>Previous relevant Qualification of NSQF Level 3.5</td> <td>1.5 Years of relevant experience.</td> </tr> <tr> <td style="text-align: center;">5</td> <td>Previous relevant Qualification of NSQF Level 3</td> <td>3 Years of relevant experience.</td> </tr> </tbody> </table> <p><b>b. Age: 18</b></p>		S. No.	Academic/Skill Qualification (with Specialization - if applicable)	Required Experience (with Specialization - if applicable)	1	12 <sup>th</sup> grade pass or Pursuing	No Experience Required.	2	11 <sup>th</sup> Grade Pass	1.5 Years of relevant experience.	3	10 <sup>th</sup> Grade Pass	3 Years of relevant experience.	4	Previous relevant Qualification of NSQF Level 3.5	1.5 Years of relevant experience.	5	Previous relevant Qualification of NSQF Level 3	3 Years of relevant experience.
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5	Previous relevant Qualification of NSQF Level 3	3 Years of relevant experience.																			

<b>8. Credits Assigned to this NOS-Qualification, Subject to Assessment</b> <i>(as per National Credit Framework (NCrF))</i>	4	<b>9. Common Cost Norm Category (I/II/III)</b> <i>(wherever applicable): I</i>																
<b>10. Any Licensing Requirements for Undertaking Training on This Qualification</b> <i>(wherever applicable)</i>	N/A																	
<b>11. Training Duration by Modes of Training Delivery</b> <i>(Specify Total Duration as per selected training delivery modes and as per requirement of the qualification)</i>	<input type="checkbox"/> Offline Only <input type="checkbox"/> Online Only <input checked="" type="checkbox"/> Blended <table border="1" data-bbox="1025 419 1711 632"> <thead> <tr> <th>Training Delivery Mode</th> <th>Theory (Hours)</th> <th>Practical (Hours)</th> <th>Total (Hours)</th> </tr> </thead> <tbody> <tr> <td>Classroom (offline)</td> <td>0</td> <td>40</td> <td>40</td> </tr> <tr> <td>Online</td> <td>80</td> <td>0</td> <td>80</td> </tr> <tr> <td><b>Total</b></td> <td><b>80</b></td> <td><b>40</b></td> <td><b>120</b></td> </tr> </tbody> </table> <p data-bbox="1025 643 1256 671"><i>Annexure for details)</i></p> <p data-bbox="1738 608 2007 636"><i>(Refer Blended Learning</i></p>		Training Delivery Mode	Theory (Hours)	Practical (Hours)	Total (Hours)	Classroom (offline)	0	40	40	Online	80	0	80	<b>Total</b>	<b>80</b>	<b>40</b>	<b>120</b>
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<b>12. Assessment Criteria</b>	<table border="1" data-bbox="1025 743 1980 849"> <thead> <tr> <th>Theory (Marks)</th> <th>Practical (Marks)</th> <th>Project (Marks)</th> <th>Viva (Marks)</th> <th>Total (Marks)</th> <th>Passing %age</th> </tr> </thead> <tbody> <tr> <td>60</td> <td>0</td> <td>30</td> <td>10</td> <td>100</td> <td>50</td> </tr> </tbody> </table>		Theory (Marks)	Practical (Marks)	Project (Marks)	Viva (Marks)	Total (Marks)	Passing %age	60	0	30	10	100	50				
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60	0	30	10	100	50													
<b>13. Is the NOS Amenable to Persons with Disability</b>	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No If “Yes”, specify applicable type of Disability:																	
<b>14. Progression Path After Attaining the Qualification, wherever applicable</b> <i>(Please show Professional and Academic progression)</i>	N/A																	
<b>15. How participation of women will be encouraged?</b>	Scholarships and financial support. Awareness and Outreach Campaigns. Additional Support for Women in Different Government Schemes.																	
<b>16. Other Indian languages in which the Qualification &amp; Model Curriculum are being submitted</b>	N/A																	
<b>17. Is similar NOS available on NQR-if yes, justification for this qualification</b>	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No   URLs of similar Qualifications:																	

<b>18.</b>	<b>Name and Contact Details Submitting / Awarding Body SPOC</b> <i>(In case of CS or MS, provide details of both Lead AB &amp; Supporting ABs)</i>	<b>Name: Samadhan Samiti</b> <b>Email: mayank@iid.org.in</b> <b>Website: ab.samadhan.group</b>	<b>Contact No.: 8595940536</b>
<b>19.</b>	<b>Final Approval Date by NSQC: 07th October 2025</b>	<b>20. Validity Duration: Three Years</b>	<b>21. Next Review Date: 06th October 2028</b>

## Section 2: Training Related

1.	<b>Trainer's Qualification and experience in the relevant sector (in years)</b> <i>(as per NCVET guidelines)</i>	<p>MBA with 5 years of business or consultancy experience in the relevant field.</p> <p>OR</p> <p>Graduate with 7 years of business or consultancy experience in the relevant field.</p> <p>OR</p> <p>12th Pass with 10 years of business or consultancy experience in the relevant field.</p> <p>OR</p> <p>Entrepreneurs in Drone Assembling or Drone Manufacturing with 7 Years of business or consultancy experience in the relevant field.</p> <p><b>Remarks:</b> Domain certification is compulsory.</p>
2.	<b>Master Trainer's Qualification and experience in the relevant sector (in years)</b> <i>(as per NCVET guidelines)</i>	<p>MBA with 7 years of business or consultancy experience in the relevant field with 7 years of relevant training experience in similar domain.</p> <p><b>Remarks:</b> Domain certification is compulsory.</p>
3.	<b>Tools and Equipment Required for the Training</b>	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <i>(If "Yes", details to be provided in Annexure)</i>
4.	<b>In Case of Revised NOS, details of Any Upskilling Required for Trainer</b>	NA

### Section 3: Assessment Related

1.	<b>Assessor’s Qualification and experience in relevant sector (in years)</b> <i>(as per NCVET guidelines)</i>	MBA with 3 years of business or consultancy experience in the relevant field.  Or  Entrepreneurs in Drone Assembling or Drone Manufacturing with 5 Years of business or consultancy experience in the relevant field.  <b>Remarks:</b> Domain certification is compulsory.
2.	<b>Proctor’s Qualification and experience in relevant sector (in years)</b> <i>(as per NCVET guidelines), (wherever applicable)</i>	MBA with 3 years of business or consultancy experience in the relevant field.  Or  Entrepreneurs in Drone Assembling or Drone Manufacturing with 7 Years of business or consultancy experience in the relevant field.  <b>Remarks:</b> Relevant experience in proctoring in any qualification.
3.	<b>Lead Assessor’s/Proctor’s Qualification and experience in relevant sector (in years)</b> <i>(as per NCVET guidelines)</i>	MBA with 5 years of business or consultancy experience in the relevant field with 2 years of relevant training experience in similar domain.  <b>Remarks:</b> Domain & Platform certification is compulsory.
4.	<b>Assessment Mode</b> <i>(Specify the assessment mode)</i>	<b>Online MCQ Assessment, Project Assessment and Viva</b>
5.	<b>Tools and Equipment Required for Assessment</b>	<input checked="" type="checkbox"/> Same as for training <input type="checkbox"/> Yes <input type="checkbox"/> No <i>(details to be provided in Annexure-if it is different for Assessment)</i>

### Section 4: Evidence of the Need for the Standalone NOS

*Provide Annexure/Supporting documents name.*

1.	Government /Industry initiatives/ requirement (Yes/No): Yes, Annexure: Government Initiatives to Promote Drone Assembling Business
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2.	Number of Industry validation provided: 30, Annexure: Industry Validations Summary
3.	Estimated number of people to be trained: <b>300</b>
4.	Evidence of Concurrence/Consultation with Line/State Departments (In case of regulated sectors): (Yes/No): <b>Yes</b>

## Section 5: Annexure & Supporting Documents Check List

*Specify Annexure Name / Supporting document file name*

1.	<b>Annexure:</b> NCrF/NSQF level justification based on NCrF/NSQF descriptors <i>(Mandatory)</i>	Annexure: Evidence of Level
2.	<b>Annexure:</b> List of tools and equipment relevant for NOS <i>(Mandatory, except in case of online course)</i>	Annexure: Tools and Equipment
3.	<b>Annexure:</b> Performance and Assessment Criteria <i>(Mandatory)</i>	1. Annexure: Standalone NOS- Performance Criteria details 2. Annexure: Assessment Criteria
4.	<b>Annexure:</b> Assessment Strategy <i>(Mandatory)</i>	Annexure: Assessment Strategy
5.	<b>Annexure:</b> Blended Learning <i>(Mandatory, in case selected Mode of delivery is Blended Learning)</i>	Annexure: Blended Learning
6.	<b>Annexure:</b> Acronym and Glossary <i>(Optional)</i>	Annexure: Acronym and Glossary
7.	<b>Annexure/Supporting Document:</b> Standalone NOS- Performance Criteria Details Annexure/Document with PC-wise detailing as per NOS format (Mandatory- Public view)	1. Annexure: Standalone NOS- Performance Criteria details 2. Annexure: Recommended Complementary Entrepreneurship Modules
8.	<b>Supporting Document:</b> Model Curriculum <i>(Mandatory – Public view)</i>	Model Curriculum Entrepreneurship in Drone Assembling Business

### Annexure: Evidence of Level

NCrF/NSQF Level Descriptors	Key requirements of the job role/ outcome of the qualification	How the job role/ outcomes relate to the NCrF/NSQF level descriptor	NCrF/NSQF Level
<b>Professional Theoretical Knowledge/Process</b>	The individual should possess basic knowledge of drone types (quadcopter, hexacopter), essential components (frame, propellers, battery, controller), and standard assembly processes. Understanding simple wiring, part placement, component fitting, and compliance with standard safety and handling protocols is crucial. Basic familiarity with relevant terminology, functions of drone parts, and an introductory understanding of government regulations and Assembling documentation is also required.	At NSQF Level 4, this job role involves the application of specialized knowledge in the domain of drone manufacturing processes. The learner is expected to understand and apply theoretical principles related to aerodynamics, propulsion, structural integrity, electronics integration, and compliance with drone-related regulations. This level emphasizes the ability to function in both standard and non-standard contexts, showcasing an in-depth understanding of production techniques, safety protocols, and quality assurance within the evolving unmanned aerial systems (UAS) sector. The entrepreneurial aspect integrates knowledge of supply chain management, costing, and technical documentation, in alignment with industry and policy frameworks like Drone Shakti and Make in India.	4
<b>Professional and Technical Skills/ Expertise/ Professional Knowledge</b>	The qualification requires the learner to demonstrate proficiency in basic mechanical and electronic handling—such as using screwdrivers, pliers, wire strippers, and small multimeters. The individual should be able to follow component layout diagrams, perform basic soldering or wire connections, and assemble pre-manufactured drone kits. Operating under the supervision of a technician or supervisor, the learner must also participate in simple testing procedures, battery charging, and ensure basic maintenance of work tools and materials.	This job role at NSQF Level 4 involves the application of technical skills with a high level of precision, particularly in drone assembly, integration, testing, and fault diagnostics. The level descriptor emphasizes proficiency in managing both routine and non-routine activities using a range of tools and digital technologies. The learner demonstrates expertise in using professional-grade instruments and software to ensure quality, safety, and performance in drone manufacturing and maintenance. These skills also encompass the use of tools for	4

		simulation, prototyping, and operational verification in unpredictable or varied operational contexts.	
<b>Employment Readiness &amp; Entrepreneurship Skills &amp; Mind-set/Professional Skill</b>	The learner is expected to communicate clearly with peers and supervisors, maintain work discipline, and follow safety norms. Basic entrepreneurial exposure includes understanding product value, customer needs, and fundamental cost factors (materials, time, packaging). The learner should be introduced to startup opportunities in drone repairs, kit assembly, or local customization. Skills such as handling digital tools (basic apps or inventory tools), maintaining simple records, and showing initiative in task completion are required.	Aligned with NSQF Level 4, this job role strengthens the learner’s employment readiness and entrepreneurial capabilities, focusing on professional behavior, decision-making, and digital fluency. The level descriptor supports the development of a proactive entrepreneurial mindset, essential for establishing and operating a drone manufacturing venture. It includes the capacity to lead teams, manage risk, communicate with stakeholders, and navigate market dynamics confidently, thereby enhancing self-employment potential and startup viability.	4
<b>Broad Learning Outcomes/Core Skill</b>	The learner should be able to read and interpret basic assembly instructions, part labels, and maintenance checklists. Core skills include completing log entries, simple calculations for quantity or dimensions, and following quality parameters like checking part alignment or loose connections. The individual must be capable of organizing materials, managing workspace cleanliness, and documenting daily tasks. This level also introduces basic problem-solving, such as replacing damaged parts or troubleshooting simple connectivity issues under guidance.	At Level 4, this job role emphasizes the ability to execute complex tasks independently and evaluate technical challenges in both predictable and unpredictable contexts. For this qualification, the entrepreneur is expected to apply critical thinking, decision-making, and problem-solving abilities in real-world drone manufacturing and deployment scenarios. This includes adapting to emerging technologies, modifying processes based on feedback, and ensuring the product meets functional and regulatory expectations.	4
<b>Responsibility</b>	The learner is responsible for assembling drone kits correctly, ensuring tools are used safely, and following quality control checklists. They must maintain regular reporting to supervisors, take care of tools and consumables, and follow daily task routines diligently. The learner is also expected to support team operations by helping with material handling, organizing	The job role positions the individual as a highly skilled professional capable of taking full responsibility for their work and contributing to group tasks. The entrepreneur must demonstrate initiative, autonomy, and accountability in managing a drone production unit or startup. They are expected to oversee operational, legal,	4

workstations, and adhering to production targets. Developing a sense of ownership, time management, and safe workplace behavior is key at this level.

and quality related aspects while ensuring compliance with government norms and safety protocols.

### Annexure: Tools and Equipment (lab set-up)

List of Tools and Equipment

**Batch Size: 30**

S. No.	Tool / Equipment Name	Specification	Quantity for specified Batch size
1	Computer or Laptop	8 GB RAM, 12 GHZ total processing speed, 2 GB Graphics memory.	30
2	Microsoft Office	365	30

Classroom Aids

The aids required to conduct sessions in the classroom are:

1. Laptop
2. Projector
3. Whiteboard
4. Whiteboard Marker
5. Whiteboard Duster

### Annexure: Industry Validations Summary

S. No	Organization Name	Representative Name	Designation	Contact Address	Contact Phone No	E-mail ID
1	Casca E-Connect	Jyoti Agrawal	Director	F-92/1 Shanti Swaroop Complex, 4th Floor, Munirka, New Delhi, Delhi 110067	9667239653	info@cascaeconnect.com
2	IOTECH World	Deepak Bhardwaj	Founder & Director	Plot No. 31 & 34, Sector 35, Gurugram, Haryana 122004	8810273125	dbhardwaj@iotechworld.com

3	Drona Aviation	Tushar Agrawal	Drone Skill Trainer	Tehsil Sardhana, 201, Meharmati Ganeshpur, Sardhana, Uttar Pradesh 250342	8765750675	support@dronaaviation.com
4	Vecros Technologies	Besta Prem Sai	Partner	Synergy Building, VECROS HQ, TBIU, Hauz Khas, New Delhi, Delhi 110016	9815490918	contact@vecros.com
5	Skytex Unmanned Aerial Solutions	Mohit Gupta	CEO	5-A, Sector 80 Rd, Block A, Sector 80, Noida, Uttar Pradesh 201305	9815490918	Info@skytex.com.eg
6	Karman Drones	Anand Sengar	CEO	B-26, B Block, Sector 8, Noida, Uttar Pradesh 201301	9522217460	Write@karmandrones.Com
7	IG Drones	Bodhisattwa Sanghapriya	CEO	Second Floor , Devsha Business Park D-215, D Block, Sector 63, Noida, Delhi NCR 201301, Noida, Uttar Pradesh 201301	9990500337	Contact@igdrones.com
8	Garuda UAV	Brijesh Pandey	CEO	3rd Floor, Tower 2, Assotech Business Cresterra: Unit No. 301 to 318, Plot 22, Sector 135, Noida, Uttar Pradesh 201304	9354915060	brijeshpandey95442@gmail.com
9	D Town Robotics	Avinash Chandra pal	Director	G-294, G Block, Sector 63, Noida, Chotpur, Uttar Pradesh 201301	9718611243	avinash.preysler@gmail.com
10	Drone Anatomy	Ajay Kumar	Director	C40, Durga Industrial park, Prakash Industrial Estate, Sahibabad Industrial Area Site 4, Sahibabad, Ghaziabad, Uttar Pradesh 201005	9971062561	info@droneanatomy.com
11	Aerosight Technologies	Arya	Director	41A/11, 1st floor , 2nd Cross, 2nd Phase , Peenya Industrial Area Chokkasaandra ,opp ABB,Bengaluru- 560058	9945793607	support@aerosight.in
12	Skylark	Sanjeev Kumar	Director	UrbanVault , 1090c, 18th Cross Rd Sector 3, HSR Layout , Bengaluru ,Karnataka -560102	7894427233	info@skylarkdrones.com
13	MDrone	Manish	Director	No- 535, MIG ,KHB Colony , C 36M+HC4,Amargol Phase -2 Hubballi, Karnataka - 580025	9591999044	corporate@multiplexdrone.com
14	Aerosys Aviation India Pvt Ltd	Avinash Aerosya	Director	Aerosys Aviation India Pvt. Ltd B -103 1st Floor Sector -6 Noida Uttar Pradesh - 201301	821016054	info@aerosysaviation.com
15	Cyglone	Ranjan	Director	1/45 1st Floor , Lalita Park , Laxmi Nagar Delhi ,110092	6397423511	sales@djicygloneindia.com
16	Vyamnik Aerospace	Akhand Pratap Singh	Director	TBI-KIET Murad Nagar Phase -1 Ghaziabad , Uttar Pradesh - 201206	8182830960	info@vymanikaero.in

17	Vaayu Deones	Rahul Aggarwal	Director	Eco Tower , Plot no - A 14, 7th Floor sector 125 Noida Uttar Pradesh - 201301	9560099707	info@vaayudrones.com
18	Raphe mPhibr Pvt Ltd	Sanjeev Kapoor	Director	B200, Block B Phase - 2 Noida Uttar Pradesh 201305	7428698331	info@mphibr.com
19	GarudaUAV	Misbah	Director	Asstech Business Cresterra Unitno - 301 to 318 Third floor Tower 2 Plot 22 Sector E xpressway Noida Uttar Preadesh 201304	787972191	sales@gurudauav.com
20	Indowings	Indira Singh	Director	A-21 Sector - 60 Noida Gautam Buddha Nagar U.P 201301	9990500337	connect@indowings.com
21	Falco Robotics	Yogesh Sharma	Director	A22, CP Plus Office Block A Sector 4 Noida UP 201301	9354150989	info@falcorobotics.in
22	Hyperpixel Robotics	Mr Ganendra	Director	L35 gate no - 6 KPI Noida UP 201304	7337447772	ganendra@hyperixelrobotics.co
23	Surveyan Drones	Nirbus	Director	3rd Floor Sulikunti Village Bangalore 562125	9606922556	info@nirbus.in
24	Fly India Drone	Ashwath Salunke	Director	165/4 2nd floor Nagappa St above ICICI ATM DN Ramaiah layout , palace Guttahalli Bengaluru Karnatka 560003	7892567843	nfo@flyindiadrone.com
25	BBPL Aero Private limited	Amit gupta	Director	105 Sector 8 IMT Manesar Gurgaon Haryana 122050	9124484900	info@teevra.org
26	Gamma Rotors	Arpan Ghosh	Founder & Director	B-125, Second Floor, Multisoft Building, Near Sector-15 Metro Station, Sector 2, Noida, Uttar Pradesh - 201301, India	9999649138	info@gammarotors.com
27	Indowings	Indira Singh	Director	A-21 Sector - 60 Noida Gautam Buddha Nagar U.P 201301	9990500337	connect@indowings.com
28	Aerosight Technologies	Arya	Director	41A/11, 1st floor , 2nd Cross, 2nd Phase , Peenya Industrial Area Chokkasaandra ,opp ABB,Bengaluru- 560058	9945793607	support@aerosight.in
29	Vimaana Technologies	Mridul Jain	Director	Spring Meadows,GH-07A, Techzone 4, Patwari , Greater Noida Uttar Pradesh - 201306	9899170989	contact@vimaantech.com
30	Greenleap Robotics	Apoorv Tyagi	Director	Chandrashekhar Bhawan, IITD's FITT Incubator, Mandi house, New Delhi - 110002	8375956792	apoorv. tyagi@greenleap robotics.com

## Annexure: Training Details

**Training Projections:**

Year	Estimated Training # of Total Candidates	Estimated training # of Women	Estimated training # of People with Disability
2025-2026	300	20	0
2026-2027	300	20	0
2027-2028	300	20	0

*Data to be provided year-wise for next 3 years.*

## Annexure: Blended Learning

**Blended Learning Estimated Ratio & Recommended Tools:**

*Refer NCVET “Guidelines for Blended Learning for Vocational Education, Training & Skilling” available on:*

<https://ncvet.gov.in/sites/default/files/Guidelines%20for%20Blended%20Learning%20for%20Vocational%20Education,%20Training%20&%20Skilling.pdf>

S. No.	Select the Components of the NOS	List Recommended Tools – for all Selected Components	Offline: Online Ratio
1	<input checked="" type="checkbox"/> Theory/ Lectures - Imparting theoretical and conceptual knowledge	Laptop or Mobile	0:1
2	<input checked="" type="checkbox"/> Imparting Soft Skills, Life Skills and Employability Skills /Mentorship to Learners	Laptop or Mobile	0:1
3	<input checked="" type="checkbox"/> Showing Practical Demonstrations to the learners	Laptop or Mobile	0:1
4	<input type="checkbox"/> Imparting Practical Hands-on Skills/ Lab Work/ workshop/ shop floor training	N/A	N/A
5	<input checked="" type="checkbox"/> Tutorials/ Assignments/ Drill/ Practice	Laptop or Mobile	1:0
6	<input checked="" type="checkbox"/> Proctored Monitoring/ Assessment/ Evaluation/ Examinations	Laptop or Mobile	0:1
7	<input checked="" type="checkbox"/> On the Job Training (OJT)/ Project Work Internship/ Candidate Training	Laptop or Mobile	1:0

## Annexure: Standalone NOS- Performance Criteria details

### 1. Description:

The drone Assembling industry is experiencing rapid growth and innovation, presenting unique opportunities for small entrepreneurs. Small entrepreneurship in drone Assembling involves starting and managing small-scale enterprises focused on the design, production, and sale of unmanned aerial vehicles (UAVs). These businesses can cater to various sectors, including agriculture, surveillance, logistics, and entertainment, by providing customized and niche drone solutions.

As small entrepreneurs in this dynamic field, individuals harness their technical skills in electronics, mechanical design, and software development to create sophisticated drone systems. They combine these technical proficiencies with business acumen, managing aspects such as project planning, marketing, financial management, and regulatory compliance. This dual skill set enables them to innovate, produce high-quality drones, and effectively compete in the marketplace.

### 2. Scope:

- The scope covers the following:
- Gain a comprehensive understanding of drone Assembling including its application and working
- Learn about the different types of drones and how to implement quality control.
- Understand the importance of security compliance and regulations of drones.
- Explore continuous improvement techniques and innovations in drone Assembling.
- Understand advanced concepts in market research and customer targeting for drone Assembling businesses.
- Learn various business models, legal requirements, and customer service strategies in the drone Assembling industry.
- Develop skills in pricing strategies, marketing, financial management, and human resource management specific to drone Assembling.
- Explore innovative techniques for revenue management, budgeting, cost control, and financial analysis in drone Assembling.
- Gain knowledge of risk management strategies, insurance requirements, and collaboration opportunities with auto dealerships and rental agencies.
- Apply theoretical knowledge to real-world scenarios and analyze data collected during the project.
- Enhance writing and presentation skills through the creation of a professional project report.
- Gain practical experience in business research, analysis, and business project management.

### **3. Elements and Performance Criteria**

#### **Element-1. Introduction to Drone Assembling Business**

To be competent, the user/individual in the business must be able to:

- PC1.** Introduction to drones and their uses
- PC2.** Introduction to different types of drones

#### **Element-2. Basics of Drone Flying Mechanism**

To be competent, the user/individual in the business must be able to:

- PC3.** Introduction to basic principles of flight
- PC4.** Basics of Aerodynamic Forces

#### **Element-3. Main Assembly Components of a Basic Drone**

To be competent, the user/individual in the business must be able to:

- PC5.** Introduction to materials and construction techniques for drone frames
- PC6.** Introduction to basic types of drone designs

#### **Element-4. Basic Understanding of electrical and electronic Systems of Drone**

To be competent, the user/individual in the business must be able to:

- PC7.** Introduction to basics of drone power systems
- PC8.** Identify and explain the function of key electronic components used in drones

#### **Element-5. Basic Drone Software and Controls**

To be competent, the user/individual in the business must be able to:

- PC9.** Introduction to basic programming used in drones
- PC10.** Basic overview of flight control software and its operation

#### **Element-6. Understanding Power Systems and Battery Management in Drone**

To be competent, the user/individual in the business must be able to:

- PC11.** Introduction to types of drone batteries
- PC12.** Explain the importance of battery health and safety

#### **Element-7. Understanding Drone Propellers and Movement**

To be competent, the user/individual in the business must be able to:

- PC13.** Introduction to balancing propellers and motors
- PC14.** Introduction to basic principles of thrust generation

**Element-8. Understanding Regulations & Compliance in Drone Assembling**

To be competent, the user/individual in the business must be able to:

- PC15.** Introduction to regulations and compliance in drone assembly
- PC16.** Knowledge of Operational Restriction including No-Fly Zone, Altitude limits, and line of sight (LOS)

**Element-9. Identify Troubleshooting of the Drone**

To be competent, the user/individual in the business must be able to:

- PC17.** Identifying and fixing common issues with drones.
- PC18.** Knowledge of Routine Maintenance of drones

**Element-10. Safety and Risk Management in Drone Assembling**

To be competent, the user/individual in the business must be able to:

- PC19.** Listing safety protocols for drone operation and Assembling
- PC20.** Managing potential hazards in Assembling drone

**Element-11. Assembling a Drone Step-by-Step**

To be competent, the user/individual in the business must be able to:

- PC21.** Introduction to assembly processes of Drone
- PC22.** Comprehensive testing and troubleshooting

**Element-12. Testing the Assembled Drone Functionality**

To be competent, the user/individual in the business must be able to:

- PC23.** Building and testing prototypes to refine design and performance
- PC24.** Virtual testing of flight dynamics

**Element-13. Understanding Payload Systems of the Drone**

To be competent, the user/individual in the business must be able to:

- PC25.** Introduction to different payload types and applications
- PC26.** Assess how payload affects drone performance

**Element-14. Operating Drones Using a Controller**

To be competent, the user/individual in the business must be able to:

- PC27.** Introduction to autonomous functions like path planning, object tracking, geotagging
- PC28.** List down the practical implementation like calibration, tuning, and testing

**Element-15. Understanding Drone Direction and Movement**

To be competent, the user/individual in the business must be able to:

- PC29.** Tracking Drone Location with GPS
- PC30.** Basics of Drone Motion Sensors to track speed and direction

**Element-16. Implementing Waste Management Techniques for Drone Assembling Business**

To be competent, the user/individual in the business must be able to:

- PC31.** Identify & Minimize material wastage generated during the design, assembly, and testing of drones.

**Element-17. Understanding Flying Rules and Safety Guidelines**

To be competent, the user/individual in the business must be able to:

- PC32.** Introduction to national and international aviation regulations
- PC33.** Introduction to procedures for certifying drones

**Element-18. Understanding Weather Effects on Drone Operation**

To be competent, the user/individual in the business must be able to:

- PC34.** Introduction to the effects of wind, temperature, and humidity on drone systems and flight dynamics.
- PC35.** Define risk mitigation strategies to ensure safe drone operation under variable environmental conditions.

**Element-19. Market Research for Drone Assembling Businesses**

To be competent, the user/individual in the business must be able to:

- PC36.** Identify appropriate research methodologies, such as surveys, interviews, and focus groups, to collect relevant data from target markets.

**Element-20. Identifying Target Customers in the Drone Assembling Business**

To be competent, the user/individual in the business must be able to:

- PC37.** Develop customer personas to represent different segments of the target audience and tailor marketing strategies accordingly.

**Element-21. Drone Assembling Business Models and Strategies**

To be competent, the user/individual in the business must be able to:

- PC38.** Explore different business models and revenue streams for drone Assembling businesses  
**PC39.** Evaluate the pros and cons of each business model in terms of investment requirements, scalability, and market opportunities.

**Element-22. Legal Requirements and Regulations for Drone Assembling Businesses**

To be competent, the user/individual in the business must be able to:

- PC40.** Introduction to legal and regulatory requirements, including licenses and permits

**Element-23. Product Development and Innovation**

To be competent, the user/individual in the business must be able to:

- PC41.** Learn the use of advanced materials like carbon fiber, graphene, and nanomaterials to reduce weight and increase strength  
**PC42.** Use modern tools and technologies for efficient data processing and product improvement.

**Element-24. Marketing Essentials for Drone Assembling Businesses**

To be competent, the user/individual in the business must be able to:

- PC43.** Utilize marketing tools and channels such as advertising, branding, digital marketing, and customer relationship management (CRM) to drive business growth.

**Element-25. Managing Finances in Drone Assembling Businesses**

To be competent, the user/individual in the business must be able to:

- PC44.** Introduction to basic accounting principles and financial statements, including income statements, balance sheets, and cash flow statements.  
**PC45.** Utilize financial analysis tools and metrics to evaluate business performance, profitability, and return on investment (ROI).

**Element-26. Budgeting and Cost Control in Drone Assembling Business**

To be competent, the user/individual in the business must be able to:

**PC46.** Identify fixed and variable costs associated with operating a drone Assembling business, including supplies, and maintenance.

**Element-27. Supply Chain and Operations Management for Drone Assembling**

To be competent, the user/individual in the business must be able to:

**PC47.** Identify reliable suppliers for raw materials and electronic components.

**PC48.** Implement JIT inventory systems to reduce holding costs and minimize waste.

**Element-28. Customer Service Skills for Drone Assembling Businesses**

To be competent, the user/individual in the business must be able to:

**PC49.** Develop essential customer service skills, such as active listening, empathy, and effective communication, to enhance the customer experience.

**Element-29. Marketing and Sales Strategy**

To be competent, the user/individual in the business must be able to:

**PC50.** Develop a strong brand identity emphasizing innovation, quality, and reliability.

**PC51.** Build digital marketing campaigns (SEO, SEM, social media) to reach target audiences

**Element-30. Continuous Improvement**

To be competent, the user/individual in the business must be able to:

**PC52.** Implement suggestions & Improvements based on reviews by the customers

**Element-31. Manage Branding and Promotion of Business**

To be competent, the user/individual in the business must be able to:

**PC53.** Define a comprehensive branding strategy aligned with business objectives.

**Element-32. Human Resource Management in Drone Assembling Business**

To be competent, the user/individual in the business must be able to:

**PC54.** Develop human resource management skills to recruit, train, and retain a high-performing workforce in the drone Assembling business.

**Element-33. Risk Management Strategies for Drone Assembling Business**

To be competent, the user/individual in the business must be able to:

**PC55.** Introduction to Supply Chain Risks, Operational Risks, Regulatory and Compliance Risks & market risk including supplier reliability, logistics, and transportation, production process, quality control etc.

**Element-34. Revenue Management Techniques for Drone Assembling Business**

To be competent, the user/individual in the business must be able to:

- PC56.** Understand sales optimization including direct sales, indirect sales, and international markets
- PC57.** Understand Pricing Strategies including dynamic pricing, and value-based pricing.

**Element-35. Financial Analysis and Performance Metrics for Drone Assembling Business**

To be competent, the user/individual in the business must be able to:

- PC58.** Understand financial statements including income statements, gross profit, and operating expenses

**Element-36. Understanding Import and Export Strategies in Drone Assembling Business**

To be competent, the user/individual in the business must be able to:

- PC59.** Comprehend international drone laws, including export controls and certifications.
- PC60.** Learn to prepare export documentation, including licenses and permits for drone exports.

**Element-37. Detailed Project Report on Drone Assembling Business**

To be competent, the user/individual in the business must be able to:

- PC61.** Identify the scope, objectives, and vision of the drone assembling business in the report.
- PC62.** Define the business model, including value proposition, target market, and revenue generation strategy.
- PC63.** Conduct detailed market analysis including demand trends, competitor landscape, and industry growth projections.
- PC64.** Detail the operational workflow of the assembling process including component sourcing, integration, and testing.
- PC65.** List all required tools, equipment, and infrastructure with estimated costs.
- PC66.** Prepare a comprehensive financial plan including capital investment, working capital, projected income, and break-even analysis.
- PC67.** Outline legal, regulatory, and safety compliance requirements for drone manufacturing and operations.
- PC68.** Incorporate environmental, waste management, and sustainability measures in the business plan.
- PC69.** Integrate a risk management section addressing possible technical, financial, and regulatory challenges.
- PC70.** Compile and present the DPR in a structured, professional format using charts, tables, and visuals where appropriate.

**4. Knowledge and Understanding (KU):**

The individual in the business needs to know and understand:

- KU1.** Identify and apply research and analysis techniques for market, competitor, and operational insights.
- KU2.** Define key economic and business terminology relevant to drone assembling and entrepreneurship.

- KU3.** Demonstrate creative and critical thinking in designing drone solutions and business innovations.
- KU4.** Explain innovation and idea management techniques for product and process improvement.
- KU5.** Apply project and time management strategies in executing drone assembling business operations.
- KU6.** Discuss the components of business and strategic planning for drone assembling entrepreneurship.
- KU7.** Develop financial models and projections for revenue, cost, and profit analysis.
- KU8.** Identify and utilize tools for market and customer research for business strategy.
- KU9.** Discuss risk assessment methods and strategies for managing operational, financial, and regulatory risks.
- KU10.** Conduct legal and regulatory research for drone assembling licenses, permits, and safety norms.
- KU11.** Describe procedures for documentation, filing, and record-keeping in drone assembling business.
- KU12.** Explain the steps to ensure compliance with local, state, and central drone-related regulations.
- KU13.** Describe budgeting techniques and financial management practices for cost control.
- KU14.** Apply problem-solving and resourcefulness in drone maintenance and troubleshooting.
- KU15.** Demonstrate negotiation and communication skills for customer service and business partnerships.
- KU16.** Identify relevant government schemes and draft grant proposals for funding.
- KU17.** Analyze market segments and develop customer personas for targeted marketing.
- KU18.** Conduct benchmarking and competitive analysis to identify industry best practices.
- KU19.** Explain the process of business model development and revenue stream planning.
- KU20.** Identify basic operations and management practices for running a drone business.
- KU21.** Demonstrate domain-specific knowledge of drone types, components, and assembling processes.
- KU22.** Identify and handle drone equipment and tools used in assembling and maintenance.
- KU23.** Explain safety protocols and quality control standards in drone assembly and testing.
- KU24.** Discuss environmental and waste management regulations and practices.
- KU25.** Apply customer profiling techniques and relationship management strategies.
- KU26.** Use data analysis for decision-making and performance optimization.
- KU27.** Identify digital marketing tools and techniques suitable for drone businesses.
- KU28.** Explain branding and brand management practices to build business identity.
- KU29.** Demonstrate social media and content creation skills for online visibility.
- KU30.** Prepare and present a structured business plan including all operational aspects.
- KU31.** Explain human resource and workforce management techniques for drone business teams.
- KU32.** Identify supply chain and inventory management practices for efficient operations.
- KU33.** Develop sales, pricing, and revenue strategies for market penetration and profitability.
- KU34.** Describe import/export regulations and documentation for global drone business.
- KU35.** Prepare detailed project reports (DPRs) including financials, market analysis, and compliance.

### **5. Generic Skills (GS):**

User/individual in business needs to know how to:

- GS1.** Critical Thinking
- GS2.** Communication Skills
- GS3.** Adaptability
- GS4.** Problem-solving
- GS5.** Networking
- GS6.** Creative Thinking
- GS7.** Collaboration
- GS8.** Risk-taking
- GS9.** Decision-making
- GS10.** Time Management
- GS11.** Perseverance
- GS12.** Resourcefulness
- GS13.** Resilience
- GS14.** Positive Attitude
- GS15.** Self-reflection
- GS16.** Stress Management
- GS17.** Flexibility
- GS18.** Attention to Detail
- GS19.** Research Skills
- GS20.** Patience
- GS21.** Negotiation Skills
- GS22.** Persuasion
- GS23.** Leadership
- GS24.** Analytical Thinking
- GS25.** Physical Stamina
- GS26.** Empathy
- GS27.** Social Media Skills
- GS28.** Creativity

### Annexure: Assessment Criteria

Detailed PC-wise assessment criteria and assessment marks for the NOS are as follows:

No.	Module Names	Assessment Criteria for Performance Criteria/Learning Outcomes	Theory Marks	Project Marks	Viva Marks	Total Marks
1.	Introduction to Drone Assembling Business	Introduction to drones and their uses	1	0	0	1
		Introduction to different types of drones	1	0	0	1
		<b>Total Marks</b>	<b>2</b>	<b>0</b>	<b>0</b>	<b>2</b>
2.	Basics of Drone Flying Mechanism	Introduction to basic principles of flight	1	0	0	1
		Basics of Aerodynamic Forces	1	0	0	1
		<b>Total Marks</b>	<b>2</b>	<b>0</b>	<b>0</b>	<b>2</b>
3.	Main Assembly Components of a Basic Drone	Introduction to materials and construction techniques for drone frames	1	0	0	1
		Introduction to basic types of drone designs	1	0	0	1
		<b>Total Marks</b>	<b>2</b>	<b>0</b>	<b>0</b>	<b>2</b>
4.	Basic Understanding of electrical and electronic Systems of Drone	Introduction to basics of drone power systems	1	0	0	1
		Identify and explain the function of key electronic components used in drones	1	0	0	1
		<b>Total Marks</b>	<b>2</b>	<b>0</b>	<b>0</b>	<b>2</b>
5.	Basic Drone Software and Controls	Introduction to basic programming used in drones	1	0	0	1
		Basic overview of flight control software and its operation	1	0	0	1
		<b>Total Marks</b>	<b>2</b>	<b>0</b>	<b>0</b>	<b>2</b>
6.	Understanding Power Systems and Battery Management in Drone	Introduction to types of drone batteries	1	0	0	1
		Explain the importance of battery health and safety	1	0	0	1
		<b>Total Marks</b>	<b>2</b>	<b>0</b>	<b>0</b>	<b>2</b>
7.	Understanding Drone Propellers and Movement	Introduction to balancing propellers and motors	1	0	0	1
		Introduction to basic principles of thrust generation	1	0	0	1
		<b>Total Marks</b>	<b>2</b>	<b>0</b>	<b>0</b>	<b>2</b>
8.		Introduction to regulations and compliance in drone assembly	1	0	0	1

No.	Module Names	Assessment Criteria for Performance Criteria/Learning Outcomes	Theory Marks	Project Marks	Viva Marks	Total Marks
	Understanding Regulations & Compliance in Drone Assembling	Knowledge of Operational Restriction including No Fly Zone, Altitude limits, and line of sight (LOS)	1	0	0	1
		<b>Total Marks</b>	<b>2</b>	<b>0</b>	<b>0</b>	<b>2</b>
9.	Identify Troubleshooting of the Drone	Identifying and fixing common issues with drone	1	0	0	1
		Knowledge of Routine Maintenance of Drone	1	0	0	1
		<b>Total Marks</b>	<b>2</b>	<b>0</b>	<b>0</b>	<b>2</b>
10.	Safety and Risk Management in Drone assembling	Listing safety protocols for drone operation and Assembling	1	0	0	1
		Managing potential hazards in Assembling drone	1	0	0	1
		<b>Total Marks</b>	<b>2</b>	<b>0</b>	<b>0</b>	<b>2</b>
11.	Assembling a Drone Step-by-Step	Introduction to assembly processes of Drone	1	0	0	1
		Comprehensive testing and troubleshooting	1	0	0	1
		<b>Total Marks</b>	<b>2</b>	<b>0</b>	<b>0</b>	<b>2</b>
12.	Testing the Assembled Drone Functionality	Building and testing prototypes to refine design and performance	1	0	0	1
		Virtual testing of flight dynamics	1	0	0	1
		<b>Total Marks</b>	<b>2</b>	<b>0</b>	<b>0</b>	<b>2</b>
13.	Understanding Payload Systems of the Drone	Introduction to different payload types and applications	1	0	0	1
		Assess how payload affects drone performance	1	0	0	1
		<b>Total Marks</b>	<b>2</b>	<b>0</b>	<b>0</b>	<b>2</b>
14.	Operating Drones Using a Controller	Introduction to autonomous functions like path planning, object tracking, geotagging	1	0	0	1
		List down the practical implementation like calibration, tuning, and testing	1	0	0	1
		<b>Total Marks</b>	<b>2</b>	<b>0</b>	<b>0</b>	<b>2</b>
15.	Understanding Drone Direction and Movement	Tracking Drone Location with GPS	1	0	0	1
		Basics of Drone Motion Sensors to track speed and direction	1	0	0	1
		<b>Total Marks</b>	<b>2</b>	<b>0</b>	<b>0</b>	<b>2</b>
16.	Implementing Waste Management Techniques	Identify & Minimize material wastage generated during the design, assembly, and testing of drones.	1	0	0	1
		<b>Total Marks</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>1</b>

No.	Module Names	Assessment Criteria for Performance Criteria/Learning Outcomes	Theory Marks	Project Marks	Viva Marks	Total Marks
	for Drone Assembling Business					
17.	Understanding Flying Rules and Safety Guidelines	Introduction to national and international aviation regulations	1	0	0	1
		Introduction to procedures for certifying drones	1	0	0	1
		<b>Total Marks</b>	<b>2</b>	<b>0</b>	<b>0</b>	<b>2</b>
18.	Understanding Weather Effects on Drone Operation	Introduction to the effects of wind, temperature, and humidity on drone systems and flight dynamics.	1	0	0	1
		Define risk mitigation strategies to ensure safe drone operation under variable environmental conditions.	1	0	0	1
		<b>Total Marks</b>	<b>2</b>	<b>0</b>	<b>0</b>	<b>2</b>
19.	Market Research for Drone Assembling Businesses	Identify appropriate research methodologies, such as surveys, interviews, and focus groups, to collect relevant data from target markets.	1	0	0	1
		<b>Total Marks</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>1</b>
20.	Identifying Target Customers in the Drone Assembling Business	Develop customer personas to represent different segments of the target audience and tailor marketing strategies accordingly.	1	0	0	1
		<b>Total Marks</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>1</b>
21.	Drone Assembling Business Models and Strategies	Explore different business models and revenue streams for drone Assembling businesses	1	0	0	1
		Evaluate the pros and cons of each business model in terms of investment requirements, scalability, and market opportunities.	1	0	0	1
		<b>Total Marks</b>	<b>2</b>	<b>0</b>	<b>0</b>	<b>2</b>
22.	Legal Requirements and Regulations for Drone Assembling Businesses	Introduction to legal and regulatory requirements, including licenses and permits	1	0	0	1
		<b>Total Marks</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>1</b>
23.		Learn the use of advanced materials like carbon fiber, graphene, and nanomaterials to reduce weight and increase strength	1	0	0	1

No.	Module Names	Assessment Criteria for Performance Criteria/Learning Outcomes	Theory Marks	Project Marks	Viva Marks	Total Marks
	Product Development and Innovation	Use modern tools and technologies for efficient data processing and product improvement.	1	0	0	1
		<b>Total Marks</b>	<b>2</b>	<b>0</b>	<b>0</b>	<b>2</b>
24.	Marketing Essentials for Drone Assembling Businesses	Utilize marketing tools and channels such as advertising, branding, digital marketing, and customer relationship management (CRM) to drive business growth.	1	0	0	1
		<b>Total Marks</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>1</b>
25.	Managing Finances in Drone Assembling Businesses	Introduction to basic accounting principles and financial statements, including income statements, balance sheets, and cash flow statements.	1	0	0	1
		Utilize financial analysis tools and metrics to evaluate business performance, profitability, and return on investment (ROI).	1	0	0	1
		<b>Total Marks</b>	<b>2</b>	<b>0</b>	<b>0</b>	<b>2</b>
26.	Budgeting and Cost Control in Drone Assembling Business	Identify fixed and variable costs associated with operating a drone Assembling business, including supplies, and maintenance.	1	0	0	1
		<b>Total Marks</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>1</b>
27.	Supply Chain and Operations Management for Drone Assembling	Identify reliable suppliers for raw materials and electronic components.	1	0	0	1
		Implement JIT inventory systems to reduce holding costs and minimize waste.	1	0	0	1
		<b>Total Marks</b>	<b>2</b>	<b>0</b>	<b>0</b>	<b>2</b>
28.	Customer Service Skills for Drone Assembling Businesses	Develop essential customer service skills, such as active listening, empathy, and effective communication, to enhance the customer experience.	1	0	0	1
		<b>Total Marks</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>1</b>
29.	Marketing and Sales Strategy	Develop a strong brand identity emphasizing innovation, quality, and reliability.	1	0	0	1
		Build digital marketing campaigns (SEO, SEM, social media) to reach target audiences	1	0	0	1
		<b>Total Marks</b>	<b>2</b>	<b>0</b>	<b>0</b>	<b>2</b>
30.	Continuous Improvement	Implement suggestions & Improvements based on reviews by the customers	1	0	0	1
		<b>Total Marks</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>1</b>
31.	Manage Branding and Promotion of Business	Define a comprehensive branding strategy aligned with business objectives.	1	0	0	1
		<b>Total Marks</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>1</b>
32.		Develop human resource management skills to recruit, train, and retain a high-performing workforce in the drone Assembling business.	1	0	0	1

No.	Module Names	Assessment Criteria for Performance Criteria/Learning Outcomes	Theory Marks	Project Marks	Viva Marks	Total Marks
	Human Resource Management in Drone Assembling Business	<b>Total Marks</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>1</b>
33.	Risk Management Strategies for Drone Assembling Business	Introduction to Supply Chain Risks, Operational Risks, Regulatory and Compliance Risks & market risk including supplier reliability, logistics, and transportation, production process, quality control etc.	1	0	0	1
		<b>Total Marks</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>1</b>
34.	Revenue Management Techniques for Drone Assembling Business	Understand sales optimization including direct sales, indirect sales, and international markets	1	0	0	1
		Understand Pricing Strategies including dynamic pricing, and value-based pricing.	1	0	0	1
		<b>Total Marks</b>	<b>2</b>	<b>0</b>	<b>0</b>	<b>2</b>
35.	Financial Analysis and Performance Metrics for Drone Assembling Business	Understand financial statements including income statements, gross profit, and operating expenses	1	0	0	1
		<b>Total Marks</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>1</b>
36.	Understanding Import and Export Strategies in Drone Assembling Business	Comprehend international drone laws, including export controls and certifications.	1	0	0	1
		Learn to prepare export documentation, including licenses and permits for drone exports.	1	0	0	1
		<b>Total Marks</b>	<b>2</b>	<b>0</b>	<b>0</b>	<b>2</b>
37.	Detailed Project Report on Drone Assembling Business	Identify the scope, objectives, and vision of the drone assembling business in the report.	0	3	1	4
		Define the business model, including value proposition, target market, and revenue generation strategy.	0	3	1	4
		Conduct detailed market analysis including demand trends, competitor landscape, and industry growth projections.	0	3	1	4
		Detail the operational workflow of the assembling process including component sourcing, integration, and testing.	0	3	1	4
		List all required tools, equipment, and infrastructure with estimated costs.	0	3	1	4
		Prepare a comprehensive financial plan including capital investment, working capital, projected income, and break-even analysis.	0	3	1	4
		Outline legal, regulatory, and safety compliance requirements for drone manufacturing and operations.	0	3	1	4

No.	Module Names	Assessment Criteria for Performance Criteria/Learning Outcomes	Theory Marks	Project Marks	Viva Marks	Total Marks
		Incorporate environmental, waste management, and sustainability measures in the business plan.	0	3	1	4
		Integrate a risk management section addressing possible technical, financial, and regulatory challenges.	0	3	1	4
		Compile and present the DPR in a structured, professional format using charts, tables, and visuals where appropriate.	0	3	1	4
		<b>Total Marks</b>	<b>0</b>	<b>30</b>	<b>10</b>	<b>40</b>
<b>Total Marks for Mandatory Modules of Standard Qualification</b>			<b>60</b>	<b>30</b>	<b>10</b>	<b>100</b>

NSQC Approved

## Annexure: Assessment Strategy

This section includes the processes involved in identifying, gathering, and interpreting information to evaluate the Candidate on the required competencies of the program.

**Qualification Title:** Entrepreneurship in Drones Assembling

**Assessment Overview:** The assessment strategy for the Entrepreneurship in Drone Assembling qualification is designed to comprehensively evaluate students' understanding, application, and integration of theoretical concepts with practical skills in managing a drone Assembling business. The assessment methods include written assignments and case studies, MCQ-based segment-wise final tests, development, and evaluation of a comprehensive project report based on experiential learning, and a viva voice examination on the project work undertaken by the students.

### **Assessment Methods:**

#### **1. Written Assignments and Case Studies:**

- Purpose: To assess students' ability to analyze and solve real-world problems related to drone Assembling business.
- Description: Students will be required to complete written assignments and case studies that simulate scenarios encountered in the drone Assembling industry. These assessments will evaluate their critical thinking, problem-solving, and decision-making skills.

#### **2. MCQ-Based Segment Wise Final Test:**

- Purpose: To evaluate students' understanding of key concepts and principles covered in each module of the qualification.
- Description: The final test will consist of multiple-choice questions (MCQs) covering each module of the qualification. This assessment will test students' knowledge and comprehension of the course material.

#### **3. Development & Evaluation of a Comprehensive Project Report:**

- Purpose: To assess students' ability to apply theoretical concepts to real-world situations and to effectively communicate their findings and recommendations.
- Description: Students will undertake a practical project (e.g., market research, operational improvement, marketing strategy) related to a drone Assembling business. They will develop a comprehensive project report based on their experiential learning, detailing their project objectives, methodology, findings, and recommendations. The project report will be evaluated based on its clarity, depth of analysis, and practical relevance.

#### 4. **Viva on the Project Work Taken Up:**

- Purpose: To assess students' understanding of their project work and their ability to articulate and defend their findings and recommendations.
- Description: Students will participate in a viva voce examination where they will present and discuss their project work with a panel of examiners. The viva will assess their knowledge, understanding, and critical reflection on their project, as well as their ability to respond to questions and feedback.

**Assessment Criteria:** The assessment criteria for each assessment method will be aligned with the learning outcomes of the qualification. Criteria may include:

- Demonstration of understanding and application of theoretical concepts.
- Critical analysis and evaluation of information.
- Effectiveness of communication and presentation.
- Creativity and innovation in problem-solving.
- Ability to work independently and collaboratively.
- Ability to reflect on learning and apply feedback.

**Assessment Schedule:** Assessment tasks will be distributed throughout the qualification to ensure ongoing feedback and opportunities for improvement. The final project report and viva voce examination will typically be scheduled toward the end of the qualification, allowing students to integrate and apply their learning from the entire program.

**Assessment Integrity:** To ensure the integrity of the assessment process, all assessments will be conducted by the institution's policies and procedures. Measures will be in place to prevent plagiarism and cheating, and assessments will be marked by qualified and impartial assessors, as elaborated in the Qualification File.

**Conclusion:** The assessment strategy outlined above aims to provide a rigorous and comprehensive evaluation of students' knowledge, skills, and competencies in managing a drone Assembling business. By combining written assignments, tests, project work, and viva voce examinations, the assessment strategy ensures that students are well-prepared to succeed in dynamic and competitive drone Assembling.

## Annexure: Acronym and Glossary

### Acronym

Acronym	Description
AA	Assessment Agency
AB	Awarding Body
NCrF	National Credit Framework
NOS	National Occupational Standard(s)
NQR	National Qualification Register
NSQF	National Skills Qualifications Framework

### Glossary

Term	Description
<b>National Occupational Standards (NOS)</b>	NOS define the measurable performance outcomes required from an individual engaged in a particular task. They list down what an individual performing that task should know and also do.
<b>Qualification</b>	A formal outcome of an assessment and validation process which is obtained when a competent body determines that an individual has achieved learning outcomes to given standards
<b>Qualification File</b>	A Qualification File is a template designed to capture necessary information of a Qualification from the perspective of NSQF compliance. The Qualification File will be normally submitted by the awarding body for the qualification.
<b>Sector</b>	A grouping of professional activities on the basis of their main economic function, product, service or technology.

NSQC